APPENDIX A

Notice of Preparation (NOP) Materials

Appendix A

Solana Highlands Project

Comments on the Notice of Preparation / Public Scoping Meeting

The City of Solana Beach (City) released a Notice of Preparation (NOP) in accordance with CEQA Guidelines §15082(a) on November 13, 2014 for an extended review period of 65 days, through January 9, 2015 to solicit input from public agencies and the public as to the issues of concern that should be evaluated in the Environmental Impact Report (EIR). The City held a public scoping meeting in accordance with CEQA Guidelines §15082(c) on November 20, 2014 at 5:30 pm at City Hall to provide information to the public and facilitate public involvement in the process. All public and agency comments were provided in writing and are summarized in the table below. The table also identifies the relevant section of the EIR where the comment has been considered, if appropriate, several comments provided are not relevant to the CEQA process, which addresses specifically the potential physical effects on the environment that may result from the proposed project, but are included in the record for the consideration of the City. A copy of the stamped NOP, Public Scoping Meeting materials, sign in sheet and all comment letters are provided following this table.

DATE DATED or RECEIVED	COMMENTS SUMMARY	CONSIDERED IN EIR	COMMENTOR
November 20, 2014	Concerns for homeowners on Solana Circle West and East 1) When the construction trucks are blocking Nardo to Stevens, we will have heavier traffic on Solana Circle as a short cut to Via de la Valle. Can you please place a Detour sign on the corner of LSF and Nardo directing through traffic to Stevens? 2) For years there have been rumors of mold and asbestos in those apartments. Will samples be tested and abatement measures taken to avoid airborne contamination to our neighboring homes and St. James School? 3) I hope that the new project will provide 2 off-street parking spaces per unit. Currently, the extra cars park on Nardo. With 60 more units they may start parking on Solana Circle also.	-Traffic - Hazardous Materials	Ana Maria Grace
December 23, 2014	1) What is wrong with the way the apartments are right now? Why do they have to be demolished? 2) Already overcrowded in that area 3) The turn heading down Nardo to Stevens is narrow and dangerous	- Population and Housing -Traffic	Annie Johnson Solana Beach Resident
November 18, 2014	As a resident at 821 Stevens Ave. this project would have direct effects on the traffic flowing in and around my driveway. 1) The intersection of Stevens and Nardo is already a very busy one, with residents of the homes and 2 apartment complexes intersecting at the light in front	- Traffic - Aesthetics - Population and Housing	Candace Goldstein 821 Stevens Ave. Solana Beach, CA., 92075

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	of my house, and also the church traffic going up to St. Andrews. 2) I specifically oppose the increased density from 194 units to the proposed 260 units for its effect on traffic and parking. I also oppose increasing the height from 30 to 68 feet, as it will obscure views of the track and ocean for those of us living in the neighborhood. 3) Oppose altering the 4 entrances down to 2 and moving them closer to Stevens Ave. as this will greatly increase the noise and flow of residents entering and exiting the complex right next to my place. 4) There are many middle to low income families living in the Highlands, who serve our community as restaurant and hotel servers. I am very concerned that these families will be priced out of renting here, and we will become a community of wealthy families only. These families deserve our respect and caring. Where will they go? Do all the poor people have to move to Escondido?		
December 18, 2014	Lirio St. for the most part has heavy, speeding traffic during early morning and early evening hours as people cut across the hill rather than taking Stevens. It's absolutely unacceptable to be in fear for your life walking on Nardo and Lirio and Grenados. The current traffic is dangerous – sooner or later someone will be badly injured. This project means: 1) Lower neighborhood quality of life 2) Immense disruption for people on Nardo trying to access the freeway for years, 3) Increased permanent traffic 4) Fewer affordable units in the city 5) Trees would all be removed This is a single-family residential neighborhood with quite expensive values and incredible views that the City gets benefit from due to steadily increasing property tax revenues. People who purchase these homes want to stay, remodel or rebuild, and continue contributing to the beauty of this community. We do not want our values to decline because of proximity to multi-family increased density.We do not need more cars parking. We do not want more traffic. And we do	-Traffic -Population and Housing -Aesthetics	Carla Hayes 465 Lirio St.

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	want mature greenspace and trees. If you want to install traffic circles and barriers similar to other progressive cities such as Santa Monica or Berkeley, then you might be able to permit higher density housing. Then you can provide more affordable housing plus preserve single-family unit neighborhoods. Additionally; Requires off-street parking to serve all 260 units		
	As a homeowner at 662 S. Nardo Ave. across the street from the Solana Highlands apartment complex there are many things that are concerning about the project: 1) The 3 year proposed construction site will cause undue hardship especially to us homeowners that are right across the street. 2) The plan will cause an increase in dust/air pollution, construction vehicle emissions pollution and excessive noise pollution 3) The plan to increase density by 34% will also affect us by additional daily automobile trips up to 200/300 per day. Nardo has become a very busy street over the years with no traffic calming measures in place now. Many times throughout the day it is very hard to exit our driveway. With the addition of 66 units and possibly 132 cars it will be extra hard to pull out of our driveway	-Traffic -Air Quality -Noise -Population and Housing	Gayle Wells
	I support redevelopment of Solana Highlands as long as they increase, more than proportionately, the number of parking spaces to accommodate the additional cars. The cars parking on our streets (i.e. Nardo) is already overflowing from the apartment complex.	-Traffic	Gerard Lawrence 759 E. Solana Circle
	1) I took a second look at the cut and fill proposed for this project and believe the public presentation on height and view impacts was severely misleading. The aesthetics of large buildings and retaining walls was also marginalized by showing large shade trees towering over the project. Recommend either staying within existing	-Aesthetics -Recreation -Traffic -Noise -Land Use and	Jack Black

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	height limits or providing another public presentation as this will change the look of the neighborhood 2) The existing grass areas are being reduced forcing dogs and children into the neighborhood. How is this mitigated? 3) When the large building at 620 Solana Circle was built it is my understanding the developer was required to provide large grass areas with public paths as mitigation. Why is that not the case here? 4) The parking and traffic appear to be based on conservative assumptions. How is the developer planning on mitigating the likely community impacts in the event their assumptions are incorrect? As this project construction is phased over several years is the developer willing to reconsider if community impacts materialize or is this all or nothing? 5) Recognizing their will be impacts to the existing residents, be it service disruption, construction traffic, construction noise, dust, or debris, how is the developer planning on being a good neighbor? Recognizing the neighborhood tolerance is proportional to the quality of their relationship. 6) I understood from the public presentation the City needs low income housing and is willing to grant variances for this project if the developer will accommodate. As this is already the most affordable area of SB it seems unreasonable the City would seek to devalue this area further. Suggest not granting variances and building fewer nice homes rather than exploiting the existing residence. 7) How is the 5 years of disruption to the neighborhood mitigated? Will temporary (5-yr) construction offices, trailers, equipment, fences, etc be tolerated under the construction permits? Also, will traffic disruption account for school, fair, and racetrack traffic? I am not against the construction as long as the developer is respectful of the existing community and proposes a scaled back version of the current plan	Planning	
	We as home owners in direct proximity to the proposed expansion project have concerns that would like to be considered: 1) The project is slated for 3yrs. This is directly in front of	-Noise -Traffic and Circulation -Land Use and	Jason and Adrienne Davenport 710 South Nardo Ave.

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	my home. The noise and construction dust will be a constant noise pollution. 2) Additional units create more cars parking on the street and directly in front of my home. We already have oil spills, trash, parking into our driveway and speeding cars. The streets are never swept in front if my house due to the current parking situation. We have difficulty pulling out of our driveway without fearing that a speeding car will hit us. 3) The current housing density already has a large parking overflow into the street. This will get worse with the increase in density. The 34% increase in density brings at least 130 more cars making near 300 trips daily. 4) The developer is requesting a variance to increase housing density and building heights (34% increase in density). This is not acceptable. The height and density was established and should not be changed. Building a 68' building across the street from my home, in a residential neighborhood, will be a very negative impact to my homes values from the visual pollution. 5) How will dust control be handled during grading? My home will be constantly covered in dust. Who will clean this? I will expect that the developer will. 6) The primary entrance has been called out as the southern entrance. I do not believe that people will use this as the primary entrance with the inconvenience of the roundabout in this route. People will elect to use the north entrance, as it is more direct access to the complex 7) The greenscape will be permanently altered with the trees removed and open green spaces removed. The green open spaces are a large reason that we moved to our home. The trees in the area are 40+ years old and cannot be replaced. 8) A waiver has been requested for fences, walls and retaining walls. I believe that all of these structures should be carefully considered and properly engineered. Walls of this nature can have a terrible aesthetic impact.	Planning -Aesthetics -Air Quality	

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	We love our home and neighborhood! We want to see the complex improve but in a reasonable fashion		
	1) The proposed project will increase the amount of residential units on the site. This will increase the amount of traffic from residents and vendors to the site. It will also increase the demand for parking, including off-site parking for residents and guests, particularly since the proposed project does not include adequate resident and guest parking. The EIR must evaluate reasonable projections for parking demand, even if proposed parking complies with City zoning for parking. Based on other projects in the City it is clear that City parking requirements are not adequate. Therefore, realistic parking demand must be studied 2) There is an existing large apartment complex and several large parcels of land that are zoned and available for development located in the immediate vicinity of the proposed project. All of these nearby sites are in various stages of planning for development or redevelopment. The new development or redevelopment on these nearby sites will substantially increase the density of housing units on these sites and for the immediate area nearby the proposed project. It is my understanding that developers for one or more of these nearby sites have made inquiries with the City Planning Department. Therefore, in order to adequately study the traffic and parking impacts that will result from the proposed project, the traffic and parking impacts must be studied in the context of the increased density and traffic load caused by the totality of development or redevelopment of all these sites in the nearby area, including the forthcoming development and redevelopment of the nearby sites that are being studied or in the planning stages for development. The traffic and parking impacts must be studied based on full build out of all the nearby sites, not simply based on the current conditions. The term “full build out” means the development to the maximum amount of units permitted	-Land Use and Planning -Traffic and Circulation -Cumulative Effects -Population and Housing -Public Services and Utilities -Alternatives -Aesthetics	Jim Ratzer 360 S. Nardo Ave., Solana Beach

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	under applicable zoning. In order to have a fair assessment of the impacts of the proposed project, the surrounding sites should be considered to be built out to the maximum zoned density and the EIR analysis must consider the corresponding impacts on traffic and parking from such full build our permitted under zoning. 3) The proposed project will cause the elimination of moderately priced rental units that provide housing for persons with low and moderate incomes. The current apartments provide housing at moderately priced rents, which provide housing for persons with low and moderate incomes, such as seniors on fixed incomes, teachers, retail workers, janitors, students, single income adults, and blue collar workers. The proposed project is projected to have rents at significantly higher amounts that will eliminate the opportunity for rental by low and moderate income residents. The EIR should study the impact that the loss of this low and moderate rental housing will have on housing in our community. How will the City meet its obligation to provide housing for all income levels? 4) The current residents of Solana Highlands include multiple families with children enrolled in the Solana Beach schools. Will the new development change the makeup of residents in a way that will impact enrollment in the schools? The potential impact of redevelopment on our schools should be included in the EIR analysis 5) The proposed project will increase the quantity of units on the site. This will increase the amount of energy used on the site. The proposed project does not provide solar energy generation. It is possible with the use of solar panels to satisfy the demand for electricity for the entire project. It is essential to study the impacts that are caused by the proposed project because it does not mitigate the increase in the consumption of energy. Also, it is important to study the impacts that result from not maximizing the		

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	opportunity to install and use solar panels to generate energy for the site. The EIR must study how the proposed project mitigates the energy usage that could have been provided by having the entire site powered by solar energy generation with photovoltaic panels. 6) The County of San Diego has declared a water emergency. The proposed project will increase the quantity of units on the site. The increase units will increase the demand for water and the consumption of water. However, there is already a shortage of available water. Therefore, where will the water come from to support the increase in the quantity of residential units? If there are not sufficient water supplies, then the proposed project cannot increase the demand for water because there are not sufficient water supplies. 7) As an alternative to the proposed project, the EIR should study an alternative whereby the existing units and buildings are renovated or rebuilt 8) The proposed project will result in the destruction of all the mature landscaping on the project site including a substantial amount of very large trees. The large trees and mature landscape provide numerous environmental and quality of life benefits to both the project site and the surrounding neighborhood. The destruction of the substantial quantity of large trees will have a significant negative impact on the project site and the neighborhood. This significant negative impact must be prevented. 9) With the increase in traffic from the proposed project there will be negative impacts on traffic circulation in the area surrounding the project. There needs to be a study of the location and quantity of entry and exit locations to and from the project. There should only be one entry location and it should be located as close to Stevens Avenue as possible. All exit locations must be right turn only towards Stevens Avenue. Traffic to and from the site must be directed away from the surrounding neighborhood and neighborhoods to the west, and all exits shall only allow traffic to travel towards Stevens Avenue. No left turns out of the		

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	project toward Solana Circle. In addition, install medians in the middle of the street to force traffic circulation toward Stevens Avenue and provide landscaping to provide a screen of the project.		
	The reason we chose this location as a home was because the apartment buildings were not that unappealing as far as apartment complexes go. I am very disappointed at this proposal. The new look is unsightly and takes away the charm of the neighborhood. The height of the complex will be visible, the noise pollution inescapable, the new traffic distressful.	-Aesthetics -Noise	John Modesitt 707 Fresca Ct.
	I believe the following comments are pertinent to the scope and content of the proposed EIR. 1) The basis for most of the lasting negative environmental effects is the proposed increase in the number of housing units from 194 to 260. The most significant impact of this many additional units would be the increase in traffic on Nardo Ave caused by 66 additional units, that is at least 130 additional cars making 300+ trips daily. And that is just from the additional residents, not potential visitors, etc. The impact would be felt not only from Stevens to the top of the hill, but all along Nardo Ave to Lomas Santa Fe, along Solana Circle, Lirio, Corto, Granados, Rios... All of these residential streets would experience an increase in traffic, both in volume and speed, with more people in the neighborhood, trying to find a short-cut or quick-cut to/from the coast to/from I-5, going north and/or south. An additional 130 cars in the immediate area would definitely and undeniably be a negative impact on the residents and the environment, with increased noise and air pollution in addition to issues caused by increased traffic. Although perhaps less easily determined, the impact of such a dramatic increase in density would also be felt in other local public services, such as schools, fire and police protection. 2) According to the Notice of Preparation you sent, SBMC Section 17.20.030(B)(4) allows for 206.6 units, and regardless of compliance with Affordable Housing	-Traffic -Population and Housing -Aesthetics -Land Use and Planning	Karen Griglak

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	Ordinance and density bonuses sections, the remaining 54 units are entirely at the discretion of the City of Solana Beach via the signed development agreement. It is not in the best interest of the community to increase the density of Solana Highlands; the City should not approve a project with more than 206 units. Further, the proposed density can only be accomplished in the current design by granting the developer multiple waivers and variances for grading and construction, causing further environmental disruption for no good reason. 3) Another environmental aspect that would be negatively impacted by the proposed development is aesthetic. The existing trees in the complex and the existing buildings integrated nicely into the contours of the hill make it visually very appealing – unlike many apartment complexes. This is important not only to those driving along the street but also to the residents in the apartments. The proposed buildings, requiring a waiver to more than double the allowed height from 30' to 68' would introduce a type of building that is foreign to Solana Beach. The natural beauty of Solana Beach is one of the reasons to live here, vs. a Carmel Valley atmosphere. We don't need a bland tract housing project with no trees, no contours of the land, and 68' building blocks. If the developer indeed removes all of the existing trees, it will be decades, if ever, before there are beautiful trees like the ones there now. This point is probably beyond the scope of what the City can control in the project, but it would be nice if the developer tried to preserve the trees. On the other hand, there is absolutely no good reason for the City to grant waivers for fences, walls and retaining wall regulations, or grant waivers and variances to allow grading on the project site to lower the elevation of the site to create lower flatter pads, and increase the building height limit to 68' to enable increased density, all the while destroying the landscape and creating an eyesore. I am disappointed that the city didn't notify residents in the		

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	entire area who would be affected by the proposed changes. The 300-500' rule might be appropriate for a single family residence; but a project of this size and scope will impact a much larger area. I understand the City is going through the process, and we were told by city officials that the City of Solana Beach would not benefit from this project. However, most people present at the 11/20/2014 meeting believe that without vigilance and vigorous objections from residents, the city of Solana Beach will give the developer the variants and waivers needed, and approve the proposed project. Why is that? Why would the City approve such a project? The fact that many of us heard about it from our neighbors, not the City, goes to the issue of trust. I would like to see you and our elected officials act on our behalf – not those of a developer. Protect our environment and the beautiful community that we have. To that end, I would suggest notifying a larger segment of the affected neighborhood of the project and extending the comment period in order to get a true assessment of community sentiment. H.G. Fenton certainly has every right to update their property, but it should be done within the constraints of existing codes and regulations and Without Variances or Waivers. The City shouldn't offer variances and waivers of the scale and scope required by this project when: a) it does not offer a clear benefit to the community, and b) it actually diminishes the quality of life in the surrounding area. 32 affordable housing units do not justify the overall negative impact it would have on multiple aspects of life in this neighborhood, both practical and aesthetic. A project that was a benefit to the community would be 194 units, of which 32 would be affordable housing units, with additional off-street parking, no significant grading changes, no waivers for retaining walls or fences, no buildings above 30', and every effort made to save as many trees as possible. Bring a proposal like that, and the residents will just have to put up with the pollution, noise, disruption and nuisance of a 2.5-3 year major construction project. The project as currently defined is a benefit to the developer, money in his pocket at the major		

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	expense of the community. I hope you will not approve it.		
	We are the owners of 618 East Solana Circle and have discussed and viewed the site for the proposed project. We agree with our board that the addition of both the height and number of units will have a negative effect on our property and the environment. We support our board in opposing this project.	-Land Use and Planning	Louise McCready R. Michael Craig 618 East Solana Circle
	This street is already very busy! With the construction, it will be too many people and cars for a residential neighborhood	-Land Use and Planning	Marc Levin 301 S. Granados
	1) Water-adding 60 living units puts even more stress on our severe drought 2) Fenton's plan calls for cutting down all of the trees on their property. Carmel, CA. has a very strict tree ordinance for the protection of the ambience of their community. I would champion a similar ordinance for Solana Beach 3) Traffic equals more noise and air pollution. The traffic on Nardo is too much right now. There is a grade school at the church and a school bus stop below the apartment complex. This is a tragedy waiting to happen. Don't allow the situation to get worse. Fenton has a jewel of an investment just the way it is. They want to increase the revenue from that investment at the expense of the quality of life for the families in Solana Beach. It is your obligation and responsibility to maintain and increase the quality of life for the families in Solana Beach, not degrade it.	-Utilities -Aesthetics -Noise -Air Quality -Traffic and Circulation	Mark Wells 662 S. Nardo Ave.
	1) The proposed project will increase the amount of residential units on the site. This will increase the amount of traffic from residents and vendors to the site. It will also increase the demand for parking, including off-site parking for residents and guests, particularly since the proposed project does not include adequate resident and guest parking. The EIR must evaluate reasonable projections for parking demand, even if proposed parking complies with City zoning for parking. Based on other projects in the City	-Land Use and Planning -Traffic and Circulation -Cumulative Effects -Population and Housing -Public Services and Utilities	Marty Snyderman 638 South Nardo Ave., Solana Beach

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	it is clear that City parking requirements are not adequate. Therefore, realistic parking demand must be studied 2) There is an existing large apartment complex and several large parcels of land that are zoned and available for development located in the immediate vicinity of the proposed project. All of these nearby sites are in various stages of planning for development or redevelopment. The new development or redevelopment on these nearby sites will substantially increase the density of housing units on these sites and for the immediate area nearby the proposed project. It is my understanding that developers for one or more of these nearby sites have made inquiries with the City Planning Department. Therefore, in order to adequately study the traffic and parking impacts that will result from the proposed project, the traffic and parking impacts must be studied in the context of the increased density and traffic load caused by the totality of development or redevelopment of all these sites in the nearby area, including the forthcoming development and redevelopment of the nearby sites that are being studied or in the planning stages for development. The traffic and parking impacts must be studied based on full build out of all the nearby sites, not simply based on the current conditions. The term “full build out” means the development to the maximum amount of units permitted under applicable zoning. In order to have a fair assessment of the impacts of the proposed project, the surrounding sites should be considered to be built out to the maximum zoned density and the EIR analysis must consider the corresponding impacts on traffic and parking from such full build out permitted under zoning. 3) The proposed project will cause the elimination of moderately priced rental units that provide housing for persons with low and moderate incomes. The current apartments provide housing at moderately priced rents, which provide housing for persons with low and moderate incomes, such as seniors on fixed incomes, teachers, retail workers, janitors, students, single	-Alternatives	

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	income adults, and blue collar workers. The propose project is projected to have rents at significantly higher amounts that will eliminate the opportunity for rental by low and moderate income residents. The EIR should study the impact that the loss of this low and moderate rental housing will have on housing in our community. How will the City meet its obligation to provide housing for all income levels? 4) The current residents of Solana Highlands include multiple families with children enrolled in the Solana Beach schools. Will the new development change the makeup of residents in a way that will impact enrollment in the schools? The potential impact of redevelopment on our schools should be included in the EIR analysis. 5) The proposed project will increase the quantity of units on the site. This will increase the amount of energy used on the site. The proposed project does not provide solar energy generation. It is possible with the use of solar panels to satisfy the demand for electricity for the entire project. It is essential to study the impacts that are caused by the proposed project because it does not mitigate the increase in the consumption of energy. Also, it is important to study the impacts that result from not maximizing the opportunity to install and use solar panels to generate energy for the site. The EIR must study how the proposed project mitigates the energy usage that could have been provided by having the entire site powered by solar energy generation with photovoltaic panels. 6) The County of San Diego has declared a water emergency. The proposed project will increase the quantity of units on the site. The increase units will increase the demand for water and the consumption of water. However, there is already a shortage of available water. Therefore, where will the water come from to support the increase in the quantity of residential units? If there are not sufficient water supplies, then the proposed project cannot increase the demand for water because there are not sufficient water supplies.		

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	7) As an alternative to the proposed project, the EIR should study an alternative whereby the existing units and buildings are renovated or rebuilt		
	The Native American Heritage Commission (NAHC) has reviewed the Notice of Preparation (NOP) referenced above. The California Environmental Quality Act (CEQA) states that any project that causes a substantial adverse change in the significance of an historical resource, which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA Guidelines 15064(b)). To comply with this provision the lead agency is required to assess whether the project will have an adverse impact on historical resources within the area of project effect (APE), and if so to mitigate that effect. To adequately assess and mitigate project-related impacts to archaeological resources, the NAHC recommends the following actions: 1) Contact the appropriate regional archaeological information Center for a record search. 2) If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the finding and recommendations of the records search and field survey. 3) Contact the Native American Heritage Commission for a Sacred Lands File Check and a list of appropriate Native American contacts for consultation concerning the project site and to assist in the mitigation measures. 4) Lack of surface evidence of archeological resources does not preclude their subsurface existence	-Cultural Resources	Native American Heritage Commission Katy Sanchez Associate Government Program Analyst
	How was the bonus decided? Why 54 units if only 32 low income units are being proposed?	-Population and Housing	Norma Hasselman 519 S. Nardo
	Out with the old and in with the new. The existing development is long past its useful life and is not in keeping with the development pattern we have seen since 1988 when the City incorporated. However, Nardo will require traffic calming measures from Lomas Santa Fe to Valley to be effective. Not just in front of the project. How can traffic calming measures for the entire length of Nardo be implemented with this project?	-Traffic and Circulation	Paul McNeil 144 S. Nardo Ave.

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	I live across the street from Solana Highlands so it will very much affect me. I am not in favor of the project because of 3 years of construction, adding more traffic to Nardo and surrounding streets, too many units, noise and pollution. I also feel it will lower our property value	-Traffic and Circulation -Population and Housing -Noise	Rita Hart 740 S. Nardo Ave.
	Please get all the cars off the curve and hill. It is already dangerous- no more units than allow off street parking for 2 cars per unit	-Traffic and Circulation	Rob Yaenll 450 Lirio St.
	There is already no parking for existing homes in this area. The traffic cutting through Granados is already too heavy, too fast and dangerous	-Traffic and Circulation	Rowena Schubert 142 S. Granados Ave.
	I am generally in favor of the proposed project and want to support H. G. Fenton's efforts to revitalize this residential rental project and provide this important element of housing diversity in the City. My comment addresses the issues of Traffic and Circulation and Water Quality, with emphasis on guest and resident parking that will occur on South Nardo Avenue. The existing guest and resident parking is inadequate and the increase in number of dwelling units will obviously add traffic to South Nardo Avenue and increase the demand for guest and resident parking. This will have a detrimental effect to both Traffic Safety and Water Quality. 1) While the adjacent residential streets may be able to accommodate the additional trips generated by the proposed project, parking of vehicles on both sides of South Nardo Avenue creates a significant Traffic Safety Impact. The existence of this safety issue is recognized and partially mitigated by prohibiting on-street parking on the north side of South Nardo Avenue along the inside portion of one of the several roadway curves fronting the proposed project. However, this measure does not adequately mitigate the existing safety problem. The additional traffic trips on South Nardo Avenue, growth in number and concentration of ingress and egress turning movements, and the increase in demand for guest and resident parking along the project frontage	-Traffic and Circulation -Water Quality	Russell E. Hunt South Nardo Avenue

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	created by the additional dwelling units will make this Traffic Safety Impact worse. The proposed access to the project to be regulated by security gates at both the primary and secondary points of ingress and egress will only intensify the demand for on-street parking by creating an impediment for residents, and especially guests, to use the required onsite parking spaces provided. This will apply to both short term (quick visits by guests or short stops by residents) as well as long term (overnight) parking needs. In addition, on-street parking will increase where currently allowed along the inside of the sharpest and most dangerous roadway curve on the proposed project frontage on South Nardo Avenue adjacent to the Fresca Street intersection and pedestrian cross walk. Any increase in on-street parking of high-profile vehicles such as vans, SUVs, trucks, commercial vehicles or RVs will adversely affect sight distance. The Traffic Safety Impacts created by increased on-street is caused by the inadequate sight distance from oncoming vehicles, the Fresca Street intersection, the multiple private driveways on north side of street, the two points of proposed project ingress and egress, and the existing and proposed pedestrian crossings, and jay-walking residents and guests for the existing and increase in vehicle trips on South Nardo Avenue. In addition, dangerous traffic conflicts are created by the difficulty for vehicles to maneuver into and out of on-street parallel parking spaces and for occupants to safely enter and exit vehicles. 2) Water Quality degradation created by increased on-street parking is caused by untreated stormwater runoff from the impervious parking surface used by the increased number of resident and guest vehicles occupying the on-street parking spaces. Treatment of stormwater runoff for the increase in on-street parking created by the proposed project is difficult because the current on-street parking is an existing condition that pre-dates low impact development standards and involves steep impervious pavement gradients.		

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	I have visited the proposed project site and reviewed the plans submitted with the project application, including the proposed traffic calming measures for South Nardo Avenue. I believe that the proposed repainted pedestrian crosswalks and traffic chokers are inadequate to mitigate the safety impacts created by the increased traffic trips and on-street parking by residents and guests. No treatment of stormwater runoff is proposed for the increased usage of on-street parking spaces. I respectfully request that the proposed project be modified to eliminate on-street parking along South Nardo Avenue. This would decrease the traffic safety and water quality impacts described above. This could be accomplished by either modifying the proposed project or requiring an alternative that proposes elimination of on-street parking along the proposed project frontage. This reduced on-street parking and stormwater degradation alternative would have the additional benefits of providing the opportunity to implement meaningful traffic calming measures, reduce the paved width to better accommodate pedestrians crossing, reduce the amount of impervious pavement used for vehicles along the proposed project frontage, increase the opportunity for both the landscape and pedestrian oriented amenities along the proposed project frontage and allow the flexibility to design stormwater treatment facilities along South Nardo Avenue.		
	The area is too dense already and the traffic on that area of Nardo is dangerous considering the volume of congestion. At least the existing apartments have a somewhat park like surrounding with mature trees and green which I understand will be lessened	-Traffic and Circulation -Recreation	Sandra Whitson 732 Solana Circle
	1) DENSITY: We'd like to see HG Fenton's proposed project numbers reduced substantially. 194 current Units to proposed 260 units is entirely too much. The occupant increase of approximately 190-200 residents is extremely concerning, and these are conservative numbers considering how many residents are	-Population and Housing -Traffic and Circulation -Air Quality	Scott and Angelique Sorensen 601 Sonrisa Street

DATE DATED or RECEIVED	COMMENTS SUMMARY	CONSIDERED IN EIR	COMMENTOR
	currently stuffed into those apartments without any policing by management. *Increase in pets, pet waste, and pet pollution to our neighborhoods is a large concern as well 2) PARKING: Currently 1.47 parking spaces per unit. Proposed 2.02 parking spaces per unit. We'd like to see MORE ON-PROPERTY PARKING: As proposed, the additional .55 parking spots will NOT be enough to support the increase of residents/drivers. 3) TRAFFIC: Traffic controlling features should be added to the entire length of Nardo Avenue. Current proposed traffic control elements need re-thinking for aesthetics of the neighborhood and proper, effective speed control. The increase in density will create an overwhelming increase in traffic for the neighborhood. As proposed, we residents/homeowners will experience a substantial increase of cars/drivers on an already busy, poorly patrolled street. We would like to see the extension red curbs at Nardo and Fresca. As is, it remains a HUGE HAZARD. We'd like to see the on-street parking along Nardo and Fresca managed by metered parking, permit parking or time limit parking signs, and regularly patrolled. We would also like to see removal of on-street parking to allow the street sweepers to do their jobs. 4) ON STREET PARKING: The on-street parking is currently a MESS. The proposed 2.02 parking will not proportionately resolve the problem of on-street parking. 5) CONSTRUCTION: HG Fenton is proposing the project to take approximately 3 years to complete, and will be done in 3 phases. - What will be done to eliminate the inevitable delays and inconveniences to the homeowners of Nardo, Fresca, Fresca Court, Sonrisa, Nardito, Solana Circle, etc.? - Can the already congested Via de la Valle and Lomas Santa Fe Drive take on the additional traffic and delays during this proposed 3-year time period? - What will be done to eliminate construction dust, dirt and debris from over flowing onto Nardo, Fresca and the	-Noise	

DATE DATED or RECEIVED	COMMENTS SUMMARY	CONSIDERED IN EIR	COMMENTOR
	surrounding residents? - What will be done to accommodate the construction worker's parking, trash, loitering etc. avoiding over-flow onto Fresca? In closing, Solana Highlands Apartments/ HG Fenton Company is already a poor neighbor. Additionally, the City of Solana Beach has been unable to properly patrol and/or manage the overwhelming abuses of speed, street parking, loitering, trash, and pet pollution along Nardo and Fresca and Sonrisa Street. How will HG Fenton Company and the City of Solana Beach be able to properly manage a larger project when it is currently being managed so poorly? In closing, we would like to see the proposed numbers lowered substantially, along with answers/solutions to our above listed questions/concerns. It is our opinion that the project as currently proposed, will have an overwhelmingly negative effect on this neighborhood's property values, quality, and our quality of life.		
November 20, 2014	My mother and I are deeply concerned about the proposal to expand the apartment complex between 661 South and 781 South Nardo Avenue. Both my mother and I live just around the corner from there, a few houses north of the Catholic Church. We have difficulties enough backing out of the garage into South Nardo, with people using the road as a shortcut and with those taking their children to and from the school that the church runs. The new apartment complex would increase this difficulty many fold. The risk of auto accidents will be much higher, both with construction equipment blocking the road and the later increase in traffic from the new tenants. Parking is also at a premium along that stretch of road. Also, the project in question seems to be at odds with the ordinance voted on a couple of years back that restricts the cubic space that homes can be built or expanded to. Since many of the homes along this section of South Nardo (ours included) are adversely affected by the ordinance, shouldn't the apartment complex be, as well? Please reconsider any thought of approving the project and convince the others on the city council to do likewise. While we do understand that the community is growing, we would	-Traffic and Circulation -Land Use and Planning	Dana E Sanborn Carol J Sanborn 544 South Nardo Ave.

DATE DATED or RECEIVED	COMMENTS SUMMARY	CONSIDERED IN EIR	COMMENTOR
	like to keep this area as much as it was when we first came here, for safety's sake, if nothing else.		
January 5, 2015	1) The proposed project will significantly increase the density of residential units on the site. This will increase the amount of traffic from residents and vendors to the site. It will also increase the demand for parking, including off-site parking for residents and guests, particularly since the proposed project does not include adequate resident and guest parking. The EIR must evaluate reasonable projections for parking demand, even if proposed parking complies with City zoning for parking. Based on other projects in the City it is clear that City parking requirements are not adequate. Therefore, realistic parking demand must be studied. Also, due to existing high, uncontrolled speeds on Nardo the increased volume presents additional safety issues for pedestrians crossing the street and should be studied. 2) There is an existing large apartment complex and several large parcels of land that are zoned and available for development located in the immediate vicinity of the proposed project. All of these nearby sites are in various stages of planning for development or redevelopment. The new development or redevelopment on these nearby sites will substantially increase the density of housing units on these sites and for the immediate area nearby the proposed project. It is my understanding that developers for one or more of these nearby sites have made inquiries with the City Planning Department. Therefore, in order to adequately study the traffic and parking impacts that will result from the proposed project, the traffic and parking impacts must be studied in the context of the increased density and traffic load caused by the totality of development or redevelopment of all these sites in the nearby area, including the forthcoming development and redevelopment of the nearby sites that are being studied or in the planning stages for development. 3) The proposed project will cause the elimination of moderately priced rental units that provide housing for	-Traffic and Circulation -Land Use and Planning -Population and Housing -Public Services -Utilities -Hazardous Materials -Noise -Air quality	John Wilson III 754 S. Nardo Ave.

DATE DATED or RECEIVED	COMMENTS SUMMARY	CONSIDERED IN EIR	COMMENTOR
	persons with low and moderate incomes. The current apartments provide housing at moderately priced rents, which provide housing for persons with low and moderate incomes, such as seniors on fixed incomes, teachers, retail workers, janitors, students, single income adults, and blue collar workers. The propose project is projected to have rents at significantly higher amounts that will eliminate the opportunity for rental by low and moderate income residents. The EIR should study the impact that the loss of this low and moderate rental housing will have on housing in our community. How will the City meet its obligation to provide housing for all income levels? 4) The current residents of Solana Highlands include multiple families with children enrolled in the Solana Beach schools. Will the new development change the makeup of residents in a way that will impact enrollment in the schools? The potential impact of redevelopment on our schools should be included in the EIR analysis. 5) The proposed project will increase the quantity of units on the site. This will increase the amount of energy used on the site. The proposed project does not provide solar energy generation. It is possible with the use of solar panels to satisfy the demand for electricity for the entire project. It is essential to study the impacts that are caused by the proposed project because it does not mitigate the increase in the consumption of energy. Also, it is important to study the impacts that result from not maximizing the opportunity to install and use solar panels to generate energy for the site. The EIR must study how the proposed project mitigates the energy usage that could have been provided by having the entire site powered by solar energy generation with photovoltaic panels. 6) The County of San Diego has declared a water emergency. The proposed project will increase the quantity of units on the site. The increase units will increase the demand for water and the consumption of water. However, there is already a shortage of available water. Therefore, where will the water come		

DATE DATED or RECEIVED	COMMENTS SUMMARY	CONSIDERED IN EIR	COMMENTOR
	from to support the increase in the quantity of residential units? If there are not sufficient water supplies, then the proposed project cannot increase the demand for water because there are not sufficient water supplies. 7) Living directly across the street from the planned new major ingress-egress drive, I am concerned about traffic, noise and pollutants that will rain down on my home, not to mention potential hazardous materials that will become airborne from tear down of these old buildings and grading soil that has long gone undisturbed. As someone with chronic respiratory ailments I fear for both my safety and the safety of my 3 year old daughter whose lungs are still developing, not to mention he additional pollutants that will be in the air for years in such a massive multi-phased project. 8) As an alternative to the proposed project, the EIR should study an alternative whereby the existing units and buildings are renovated or rebuilt with zero or negative density and improved beautification and improved safety on Nardo Avenue and that adequately addresses all of the important EIR issues called out above.		
January 9, 2015	1) Parking.....how many dedicated spaces per unit....how is parking allocated per unit....is all parking included in the base rent or will renters have to purchase parking as an extra?... how many spaces are reserved for guests only, not residences....how many company maintenance vehicle spaces?...are employees provided with parking...how many space and if not where are they to park?....how many office spaces? This list is not exclusive and all aspects of parking and how it affects the surrounding community needs to be fully addressed. 2) Many of the proposed buildings significantly exceed the City's allowable building heights. If these heights were approved how would that affect future developments in the City? That is, others may take approval of building heights that exceed the allowable	-Traffic and Circulation -Land Use and Planning -Population and Housing -Public Services and Utilities -Recreation	George Boyd & Devon Hedding 610 Sonrisa Street

DATE DATED or RECEIVED	COMMENTS SUMMARY	CONSIDERED IN EIR	COMMENTOR
	heights as a green light to request the same… how this will affect the City needs to be fully addressed. 3) Currently the proposed build out timeframe is 3 years. How would this affect the surrounding community...all aspects of this must be addressed including but not limited to: dust and debris, worker parking, renter parking, access, staging of trucks, security, etc. As for one instance, how will Nardo and Fresca be kept clean? Saying that it will be swept is not sufficient as there are always cars parked on these streets. 4) Density and traffic. Some issues include: How will ingress and egress be controlled? Drivers take the path of least resistance and with two exits both will be used heavily. How with this affect the neighborhoods surrounding the proposed project. How will the increase in density affect all aspects of the community? 5) Street parking. How many parking places are there currently along Nardo in the proposed development area? How many will there be if the project is approved as per their "traffic calming" and entrance/exit changes? 6) Pets. Disrespectful pet owners are a continuing issue for the surrounding community. How does the developer plan to deal with the increase in the number of pets and how that will affect the surrounding community? 7) Socioeconomic...presumably the proposed units will be significantly more costly that the existing. How will that removal of mid-income housing affect the community? How will the proposed new demographic affect the community. Some aspects for instance are: do higher income renters have more cars? More pets? More or less children? etc, etc, etc		
November 20, 2014	Yesterday, January 8, I submitted several written comments on the subject project to you via the City receptionist. In my letter, I wrote"---- the intersection of South Nardo Avenue with Nardito and Solana Circle, coupled with the entrance and exit to the Catholic Church in the same area, is an accident waiting to happen."	-Traffic and Circulation	Frances B. Moore 545 South Nardo Ave.

DATE DATED or RECEIVED	COMMENTS SUMMARY	CONSIDERED IN EIR	COMMENTOR
	I feel I should expand further on this. There is not only a Catholic church in the same area, there is also a Catholic school for children at that place, which is serviced by many cars and SUVs all attempting to use the single narrow entrance road at the same time on several days of the week. Vehicles routinely line up in both directions on Nardo awaiting their entrance to this sharply angled turn, and we frequently see impatient drivers (who are not going to the school) pass the line by pulling into the other lane. We have seen this on many occasions and witnessed numerous near-accidents. This is, in my opinion, a problem which can only get worse with the increased traffic from the proposed higher-density redevelopment of the apartment complex.		
January 5, 2015	Overall Project Impact 1) There is an existing large apartment complex and several large parcels of land that are zoned and available for development located in the immediate vicinity of the proposed project. All of these nearby sites are in various stages of planning for development or redevelopment. The new development or redevelopment on these nearby sites will substantially increase the density of housing units on these sites and for the immediate area nearby the proposed project. The traffic and parking impacts of this project must be studied based on full build out of all the nearby sites, not simply based on the current conditions. The term “full build out” means the development to the maximum amount of units permitted under applicable zoning. In order to have a fair assessment of the impacts of the proposed project, the surrounding sites should be considered to be built out to the maximum zoned density and the EIR analysis must consider the corresponding impacts on traffic and parking from such full build out permitted under zoning. 2) The proposed project will result in the destruction of all the mature landscaping on the project site including a substantial amount of very large trees. The large	-Land Use and Planning -Aesthetics -Traffic and Circulation	Kerily McEvoy 558 S. Nardo Ave.

DATE DATED or RECEIVED	COMMENTS SUMMARY	CONSIDERED IN EIR	COMMENTOR
	trees and mature landscape provide numerous environmental and quality of life benefits to both the project site and the surrounding neighborhood. The destruction of the substantial quantity of large trees will have a significant negative impact on the project site and the neighborhood. 3) With the increase in traffic from the proposed project there will be negative impacts on traffic circulation in the area surrounding the project. There needs to be a study of the location and quantity of entry and exit locations to and from the project as well as the flow of traffic onto residential versus commercial streets. Nardo and Solana Circle are already hazardous with many drivers using them as a cut-through to Lomas Santa Fe, Stevens or Via de la Valle (commercial streets). Increased traffic volume will make the situation worse. Traffic should be studied in its entirety not just within the immediate area of the project. 4) The proposed project will increase the amount of residential units on the site. This will increase the demand for parking, including off-site parking for residents and guests, particularly since the proposed project does not include adequate resident and guest parking. The EIR must evaluate reasonable projections for parking demand, even if proposed parking complies with City zoning for parking. Based on other projects in the City it is clear that City parking requirements are not adequate. Therefore, realistic parking demand must be studied.		
January 6, 2015	1) Traffic. Traffic counters were placed on Nardo Avenue last November, presumably for the upcoming EIR study of the Solana Highlands Apartments proposed expansion. The traffic counter at lower part of Nardo Avenue was placed above the lower parking lot entrance to the Solana Highlands apartments. In this position the counter did not count cars, using the lower parking lot, that were coming from or going to Stevens Avenue. See Figure 1. The traffic counter located at the top of Nardo Ave. was placed above the intersection with Solana Circle. This traffic counter did	-Traffic and Circulation -Utilities -Hydrology & Water Quality	Thomas Kaiser 619 Fresca Street

DATE DATED or RECEIVED	COMMENTS SUMMARY	CONSIDERED IN EIR	COMMENTOR
	not count cars coming up Nardo and turning onto Solana Circle and also would not have counted cars coming from Solana Circle and heading down Nardo. See Figure 2. Positioning of both traffic counters would have resulted in undercounting vehicle traffic at both locations. The position of the traffic counters can be seen clearly in both Figure 1 and 2. The erroneous traffic counter positions need to be corrected before the data can be included in the upcoming EIR study. 2) Public street parking congestion: Solana Highlands Apartments only provide their tenants one parking space per apartment. The tenants can rent additional parking spaces, but most choose not to. As a result, parked cars line both sides of Nardo Avenue and the South end of Fresca Street at all times of the day and on all days of the week. Concurrently, unused parking spaces can be seen at the underutilized Solana Highland Apartment complex parking lots since their tenants are unwilling to pay the additional rent for the parking spaces. Prior owners of the Solana Highlands Apartments allowed their tenants full use of the complex parking and, as a result, the street parking was never this bad. The public street parking situation needs to be addressed in the upcoming EIR study and the effect of the Fenton Company onsite parking policies needs to be included. The EIR also needs to address how the already bad parking situation will be exasperated by proposed additional 60 residential units. Examples of the Solana Highlands use of public street parking is shown in figures 3 and 4. 3) Runoff Water Pollution: As a result of the public street parking congestion, long sections of Nardo and Fresco Street are almost never cleaned by the cities monthly street sweeping service. During recent rains, the runoff water on those streets had large amounts of trash and debris, including dog feces and discarded diapers. The runoff water also has an oily sheen too as a result of all the leaky cars being parked on the street with virtually no street sweeping being accomplished in years. All these debris and automotive fluids end up being on our beaches. To make matters worse, many of the Solana Highland		

DATE DATED or RECEIVED	COMMENTS SUMMARY	CONSIDERED IN EIR	COMMENTOR
	tenants regularly work on their cars while parked on the public streets, further constraining road space and adding to the engine oil, brake fluid, and engine coolant being leaked onto the streets and into the street gutters. The runoff water quality, on these streets needs to be addressed in the EIR study. An example of vehicle repair being done on public streets is shown in figure 5. 4) Vehicle Traffic: Traffic conditions, on an already very busy Nardo Avenue, are made even more dangerous by having to drive through a tunnel of parked cars on both sides of the road. Visibility at the Nardo/Fresca intersections is poor as a result. Space at that intersection, for moving vehicles, ends up being very constrained. Accidents are a regular occurrence. Figure 6 is an example of one such accident at exactly that intersection. Summary: The current parking and traffic problems created by the Solana Highlands Apartments are unacceptable at their current density. Adding over 60 additional residences to those apartments will create one of the worst problem areas for the City of Solana Beach for many generations to come. Simply adding additional parking to the complex will not address the problem because the apartments underutilize their current parking capacity as is and the City will have no authority to force the Solana Highlands owners to change their policies. 60 additional residences would mean at least another 120 more cars which would be making multiple daily trips on Nardo Avenue, Lirio, South Grandos, and Solana Circle. These are all residential streets, with houses very close to the street edge. Many of these streets are unsafe and unpleasant at their current vehicle traffic volume. Vehicle traffic on all of the above streets needs to be included in the EIR study. Part of Fenton Companies proposal has addressed the addition of traffic calming features. Several of these types of traffic calming features have been installed on parts of Highland drive and, subsequently removed. The failure of those traffic calming attempts needs to be addressed as part of this EIR study. Traffic calming features have also been		

DATE DATED or RECEIVED	COMMENTS SUMMARY	CONSIDERED IN EIR	COMMENTOR
	added as part of the Highway 101 renovation and many of the neighbors near those features are upset about the noise created by them. Again, this example needs to be included in the upcoming EIR study. All of the above issues have been repeatedly brought to the attention of staff and documented via email. Staff has been unable to address these problems and we have no reason to expect otherwise after the redevelopment of the apartments, therefore these problems have to be addressed as part of the project and as part of the EIR study.		
January 7, 2015	Project Issues: Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Coastal Zone; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Growth Inducing; Land use; Cumulative Effects Reviewing Agencies: Resources Agency; California Coastal Commission; Department of Parks and Recreation; Department of Fish and Wildlife, Region 5; Department of Housing and Community Development; Office Emergency Services, California; Native American Heritage Commission; Public Utilities Commission; State Lands Commission; California Highway Patrol; Caltrans, District 11; Air Resources Board; State Water Resources Control Board, Division of Drinking Water; Department of Toxic Substances Control; Regional Water Quality Control Board, Region 9	-Aesthetic -Air Quality -Cultural -Biological Resources -Public Services -Utilities -Geology & Soils -Noise -Population & Housing -Recreation -Hazards & Hazardous Materials -Traffic & Circulation -Hydrology & Water Quality -Land Use & Planning -Cumulative Effects	Scott Morgan Director, State Clearinghouse State of California Governor's Office of Planning and Research State Clearinghouse and Planning Unit

APPENDIX B

Visual Simulations
Proposed Project KOP 1 through 10

Existing Street View

Proposed Street View

Key Map

SOURCE:

DUDEK

FIGURE 1.1

Key Observation Point 1

Solana Highlands Comparative Street Perspective

Existing Street View

Proposed Street View

Key Map

SOURCE:

DUDEK

FIGURE 1.2

Key Observation Point 2

Solana Highlands Comparative Street Perspective

Existing Street View

Proposed Street View

Key Map

SOURCE:

DUDEK

FIGURE 1.3

Key Observation Point 3

Solana Highlands Comparative Street Perspective

Existing Street View

Proposed Street View

Key Map

SOURCE:

DUDEK

FIGURE 1.4

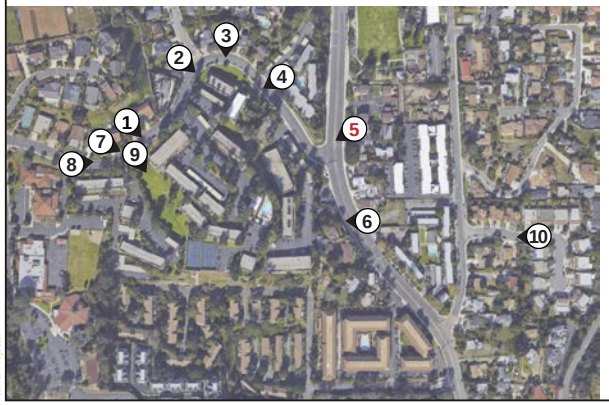
Key Observation Point 4

Solana Highlands Comparative Street Perspective

Existing Street View

Proposed Street View

Key Map



SOURCE:

DUDEK

FIGURE 1.5

Key Observation Point 5

Solana Highlands Comparative Street Perspective

Existing Street View

Proposed Street View

Key Map

SOURCE:

DUDEK

FIGURE 1.6

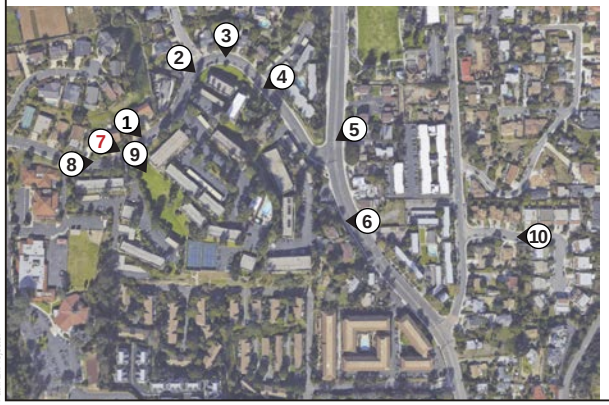
Key Observation Point 6

Solana Highlands Comparative Street Perspective

Existing Street View

Proposed Street View

Key Map



SOURCE:

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FIGURE 1.7

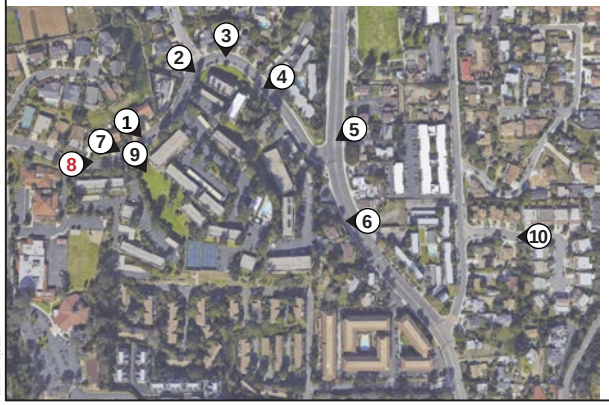
Key Observation Point 7

Solana Highlands Comparative Street Perspective

Existing Street View

Proposed Street View

Key Map



SOURCE:

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FIGURE 1.8

Key Observation Point 8

Solana Highlands Comparative Street Perspective

Existing Street View

Proposed Street View

Key Map

SOURCE:

DUDEK

FIGURE 1.9

Key Observation Point 9

Solana Highlands Comparative Street Perspective

Existing Street View

Proposed Street View

Key Map

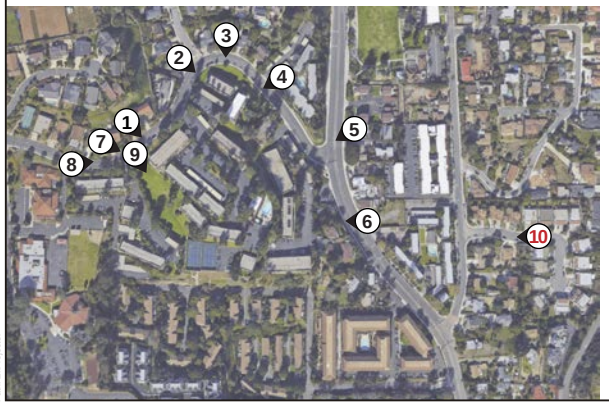

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FIGURE 1.10

Key Observation Point 10

Solana Highlands Comparative Street Perspective

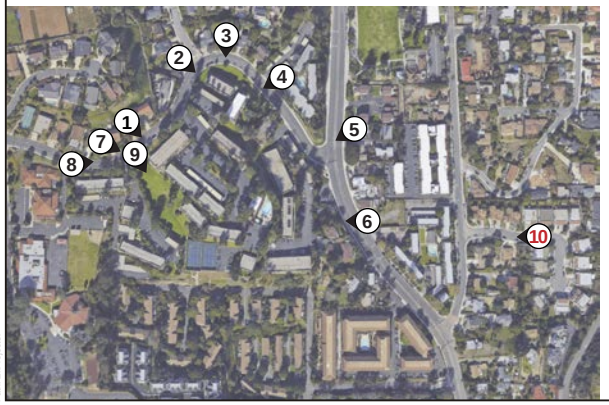
APPENDIX C

Visual Simulations
Alternative 6 KOP 1 through 10
and
Story Pole Process

Existing Street View

Proposed Street View

Key Map



SOURCE:

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FIGURE 1.10

Key Observation Point 10

Solana Highlands Comparative Street Perspective

Existing Street View

Proposed Street View

Key Map

SOURCE:

DUDEK

FIGURE 2.1

Alternative 6 – Key Observation Point 1

Solana Highlands Comparative Street Perspective

Existing Street View

Proposed Street View

Key Map

SOURCE:

DUDEK

FIGURE 2.2

Alternative 6 – Key Observation Point 2

Solana Highlands Comparative Street Perspective

Existing Street View

Proposed Street View

Key Map

SOURCE:

DUDEK

FIGURE 2.3

Alternative 6 – Key Observation Point 3

Solana Highlands Comparative Street Perspective

Existing Street View

Proposed Street View

Key Map

SOURCE:

DUDEK

FIGURE 2.4

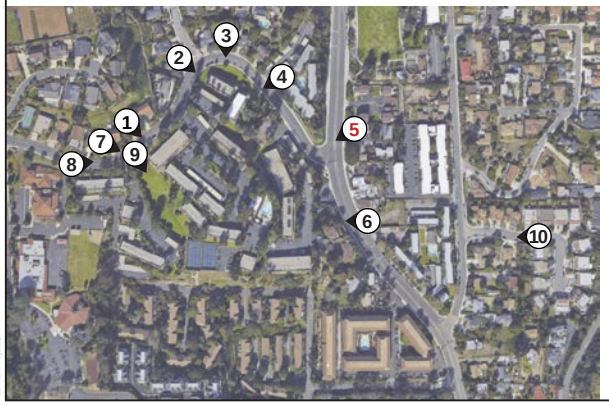
Alternative 6 – Key Observation Point 4

Solana Highlands Comparative Street Perspective

Existing Street View

Proposed Street View

Key Map



SOURCE:

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FIGURE 2.5

Alternative 6 – Key Observation Point 5

Solana Highlands Comparative Street Perspective

Existing Street View

Proposed Street View

Key Map

SOURCE:

DUDEK

FIGURE 2.6

Alternative 6 – Key Observation Point 6

Solana Highlands Comparative Street Perspective

Existing Street View

Proposed Street View

Key Map

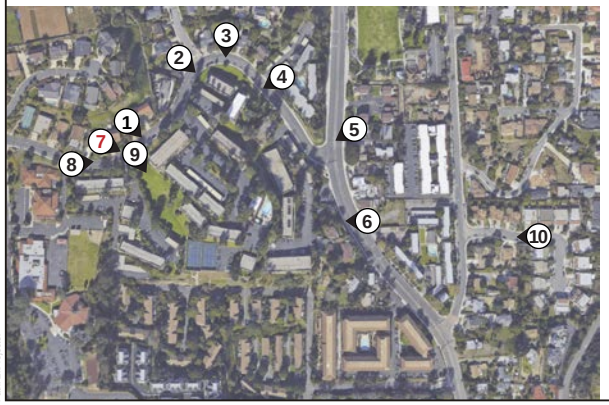

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FIGURE 2.7

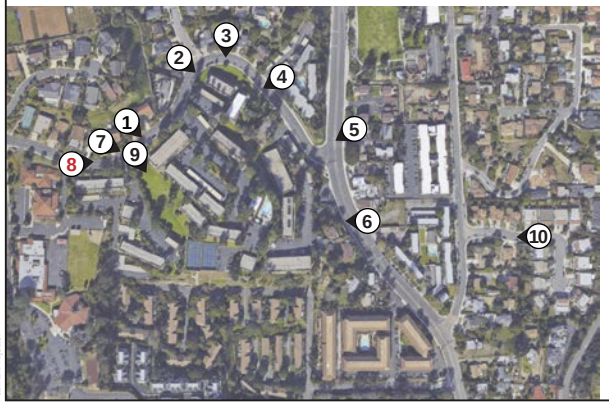
Alternative 6 – Key Observation Point 7

Solana Highlands Comparative Street Perspective

Existing Street View

Proposed Street View

Key Map



SOURCE:

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FIGURE 2.8

Alternative 6 – Key Observation Point 8

Solana Highlands Comparative Street Perspective

Existing Street View

Proposed Street View

Key Map

SOURCE:

DUDEK

FIGURE 2.9

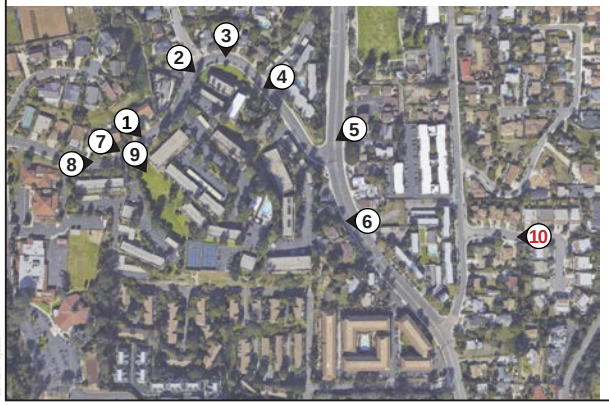
Alternative 6 – Key Observation Point 9

Solana Highlands Comparative Street Perspective

Existing Street View

Proposed Street View

Key Map



SOURCE:

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FIGURE 2.10

Alternative 6 – Key Observation Point 10

Solana Highlands Comparative Street Perspective

1 STORY POLE PLAN

1"=40'-0"

GENERAL NOTES

- REFER TO ROOF PLAN DRAWINGS FOR STORY POLE DIMENSIONS PER BUILDING TYPE.

0 20' 40' 80'

SCALE: 1" = 40'

N

STORY POLE NUMBER (BLDG# . BLDG TYPE .POLE#)		POLE I.D.	POLE ELEV (* = roof of ex bldg; AG = Assumed grade below roof (roof ht minus 18.4'))	EX GRADE	FIN GRADE (NP= No Pole; height is lower than ex. bldg. String will be affixed to side of building at marked point)	POLE LENGTH	HT FRM LOWEST (EX/FIN)
STORY POLE DATA- BLDGS 1-5							
BLDG 1	D1	1.D.1	160	154.22	126.00	128.00	28.22
		1.D.2	161	154.22	131.80	128.00	22.42
		1.D.3	162	154.22	135.00	128.00	19.22
		1.D.4	163	154.22	150.90 * / 132.50 AG	128.00	3.32
	t-pole	1.D.5	164	156.22	126.60	128.00	29.62
BLDG 2	D2	2.D.1	165	153.17	124.60	126.00	28.57
		2.D.2	166	153.17	125.40	126.00	27.77
		2.D.3	167	153.17	150.80 * / 132.40 AG	126.00	2.37
		2.D.4	168	153.17	150.90 * / 132.50 AG	126.00	2.27
BLDG 3	D3	3.D.1	169	150.82	116.10	122.90	34.72
		3.D.2	170	150.82	125.50	122.90	25.32
		3.D.3	171	150.82	132.70	122.90	18.12
		3.D.4	172	150.82	125.60	122.90	25.22
	t-pole	3.D.5	173	151.83	117.00	122.90	34.83
BLDG 4	D4	4.D.1	174	145.60	124.00	121.50	21.60
		4.D.2	175	145.60	117.00	121.50	28.60
		4.D.3	176	145.60	125.90	121.50	19.70
		4.D.4	177	145.60	143.40 * / 125.00 AG	121.50	2.20
BLDG 5	D1	5.D.1	178	131.22	115.50	105.00	15.72
		5.D.2	179	131.22	125.80	105.00	5.42
		5.D.3	180	131.22	143.60 *NP / 125.20 AG	105.00	-12.38
		5.D.4	181	131.22	118.50	105.00	12.72
	t-pole	5.D.5	182	134.11	121.20	105.00	12.91
STORY POLE DATA- BLDGS 6-10							
BLDG 6	D2	6.D.1	183	130.87	103.40	103.70	27.47
		6.D.2	184	130.87	114.50	103.70	16.37
		6.D.3	185	130.87	118.00	103.70	12.87
		6.D.4	186	130.87	107.90	103.70	22.97
BLDG 7	D4	7.D.1	187	121.04	118.70 * / 100.30 AG	99.40	2.34
		7.D.2	188	121.88	118.80 * / 100.40 AG	99.40	3.08
		7.D.3	189	121.20	107.20	99.40	14.00
		7.D.4	190	121.20	110.60	99.40	10.60
		7.D.5	191	121.88	118.90 * / 100.50 AG	99.40	2.98
		7.D.6	192	121.04	118.80 * / 100.40 AG	99.40	2.24
	t-pole	7.D.7	193	124.73	118.80 *	99.40	5.93
	t-pole	7.D.8	194	124.73	110.40	99.40	14.33
BLDG 8	D4	8.D.1	195	121.04	118.70 * / 100.30 AG	99.40	2.34
		8.D.2	196	121.88	118.60 * / 100.20 AG	99.40	3.28
		8.D.3	197	121.20	121.20 *NP / 102.80 AG	99.40	0.00
		8.D.4	198	121.20	81.10	99.40	40.10
		8.D.5	199	121.88	83.90	99.40	37.98
		8.D.6	200	121.04	83.60	99.40	37.44
	t-pole	8.D.7	201	124.73	84.40	99.40	40.33
	t-pole	8.D.8	202	124.73	81.70	99.40	43.03
BLDG 9	D3	9.D.1	203	130.92	104.60	103.00	26.32
		9.D.2	204	130.92	118.70 * / 100.30 AG	103.00	12.22
		9.D.3	205	130.92	90.90	103.00	40.02
		9.D.4	206	130.92	118.80 * / 100.40 AG	103.00	12.12
	t-pole	9.D.5	207	131.93	101.00	103.00	30.93
BLDG 10	D2	10.D.1	208	131.67	124.70	104.50	6.97
		10.D.2	209	131.67	116.40	104.50	15.27
		10.D.3	210	131.67	117.10	104.50	14.57
		10.D.4	211	131.67	123.60	104.50	8.07
STORY POLE DATA- BLDGS 11-15							
BLDG 11		11.DS.1	212	146.13	115.30	120.30	30.83
		11.DS.2	213	146.13	124.70	120.30	21.43
		11.DS.3	214	138.80	141.00 *NP / 122.60 AG	110.30	-2.20
		11.DS.4	215	138.80	111.10	110.30	27.70
		11.DS.5	216	143.80	112.70	120.30	31.10
		11.DS.6	217	143.80	123.40	120.30	20.40
BLDG 12		12.DS.1	218	147.13	123.90	121.30	23.23
		12.DS.2	219	147.13	114.30	121.30	32.83
		12.DS.3	220	139.80	109.40	111.30	30.40
		12.DS.4	221	139.80	117.10	111.30	22.70
		12.DS.5	222	144.80	121.10	121.30	23.70
		12.DS.6	223	144.80	111.10	121.30	33.70
BLDG 13		13.F1.1	154	139.06	105.90	103.20	33.16
		13.F1.2	155	139.04	108.00	103.20	31.04
		13.F1.3	156	148.47 / 140.60	112.30 (to pole F1.2)	113.20	36.17
		13.F1.4	157	147.93	119.40	113.20	28.53
		13.F1.5	158	149.28	100.60	113.20	48.68
		13.F1.6	159	149.28 / 140.60	98.10 (to pole F1.1)	113.20	51.18
BLDG 14		14.A.1	142	129.67	105.80	103.50	23.87
		14.A.3	143	129.67	105.40	103.50	24.27
		14.A.4	144	129.67	107.90	103.50	21.77
		14.A.6	145	129.67	109.70	103.50	19.97
	t-pole	14.A.7	146	132.58	108.20	103.50	24.38
	t-pole	14.A.8	147	132.58	105.60	103.50	26.98
BLDG 15		15.F2.1	148	139.26	101.10	103.40	38.16
		15.F2.2	149	139.26	105.70	103.40	33.56
		15.F2.3	150	139.26 / 130.80	105.10 (tc pole F2.4)	103.40	34.16
		15.F2.4	151	129.26	104.00	93.40	25.26
		15.F2.5	152	130.33	96.70	93.40	33.63
		15.F2.6	153	139.26 / 130.80	98.90 (tc pole F2.5)	103.40	40.36
STORY POLE DATA- BLDGS 16-20							
BLDG 16		16.E.1	129	117.83	96.80	100.00	21.03
		16.E.2	130	132.42	99.30	100.00	33.12
		16.E.3	131	120.58	104.10	90.00	16.48
		16.E.4	132	124.58	92.60	90.00	31.98
		16.E.5	133	124.58	87.90	90.00	36.68
		16.E.6	134	127.80	87.40	90.00	40.40
		16.E.7	135	115.88	90.80	90.00	25.08
		16.E.8	136	124.28	91.20	100.00	33.08
		16.E.9	137	119.58	91.30	100.00	28.28
		16.E.10	138	127.71	93.40	100.00	34.31
		16.E.11	139	126.00	93.30	100.00	32.70
		16.E.12	140	125.77	93.60	90.00	32.17
		16.E.13	141	128.75	92.90	90.00	35.85
BLDG 17		17.C.1	119	134.43	101.90	102.20	32.53
		17.C.2	120	136.53	131.40 * / 113.00 AG	102.20	5.13
		17.C.3	121	134.74	131.40 * / 113.00 AG	102.20	3.34
		17.C.4	122	135.16	137.80 * / 119.40 AG	102.20	-2.64
		17.C.5	123	137.62	137.90 * / 119.50 AG	102.20	-0.28
		17.C.6	124	137.20	125.80 * / 107.40 AG	102.20	11.40
		17.C.7	125	137.83	125.70 * / 107.30 AG	102.20	12.13
		17.C.8	126	137.83	115.20	102.20	22.63
	t-pole	17.C.9	127	140.37	131.40 *	102.20	8.97
	t-pole	17.C.10	128	140.37	137.80 *	102.20	2.57
BLDG 18		18.C.1	109	127.63	83.20	95.40	44.43
		18.C.2	110	129.73	110.30	95.40	19.43
		18.C.3	111	127.94	111.40	95.40	16.54
		18.C.4	112	128.36	120.40	95.40	7.96
		18.C.5	113	130.82	120.40	95.40	10.42
		18.C.6	114	130.40	103.20	95.40	27.20
		18.C.7	115	131.00	92.20	95.40	38.80
		18.C.8	116	131.00	111.50	95.40	19.50
	t-pole	18.C.9	117	133.57	111.50	95.40	22.07
	t-pole	18.C.10	118	133.57	120.40	95.40	13.17
BLDG 19		19.R.1	93	96.43	64.10	84.50	32.33
		19.R.2	94	102.00	87.30 * / 68.90 AG	84.50	14.70
		19.R.3	95	102.00	74.90	84.50	27.10
		19.R.4	96	108.25	80.50	84.50	27.75
		19.R.5	97	111.28	89.20	84.50	22.08
		19.R.6	98	117.53	74.30	84.50	43.23
		19.R.7	99	96.17	93.20 * / 74.80 AG	84.50	2.97
		19.R.8	100	96.17	75.00	84.50	21.17
		19.R.9	101	108.25	67.10	84.50	41.15
		19.R.10	102	112.03	66.50	84.50	45.53
		19.R.11	103	102.43	64.70	84.50	37.73
		19.R.12	104	117.53	87.40 * / 69.00 AG	84.50	30.13
		19.R.13	105	112.03	69.10	84.50	42.93
	t-pole	19.R.14	106	124.70	87.20 *	84.50	37.50
	t-pole	19.R.15	107	124.70	87.40 *	84.50	37.30
	t-pole	19.R.16	108	116.56	87.40 *	84.50	29.16
BLDG 20		20.C.1	83	124.33	104.40	92.10	19.93
		20.C.2	84	126.43	96.50	92.10	29.93
		20.C.3	85	124.64	89.60	92.10	35.04
		20.C.4	92	125.06	94.50	92.10	30.56
		20.C.5	88	127.52	96.70	92.10	30.82
		20.C.6	90	127.10	107.60	92.10	19.50
		20.C.7	91	127.70	110.30	92.10	17.40
		20.C.8	89	127.70	97.80	92.10	29.90
	t-pole	20.C.9	86	130.27	91.50	92.10	38.77
	t-pole	20.C.10	87	130.27	94.50	92.10	35.77
STORY POLE DATA- BLDGS 21-25							
BLDG 21		21.A.1	77	118.17	101.50	92.00	16.67
		21.A.3	78	118.17	98.00	92.00	20.17
		21.A.4	79	118.17	97.80	92.00	20.37
		21.A.6	80	118.17	97.60	92.00	20.57
	t-pole	21.A.7	81	121.08	101.50	92.00	19.58
	t-pole	21.A.8	82	121.08	97.90	92.00	23.18
BLDG 22		22.C.1	67	123.43	77.30	91.20	46.13
		22.C.2	72	125.53	98.00	91.20	27.53
		22.C.3	76	123.74	102.70	91.20	21.04
		22.C.4	73	124.16	69.90	91.20	54.26
		22.C.5	70	126.62	87.40 * / 69.00 AG	91.20	39.22
		22.C.6	69	126.20	77.00	91.20	49.20
		22.C.7	68	126.80	95.30 * / 76.90 AG	91.20	31.50
		22.C.8	71	126.80	84.10	91.20	42.70
	t-pole	22.C.9	75	129.37	100.40	91.20	28.97
	t-pole	22.C.10	74	129.37	69.10	91.20	60.27
BLDG 23		23.B.1	57	120.36	79.90	86.50	40.46
		23.B.2	58	120.83	76.70	86.50	44.13
		23.B.3	59	124.67	79.80	86.50	44.87
		23.B.4	60	122.75	83.80	86.50	38.95
		23.B.5	61	119.71	93.20	86.50	26.51
		23.B.6	62	124.67	90.40	86.50	34.27
	t-pole	23.B.7	63	124.67	77.00	86.50	47.67
	t-pole	23.B.8	64	124.67	76.80	86.50	47.87
	t-pole	23.B.9	65	124.67	102.80 *	86.50	21.87
	t-pole	23.B.10	66	124.67	84.20	86.50	40.47
BLDG 24		24.A.1	41	112.67	94.80 * / 76.40 AG	86.50	17.87
		24.A.3	42	112.67	94.80 * / 76.40 AG	86.50	17.87
		24.A.4	43	112.67	80.30	86.50	32.37
		24.A.6	44	112.67	77.40	86.50	35.27
	t-pole	24.A.7	45	115.58	74.40	86.50	41.18
	t-pole	24.A.8	46	115.58	76.60	86.50	38.98
BLDG 25		25.C.1	47	118.73	94.80 * / 76.40 AG	86.50	23.93
		25.C.2	48	120.83	76.20	86.50	44.63
		25.C.3	49	119.04	77.10	86.50	41.94
		25.C.4	50	119.46	68.60	86.50	50.86
		25.C.5	51	121.92	71.40	86.50	50.52
		25.C.6	52	121.50	94.80 * / 76.40 AG	86.50	26.70
		25.C.7	53	122.10	94.80 * / 76.40 AG	86.50	27.30
		25.C.8	54	122.10	73.90	86.50	48.20
	t-pole	25.C.9	55	124.67	77.00	86.50	47.67
	t-pole	25.C.10	56	124.67	68.70	86.50	55.97

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REVITALIZING SOLANA HIGHLANDS

STORY POLE PLOT PLAN

STORY POLE UPDATE
4/17/15

0-3.1

STORY POLE NUMBER		POLE ELEV	EX GRADE		FIN GRADE	POLE LENGTH	HT FRM LOWEST (EX/FIN)
(BLDG# . BLDG TYPE .POLE#)		(*roof of ex bldg)(**assumed roof elevation based on existing ground surface - top of roof estimated at 18.4') (***assumed elevation for the carport)					
STORY POLE DATA- BLDGS 1-5							
BLDG 1							
D1	1.D.1	154.22	126.70		128.00	27.52	27.52
	1.D.2	154.22	133.70		128.00	20.52	26.22
	1.D.3	154.22	151.00	*	128.00	3.22	26.22
	1.D.4	154.22	151.00	*	128.00	3.22	26.22
t-pole	1.D.5	156.22	127.10		128.00	29.12	29.12
BLDG 2							
D2	2.D.1	153.17	125.90		126.60	27.27	27.27
	2.D.2	153.17	126.20		126.60	26.97	26.97
	2.D.3	153.17	151.00	*	126.60	2.17	26.57
	2.D.4	153.17	151.00	*	126.60	2.17	26.57
BLDG 3							
D3	3.D.1	150.82	117.20		122.90	33.62	33.62
	3.D.2	150.82	125.80		122.90	25.02	27.92
	3.D.3	150.82	133.60		122.90	17.22	27.92
	3.D.4	150.82	126.20		122.90	24.62	27.92
t-pole	3.D.5	151.83	126.00		122.90	25.83	28.93
BLDG 4							
D4	4.D.1	145.60	125.00		121.50	20.60	24.10
	4.D.2	145.60	117.80		121.50	27.80	27.80
	4.D.3	145.60	126.10		121.50	19.50	24.10
	4.D.4	145.60	143.60	*	121.50	2.00	24.10
BLDG 5							
D1	5.D.1	131.22	116.20		105.00	15.02	26.22
	5.D.2	131.22	126.70		105.00	4.52	26.22
	5.D.3	131.22	143.60	*	105.00	-12.38	26.22
	5.D.4	131.22	118.90		105.00	12.32	26.22
t-pole	5.D.5	134.11	121.00		105.00	13.11	29.11
STORY POLE DATA- BLDGS 6-10							
BLDG 6							
D2	6.D.1	130.87	104.30		103.70	26.57	27.17
	6.D.2	130.87	115.00		103.70	15.87	27.17
	6.D.3	130.87	117.80		103.70	13.07	27.17
	6.D.4	130.87	108.70		103.70	22.17	27.17

BLDG 7						
D4	7.D.1	121.04	119.20 *	99.40	1.84	21.64
	7.D.2	121.88	119.20 *	99.40	2.68	22.48
	7.D.3	121.20	107.00	99.40	14.20	21.80
	7.D.4	121.20	111.30	99.40	9.90	21.80
	7.D.5	121.88	119.20 *	99.40	2.68	22.48
	7.D.6	121.04	119.20 *	99.40	1.84	21.64
t-pole	7.D.7	124.73	119.20 *	99.40	5.53	25.33
t-pole	7.D.8	124.73	120.00 ***	99.40	4.73	25.33
BLDG 8						
D4	8.D.1	121.04	119.10 *	99.40	1.94	21.64
	8.D.2	121.88	119.10 *	99.40	2.78	22.48
	8.D.3	121.20	119.10 *	99.40	2.10	21.80
	8.D.4	121.20	81.00	99.40	40.20	40.20
	8.D.5	121.88	84.50	99.40	37.38	37.38
	8.D.6	121.04	84.00	99.40	37.04	37.04
t-pole	8.D.7	124.73	84.60	99.40	40.13	40.13
t-pole	8.D.8	124.73	84.20	99.40	40.53	40.53
BLDG 9						
D3	9.D.1	130.92	105.80	103.00	25.12	27.92
	9.D.2	130.92	119.10 *	103.00	11.82	30.22
	9.D.3	130.92	89.80	103.00	41.12	41.12
	9.D.4	130.92	119.00 *	103.00	11.92	46.32
t-pole	9.D.5	131.93	119.00 *	103.00	12.93	47.33
BLDG 10						
D2	10.D.1	131.67	125.40	104.50	6.27	27.17
	10.D.2	131.67	117.50	104.50	14.17	27.17
	10.D.3	131.67	117.80	104.50	13.87	27.17
	10.D.4	131.67	123.60	104.50	8.07	27.17
STORY POLE DATA- BLDGS 11-15						
BLDG 11						
	11.DS.1	146.13	116.10	120.30	30.03	30.03
	11.DS.2	146.13	124.40	120.30	25.83	25.83
	11.DS.3	138.80	142.00 **	110.30	28.50	28.50
	11.DS.4	138.80	112.00	110.30	28.50	28.50
	11.DS.5	143.80	113.70	120.30	30.10	23.50
	11.DS.6	143.80	142.00 **	120.30	23.50	23.50

BLDG 12						
	12.DS.1	147.13	124.70	121.30	25.83	25.83
	12.DS.2	147.13	115.10	121.30	32.03	32.03
	12.DS.3	139.80	108.80	111.30	31.00	31.00
	12.DS.4	139.80	116.20	111.30	28.50	28.50
	12.DS.5	144.80	122.20	121.30	23.50	23.50
	12.DS.6	144.80	112.30	121.30	32.50	23.50
BLDG 13						
	13.F1.1	139.06	103.60	103.20	35.46	35.86
	13.F1.2	139.04	108.40	103.20	30.64	35.84
	13.F1.3	148.47	112.80	113.20	35.67	35.67
		140.60	(to pole F1.2)			
	13.F1.4	147.93	119.80	113.20	28.13	34.73
	13.F1.5	149.28	101.20	113.20	48.08	48.08
	13.F1.6	149.28	98.40	113.20	50.88	50.88
		140.60	(to pole F1.1)			
BLDG 14						
	14.A.1	129.67	106.00	103.50	26.17	42.07
	14.A.3	129.67	106.10	103.50	26.17	26.17
	14.A.4	129.67	108.20	103.50	26.17	26.17
	14.A.6	129.67	110.20	103.50	26.17	26.17
t-pole	14.A.7	132.58	107.90	103.50	29.08	29.08
t-pole	14.A.8	132.58	106.20	103.50	29.08	29.08
BLDG 15						
	15.F2.1	139.26	101.20	103.40	38.06	38.06
	15.F2.2	139.26	105.90	103.40	35.86	35.86
	15.F2.3	139.26	105.50	103.40	35.86	35.86
		130.80	(to pole F2.4)			
	15.F2.4	129.26	103.90	93.40	35.86	35.86
	15.F2.5	130.33	96.50	93.40	36.93	36.93
	15.F2.6	139.26	97.30	103.40	41.96	41.96
		130.80	(to pole F2.5)			

STORY POLE DATA- BLDGS 16-20

BLDG 16						
	16.E.1	117.83	95.00	100.00	22.83	22.83
	16.E.2	132.42	99.50	100.00	32.92	32.92
	16.E.3	120.58	105.00	90.00	30.58	30.58
	16.E.4	124.58	93.90	90.00	34.58	34.58
	16.E.5	124.58	90.80	90.00	33.78	34.58
	16.E.6	127.80	88.50	90.00	39.30	39.30
	16.E.7	115.88	91.00	90.00	24.88	25.88

	16.E.8	124.28	91.70		100.00	32.58	32.58
	16.E.9	119.58	91.70		100.00	27.88	27.88
	16.E.10	127.71	93.90		100.00	33.81	33.81
	16.E.11	126.00	93.90		100.00	32.10	32.10
	16.E.12	125.77	94.50		90.00	31.27	35.77
	16.E.13	128.75	93.90		90.00	34.85	38.75
BLDG 17							
	17.C.1	139.51	102.10		102.20	37.41	37.41
	17.C.2	143.72	132.00	*	102.20	11.72	41.52
	17.C.3	134.74	132.00	*	102.20	2.74	32.54
	17.C.4	135.36	138.20	*	102.20	-2.84	33.16
	17.C.5	143.72	138.20	*	102.20	5.52	41.52
	17.C.6	134.94	126.20	*	102.20	8.74	32.74
	17.C.7	140.35	126.2	*	102.20	14.15	38.15
	17.C.8	140.35	110.20		102.20	30.15	38.15
t-pole	17.C.9	140.37	132.00	*	102.20	8.37	38.17
t-pole	17.C.10	140.37	132.00	*	102.20	8.37	38.17
BLDG 18							
	18.C.1	132.71	83.80		95.40	48.91	48.91
	18.C.2	136.92	110.40		95.40	26.52	41.52
	18.C.3	127.94	111.80		95.40	16.14	32.54
	18.C.4	128.56	120.80		95.40	7.76	33.16
	18.C.5	136.92	121.00		95.40	15.92	41.52
	18.C.6	128.14	97.10		95.40	31.04	32.74
	18.C.7	133.55	89.00		95.40	44.55	44.55
	18.C.8	133.55	111.90		95.40	21.65	38.15
t-pole	18.C.9	133.57	111.90		95.40	21.67	38.17
t-pole	18.C.10	133.57	120.70		95.40	12.87	38.17
BLDG 19							
	19.R.1	96.43	64.30		84.50	32.13	32.13
	19.R.2	102.00	87.80	*	84.50	14.20	32.60
	19.R.3	102.00	75.00		84.50	27.00	27.00
	19.R.4	108.25	80.80		84.50	27.45	27.45
	19.R.5	111.28	89.00		84.50	22.28	26.78
	19.R.6	117.53	72.80		84.50	44.73	44.73
	19.R.7	96.17	92.80	*	84.50	3.37	21.77
	19.R.8	96.17	92.80	*	84.50	3.37	21.77
	19.R.9	108.25	67.70		84.50	40.55	40.55
	19.R.10	112.03	67.60		84.50	44.43	44.43
	19.R.11	102.43	64.30		84.50	38.13	38.13
	19.R.12	117.53	87.80	*	84.50	29.73	48.13
	19.R.13	112.03	67.40		84.50	44.63	44.63
t-pole	19.R.14	124.70	87.80	*	84.50	36.90	58.60

t-pole	19.R.15	124.70	87.80 *	84.50	36.90	58.60
t-pole	19.R.16	116.56	67.80	84.50	48.76	48.76
BLDG 20						
	20.C.1	129.41	108.40	92.10	21.01	37.31
	20.C.2	133.62	97.00	92.10	36.62	41.52
	20.C.3	124.64	83.80	92.10	40.84	40.84
	20.C.4	125.26	94.90	92.10	30.36	33.16
	20.C.5	133.62	97.00	92.10	36.62	41.52
	20.C.6	124.84	106.50	92.10	18.34	32.74
	20.C.7	130.25	106.60	92.10	23.65	38.15
	20.C.8	130.25	98.30	92.10	31.95	38.15
t-pole	20.C.9	130.27	84.10	92.10	46.17	46.17
t-pole	20.C.10	130.27	94.90	92.10	35.37	38.17

STORY POLE DATA- BLDGS 21-25

BLDG 21						
	21.A.1	118.17	104.00	92.00	14.17	26.17
	21.A.3	118.17	100.00	92.00	18.17	26.17
	21.A.4	118.17	98.10	92.00	20.07	26.17
	21.A.6	118.17	98.00	92.00	20.17	26.17
t-pole	21.A.7	121.08	99.80	92.00	21.28	29.08
t-pole	21.A.8	121.08	99.50	92.00	21.58	29.08
BLDG 22						
	22.C.1	128.51	77.90	91.20	50.61	50.61
	22.C.2	132.72	98.80	91.20	33.92	41.52
	22.C.3	123.74	98.30	91.20	25.44	32.54
	22.C.4	124.36	69.90	91.20	54.46	54.46
	22.C.5	132.72	87.80 *	91.20	44.92	63.32
	22.C.6	123.94	77.40	91.20	46.54	46.54
	22.C.7	129.35	95.80 *	91.20	33.55	51.95
	22.C.8	129.35	83.60	91.20	45.75	45.75
t-pole	22.C.9	129.37	98.00	91.20	31.37	38.17
t-pole	22.C.10	129.37	70.00	91.20	59.37	59.37
BLDG 23						
	23.B.1	120.36	75.00	86.50	45.36	45.36
	23.B.2	120.83	77.00	86.50	43.83	43.83
	23.B.3	124.67	77.90	86.50	46.77	46.77
	23.B.4	122.75	83.60	86.50	39.15	39.15
	23.B.5	119.71	93.00	86.50	26.71	33.21
	23.B.6	124.67	85.80	86.50	38.87	38.87
t-pole	23.B.7	124.67	78.20	86.50	46.47	46.47
t-pole	23.B.8	124.67	77.10	86.50	47.57	47.57

t-pole	23.B.9	124.67	103.10 *	86.50	21.57	38.17
t-pole	23.B.10	124.67	83.80	86.50	40.87	40.87
BLDG 24						
	24.A.1	112.67	95.10 *	86.50	17.57	35.97
	24.A.3	112.67	95.10 *	86.50	17.57	35.97
	24.A.4	112.67	81.10	86.50	31.57	31.57
	24.A.5	112.67	81.00	86.50	31.67	31.67
t-pole	24.A.7	115.58	77.80	86.50	37.78	37.78
t-pole	24.A.8	115.58	79.00	86.50	36.58	36.58
BLDG 25						
	25.C.1	123.81	95.10 *	86.50	28.71	47.11
	25.C.2	128.02	76.30	86.50	51.72	51.72
	25.C.3	119.04	77.70	86.50	41.34	41.34
	25.C.4	119.66	69.40	86.50	50.26	50.26
	25.C.5	128.02	71.40	86.50	56.62	56.62
	25.C.6	119.24	95.10 *	86.50	24.14	42.54
	25.C.7	124.65	95.10 *	86.50	29.55	47.95
	25.C.8	124.65	74.00	86.50	50.65	50.65
t-pole	25.C.9	124.67	77.90	86.50	46.77	46.77
t-pole	25.C.10	124.67	69.50	86.50	55.17	55.17

PASCO LARET SUITER
& ASSOCIATES
CIVIL ENGINEERING + LAND PLANNING + LAND SURVEYING

June 15, 2015

PLSA 1782

City of Solana Beach
635 S. Hwy 101
Solana Beach, CA 92075

RE: STORY POLE CERTIFICATION, SOLANA HIGHLANDS 661 S. NARDO (APN 298-260-33)

To Whom It May Concern,

Please be advised that between June 1st and June 13th, 2015 this office field reviewed the Story Poles on the above referenced site. Based on the information gathered from the survey, I hereby state that the horizontal and vertical positions of said Story Poles are in substantial conformance with the Story Pole Plan and attached Cut Sheets.

If you have any questions regarding the above please feel free to contact this office.

Sincerely,

Joseph C. Yuhas PLS5211
Principal Land Surveyor
Pasco Laret Suiter & Associates, Inc.

LICENSED LAND SURVEYOR
JOSEPH C. YUHAS
LS 5211
STATE OF CALIFORNIA

CITY OF SOLANA BEACH
635 SOUTH HIGHWAY 101 • SOLANA BEACH, CALIFORNIA 92075-2215 • (858) 720-2400
www.ci.solana-beach.ca.us FAX (858) 792-6513 / (858) 755-1782

STORY POLE HEIGHT CERTIFICATION

Date: 6-15-15

Assessor's Parcel No.: 298-260-33

Site Address: 701 S. NARDO

Owner's Name: FENTON SOLANA HIGHLANDS

This is to certify that on 6-13-15 the story poles located on the above referenced site were surveyed by the undersigned, and found to be in conformance with the attached story pole plot plan. In addition, the following measurements were found: BLDG 1 POLE D1

Highest point of the story poles:	154.2	(M.S.L.)*
Natural grade elevation:	126.0	(M.S.L.)*
Finished grade elevation:	128.0	(M.S.L.)*
Finished floor elevation:	128.6	(M.S.L.)*
TOTAL MAXIMUM HEIGHT:	28.2	

➔ **PLEASE NOTE:** **The story poles must show and the total height must include roofing materials.** At framing inspection, a **Height Certification** will be required which must be in exact conformance with the maximum height shown on this Story Pole Height Certification.

For additional information, please contact me at: 858-259-8212 (ph. number)

Licensed Land Surveyor

Seal of Registration:

LICENSED LAND SURVEYOR
JOSEPH C. YUHAS
LS 5211
STATE OF CALIFORNIA

* Mean Sea Level – all measurements must utilize a benchmark established off-site that will not change over the course of the project

2-09-05

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STORY POLE HEIGHT CERTIFICATION

Date: 6-15-15

Assessor's Parcel No.: 298-260-33

Site Address: 701 S. NARDO

Owner's Name: FENTON SOLANA HIGHLANDS

This is to certify that on 6-13-15 the story poles located on the above referenced site were surveyed by the undersigned, and found to be in conformance with the attached story pole plot plan. In addition, the following measurements were found: BLDG 22, POLE C-8 HIGHEST ELEVATION

Highest point of the story poles:	126.8	(M.S.L.)*
Natural grade elevation:	84.1	(M.S.L.)*
Finished grade elevation:	91.2	(M.S.L.)*
Finished floor elevation:	91.8	(M.S.L.)*
TOTAL MAXIMUM HEIGHT:	42.7	

➔ **PLEASE NOTE:** **The story poles must show and the total height must include roofing materials.** At framing inspection, a **Height Certification** will be required which must be in exact conformance with the maximum height shown on this Story Pole Height Certification.

For additional information, please contact me at: 858-259-8212 (ph. number)

Joseph Yuhas
Licensed Land Surveyor

Seal of Registration:

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STORY POLE HEIGHT CERTIFICATION

Date: 6-15-15

Assessor's Parcel No.: 298-260-33

Site Address: 701 S. NARDO

Owner's Name: FENTON SOLANA HIGHLANDS

This is to certify that on 6-13-15 the story poles located on the above referenced site were surveyed by the undersigned, and found to be in conformance with the attached story pole plot plan. In addition, the following measurements were found: BLDG 22, POLE C-4 TALLEST POLE

Highest point of the story poles:	124.2	(M.S.L.)*
Natural grade elevation:	69.9	(M.S.L.)*
Finished grade elevation:	91.2	(M.S.L.)*
Finished floor elevation:	91.8	(M.S.L.)*
TOTAL MAXIMUM HEIGHT:	54.3	

➔ **PLEASE NOTE:** **The story poles must show and the total height must include roofing materials.** At framing inspection, a **Height Certification** will be required which must be in exact conformance with the maximum height shown on this Story Pole Height Certification.

For additional information, please contact me at: 858-259-8212 (ph. number)

Licensed Land Surveyor

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STORY POLE HEIGHT CERTIFICATION

Date: 6-15-15

Assessor's Parcel No.: 298-260-33

Site Address: 701 S. NARDO

Owner's Name: FENTON SOLANA HIGHLANDS

This is to certify that on 6-13-15 the story poles located on the above referenced site were surveyed by the undersigned, and found to be in conformance with the attached story pole plot plan. In addition, the following measurements were found: BLDG 22, POLE C-5, TALLEST POINT FROM NAT GRADE

Highest point of the story poles:	126.6	(M.S.L.)*
Natural grade elevation:	69.1 ADJ TO BLDG	(M.S.L.)*
Finished grade elevation:	91.2	(M.S.L.)*
Finished floor elevation:	91.8	(M.S.L.)*
TOTAL MAXIMUM HEIGHT:	57.5	

➔ **PLEASE NOTE: The story poles must show and the total height must include roofing materials.** At framing inspection, a **Height Certification** will be required which must be in exact conformance with the maximum height shown on this Story Pole Height Certification.

For additional information, please contact me at: 858-259-8212 (ph. number)

Licensed Land Surveyor

Seal of Registration:

LICENSED LAND SURVEYOR
JOSEPH C. YUHAS
LS 5211
STATE OF CALIFORNIA

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2-09-05

SOLANA HIGHLANDS STORY POLES

STORY POLE NUMBER			POLE I.D.	POLE ELEV	EX GRADE	FIN GRADE	POLE LENGTH	HT FRM LOWEST (EX/FIN)	NOTES
BLDG# . BLDG TYPE .POLE#				* = roof of ex bldg **NP**= No Pole; height is lower than ex. bldg. String will be affixed to side of building at marked point **AG** = Assumed grade below roof (roof ht minus 18.4') **O**= Offset Pole; See story pole plan for distance offset from intended point **Δ**= Triangulated point, no pole **B**= To be depicted by boom lift					
STORY POLE DATA- BLDGS 1-5									
BLDG 1	D1	1.D.1	139	154.22	126.00	128.00	28.22	28.22	O
		1.D.2	140	154.22	131.80	128.00	22.42	26.22	
		1.D.3	141	154.22	135.00	128.00	19.22	26.22	
		1.D.4	138	154.22	150.90 *	128.00	3.32	26.22	
					132.50 AG				
		1.D.5	142	156.22	126.60	128.00	29.62	29.62	t-pole
BLDG 2	D2	2.D.1	136	153.17	128.00	126.00	25.17	27.17	O
		2.D.2	275	153.17	125.40	126.00	27.77	27.77	Δ
		2.D.3	137	153.17	150.80 *	126.00	2.37	27.17	
					132.40 AG				
		2.D.4	135	153.17	150.90 *	126.00	2.27	27.17	
					132.50 AG				
BLDG 3	D3	3.D.1	131	150.82	116.10	122.90	34.72	34.72	
		3.D.2	133	150.82	128.10	122.90	22.72	27.92	O
		3.D.3	134	150.82	132.70	122.90	18.12	27.92	
		3.D.4	130	150.82	125.60	122.90	25.22	27.92	
		3.D.5	132	151.83	117.00	122.90	34.83	34.83	t-pole
BLDG 4	D4	4.D.1	121	145.60	124.00	121.50	21.60	24.10	
		4.D.2	124	145.60	116.80	121.50	28.80	28.80	
		4.D.3	123	145.60	126.00	121.50	19.60	24.10	
		4.D.4	122	145.60	143.40 *	121.50	2.20	24.10	
					125.00 AG				
BLDG 5	D1	5.D.1	278	131.22	115.50	105.00	15.72	26.22	Δ
		5.D.2	107	131.22	126.20	105.00	5.02	26.22	
		5.D.3	108	131.22	143.60 *NP	105.00	-12.38	26.22	
					125.20 AG				
		5.D.4	276	131.22	118.50	105.00	12.72	26.22	Δ
		5.D.5	109	134.11	121.20	105.00	12.91	29.11	t-pole
STORY POLE DATA- BLDGS 6-10									
BLDG 6	D2	6.D.1	101	130.87	103.40	103.70	27.47	27.47	

STORY POLE NUMBER		POLE I.D.	POLE ELEV	EX GRADE	FIN GRADE	POLE LENGTH	HT FRM LOWEST (EX/FIN)	NOTES
BLDG# . BLDG TYPE .POLE#			* = roof of ex bldg NP= No Pole; height is lower than ex. bldg. String will be affixed to side of building at marked point AG = Assumed grade below roof (roof ht minus 18.4') O= Offset Pole; See story pole plan for distance offset from intended point Δ= Triangulated point, no pole B= To be depicted by boom lift					
	6.D.2	102	130.87	114.50	103.70	16.37	27.17	
	6.D.3	277	130.87	118.00	103.70	12.87	27.17	Δ
	6.D.4	279	130.87	107.90	103.70	22.97	27.17	Δ
BLDG 7 D4	7.D.1	95	121.04	118.70 *	99.40	2.34	21.64	
				100.30 AG				
	7.D.2	94	121.88	118.80 *	99.40	3.08	22.48	
				100.40 AG				
	7.D.3	281	121.20	107.20	99.40	14.00	21.80	Δ
	7.D.4	280	121.20	110.60	99.40	10.60	21.80	Δ
	7.D.5	98	121.88	118.90 *	99.40	2.98	22.48	
				100.50 AG				
	7.D.6	96	121.04	118.80 *	99.40	2.24	21.64	
				100.40 AG				
	7.D.7	97	124.73	118.70 *	99.40	6.03	25.33	t-pole
	7.D.8	99	124.73	110.40	99.40	14.33	25.33	t-pole
BLDG 8 D4	8.D.1	87	121.04	118.70 *	99.40	2.34	21.64	
				100.30 AG				
	8.D.2	86	121.88	118.60 *	99.40	3.28	22.48	
				100.20 AG				
	8.D.3	85	121.20	121.20 *NP	99.40	0.00	21.80	
				102.80 AG				
	8.D.4	84	121.20	81.10	99.40	40.10	40.10	
	8.D.5	82	121.88	83.90	99.40	37.98	37.98	
	8.D.6	80	121.04	83.60	99.40	37.44	37.44	
	8.D.7	81	124.73	84.40	99.40	40.33	40.33	t-pole
	8.D.8	83	124.73	81.70	99.40	43.03	43.03	t-pole
BLDG 9 D3	9.D.1	90	130.92	104.60	103.00	26.32	27.92	
	9.D.2	92	130.92	118.70 *	103.00	12.22	30.62	
				100.30 AG				
	9.D.3	88	130.92	90.90	103.00	40.02	40.02	
	9.D.4	89	130.92	118.80 *	103.00	12.12	30.52	
				100.40 AG				
	9.D.5	91	131.93	101.00	103.00	30.93	30.93	t-pole

STORY POLE NUMBER		POLE I.D.	POLE ELEV	EX GRADE	FIN GRADE	POLE LENGTH	HT FRM LOWEST (EX/FIN)	NOTES
BLDG# . BLDG TYPE .POLE#			* = roof of ex bldg **NP**= No Pole; height is lower than ex. bldg. String will be affixed to side of building at marked point **AG** = Assumed grade below roof (roof ht minus 18.4') **O**= Offset Pole; See story pole plan for distance offset from intended point **Δ**= Triangulated point, no pole **B**= To be depicted by boom lift					
BLDG 10 D2	10.D.1	300	131.67	124.70	104.50	6.97	27.17	Δ
	10.D.2	103	131.67	116.10	104.50	15.57	27.17	O
	10.D.3	104	131.67	117.10	104.50	14.57	27.17	
	10.D.4	282	131.67	123.50	104.50	8.17	27.17	Δ
STORY POLE DATA- BLDGS 11-15								
BLDG 11	11.DS.1	120	146.13	115.30	120.30	30.83	30.83	
	11.DS.2	117	146.13	124.70	120.30	21.43	25.83	
	11.DS.3	115	138.80	141.60 *NP 123.20 AG	110.30	-2.80	28.50	
	11.DS.4	118	138.80	111.10	110.30	27.70	28.50	
	11.DS.5	119	143.80	112.70	120.30	31.10	31.10	
	11.DS.6	116	143.80	123.40	120.30	20.40	23.50	
BLDG 12	12.DS.1	283	147.13	123.90	121.30	23.23	25.83	Δ
	12.DS.2	127	147.13	114.30	121.30	32.83	32.83	
	12.DS.3	125	139.80	109.40	111.30	30.40	30.40	
	12.DS.4	128	139.80	117.10	111.30	22.70	28.50	
	12.DS.5	129	144.80	121.10	121.30	23.70	23.70	
	12.DS.6	126	144.80	111.10	121.30	33.70	33.70	
BLDG 13	13.F1.1	12	139.06	105.90	103.20	33.16	35.86	
	13.F1.2	284	139.04	108.00	103.20	31.04	35.84	Δ
	13.F1.3	149	148.47 140.60	112.70 (to pole F1.2)	113.20	35.77	35.77	O
	13.F1.4	143	147.93	119.39	113.20	28.54	34.73	O
	13.F1.5	142	149.28	100.60	113.20	48.68	48.68	
	13.F1.6	11	149.28 140.60	98.10 (to pole F1.1)	113.20	51.18	51.18	
BLDG 14	14.A.1	147	129.67	105.80	103.50	23.87	26.17	
	14.A.3	286	129.67	105.40	103.50	24.27	26.17	Δ
	14.A.4	146	129.67	107.00	103.50	22.67	26.17	O
	14.A.6	285	129.67	109.70	103.50	19.97	26.17	Δ
	14.A.7	148	132.58	107.30	103.50	25.28	29.08	t-pole
BLDG 15	15.F2.1	1	139.26	101.10	103.40	38.16	38.16	
	15.F2.2	4	139.26	105.70	103.40	33.56	35.86	

STORY POLE NUMBER		POLE I.D.	POLE ELEV	EX GRADE	FIN GRADE	POLE LENGTH	HT FRM LOWEST (EX/FIN)	NOTES
BLDG# . BLDG TYPE .POLE#			* = roof of ex bldg **NP**= No Pole; height is lower than ex. bldg. String will be affixed to side of building at marked point **AG** = Assumed grade below roof (roof ht minus 18.4') **O**= Offset Pole; See story pole plan for distance offset from intended point **Δ**= Triangulated point, no pole **B**= To be depicted by boom lift					
	15.F2.3	5	139.26 130.80	105.10 (to pole F2.4)	103.40	34.16	35.86	
	15.F2.4	6	129.26	103.60	93.40	25.66	35.86	
	15.F2.5	287	130.33	96.70	93.40	33.63	36.93	Δ
	15.F2.6	2	139.26 130.80	98.90 (to pole F2.5)	103.40	40.36	40.36	
STORY POLE DATA- BLDGS 16-20								
BLDG 16	16.E.1	33	117.83	96.80	100.00	21.03	21.03	
	16.E.2	32	132.42	99.30	100.00	33.12	33.12	
	16.E.3	31	120.58	104.10	90.00	16.48	30.58	
	16.E.4	30	124.58	92.60	90.00	31.98	34.58	
	16.E.5	28	124.58	87.90	90.00	36.68	36.68	
	16.E.6	244	127.80	87.40	90.00	40.40	40.40	
	16.E.7	25	115.88	90.80	90.00	25.08	25.88	
	16.E.8	26	124.28	91.20	100.00	33.08	33.08	
	16.E.9	27	119.58	91.30	100.00	28.28	28.28	
	16.E.10	145	127.71	93.40	100.00	34.31	34.31	
	16.E.11	34	126.00	93.30	100.00	32.70	32.70	
	16.E.12	35	125.90	93.60	90.00	32.30	35.90	
	16.E.13	129	128.75	92.90	90.00	35.85	38.75	
BLDG 17	17.C.1	302	134.43	101.90	102.20	32.53	32.53	
	17.C.2	11	136.53	131.40 * 113.00 AG	102.20	5.13	34.33	
	17.C.3	10	134.74	131.40 * 113.00 AG	102.20	3.34	32.54	
	17.C.4	7	135.16	137.80 * 119.40 AG	102.20	-2.64	32.96	
	17.C.5	16	137.62	137.90 * 119.50 AG	102.20	-0.28	35.42	
	17.C.6	14	137.20	125.80 * 107.40 AG	102.20	11.40	35.00	
	17.C.7	13	137.83	125.70 * 107.30 AG	102.20	12.13	35.63	

STORY POLE NUMBER		POLE I.D.	POLE ELEV	EX GRADE	FIN GRADE	POLE LENGTH	HT FRM LOWEST (EX/FIN)	NOTES
BLDG# . BLDG TYPE .POLE#			* = roof of ex bldg **NP**= No Pole; height is lower than ex. bldg. String will be affixed to side of building at marked point **AG** = Assumed grade below roof (roof ht minus 18.4') **O**= Offset Pole; See story pole plan for distance offset from intended point **Δ**= Triangulated point, no pole **B**= To be depicted by boom lift					
	17.C.8	15	137.83	115.20	102.20	22.63	35.63	
	17.C.9	9	140.37	131.40 *	102.20	8.97	38.17	t-pole
	17.C.10	8	140.37	137.80 *	102.20	2.57	38.17	t-pole
BLDG 18	18.C.1	114	131.03	83.20	95.40	47.83	47.83	
	18.C.3	288	127.94	111.50	95.40	16.44	32.54	Δ
			133.57			22.07	38.17	t-pole
	18.C.4	110	128.36	120.40	95.40	7.96	32.96	
			133.57			13.17	38.17	t-pole
	18.C.5	111	130.82	120.40	95.40	10.42	35.42	
	18.C.6	112	130.40	103.20	95.40	27.20	35.00	
	18.C.7	113	131.00	92.20	95.40	38.80	38.80	
	18.C.8	289	131.00	111.50	95.40	19.50	35.60	Δ
BLDG 19	19.R.1	293	96.43	64.10	84.50	32.33	32.33	Δ
	19.R.2	75	102.00	87.30 *	84.50	14.70	33.10	
				68.90 AG				
	19.R.3	72	102.00	74.90	84.50	27.10	27.10	
	19.R.4	71	108.25	80.50	84.50	27.75	27.75	
	19.R.5	70	111.28	89.20	84.50	22.08	26.78	
	19.R.6	69	117.53	74.30	84.50	43.23	43.23	
	19.R.7	68	96.17	93.20 *	84.50	2.97	21.37	
				74.80 AG				
	19.R.8	67	96.17	75.00	84.50	21.17	21.17	
	19.R.9	290	108.25	67.10	84.50	41.15	41.15	Δ
	19.R.10	291	112.03	66.50	84.50	45.53	45.53	Δ
	19.R.11	292	102.43	64.70	84.50	37.73	37.73	Δ
	19.R.12	76	117.53	87.40 *	84.50	30.13	48.53	
				69.00 AG				
	19.R.13	78	112.03	69.10	84.50	42.93	42.93	
	19.R.14	74	124.70	87.20 *	84.50	37.50	40.20	t-pole
	19.R.15	73	124.70	87.40 *	84.50	37.30	40.20	t-pole
	19.R.16	79	116.56	69.20	84.50	47.36	47.36	t-pole
BLDG 20	20.C.1	38	124.33	104.40	92.10	19.93	32.23	
	20.C.2	144	126.43	97.90	92.10	28.53	34.33	O

STORY POLE NUMBER		POLE I.D.	POLE ELEV	EX GRADE	FIN GRADE	POLE LENGTH	HT FRM LOWEST (EX/FIN)	NOTES
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	20.C.3	42	124.64	89.60	92.10	35.04	35.04	
	20.C.4	301	125.06	94.40	92.10	30.66	32.96	O
			130.27		92.10	35.87	38.17	t-pole
	20.C.5	296	127.52	96.70	92.10	30.82	35.42	Δ
	20.C.6	294	127.10	107.60	92.10	19.50	35.00	Δ
	20.C.7	39	127.70	110.30	92.10	17.40	35.60	
	20.C.8	295	127.70	97.80	92.10	29.90	35.60	Δ
	20.C.9	41	130.27	91.50	92.10	38.77	38.77	t-pole
STORY POLE DATA- BLDGS 21-25								
BLDG 21	21.A.1	43	118.17	101.50	92.00	16.67	26.17	
	21.A.3	44	118.17	98.00	92.00	20.17	26.17	
	21.A.4	48	118.17	97.80	92.00	20.37	26.17	
	21.A.6	47	118.17	97.60	92.00	20.57	26.17	
	21.A.7	45	121.08	101.50	92.00	19.58	29.08	t-pole
	21.A.8	46	121.08	97.90	92.00	23.18	29.08	t-pole
BLDG 22	22.C.1	64	123.43	77.30	91.20	46.13	46.13	
	22.C.2	61	125.53	98.00	91.20	27.53	34.33	
	22.C.3	59	123.74	102.70	91.20	21.04	32.54	
			129.37			26.67	38.17	t-pole
	22.C.4	60	124.16	87.40 *	91.20	36.76	55.16	O
			129.37	69.00 AG		41.97	60.37	t-pole
	22.C.5	62	126.62	87.40 *	91.20	39.22	57.62	
				69.00 AG				
	22.C.6	66	126.20	77.00	91.20	49.20	49.20	
	22.C.7	65	126.80	95.30 *	91.20	31.50		
				76.90 AG			49.90	
	22.C.8	63	126.80	84.10	91.20	42.70	42.70	
BLDG 23	23.B.1	260	120.36	79.90	86.50	40.46	40.46	
	23.B.2	266	120.83	76.70	86.50	44.13	44.13	
	23.B.3	265	124.67	79.80	86.50	44.87	44.87	
	23.B.4	264	122.75	83.80	86.50	38.95	38.95	
	23.B.5	220	119.71	93.20	86.50	26.51	33.21	
	23.B.6	261	124.67	90.40	86.50	34.27	38.17	

STORY POLE NUMBER	POLE I.D.	POLE ELEV	EX GRADE	FIN GRADE	POLE LENGTH	HT FRM LOWEST (EX/FIN)	NOTES
BLDG# . BLDG TYPE .POLE#		* = roof of ex bldg NP= No Pole; height is lower than ex. bldg. String will be affixed to side of building at marked point AG = Assumed grade below roof (roof ht minus 18.4') O= Offset Pole; See story pole plan for distance offset from intended point Δ= Triangulated point, no pole B= To be depicted by boom lift					
23.B.7	259	124.67	77.00	86.50	47.67	47.67	t-pole
23.B.8	266	124.67	76.80	86.50	47.87	47.87	t-pole
23.B.9	263	124.67	102.80 *	86.50	21.87	38.17	t-pole
23.B.10	264	124.67	84.20	86.50	40.47	40.47	t-pole
BLDG 24 24.A.1	50	112.67	94.80 * 76.40 AG	86.50	17.87	36.27	
24.A.3	49	112.67	94.80 * 76.40 AG	86.50	17.87	36.27	
24.A.4	53	112.67	81.40	86.50	31.27	31.27	O
24.A.6	298	112.67	77.40	86.50	35.27	35.27	Δ
24.A.7	57	115.58	74.40	86.50	41.18	41.18	t-pole
24.A.8	52	115.58	76.60	86.50	38.98	38.98	t-pole
BLDG 25 25.C.1	55	122.13	94.80 * 76.40 AG	86.50	27.33	45.73	
25.C.3	54	119.04 124.67	77.10	86.50	41.94 47.57	41.94 47.57	t-pole
25.C.4	299	119.46 124.67	68.60	86.50	50.86 56.07	50.86 56.07	B
25.C.6	57	122.16	94.80 * 76.40 AG	86.50	27.36	45.76	
25.C.7	56	122.10	94.80 * 76.40 AG	86.50	27.30	45.70	
25.C.8	58	122.10	95.00	86.50	27.10	35.60	

APPENDIX D

Air Quality Technical Report

Air Quality Technical Report for the Solana Highlands Revitalization Project

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SUMMARY OF FINDINGS

The purpose of this technical report is to assess the potential air quality emissions impacts associated with implementation of the proposed Solana Highlands Revitalization Project (proposed project). This assessment utilizes the significance thresholds in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.).

The proposed project involves demolition of the existing development on site (which includes 194 multifamily residential units in 16 buildings and 4 single-family residences) and construction of 260 new multifamily residential units in 24 buildings, covered and open parking, landscaped areas and open space. A Single Phase Construction Alternative (Alternative) was evaluated as well that assumes a compressed schedule compared to the proposed project. Operation of both the proposed project and Alternative are identical and thus are not evaluated separately.

Air Quality

The air quality impact analysis evaluated the potential for adverse impacts to air quality due to construction and operational emissions resulting from the Project. Impacts were evaluated for their significance based on the San Diego Air Pollution Control District's (SDAPCD) mass daily criteria air pollutant thresholds of significance (SDAPCD 2016a). Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. Criteria air pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$), and lead. Pollutants that are evaluated include volatile organic compounds (VOCs) (also referred to as reactive organic gases), oxides of nitrogen (NO_x), CO, sulfur oxides (SO_x), PM_{10}, and $PM_{2.5}$. VOCs and NO_x are important because they are precursors to O_3.

Air Quality Plan Consistency

If a project proposes development that is greater than that anticipated in the local plan and San Diego Association of Government's (SANDAG's) growth projections, the project might be in conflict with the State Implementation Plan (SIP) and Regional Air Quality Strategy (RAQS) and may contribute to a potentially significant cumulative impact on air quality. The proposed project was deemed to be consistent with the current air quality plan, because the anticipated growth associated with the proposed project does not exceed that projected by SANDAG. In addition, the proposed project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations. Based on these

considerations, impacts related to the proposed project's potential to conflict with or obstruct implementation of the applicable air quality plan would be less than significant.

Construction Criteria Air Pollutant Emissions

Construction of the proposed project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and VOC off-gassing) and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Maximum daily construction emissions from the proposed project and Alternative would not exceed the SDAPCD significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ during construction.

Operational Criteria Air Pollutant Emissions

Operational year 2024 was assumed as the first full year of operation pending completion of construction for the proposed project. Operation of the proposed project would generate operational criteria air pollutants from mobile sources (vehicles), area sources (consumer product use, architectural coatings, and landscape maintenance equipment), and energy (natural gas). Maximum operational emissions would not exceed the SDAPCD operational significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$.

Exposure of Sensitive Receptors

Construction activities would not generate emissions in excess of the SDAPCD site-specific mass daily thresholds; therefore, site-specific construction impacts during construction of the proposed project and Alternative would be less than significant. In addition, diesel equipment would also be subject to the California Air Resources Board (CARB) Airborne Toxic Control Measures (ATCMs) for in-use off-road diesel fleets, which would minimize diesel particulate matter (DPM) emissions. The health risk assessment for construction of the proposed project and Alternative showed cancer above levels of significance before mitigation. With mitigation, construction of the proposed project and Alternative showed cancer and non-cancer risks below levels of significance. No residual toxic air contaminants (TAC) emissions and corresponding cancer risk are anticipated after construction, since no long-term sources of TAC emissions are anticipated during operation of the proposed project. Therefore, impacts to sensitive receptors during construction would be less than significant.

The traffic report showed that the intersections would operate at a Level of Service of D or better and thus a quantitative CO hotspots analysis was not needed. As such, potential Project-generated impacts associated with CO hotspots would be less than significant.

Odors

Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application, which would disperse rapidly from the proposed project site and generally occur at magnitudes that would not affect substantial numbers of people. Impacts associated with odors during construction would be less than significant. The proposed project is a residential development that would not include land uses with sources that have the potential to generate substantial odors, and impacts associated with odors during operation would be less than significant.

Cumulative Impacts

The potential for the proposed project to result in a cumulatively considerable impact, per the SDAPCD guidance and thresholds, is based on the proposed project's potential to exceed the project-specific daily thresholds. As discussed previously, maximum construction and operational emissions would not exceed the SDAPCD significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$. Therefore, the proposed project would not result in a cumulatively considerable increase in criteria air pollutants.

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1 INTRODUCTION

1.1 Regional and Local Setting

The project site is located at 661 to 781 South Nardo Avenue in the City of Solana Beach (City) in north coastal San Diego County (County), California (see Figures 1 and 2). The project site encompasses approximately 13.4 acres on three parcels (Assessor's Parcel Numbers 298-260-33, 298-164-22, and 298-281-10 (with listed address as 821 Stephens Avenue)). The Solana Highlands Revitalization Project (proposed project) is located in an urban setting and is surrounded by residential neighborhoods to the north, Solana Pointe Apartments to the northeast, commercial area to the east, single-family homes to the southeast, Turfwood Apartments to the south, and St. James Catholic Church and school campus to the west. Major circulation corridors surrounding the project in less than a mile radius include Interstate 5 (I-5) and Stevens Avenue to the east, Via De La Valle to the south, Lomas Santa Fe Drive to the north, and Highway 101 to the west.

In a regional setting, the proposed project is approximately 0.75 mile east of the Pacific Ocean, approximately 20 miles northwest of downtown San Diego, approximately 4 miles south of the neighboring City of Encinitas, and approximately 4 miles west of the Fairbanks Ranch community. In relation to circulation, Amtrak provides the Surfliner rail service, which stops in the City and downtown San Diego to the south and destinations to the north, including Los Angeles, Santa Barbara, and San Luis Obispo. The North County Transit District (NCTD) Coaster commuter train also has a station in the City. The NCTD Coaster runs north–south through San Diego County, serving eight stations between Oceanside and downtown San Diego.

1.2 Project Description

The proposed project involves demolition of the existing development on site (which includes 194 multifamily residential units in 16 buildings and 4 single-family residences) and construction of 260 new multifamily residential units in 24 buildings (Figures 3 and 4).

Residential buildings would range in height from two stories to three stories and would have a total of 121 one-bedroom units and 139 two-bedroom units. All units would have private outdoor space in the form of balconies (for upper-floor units) or patios (for ground-floor units), laundry facilities and storage space in all homes, and parking garages and surface parking. Project amenities would include a recreation facility/clubhouse building and associated recreation facilities, such as a pool, Jacuzzi, barbecue areas, walking paths, and passive usable open space. The project site would be broken into three neighborhood areas—Bungalow, Valley View, and Lifestyle. The Bungalow neighborhood would be two stories in height and would feature 24 one-

bedroom/one-bathroom units and 48 two-bedroom/two-bathroom units. The Bungalow neighborhood would be located along South Nardo Avenue, with setbacks of a minimum of 25 feet from the property line. The Valley View neighborhood would all be three stories in height and would feature 47 one-bedroom/one-bathroom units and 51 two-bedroom/two-bathroom units. The Valley View neighborhood would be internal to the project site. The Lifestyle neighborhood would be three stories in height and would feature 45 one-bedroom/one-bathroom units and 49 two-bedroom/two-bathroom units. The Lifestyle neighborhood would be located along the southern edge and southeastern slope of the project site toward Stevens Avenue.

1.2.1 Vehicular and Pedestrian Access

The existing four entrances to the project site located off South Nardo Avenue would be reduced to two driveways for the main apartment complex and a dedicated driveway for the senior living building off Stevens Avenue at the location of the existing access driveway for neighboring residences. The entry along the northwest portion South Nardo Avenue would be roughly positioned consistent with the existing driveway in this location. This driveway would be approximately 24 feet wide and would be gated. The second driveway would become the main driveway located closer to Stevens Avenue along the eastern portion of South Nardo Avenue. This driveway would consist of two lanes approximately 16 feet wide each, with a median dividing ingress and egress routes and gated after a turning circle. This driveway would lead from Nardo Ave. to an initial parking area and small roundabout located on the site, then would transition to a 30-foot-wide gated entrance into the site. Internal vehicular and pedestrian circulation would be guided with way-finding signage for automobiles and pedestrians. Vehicular circulation would be internal to the project site, with project buildings and landscaping screening internal roadways from surrounding developments. Separate pedestrian access would be provided via sidewalks and walkways throughout the project site, connecting residents to parking areas, other buildings, and project recreational and gathering amenities.

The senior designated building would be served by a third driveway off of Stevens Avenue in approximately the same location as the existing driveway that currently serves the off-site units owned by the applicant. This driveway would serve the senior living building and provide existing property owners adjacent to the site with direct access to their properties, and would not be gated.

The proposed project would replace the existing 311 on-site parking spaces and provide 525 on-site parking spaces. There would be 233 garage spaces, a minimum of 22 covered spaces, and up to 270 uncovered spaces. Traffic-calming measures along South Nardo Avenue would be constructed as part of the proposed project.

1.2.2 Traffic-Calming Measures

To reduce vehicle speeds and help improve the walking environment, the proposed project would include the following traffic-calming measures off site along South Nardo Avenue from Solana Circle/Nardito Lane to Stevens Avenue:

- Installation of a 10-foot-wide raised median and striping on South Nardo Avenue just west of Stevens Avenue, which would create a left-turn pocket for vehicles entering the project site.
- Installation of curb extensions on the northwest and northeast corners of the Fresca Street/South Nardo Avenue intersection, which would narrow the street, reduce speeds, and make pedestrians more visible.
- Installation of a 6-foot-wide center median and 5-foot-wide medians on either side of the street on South Nardo Avenue, approximately 230 feet west of Fresca Street and approximately 360 feet east of Nardito Lane, which would narrow the street and reduce speeds along a long stretch of South Nardo Avenue.
- Installation of a ladder-striped crosswalk at the stop-controlled north leg of the South Nardo Avenue/Fresca Street intersection. The ladder-striped crosswalk painted with reflective paint would improve pedestrian visibility compared to the existing condition.
- Installation of a speed table (a long, flat speed bump) on South Nardo Avenue between East Solana Circle and Nardito Lane. The speed table, in conjunction with the other traffic-calming measures, would help to reduce traffic speeds on South Nardo Avenue between Nardito Lane and Fresca Street.
- An existing striped yellow school crosswalk is located on the east leg of the South Nardo Avenue/Nardito Lane intersection serving the adjacent St. James Catholic Church and school. This crosswalk would be repainted with highly reflective paint to improve the visibility of the marked crosswalk.

1.2.3 Landscape Concept Plan

The proposed preliminary Landscape Concept Plan includes the use of indigenous and/or drought-tolerant plant material, where feasible. No invasive or potentially invasive species would be used. Planting is intended to be a connecting device linking the various pieces of the project and design style. The preliminary Landscape Concept Plan uses plant material to help define spaces, create/encourage circulation paths, emphasize entry points, and provide softness and scale to the architecture. Evergreen, deciduous, and flowering material are proposed throughout the project. New landscaping would use significantly less water than the current landscaping and

comply with all California landscape water usage standards. The project would also include usable open space and biofiltration areas.

1.2.4 Density Bonus

The following steps outline the density bonus and provide clarification as to how the City arrived at the number of dwelling units being proposed (also see Table 1):

Step 1: The project site is zoned High Residential (HRd), which provides for a maximum allowable density of 13–20 dwelling units per acre.

Step 2: SBMC Section 17.20.030(B)(4) requires an adjustment to the maximum allowable density for multiple dwelling unit projects located in or in proximity to sensitive land, such as steep slopes. A majority of the project site is located on slopes 0%–25%. Table 1 identifies the number of acres on site that are located on a slope and the corresponding density adjustment that applies to those acres. As shown in Table 1, after applying the slope-adjusted density, the proposed project's permitted maximum allowable density would be 206.6 units.

Step 3: The project proposes to enter into a Development Agreement with the City, as permitted by the SBMC Affordable Housing Ordinance, Section 17.70.025(B)(2), and would provide 15.5% of the permitted 206 units as affordable units (32 affordable units).

Step 4: Compliance with the City's Affordable Housing Ordinance allows the project to qualify for a density bonus. State law would entitle the project to a density bonus of 27.5%. Therefore, the project's actual permitted maximum allowable density is 263 units (0.275 x 206 permitted units = 56.65 additional units; 206 + 56.65 = 262.65/263 rounded). The project would be allowed to round up to 263, per the Density Bonus Law Roundup (California Government Code, Section 65915).

Step 5: Although the project would be allowed to build 263 units with the 27.5% density bonus, the project is proposing to construct a total of 260 units, which is actually a density bonus of 26%. While a density bonus of 26% would only require 29 affordable housing units, 32 affordable units would be provided. The 32 affordable units would be subject to a rent regulatory agreement with a term of 55 years and rented to low-income households at affordable rents as required by Section 17.70.025(C).

Table 1
Project Density Overview

Progressive Calculation	Site Density Factor	Dwelling Unit (DU) per Acre	Site DU
Step 1	HRd Zone	13–20 DU per acre	268
Step 2	Slope-Adjusted Density	*Slope* / *Acres* / *Allowable Density* / *DU* 0%–25% / 9.79 / 20 du/acre / 195.8 25%–40% / 1.08 / 10.8 du/acre / 10.8 40% + / 2.54 / 0.0 du/acre / 0.0 **Total / 13.41 / — / 206.6**	206.6
Step 3	City Affordable Housing Requirements	Applicant proposes 32 on-site affordable housing units; 15.5% of the total housing units would be affordable units	206.6
Step 4	SBMC 17.70.025 Density Bonus	Project is eligible for a density bonus	+54
Step 5	Total Number of Units Proposed	Proposed project	260

1.2.5 Sustainable Design Features

The project would be designed and developed using sustainable development practices and design features. These practices include new Title 24 (2016) standards, described in detail in Section 3.2 Regultory Setting. In addition to the measures that are part of the Title 24 measures, the project would include the following energy-efficiency measures in its design:

- Electric vehicle (EV) charging stations at selected surface parking spaces for residents and guests
- Pre-wire all garages for EV charging stations
- Photovoltaic solar panels
- Low water use appliances, in-home fixtures, and irrigation
- Low VOC (volatile organic compound) paints
- Community recycling program (In addition to meeting the City's recycling requirements property management would actively promote recycling. Recycling bins would be provided on site throughout the property, as well as next to printers and mail stations. At move-in, residents would be supplied with reusable tote bags, as well as reusable water bottles to help reduce trash. At the leasing office, eco-friendly cups made from recycled plant material would be used for water and coffee; and property management staff would be discouraged from using anything but reusable water bottles and coffee cups.)

- Energy Star appliances
- Energy-efficient LED lighting, appliance, and heating, ventilation, and air conditioning (HVAC) design
- Saltwater pool with solar heating
- Building insulation elements installed under the inspection of the Home Energy Rating System (HERS) rating agency
- Drought-tolerant landscaping
- Reclaimed water use for irrigation
- Walking paths and bicycle lockers to promote more sustainable lifestyles for residents, employees, and guests.

1.3 Project Construction and Phasing

Earthwork for the project would result in 176,000 cubic yards of cut and 22,000 cubic yards of fill, with 154,000 cubic yards of export. Exported material would be assessed for suitability for use with the City's Sand Compatibility and Opportunistic Use Program, and any material identified as suitable would be placed on the City's beaches, otherwise, soil export is assumed to be transported to the Otay Landfill as the maximum haul distance/impact for the purposes of this analysis. Grading for the project would be designed to lower the elevation of the project site to create new, flatter pads that would enable the increased density and improve internal circulation for pedestrians and vehicles. Retaining walls are necessary to facilitate site grading. Visible portions of retaining walls would range in height from 3 to 15 feet for masonry walls and 2 to 7 feet for plantable keystone walls. Landscaping, including bushes and trees, would be placed at the base of retaining walls to screen them from views and blend in with other landscaping elements proposed for the project.

The proposed project would involve a phased construction plan designed to enable partial occupancy of the site for approximately 39 months. The phased construction plan would consist of three phases, broken down as described below. The phases are anticipated to have varying durations with some phases being longer in duration and others shorter. A Single Phase Construction Alternative (Alternative) was also evaluated which consisted of a compressed schedule compared to the proposed project.

Phase 1

Phase 1 would occur on the interior and central portions of the site and involve demolition of eight buildings containing 120 existing units and the three standalone structures adjacent to the

existing complex containing four multi-family units. Phase 1 would involve construction of a portion of the Valley View neighborhood consisting of three buildings with a total of 36 units. The new administration building and recreational center would start construction as part of Phase 1. On the parcel where the three single-family homes would be demolished, a new driveway would be constructed, extending from the existing access point off Stevens Avenue to provide direct access from Stevens Avenue to adjacent single-family residences. This new driveway would not provide access from the street to the complex (see Figure 2-9). This phase involves the least amount of dirt export and building construction of the three phases, but the most demo and the initial construction of backbone utilities.

Phase 2

Phase 2 would occur in the southeast portion of the site. Phase 2 would begin within the last month-and-a-half of Phase 1 being completed. Phase 2 would involve demolition of the existing recreation/leasing center structures. Phase 2 construction would include all of the Lifestyle neighborhood and the senior affordable building, for a total of 6 buildings with a total of 111 units. The new driveway providing permanent access to the adjacent single family residents and the senior affordable apartments would be constructed during this phase. The new administration building and recreational center would be completed during this phase.

Phase 3

Phase 3 would occur in the northwest portion of the project site along South Nardo Avenue. Phase 3 would begin within the last month-and-a-half of Phase 2 being completed. Phase 3 would involve demolition of six buildings containing 74 existing units, and would involve construction of the remainder of the Valley View neighborhood and the entirety of the Bungalow neighborhood. Construction of Phase 3 would involve 15 buildings and 113 units: four buildings consisting of 47 units of the Valley View neighborhood and 11 buildings consisting of 66 units of the Bungalow neighborhood. This phase includes more soil export than earlier phases, and the most number of buildings, and is expected to be the longest duration of the three phases.

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2 METHODOLOGY

Construction

Emissions from the construction phase of the project were estimated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2, available online (www.caleemod.com). For the purposes of modeling, it was assumed that construction of the proposed project would commence in mid-2020.

A detailed depiction of the construction schedule—including information regarding subphases, demolition, and equipment used during each subphase—is included in Table 2. This shows the construction schedule of the proposed project and the Alternative. The information contained in Appendix A and B was used as CalEEMod model inputs.

Table 2
Construction Phasing Assumptions

Construction Phase	Construction Start Month/Year	Construction End Month/Year
Proposed Project		
Ph 1 - Demolition	06/2020	06/2020
Ph 1 - Grading	07/2020	09/2020
Ph 1 - Building Construction	09/2020	08/2021
Ph 2 - Demolition	06/2021	06/2021
Ph 2 - Grading	07/2021	09/2021
Ph 1 - Paving	07/2021	09/2021
Ph 1 - Architectural Coating	07/2021	09/2021
Ph 2 - Building Construction	09/2021	08/2022
Ph 3 - Demolition	06/2022	06/2022
Ph 3 - Grading	07/2022	08/2022
Ph 2 - Paving	07/2022	08/2022
Ph 2 - Architectural Coating	07/2022	08/2022
Ph 3 - Building Construction	09/2022	08/2023
Ph 3 - Paving	07/2023	08/2023
Ph 3 - Architectural Coating	07/2023	08/2023
Alternative		
Demolition	06/2020	08/2020
Grading	09/2020	03/2021
Paving	03/2021	05/2021
Building Construction	03/2021	05/2022
Architectural Coating	03/2021	05/2021

Source: H.G. Fenton Company 2018

Construction equipment specifications were provided by the project applicant, and the equipment mix is meant to represent a reasonably conservative estimate of construction activity. For the analysis, it was generally assumed that heavy construction equipment would be operating at the site for 5 days per week (22 days per month), during project construction. Construction traffic, including worker trips and haul-truck trips, were provided by Fehr and Peers (Fehr and Peers 2016). Construction phasing, equipment, worker trips, vendor trips, and haul trips for the proposed project and Alternative are included in Appendix A and B.

Health Risk Assessment

As a precautionary measure, a health risk assessment (HRA) was performed to assess the impact of construction on sensitive receptors proximate to the proposed project and Alternative. This report includes an HRA associated with emissions from construction of the proposed project and Alternative based on the methodologies prescribed in the Office of Environmental Health Hazard Assessment (OEHHA) *Air Toxics Hot Spots Program Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments* (OEHHA 2015). To implement the OEHHA Guidelines based on Project information, the SDAPCD has developed a three-tiered approach where each successive tier is progressively more refined, with fewer conservative assumptions. The SDAPCD *Supplemental Guidelines for Submission of Air Toxics "Hot Spots" Program Health Risk Assessments* provides guidance with which to perform HRAs within the SDAB (SDAPCD 2015b).

Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SDAPCD recommends a carcinogenic (cancer) risk threshold of 10 in a million. Additionally, some TACs increase non-cancer health risk due to long-term (chronic) exposures. The Chronic Hazard Index is the sum of the individual substance chronic hazard indices for all TACs affecting the same target organ system. The SDAPCD recommends a Chronic Hazard Index significance threshold of 1.0 (project increment). The exhaust from diesel engines is a complex mixture of gases, vapors, and particles, many of which are known human carcinogens. DPM has established cancer risk factors and relative exposure values for long-term chronic health hazard impacts. No short-term, acute relative exposure level has been established for DPM; therefore, acute impacts of DPM are not addressed in this assessment. This HRA evaluated the risk to future residents from diesel emissions from exhaust from on-site construction equipment and diesel haul and vendor trucks.

The dispersion modeling of DPM was performed using the American Meteorological Society/EPA Regulatory Model (AERMOD), which is the model SDAPCD requires for atmospheric dispersion of emissions. AERMOD is a steady-state Gaussian plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of surface and elevated sources, building downwash, and simple

and complex terrain (EPA 2015). For the Project, AERMOD was run with all sources emitting unit emissions (1 gram per second) to obtain the "X/Q" values. X/Q is a dispersion factor that is the average effluent concentration normalized by source strength and is used as a way to simplify the representation of emissions from many sources. The X/Q values of ground-level concentrations were determined for construction emissions using AERMOD and the maximum concentrations determined for the 1-hour and Period averaging periods. Principal parameters of this modeling are presented in Table 3.

Table 3
AERMOD Principal Parameters

Parameter	Details
Meteorological Data	The latest 3-year meteorological data (2010–2012) for the Del Mar Station (Station ID 3177) from SDAPCD were downloaded and then input to AERMOD. For cancer or chronic noncancer risk assessments, the average cancer risk of all years modeled was used.
Urban versus Rural Option	Urban areas typically have more surface roughness, as well as structures and low-albedo surfaces that absorb more sunlight—and thus more heat—relative to rural areas. However, based on the SDAPCD guidelines, the rural dispersion option was selected due to the Project's proximity to the ocean.
Terrain Characteristics	The terrain in the vicinity of the modeled Project site is generally flat. The elevation of the modeled site is about 35 meters above sea level. Digital elevation model files were imported into AERMOD so that complex terrain features were evaluated as appropriate.
Elevation Data	Digital elevation data were imported into AERMOD, and elevations were assigned to the emission sources and receptors. Digital elevation data were obtained through AERMOD View in the United States Geological Survey's National Elevation Dataset format with a 10-meter resolution.
Emission Sources and Release Parameters	Air dispersion modeling of DPM from construction equipment was conducted using emissions estimated using the CalEEMod, assuming emissions would occur in accordance with the project schedule in Appendix A. The Project area was modeled as a series of volume sources.
Source Release Characterizations	The volume source release height was assumed to be 5 meters with an initial vertical and lateral dimension of 5.81 meters. All volume sources were assumed to be 25 meters on each side.
Discrete Receptors	A uniform Cartesian grid overlaying the project site with 20-meter resolution was converted into discrete Cartesian receptors to represent sensitive receptors. Discrete Cartesian receptors were also placed on site to represent on-site residents.

Note: See Appendix C.

Dispersion model plotfiles from AERMOD were then imported into CARB's Hotspots Analysis and Reporting Program Version 2 to determine health risk, which requires peak 1-hour emission rates and annual-averaged emission rates for all pollutants for each modeling source. For the residential health risk, the HRA assumes exposure would start in the third trimester of pregnancy. The results of the HRA are provided in Section 5, and detailed results and methodology are provided in Appendix C.

Operation

Vehicular Traffic

The proposed project would impact air quality through the vehicular traffic generated by the proposed project. According to the proposed project's traffic report prepared by Fehr and Peers the proposed project would result in a total of 528 trips per day (Fehr and Peers 2016).

CalEEMod was used to estimate daily emissions from proposed vehicular sources. CalEEMod default data, including temperature, trip characteristics, variable start information, emissions factors, and trip distances, were conservatively used for the model inputs.

Project-related traffic was assumed to include a mixture of vehicles in accordance with the model outputs for traffic. For the purposes of a conservative analysis, emission factors representing the vehicle mix and emissions for 2014 (the year the NOP for the project was issued) were applied to the existing conditions to estimate emissions associated with existing residential uses. Emission factors representing the vehicle mix and emissions for 2024 were used to estimate emissions associated with full buildout of the proposed project.

Energy

In addition to estimating mobile source emissions, CalEEMod was used to estimate emissions from the project's energy use, which includes electricity and natural gas combustion. Refer to Appendix A for additional information.

Area Sources

CalEEMod was also used to estimate emissions from the project's area sources, which include hearth use, landscaping, consumer products, and architectural coatings for building maintenance. Refer to Appendix A for additional information. Currently, 39 of the existing 194 units contain wood-burning fireplaces. The off-complex units do not contain fireplaces. The proposed project would not include hearths in any of the units.

3 EXISTING CONDITIONS

This section describes the existing conditions in the project area and identifies the resources that could be affected by the proposed project.

3.1 Existing Environmental Setting

3.1.1 Climate and Topography

The weather of the San Diego region, as in most of Southern California, is influenced by the Pacific Ocean and its semi-permanent high-pressure systems that result in dry, warm summers and mild, occasionally wet winters. The average temperature ranges (in degrees Fahrenheit (°F)) from the mid-40s to the high 90s. Most of the region's precipitation falls from November to April, with infrequent (approximately 10%) precipitation during the summer. The average seasonal precipitation along the coast is approximately 10 inches; the amount increases with elevation as moist air is lifted over the mountains.

The topography in the San Diego region varies greatly, from beaches on the west to mountains and desert on the east; along with local meteorology, it influences the dispersal and movement of pollutants in the basin. The mountains to the east prohibit dispersal of pollutants in that direction and help trap them in inversion layers.

The interaction of ocean, land, and the Pacific High Pressure Zone maintains clear skies for much of the year and influences the direction of prevailing winds (westerly to northwesterly). Local terrain is often the dominant factor inland, and winds in inland mountainous areas tend to blow through the valleys during the day and down the hills and valleys at night.

3.1.2 Air Pollution Climatology

The project site is located within the San Diego Air Basin (basin or SDAB) and is subject to the SDAPCD guidelines and regulations. The basin is one of 15 air basins that geographically divide the State of California. The basin is currently classified as a federal nonattainment area for ozone (O_3) and a state nonattainment area for particulate matter with an aerodynamic diameter equal to or less than 10 microns (PM_{10}), particulate matter with an aerodynamic diameter equal to or less than 2.5 microns ($PM_{2.5}$), and O_3.

The basin lies in the southwest corner of California and comprises the entire San Diego region, covering 4,260 square miles, and is an area of high air pollution potential. The basin experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This

usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

The basin experiences frequent temperature inversions. Subsidence inversions occur during the warmer months as descending air associated with the Pacific High Pressure Zone meets cool marine air. The boundary between the two layers of air creates a temperature inversion that traps pollutants. The other type of inversion, a radiation inversion, develops on winter nights when air near the ground cools by heat radiation and air aloft remains warm. The shallow inversion layer formed between these two air masses also can trap pollutants. As the pollutants become more concentrated in the atmosphere, photochemical reactions occur that produce O_3, commonly known as smog.

Light daytime winds, predominately from the west, further aggravate the condition by driving air pollutants inland, toward the mountains. During the fall and winter, air quality problems are created due to carbon monoxide (CO) and oxides of nitrogen (NO_x) emissions. CO concentrations are generally higher in the morning and late evening. In the morning, CO levels are elevated due to cold temperatures and the large number of motor vehicles traveling. Higher CO levels during the late evenings are a result of stagnant atmospheric conditions trapping CO in the area. Since CO is produced almost entirely from automobiles, the highest CO concentrations in the basin are associated with heavy traffic. Nitrogen dioxide (NO_2) levels are also generally higher during fall and winter days.

Under certain conditions, atmospheric oscillation results in the offshore transport of air from the Los Angeles region to San Diego County. This often produces high O_3 concentrations, as measured at air pollutant monitoring stations within the County. The transport of air pollutants from Los Angeles to San Diego has also occurred within the stable layer of the elevated subsidence inversion, where high levels of O_3 are transported.

3.1.3 Air Quality Characteristics

Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion. Reduced visibility, eye irritation, and adverse health impacts upon those persons termed sensitive receptors are the most serious hazards of existing air quality conditions in the area. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Sensitive receptors include residences, schools, playgrounds, child care centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

3.2 Pollutants and Effects

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include: O_3, NO_2, CO, sulfur dioxide (SO_2), PM_{10}, $PM_{2.5}$, and lead (Pb). These pollutants are discussed in the following paragraphs.[1] In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.

Ozone. O_3 is a colorless gas that is formed in the atmosphere when volatile organic compounds (VOCs), sometimes referred to as reactive organic gases (ROGs), and NO_x react in the presence of ultraviolet sunlight. O_3 is not a primary pollutant; it is a secondary pollutant formed by complex interactions of two pollutants directly emitted into the atmosphere. The primary sources of VOCs and NO_x, the precursors of O_3, are automobile exhaust and industrial sources. Meteorology and terrain play major roles in O_3 formation and ideal conditions occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. Short-term exposures (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes.

Nitrogen Dioxide. Most NO_2, like O_3, is not directly emitted into the atmosphere but is formed by an atmospheric chemical reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO_2 are collectively referred to as NO_x and are major contributors to O_3 formation. High concentrations of NO_2 can cause breathing difficulties and result in a brownish-red cast to the atmosphere with reduced visibility. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis and some increase in bronchitis in children (2 and 3 years old) has also been observed at concentrations below 0.3 parts per million by volume (ppm).

Carbon Monoxide. CO is a colorless and odorless gas formed by the incomplete combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, such as the project location, automobile exhaust accounts for the majority of CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the

[1] The following descriptions of health effects for each of the criteria air pollutants associated with project construction and operations are based on the Environmental Protection Agency (EPA) Six Common Air Pollutants (EPA 2014a) and the CARB Glossary of Air Pollutant Terms (CARB 2010) published information.

spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions; primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas between November and February. The highest levels of CO typically occur during the colder months of the year when inversion conditions are more frequent. In terms of health, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can be dizziness, fatigue, and impairment of central nervous system functions.

Sulfur Dioxide. SO_2 is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels. SO_2 is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished ventilator function in children. SO_2 can also yellow plant leaves and erode iron and steel.

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Fine particulate matter, or $PM_{2.5}$, is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., motor vehicles, power generation, and industrial facilities), residential fireplaces, and wood stoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and VOC. Inhalable or coarse particulate matter, or PM_{10}, is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances, such as Pb, sulfates, and nitrates, can cause lung damage directly or be absorbed into the blood stream, causing damage elsewhere in the body. Additionally, these substances can transport absorbed gases, such as chlorides or ammonium, into the lungs, also causing injury. Whereas PM_{10} tends to collect in the upper portion of the

respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle, as well as produce haze and reduce regional visibility.

Lead. Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline, the manufacturing of batteries, paint, ink, ceramics, and ammunition and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase-out of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phase-out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emission sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance including intelligence quotient performance, psychomotor performance, reaction time, and growth.

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic noncancer health effects. A toxic substance released into the air is considered a toxic air contaminant (TAC). Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources such as automobiles; and area sources such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced either on short-term (acute) or long-term (chronic) exposure to a given TAC.

3.3 Regulatory Setting

This section describes the applicable regulatory plans, policies, and ordinances for the proposed project.

3.3.1 Federal

Clean Air Act

The federal Clean Air Act (CAA), passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The U.S. Environmental Protection Agency (EPA) is

responsible for implementing most aspects of the CAA, including the setting of National Ambient Air Quality Standards (NAAQS) for major air pollutants, hazardous air pollutant standards, approval of state attainment plans, motor vehicle emission standards, stationary source emission standards and permits, acid rain control measures, stratospheric ozone (O_3) protection, and enforcement provisions.

NAAQS are established by the EPA for "criteria pollutants" under the CAA, which are O_3, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (PM_{10} and $PM_{2.5}$), and lead (Pb).

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The Clean Air Act requires the EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a State Implementation Plan (SIP) that demonstrates how those areas will attain the standards within mandated time frames.

3.3.2 State

California Clean Air Act

The California Clean Air Act (CCAA) was adopted in 1988 and establishes the state's air quality goals, planning mechanisms, regulatory strategies, and standards of progress.

Under the Clean Air Act, the task of air quality management and regulation has been legislatively granted to the California Air Resources Board (CARB), with subsidiary responsibilities assigned to air quality management districts (AQMDs) and air pollution control districts (APCDs) at the regional and county levels. CARB is responsible for ensuring implementation of the CCAA, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products. Pursuant to the authority granted to it, CARB has established California Ambient Air Quality Standards (CAAQS), which are generally more restrictive than the NAAQS.

The NAAQS and CAAQS are presented in Table 4.

Table 4
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	*Primary*[c,d]	*Secondary*[c,e]
O_3	1 hour	0.09 ppm (180 μg/m^3)	—	Same as Primary Standard[f]
	8 hours	0.070 ppm (137 μg/m^3)	0.070 ppm (137 μg/m^3)[f]	

Table 4
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	*Primary*[c,d]	*Secondary*[c,e]
NO_2[g]	1 hour	0.18 ppm (339 μg/m³)	0.100 ppm (188 μg/m³)	Same as Primary Standard
	Annual Arithmetic Mean	0.030 ppm (57 μg/m³)	0.053 ppm (100 μg/m³)	
CO	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	
SO_2[h]	1 hour	0.25 ppm (655 μg/m³)	0.075 ppm (196 μg/m³)	—
	3 hours	—	—	0.5 ppm (1,300 μg/m³)
	24 hours	0.04 ppm (105 μg/m³)	0.14 ppm (for certain areas)[g]	—
	Annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}[i]	24 hours	50 μg/m³	150 μg/m³	Same as Primary Standard
	Annual Arithmetic Mean	20 μg/m³	—	
$PM_{2.5}$[i]	24 hours	—	35 μg/m³	Same as Primary Standard
	Annual Arithmetic Mean	12 μg/m³	12.0 μg/m³	15.0 μg/m³
Lead[j,k]	30-day Average	1.5 μg/m³	—	—
	Calendar Quarter	—	1.5 μg/m³ (for certain areas)[k]	Same as Primary Standard
	Rolling 3-Month Average	—	0.15 μg/m³	
Hydrogen sulfide	1 hour	0.03 ppm (42 μg/m³)	—	—
Vinyl chloride[j]	24 hours	0.01 ppm (26 μg/m³)	—	—
Sulfates	24 hours	25 μg/m³	—	—
Visibility reducing particles	8 hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to the number of particles when the relative humidity is less than 70%	—	—

Source: CARB 2016b.

Notes: μg/m³ = micrograms per cubic meter; mg/m³= milligrams per cubic meter; ppm = parts per million by volume; O_3 = ozone; NO_2 = nitrogen dioxide; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter with an aerodynamic diameter less than or equal to 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns.

a California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended particulate matter (PM_{10}, $PM_{2.5}$), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

b National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 μg/m³ is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

[c] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[d] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

[e] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[f] On October 1, 2015, the national 8-hour O_3 primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[g] To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[h] On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the national 1-hour standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[i] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM_{10} standards (primary and secondary) of 150 $\mu g/m^3$ were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.

[j] California Air Resources Board has identified lead and vinyl chloride as toxic air contaminants with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[k] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

Toxic Air Contaminants

California regulates TACs primarily through the Tanner Air Toxics Act (Assembly Bill 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (Assembly Bill 2588). The Tanner Act sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. To date, CARB has identified over 21 TACs and has adopted the EPA's list of hazardous air pollutants as TACs. Once a TAC is identified, CARB then adopts an airborne toxics control measure for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate best available control technology for toxics to minimize emissions. None of the TACs identified by CARB have a safe threshold.

Under the Air Toxics "Hot Spots" Act existing facilities that emit air pollutants above specified level were required to (1) prepare a TAC emission inventory plan and report, (2) prepare a risk assessment if TAC emissions were significant, (3) notify the public of significant risk levels, and (4) if health impacts were above specified levels, prepare and implement risk reduction measures.

California Health and Safety Code Section 41700

This section of the Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. This section also applies to sources of objectionable odors.

3.3.3 Local

The following local/regional regulations pertaining to air quality would apply to the proposed project.

San Diego Air Pollution Control District

While CARB is responsible for the regulation of mobile emission sources within the state, local air quality management districts and air pollution control districts are responsible for enforcing standards and regulating stationary sources. The project Site is located within the SDAB and is subject to the guidelines and regulations of the SDAPCD.

In San Diego County, O_3 and particulate matter are the pollutants of main concern, since exceedances of state ambient air quality standards for those pollutants are experienced here in most years. For this reason, the SDAB has been designated as a nonattainment area for the state PM_{10}, $PM_{2.5}$, and O_3 standards. The SDAB is also a federal O_3 attainment (maintenance) area for 1997 8-hour O_3 standard, an O_3 nonattainment area for the 2008 8-hour O_3 standard, and a CO maintenance area (western and central part of the SDAB only, including the project Site).

Federal Attainment Plans

In December 2016, the SDAPCD adopted an update to the Eight-Hour Ozone Attainment Plan for San Diego County (2008 O_3 NAAQS). The 2016 Eight-Hour Ozone Attainment Plan for San Diego County indicates that local controls and state programs would allow the region to reach attainment of the federal 8-hour O_3 standard (1997 O_3 NAAQS) by 2018 (SDAPCD 2016a). In this plan, SDAPCD relies on the Regional Air Quality Strategy (RAQS) to demonstrate how the region will comply with the federal O_3 standard. The RAQS details how the region will manage and reduce O_3 precursors (NO_x and VOCs) by identifying measures and regulations intended to reduce these pollutants. The control measures identified in the RAQS generally focus on stationary sources; however, the emissions inventories and projections in the RAQS address all potential sources, including those under the authority of CARB and the EPA. Incentive programs

for reduction of emissions from heavy-duty diesel vehicles, off-road equipment, and school buses are also established in the RAQS.

Currently, the County is designated as moderate nonattainment for the 2008 NAAQS and maintenance for the 1997 NAAQS. As documented in the 2016 8-Hour Ozone Attainment Plan for San Diego County, the County has a likely chance of obtaining attainment due to the transition to low-emission cars, stricter new source review rules, and continuing the requirement of general conformity for military growth and the San Diego International Airport. The County will also continue emission control measures, including ongoing implementation of existing regulations in O_3 precursor reduction to stationary and area-wide sources, subsequent inspections of facilities and sources, and the adoption of laws requiring Best Available Retrofit Control Technology for control of emissions (SDAPCD 2016a).

State Attainment Plans

The SDAPCD and the SANDAG are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The RAQS for the SDAB was initially adopted in 1991 and is updated on a triennial basis, most recently in 2016 (SDAPCD 2016b). The RAQS outlines SDAPCD's plans and control measures designed to attain the state air quality standards for O_3. The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in the County and the cities in the County, to forecast future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by the County and the cities in the County as part of the development of their general plans (SANDAG 2017a, 2017b).

In December 2016, the SDAPCD adopted the revised RAQS for the County. Since 2007, the San Diego region reduced daily VOC emissions and NO_x emissions by 3.9% and 7.0%, respectively; the SDAPCD expects to continue reductions through 2035 (SDAPCD 2016b). These reductions were achieved through implementation of six VOC control measures and three NO_x control measures adopted in the SDAPCD's 2009 RAQS (SDAPCD 2009a); in addition, the SDAPCD is considering additional measures, including three VOC measures and four control measures to reduce 0.3 daily tons of VOC and 1.2 daily tons of NO_x, provided they are found to be feasible region-wide. In addition, SDAPCD has implemented nine incentive-based programs, has worked with SANDAG to implement regional transportation control measures, and has reaffirmed the state emission offset repeal.

In regards to particulate matter emissions reduction efforts, in December 2005, the SDAPCD prepared a report titled "Measures to Reduce Particulate Matter in San Diego County" to address implementation of Senate Bill (SB) 656 in San Diego County (SB 656 required additional controls to reduce ambient concentrations of PM_{10} and $PM_{2.5}$) (SDAPCD 2005). In the report, SDAPCD evaluated implementation of source-control measures that would reduce particulate matter emissions associated with residential wood combustion; various construction activities including earthmoving, demolition, and grading; bulk material storage and handling; carryout and trackout removal and cleanup methods; inactive disturbed land; disturbed open areas; unpaved parking lots/staging areas; unpaved roads; and windblown dust (SDAPCD 2005).

SDAPCD Rules and Regulations

As stated above, the SDAPCD is responsible for planning, implementing, and enforcing federal and state ambient standards in the SDAB. The following rules and regulations apply to all sources in the jurisdiction of SDAPCD, and would apply to the proposed project:

1. **SDAPCD Regulation IV: Prohibitions; Rule 51: Nuisance.** Prohibits the discharge, from any source, of such quantities of air contaminants or other materials that cause or have a tendency to cause injury, detriment, nuisance, annoyance to people and/or the public, or damage to any business or property (SDAPCD 1969).
2. **SDAPCD Regulation IV: Prohibitions; Rule 55: Fugitive Dust.** Regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and inactive disturbed areas, as well as track-out and carry-out onto paved roads beyond a project Site (SDAPCD 2009b).
3. **SDAPCD Regulation IV: Prohibitions; Rule 67.0.1: Architectural Coatings.** Requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories (SDAPCD 2001).

3.4 Local Air Quality

3.4.1 San Diego Air Basin Attainment Designation

An area is designated in attainment when it is in compliance with the NAAQS and/or CAAQS. These standards are set by the EPA or CARB for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare.

The criteria pollutants of primary concern that are considered in this analysis are O_3, NO_2, CO, SO_2, PM_{10}, and $PM_{2.5}$. Although there are no ambient standards for VOCs or NO_x, they are important as precursors to O_3.

The portion of the basin where the project site is located is designated by the EPA as an attainment area for the 1997 8-hour NAAQS for O_3 and as a marginal nonattainment area for the 2008 8-hour NAAQS for O_3.The basin is designated in attainment for all other criteria pollutants under the NAAQS with the exception of PM_{10}, which was determined to be unclassifiable.

The basin is currently designated nonattainment for O_3 and particulate matter, PM_{10} and $PM_{2.5}$, under the CAAQS. It is designated attainment for the CAAQS for CO, NO_2, SO_2, lead, and sulfates.

Table 5 summarizes the basin's federal and state attainment designations for each of the criteria pollutants.

Table 5
San Diego Air Basin Attainment Classification

Pollutant	Federal Designation[a]	State Designation[b]
O_3 (1-hour)	Attainment[1]	**Nonattainment**
O_3 (8-hour – 1997) (8-hour – 2008)	Attainment (Maintenance) **Nonattainment (Moderate)**	**Nonattainment**
CO	Attainment (Maintenance)[2]	Attainment
PM_{10}	Unclassifiable/Attainment[3]	**Nonattainment**
$PM_{2.5}$	Unclassifiable/Attainment	**Nonattainment**
NO_2	Unclassifiable/Attainment	Attainment
SO_2	Attainment	Attainment
Lead[4]	Unclassifiable/Attainment	Attainment
Sulfates	(no federal standard)	Attainment
Hydrogen Sulfide	(no federal standard)	Unclassified
Visibility-Reducing Particles	(no federal standard)	Unclassified
Vinyl chloride[4]	No federal standard	No designation

Sources:
[a] EPA 2016b
[b] CARB 2016b.

Notes:
1 The federal 1-hour standard of 0.12 ppm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in SIPs.
2 The western and central portions of the SDAB are designated attainment, while the eastern portion is designated unclassifiable/attainment.
3 At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.
4 CARB has identified lead and vinyl chloride as toxic air contaminants with no threshold level of exposure for adverse health effects determined.

3.4.2 Air Quality Monitoring Data

The SDAPCD operates a network of ambient air monitoring stations throughout San Diego County, which measure ambient concentrations of pollutants and determine whether the ambient air quality meets the CAAQS and the NAAQS. The SDAPCD monitors air quality conditions at 10 locations throughout the basin. Not all monitoring stations monitor all criteria pollutants; therefore, data from several monitoring stations are provided. Ambient concentrations of pollutants from 2013 through 2016 are presented in Table 6. The number of days exceeding the ozone and particulate AAQS is shown in Table 7.

Table 6
Ambient Air Quality Data (ppm unless otherwise indicated)

Pollutant	Averaging Time	2013	2014	2015	2016	Most Stringent Ambient Air Quality Standard	Monitoring Station
O_3	8-hour	0.070	0.088	0.078	0.71	0.070	Del Mar–Mira Costa
	1-hour	0.081	0.099	0.077	0.079	0.090	
PM_{10}	Annual	20.0	19.5	16.7	N/A	20 µg/m^3	San Diego-Kearny Villa Road
	24-hour	38.0 µg/m^3*	39.0	37.0	35.0	50 µg/m^3	
$PM_{2.5}$	Annual*	8.3 µg/m^3*	8.2	7.2	7.5	12 µg/m^3	San Diego-Kearny Villa Road
	24-hour	22.0 µg/m^3*	20.2	25.7	19.4	35 µg/m^3	
NO_2	Annual	10.8	10	9	9	0.030	San Diego-Kearny Villa Road
	1-hour	67*	51	51	53	0.180	
CO	8-hour	2.10*	1.9*	2.0*	1.7*	9.0	Beardsley Street
	1-hour*	3.0*	2.7*	2.6*	2.2*	20	
SO_2	Annual	0.14*	0.10*	0.11*	0.18*	0.030	El Cajon
	24-hour	0.6*	0.5*	0.4*	0.2*	0.040	

Source: CARB 2016b; EPA 2016c
Data represent maximum values
Notes: * Data were taken from EPA 2014b.
N/A = not available

Table 7
Frequency of Air Quality Standard Violations

Monitoring Site	Year	Number of Days Exceeding Standard		
		State 1-Hour O_3	*State 8-Hour O_3*	*National 8-Hour O_3*
Del Mar-Mira Costa Station	2013	0	0	0
	2014	1	4	4
	2015	1	2	2
	2016	0	1	1

Source: CARB 2016b.

4 THRESHOLDS OF SIGNIFICANCE

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) provides guidance that a project would have a significant environmental impact if it would:

1. Conflict with or obstruct implementation of the applicable air quality plan.
2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for O_3 precursors).
4. Expose sensitive receptors to substantial pollutant concentrations.
5. Create objectionable odors affecting a substantial number of people.

SDAPCD

As part of its air quality permitting process, the SDAPCD has established thresholds in Rule 20.2 requiring the preparation of Air Quality Impact Assessments for permitted stationary sources. The thresholds are presented in Table 8.

Table 8
San Diego Air Pollution Control District Air Quality Significance Thresholds

Construction Emissions			
Pollutant	*Total Emissions (Pounds per Day)*		
Respirable Particulate Matter (PM_{10})	100		
Fine Particulate Matter ($PM_{2.5}$)	55		
Oxides of Nitrogen (NO_x)	250		
Oxides of Sulfur (SO_x)	250		
Carbon Monoxide (CO)	550		
Volatile Organic Compounds (VOC)	137*		
Operational Emissions			
Pollutant	*Total Emissions*		
	Pounds per Hour	*Pounds per Day*	*Tons per Year*
Respirable Particulate Matter (PM_{10})	—	100	15
Fine Particulate Matter ($PM_{2.5}$)	—	55	10
Oxides of Nitrogen (NO_x)	25	250	40
Sulfur Oxides (SO_x)	25	250	40
Carbon Monoxide (CO)	100	550	100

Table 8
San Diego Air Pollution Control District Air Quality Significance Thresholds

Construction Emissions			
Lead and Lead Compounds	—	3.2	0.6
Volatile Organic Compounds (VOC)	—	137*	13.7

Source: SDAPCD Rule 1501, 20.2
* VOC threshold based on the significance thresholds recommended by the Monterey Bay Unified Air Pollution Control District for the North Central Coast Air Basin, which has similar federal and state attainment status as the basin for O_3.

The thresholds listed in Table 8 represent screening-level thresholds that can be used to evaluate whether project-related emissions could cause a significant impact on air quality. Emissions below the screening-level thresholds would not cause a significant impact. For nonattainment pollutants, if emissions exceed the thresholds shown in Table 8, the project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

SDAPCD Rule 51 (Public Nuisance) prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person. A project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors.

5 IMPACT ANALYSIS

Would the project conflict with or obstruct implementation of the applicable air quality plan?

As mentioned in Section 3.3, Regulatory Setting, the SDAPCD and SANDAG are responsible for developing and implementing the clean air plans for attainment and maintenance of the ambient air quality standards in the SDAB—specifically, the SIP and RAQS.[2] The federal O_3 maintenance plan, which is part of the SIP, was adopted in 2012. The SIP includes a demonstration that current strategies and tactics will maintain acceptable air quality in the SDAB based on the NAAQS. The RAQS was initially adopted in 1991 and is updated on a triennial basis (most recently in December 2016) (SDAPCD 2016b). The RAQS outlines SDAPCD's plans and control measures designed to attain the state air quality standards for O_3. The SIP and RAQS rely on information from CARB and SANDAG, including mobile and area source emissions as well as information regarding projected growth in the County as a whole and the cities in the County, to project future emissions and determine the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by the County and the cities in the County as part of the development of their general plans. Additionally, SANDAG's final regional plan, San Diego Forward: The Regional Plan, and associated Strategy for Sustainability, was adopted October 9, 2015 (SANDAG 2015).

If a proposed project involves development that is greater than that anticipated in the City's General Plan, the project might be in conflict with the SIP and RAQS and may contribute to a potentially significant cumulative impact on air quality. The complex and the four residential units in three stand-alone structures are zoned High Residential (HRd), which allows for the site to be developed with 13 to 20 dwelling units per acre. The proposed project would be consistent with the General Plan land use designation for the site, and would not require a General Plan amendment (City of Solana Beach 2014). The project would include a density bonus that would allow for the development of 260 units on the project site, and would include a waiver, as prescribed by State Density Bonus law, of some development standards related to building and retaining and perimeter wall heights and steep slopes on site, which would otherwise require a reduction in density on certain portions of the site.

The resulting development equates to 19 dwelling units per acre 260 dwelling units averaged over the 13.41-acre site. Additionally, the 260 unit project is identified in the City's Housing Element (updated February 2013) along with 19 other sites within the City, the development of

[2] For the purpose of this discussion, the relevant federal air quality plan is the ozone maintenance plan (SDAPCD 2012). The RAQS is the applicable plan for purposes of state air quality planning. Both plans reflect growth projections in the basin.

which would meet SANDAG'S growth projections delineated in its 2015 Regional Plan and development anticipated in the December 2016 revision to the RAQS. Therefore, at a regional level, the proposed project would be consistent with the underlying growth forecasts in the RAQS and impacts would be **less than significant**.

Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Construction – Proposed Project

Construction of the proposed project would result in a temporary addition of pollutants to the local air basin caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling construction materials. Construction emissions can vary substantially day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Fugitive dust (PM_{10} and $PM_{2.5}$) emissions would primarily result from grading and site preparation activities. NO_x and CO emissions would primarily result from construction equipment use and motor vehicles.

Emissions resulting from the construction phase of the proposed project were estimated using CalEEMod Version 2016.3.2. For the purposes of emissions modeling, it was assumed that construction of the proposed project would commence in mid-2020[3]. Construction would occur over an approximately 39-month period and consist of three site redevelopment phases (which are physically discrete and geographically based).

A detailed depiction of the construction schedule—including information regarding subphases, demolition, and equipment used during each subphase—is included in Section 1.2, Project Description, and Appendix A of this report. The information contained in Appendix A was used as CalEEMod inputs.

Construction equipment specifications were provided by the project applicant, and the equipment mix is meant to represent a reasonable estimate of anticipated construction activity. CalEEMod defaults, including haul trips, were applied for the demolition of the existing multifamily units. Excavation activities would likely include a large portion of export material that would potentially be used as beach nourishment at Fletcher Cove Beach, which is approximately 1.5

[3] Although the construction schedule analyzed in this analysis would likely precede on-the-ground development, an earlier construction start date is considered conservative when estimating daily criteria pollutant emissions because construction emissions in future years would decrease as CARB regulations become more stringent and construction equipment fleet turn over occurs to replace older equipment with newer, more efficient equipment technology.

miles from the project site. However, for the purposes of a conservative air quality analysis, it was assumed that all soil material to be exported off site would be transported to a disposal facility. The Sycamore Landfill is located approximately 22 miles from the project site. The Otay Landfill is located approximately 33 miles from the project site. To be conservative when estimating emissions from haul trips for export activity, it was assumed all export material would be transported to the Otay Landfill. Haul trucks for material export were assumed to have a 14-cubic-yard haul capacity.

The proposed project is subject to SDAPCD Rule 55, Fugitive Dust Control. This rule requires that the project take steps to restrict visible emissions of fugitive dust beyond the property line. Compliance with Rule 55 would limit fugitive dust (PM_{10} and $PM_{2.5}$) that may be generated during grading and construction activities. To account for dust control measures in the calculations, it was assumed that the active construction areas on site would be watered two times daily, resulting in an approximately 55% reduction of particulate matter. The proposed project is also subject to SDAPCD Rule 67.0.1, Architectural Coatings. This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories. VOC content restrictions, which include 100 grams per liter for exterior coatings and 50 grams per liter for interior coatings, are reflected in the emissions estimates.

Table 9 shows the estimated maximum daily construction emissions associated with the construction phases of the proposed project. Complete details of the emissions calculations are provided in Appendix A of this document.

Table 9
Estimated Maximum Daily Construction Emissions (pounds/day) – Proposed Project

Construction Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
2020	4.42	77.65	34.89	0.19	8.87	4.20
2021	64.49	102.15	55.53	0.27	11.06	5.24
2022	65.64	104.59	58.33	0.32	11.99	5.29
2023	61.45	14.96	22.38	0.04	1.65	0.92
Maximum Daily Emissions	***65.64***	***104.59***	***58.33***	***0.32***	***11.99***	***5.29***
Emission Threshold	*137*	*250*	*550*	*250*	*100*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SOx = oxides of sulfur; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns. Emissions represent maximum of summer and winter. Summer emissions are representative of the conditions that may occur during the ozone season (May 1 to October 31), and winter emissions are representative of the conditions that may occur during the balance of the year (November 1 to April 30).
Source: See Appendix A for complete results.

As shown in Table 9, daily construction emissions would not exceed the significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$; therefore, impacts during construction would be less than significant.

Construction – Alternative

Emissions resulting from the construction phase of the Alternative were estimated using CalEEMod Version 2016.3.2. For the purposes of emissions modeling, it was assumed that construction of the proposed project would commence in mid-2020. Construction would occur over an approximately 24-month period. Under this construction scenario the project would not be constructed in discrete phases and there would be no on-site residents during construction.

A detailed depiction of the construction schedule—including information regarding subphases, demolition, and equipment used during each subphase—is included in Section 1.2, Project Description, and Appendix B of this report. The information contained in Appendix B was used as CalEEMod inputs.

Table 10 shows the estimated maximum daily construction emissions associated with the construction phases of the proposed project. Complete details of the emissions calculations are provided in Appendix B of this document.

Table 10
Estimated Maximum Daily Construction Emissions (pounds/day) – Alternative

Construction Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
2020	4.32	90.41	33.94	0.23	15.73	4.92
2021	48.30	112.99	68.22	0.29	88.28	23.16
2022	1.77	13.13	15.87	0.05	2.80	1.03
Maximum Daily Emissions	***48.30***	***112.99***	***68.22***	***0.29***	***88.28***	***23.16***
Emission Threshold	*137*	*250*	*550*	*250*	*100*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SOx = oxides of sulfur; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns. Emissions represent maximum of summer and winter. Summer emissions are representative of the conditions that may occur during the ozone season (May 1 to October 31), and winter emissions are representative of the conditions that may occur during the balance of the year (November 1 to April 30).
Source: See Appendix B for complete results.

As shown in Table 10, daily construction emissions would not exceed the significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$; therefore, impacts during construction would be less than significant.

Operation

Following the completion of construction activities, the proposed project would generate VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions from mobile and stationary sources, including vehicular traffic and area sources (water heating and landscaping). Because operation of the existing buildings also generates air pollutant emissions, the emissions associated with the existing buildings were subtracted from those resulting from the proposed project, and the net change in emissions was compared to the significance thresholds. Operational emissions were estimated using CalEEMod Version 2016.3.2.

Vehicular Traffic

The proposed project would impact air quality through the anticipated increase in vehicular traffic associated with the proposed project. The proposed project would result in a total of 496 additional average daily trips (ADT) above existing conditions.

Project-related traffic was assumed to include a mixture of vehicles in accordance with the model outputs for traffic. Emission factors representing the vehicle mix and emissions for 2014 (year of issuance of the NOP) was applied to the existing site trips, and emission factors for the year 2024 were used to estimate emissions associated with full buildout of the proposed project.

Energy

In addition to estimating mobile source emissions, CalEEMod was also used to estimate emissions from the project's energy use, which includes natural gas combustion. CalEEMod default factors for Title 24 energy rates were applied to the existing building and the proposed project energy emission estimates, which is considered conservative because the existing structure were built in the 1970s and do not reflect current building codes regarding energy efficiency. Refer to Appendix A for additional information.

Area Sources

CalEEMod was also used to estimate emissions from the project's area sources, which include hearth use, landscaping, consumer products, and architectural coatings for building maintenance. Refer to Appendix A for additional information. Currently, 39 of the existing 194 units contain wood-burning fireplaces. The off-complex units do not contain fireplaces. The proposed project would not include any fire burning hearths in any of the units.

Table 11 presents both the maximum daily emissions associated with existing on-site buildings and the operation of the proposed project after all phases of construction have been completed. The net increase in emissions for each criteria pollutant is provided. The values shown for motor vehicles and area sources are the maximum summer or winter daily emissions results from CalEEMod. Complete details of the emissions calculations are provided in Appendix A.

Table 11
Estimated Daily Maximum Operational Emissions

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds Per Day					
Existing Buildings						
Area sources	172.01	4.74	202.79	0.31	25.63	25.63
Energy	0.03	0.29	0.13	0.00	0.02	0.02
Mobile sources	5.42	21.00	64.84	0.14	9.88	2.83
Total	**177.46**	**26.03**	**267.76**	**0.45**	**35.53**	**28.48**
Proposed Project						
Area sources	8.42	0.25	21.48	0.00	0.12	0.12
Energy	0.06	0.49	0.21	0.00	0.04	0.04
Mobile sources	3.97	16.87	46.63	0.16	12.74	3.51
Total	**12.45**	**17.61**	**68.32**	**0.16**	**12.90**	**3.67**
Net Change	***(165.01)***	***(8.42)***	***(199.44)***	***(0.29)***	***(22.63)***	***(24.81)***
Emission Threshold	*137*	*250*	*550*	*250*	*100*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: Note: A decrease in emissions is denoted by parenthesis
VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = oxides of sulfur; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns.
Emissions represent maximum of summer and winter. Summer emissions are representative of the conditions that may occur during the ozone season (May 1 to October 31), and winter emissions are representative of the conditions that may occur during the balance of the year (November 1 to April 30).
Source: See Appendix A for complete results.

As shown in Table 11, the net change in daily operational emissions from the proposed project would not exceed the significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$. All criteria pollutant emissions would result in a net decrease from existing conditions, primarily as a result of the area emission sources from wood-burning hearth use in the existing structures versus the proposed structures which would not include fireplaces. Additionally, regarding mobile emissions, the proposed project's buildout year of 2024 represents a vehicle fleet mix that reflects the latest federal and state regulatory standards regarding engine and fuel efficiency compared to the existing building's baseline year of 2014. Therefore, operational emissions would be **less than significant**.

Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

The SDAB has been designated as a federal nonattainment area for O_3 and a state nonattainment area for O_3, PM_{10}, and $PM_{2.5}$. PM_{10} and $PM_{2.5}$ emissions associated with construction generally result in localized impacts. The nonattainment status is the result of cumulative emissions from all sources of these air pollutants and their precursors within the SDAB. As discussed previously, the project related emissions of all criteria pollutants, including ozone precursors, would be below the significance levels during construction and operation of the project; therefore, construction emissions would not contribute to a cumulatively considerable impact. Additionally, construction would be short term and temporary in nature and not a long-term or permanent new emissions source. Once construction is completed, construction-related emissions would cease.

Regarding operational emissions, as shown in Table 11, emissions generated by the proposed project would result in a net decrease in all criteria pollutant emissions compared to existing land uses primarily as a result of the area emission sources from wood-burning hearth use in the existing structures versus the proposed structures, which would not include wood burning fireplaces, as well as a slightly older vehicle fleet (i.e., less efficient vehicles) associated with the existing uses compared to the proposed project. Therefore, the project **would not contribute to a cumulatively considerable impact**.

Would the project expose sensitive receptors to substantial pollutant concentrations?

Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion. Reduced visibility, eye irritation, and adverse health impacts upon those persons termed “sensitive receptors” are the most serious hazards of existing air quality conditions in the area. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution, as identified by CARB, include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases; however, for the purposes of this analysis, residents are also considered sensitive receptors. The SDAPCD identifies sensitive receptors as those who are especially susceptible to adverse health effects from exposure to toxic air contaminants, such as children, the elderly, and the ill. Sensitive receptors include schools (grades Kindergarten through 12), day care centers, nursing homes, retirement homes, health clinics, and hospitals within 2

kilometers of the facility (SDAPCD 2015). The closest off-site sensitive receptors to the project are a church and associated schoolyard playground located within approximately 50 feet of the western project boundary. In addition, existing residential land uses to the north, south and east are located with approximately 100 feet of the project boundaries. Receptors also include residents of the on-site apartments for the proposed project. The Alternative would not have on-site residents during construction.

Table 12 presents a list of the criteria pollutants and other related pollutants of concern, emission sources, associated health effects, and current SDAB attainment status.

Table 12
Pollutants, Sources, Health Effects, and Attainment Status

Pollutant	Sources	Health Effects	Attainment Status	
			NAAQS	*CAAQS*
Ozone (O_3)	Formed when reactive organic gases (ROG) and nitrogen oxides react in the presence of sunlight. ROG sources include any source that burns fuels (e.g., gasoline, natural gas, wood, oil); solvents; petroleum processing and storage.	Breathing difficulties, lung tissue damage, vegetation damage, damage to rubber and some plastics.	Attainment	Nonattainment
Respirable Particulate Matter (PM_{10})	Road dust, windblown dust, agriculture and construction, fireplaces. Also formed from other pollutants (NO_x, SO_x, organics). Incomplete combustion.	Increased respiratory disease, lung damage, cancer, premature death, reduced visibility, surface soiling.	Unclassifiable	Nonattainment
Fine Particulate Matter ($PM_{2.5}$)	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning. Also formed from reaction of other pollutants (NO_x, SO_x, organics, and NH_3).	Increases respiratory disease, lung damage, cancer, and premature death, reduced visibility, surface soiling. Particles can aggravate heart diseases such as congestive heart failure and coronary artery disease	Attainment	Nonattainment
Carbon Monoxide (CO)	Any source that burns fuel such as automobiles, trucks, heavy construction and farming equipment, residential heating.	Chest pain in heart patients, headaches, reduced mental alertness.	Unclassifiable/ Attainment	Attainment
Nitrogen Dioxide (NO_2)	See carbon monoxide.	Lung irritation and damage. Reacts in the atmosphere to form ozone and acid rain.	Unclassifiable/ Attainment	Attainment
Lead	Metal smelters, resource recovery, leaded gasoline, deterioration of lead paint.	Learning disabilities, brain and kidney damage.	Attainment	Attainment

Table 12
Pollutants, Sources, Health Effects, and Attainment Status

Pollutant	Sources	Health Effects	Attainment Status	
			NAAQS	*CAAQS*
Sulfur Dioxide (SO_2)	Coal or oil burning power plants and industries, refineries, diesel engines.	Increases lung disease and breathing problems for asthmatics. Reacts in the atmosphere to form acid rain.	Attainment	Attainment
Sulfates	Produced by reaction in the air of SO_2, (see SO_2 sources), a component of acid rain.	Breathing difficulties, aggravates asthma, reduced visibility.	(no federal standard)	Attainment
Hydrogen Sulfide	Geothermal power plants, petroleum production and refining, sewer gas.	Nuisance odor (rotten egg smell), headache and breathing difficulties (higher concentrations).	(no federal standard)	Unclassified
Visibly Reducing Particles	See $PM_{2.5}$	Reduced visibility (e.g., obscures mountains and other scenery), reduced airport safety.	(no federal standard)	Unclassified
Vinyl Chloride	Exhaust gases from factories that manufacture or process vinyl chloride (construction, packaging, and transportation industries)	Central nervous system effects (e.g., dizziness, drowsiness, headaches), kidney irritation, liver damage, liver cancer.	N/A	N/A
Toxic Air Contaminant (TAC)	Combustion engines (stationary and mobile), diesel combustion, storage and use of TAC-containing substances (i.e., gasoline, lead smelting, etc.)	Depends on TAC, but may include cancer, mutagenic and/or teratogenic effects, other acute or chronic health effects	N/A	N/A

Source: County of San Diego 2007.

Health Impacts of Toxic Air Contaminants

"Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period would contract cancer based on the use of standard OEHHA risk-assessment methodology (OEHHA 2015). In addition, some TACs have non-carcinogenic effects. TACs that would potentially be emitted during construction activities would be DPM emitted from heavy-duty construction equipment and heavy-duty trucks. Heavy-duty construction equipment and diesel trucks are subject to CARB ATCMs to reduce DPM emissions. According to the OEHHA, HRAs should be based on a 30-year exposure duration based on typical residency period; however, such assessments should be limited to the period/duration of activities associated with the project (OEHHA 2015). Thus, the duration of proposed construction activities (approximately 39 months for the proposed project and 24 months for the Alternative) would only constitute a small percentage of the total long-term exposure period and would not result in exposure of proximate

sensitive receptors to substantial TACs. After construction is completed there would be no long-term source of TAC emissions during operation.

However, as a precautionary measure a HRA was performed to evaluate the risk from diesel exhaust emissions on existing sensitive receptors from construction activities. The HRA methodology was further described in Section 2, and the detailed assessment is provided in Appendix C. The results of the HRA for proposed project and the Alternative construction are summarized in Table 13.

Table 13
Construction Activity Health Risk Assessment Results – Unmitigated

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Proposed Project				
MICR – Residential On Site	Per Million	57.10	10.0	**Potentially Significant**
HIC – On Site	Not Applicable	0.12	1.0	Less than Significant
MICR – Residential Off Site	Per Million	56.38	10.0	**Potentially Significant**
HIC – Off Site	Not Applicable	0.17	1.0	Less than Significant
Alternative				
MICR – Residential Off Site	Per Million	92.20	10.0	**Potentially Significant**
HIC – Off Site	Not Applicable	0.054	1.0	Less than Significant

Sources: Attachment B
Notes: MICR – Maximum Individual Cancer Risk; HIC – Chronic Hazard Index

The results of the HRA demonstrate that the TAC exposure from construction diesel exhaust emissions would result in cancer risk on site above the 10 in 1 million threshold for the proposed project and Alternative. The Chronic Hazard Index for both the proposed project and Alternative would be less than 1. Therefore, TAC emissions from construction activities of the proposed project and Alternative may expose sensitive receptors to substantial pollutant concentrations and would result in a potentially significant impact and therefore, mitigation is required.

Health Impacts of Carbon Monoxide

As described previously, high concentrations CO exposure can result in dizziness, fatigue, chest pain, headaches, and impairment of central nervous system functions. Mobile-source impacts, including those related to CO, occur on two scales of motion. Regionally, project-related construction travel would add to regional trip generation and increase the VMT within the local airshed and the SDAB. Locally, construction traffic would be added to the roadway system in the vicinity of the proposed project site. Although the SDAB is currently an attainment area for CO, there is a potential for the formation of microscale CO “hotspots” to occur immediately around

areas where there is traffic congestion. Hotspots can form if such traffic occurs during periods of poor atmospheric ventilation and when a large number of vehicles "cold-started" and operating at pollution-inefficient speeds. Because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SDAB is steadily decreasing (CARB 2005).

Carbon monoxide transport is extremely limited and disperses rapidly with distance from the source. Under certain extreme meteorological conditions, however, CO concentrations near a congested roadway or intersection may reach unhealthy levels, affecting sensitive receptors such as residents, school children, hospital patients, and the elderly. Typically, high CO concentrations are associated with urban roadways or intersections operating at an unacceptable level of service (LOS). CO hotspots have been found to occur only at signalized intersections that operate at or below LOS E with peak-hour traffic volumes exceeding 3,000 vehicle trips. According to the County of San Diego's *Guidelines for Determining Significance and Report Format and Content Requirements*, if a project would place a sensitive receptor within 500 feet of such an intersection, a CO hotspot analysis would be required. Similarly, any project that would cause intersections to operate at or below LOS E with peak-hour trips exceeding 3,000 trips, a CO hotspot analysis would be required (County of San Diego 2007). As previously discussed, construction-generated traffic would not contribute a substantial number of trips to the local roadway network; therefore, a construction CO hotspot analysis is unwarranted.

Additionally, as stated in the Traffic Impact Analysis prepared by Fehr and Peers, all key study area intersections will continue to operate at LOS D or better under Horizon Year (2035) Conditions without and with the proposed project. The reported travel delay at the Stevens Avenue/South Nardo Avenue intersection is projected to decrease compared to Near Term (2017) Conditions despite the increase in volumes because the intersection's signal timing automatically adjusts to provide more green time to the north and south approaches in response to the increased demand. The green time provided for the east and west approaches automatically decreases, in response, in order to maintain the cycle length. The vehicular delay at the north and south approaches are therefore reduced and thus, the overall delay reported for the intersection is reduced (Fehr and Peers 2016). Therefore, because the project would not cause intersection performance to operate at or below LOS E during project operation, a CO hotspot analysis would not be required. Localized carbon monoxide impacts, therefore, would be considered **less than significant**.

Health Impacts of Other Criteria Air Pollutants

Construction and operation of the proposed project would not result in emissions that exceed the SDAPCD emission thresholds for any criteria air pollutants including VOC, NO_x, CO, SO_x, PM_{10} or $PM_{2.5}$. Some VOCs would be associated with motor vehicles and construction equipment, while others are associated with architectural coatings, the emissions of which

would not result in the exceedances of the SDAPCD thresholds as shown in Table 8. Additionally, SDAPCD Rule 67.0.1 restricts the VOC content of coatings for both construction and operational applications.

VOCs and NO_x are precursors to O_3, for which the SDAB is designated as nonattainment with respect to the NAAQS and CAAQS (the SDAB is designated by the EPA as an attainment area for the 1-hour O_3 NAAQS standard and 1997 8-hour NAAQS standard). The potential health effects associated with O_3, as discussed in Section 3.2, are generally associated with reduced lung function. The contribution of VOCs and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SDAB due to O_3 precursor emissions tend to be found downwind from the source location allowing time for photochemical reactions to occur. The potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur because exceedances of the O_3 AAQS tend to occur between April and October when solar radiation is highest. The EPA, in coordination with the National Oceanic and Atmospheric Association (NOAA), National Park Service, tribal, state and local agencies developed the Air Quality Index – an air monitoring system under the AirNow program, which provides real-time monitoring data for ozone and particulate matter and archives historical air quality data throughout the year. Air quality data collected under the system is then ranked using a color and number scale, which corresponds to the level of pollutants and associated health effects from exposure at those levels. Table 14 shows these scales and descriptions.

Table 14
Air Quality Health Effects Index Scale

Air Quality Index	Color (Level of Health Concern)	Health Effects
Good (0–50)	Green	No health impacts are expected when air quality is in this range.
Moderate (51–100)	Yellow	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people. For example, people who are unusually sensitive to ozone may experience respiratory symptoms.
Unhealthy for Sensitive Groups (101–150)	Orange	Although general public is not likely to be affected at this AQI range, people with lung disease, older adults and children are at a greater risk from exposure to ozone, whereas persons with heart and lung disease, older adults and children are at greater risk from the presence of particles in the air.
Unhealthy (151–200)	Red	Everyone may begin to experience some adverse health effects, and members of the sensitive groups may experience more serious effects.
Very Unhealthy (201–300)	Purple	This would trigger a health alert signifying that everyone may experience more serious health effects.
Hazardous (301–500)	Maroon	This would trigger a health warnings of emergency conditions. The entire population is more likely to be affected.

Source: EPA 2015

Because ozone concentrations tend to be the highest during the summer months, ozone during the months of June 2014 and July 2014 were examined to establish existing worst-case ozone conditions at the project site location. Of the 61 consecutive days analyzed, approximately 59 days were reported as having "Good" ozone levels (the lowest reported levels) and approximately 2 of the 61 days were reported as having "Moderate" ozone levels in the coastal San Diego area (EPA 2015). The overall effect of a single project's emissions of O_3 precursors is speculative due to the lack of quantitative methods to assess impacts. Nonetheless, the VOC and NO_x emissions associated with project construction could minimally contribute to regional O_3 concentrations and the associated health impacts. Due to the minimal contribution during construction and operation, as well as the existing good air quality in the project area and coastal San Diego areas, potential air quality related health impacts would be considered less than significant.

Similar to O_3, construction of the proposed project would not exceed thresholds for PM_{10} or $PM_{2.5}$ and would not contribute to exceedances of the NAAQS and CAAQS for particulate matter. The project would also not result in substantial DPM emissions during construction and operation and therefore, would not result in significant health effects related to DPM exposure. Additionally, of the 61 consecutive days analyzed as described previously, approximately 14 days were reported as having "Good" particulate levels (the lowest reported levels) and approximately 47 of the 61 days were reported as having "Moderate" particulate levels in the coastal San Diego area (EPA 2015). As shown in Table 14, moderate levels are considered acceptable in terms of localized health effects. Due to the minimal contribution of particulate matter during construction and operation, potential air quality related health impacts would be considered less than significant.

Regarding nitrogen dioxide, according to the construction emissions analysis, construction of the proposed project would not contribute to exceedances of the NAAQS and CAAQS for NO_2. As described in Section 3.2, NO_2 and NO_x health impacts are associated with respiratory irritation, which may be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. However, these operations would be relatively short term, and application of construction best management practices AQ-1 and AQ-2 would help to reduce this impact. Additionally, off-road construction equipment would be operating at various portions of the site and would not be concentrated in one portion of the site at any one time. Additionally, construction of the proposed project would not require any stationary emission sources that would create substantial, localized NO_x impacts. Therefore, potential air quality related health impacts would be considered less than significant.

In summary, construction and operation of the proposed project would not result in exceedances of SDAPCD emission-based thresholds for any criteria pollutants. The VOC and NOx emissions, as described previously, would minimally contribute to regional O_3 concentrations. Current and historical air quality for ozone at the project site is considered "Good" (between 0-50 on a scale of 0-500) according to the EPA's Air Quality Index (EPA 2015). In addition to O_3, NO_x emissions would not contribute to potential exceedances of the NAAQS and CAAQS for NO_2. As shown in Table 6, the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards. Thus, it is not expected the project's operational NO_x emissions would result in exceedances of the NO_2 standards or contribute to the associated health effects. CO tends to be a localized impact associated with congested intersections. The associated CO "hotspots" were discussed previously as a less-than-significant impact. Thus, the project's CO emissions would not contribute to significant health effects associated with this pollutant. PM_{10} and $PM_{2.5}$ would not contribute to potential exceedances of the NAAQS and CAAQS for particulate matter and would not obstruct the SDAB from coming into attainment for these pollutants and would not contribute to significant health effects associated with particulates. Lastly, current and historical air quality for particulate matter at the project site are considered "Good" to "Moderate" according to the EPA's Air Quality Index (EPA 2015). Therefore, health impacts associated with criteria air pollutants would be considered **less than significant.**

Would the project create objectionable odors affecting a substantial number of people?

Odors would be generated from vehicles and/or equipment exhaust emissions during construction of the proposed project. Odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment and architectural coatings. Such odors are temporary and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be considered less than significant.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project involves residential uses similar to those that currently exist on site and would not result in the creation of a land use that is commonly associated with odors. Therefore, project operations would result in an odor impact that is less than significant.

6 MITIGATION MEASURES

As discussed in Section 5, the potential impact to sensitive receptors from construction of the proposed project and Alternative would result in a potentially significant impact. Therefore, the following mitigation is required to reduce the emissions of DPM from construction and the associated health risk.

MM-AQ-1 To reduce the potential for health risks as a result of construction of the project the Applicant shall:

a. Prior to the start of construction activities, the project applicant, or its designee, shall ensure that all diesel-powered excavators, forklifts, paving equipment, rollers, rubber tired dozers, scrapers, and tractors/loaders/backhoes are powered with CARB certified Tier 4 Interim engines, except where the project applicant establishes to the satisfaction of the City that Tier 4 Interim equipment is not available.

- All other diesel-powered construction equipment will be classified as Tier 3 or higher, at a minimum, except where the project applicant establishes to the satisfaction of the City that Tier 3 equipment is not available.

In the case where the applicant is unable to secure a piece of equipment that meets the Tier 4 Interim requirement, the applicant may upgrade another piece of equipment to compensate (from Tier 4 Interim to Tier 4 Final).

Engine Tier requirements in accordance with this measure shall be incorporated on all construction plans. As the construction fleet details assumed for this analysis were based on best available data at the time of preparation (June 2018), construction fleet and operating scenarios may change once a contractor is selected prior to construction anticipated to be mid-2020.

b. Prior to the commencement of any demolition, grading, or construction activity on the project site, if the applicant makes changes to the construction fleet the applicant will conduct a supplemental health risk assessment (HRA) to ensure that the health risk associated with the construction scenario at the time of construction is no greater risk than the 10 in one million stated in the EIR.

All emissions for criteria pollutants would be well below the SDAPCD thresholds. In addition, construction best management practices (BMPs) would be implemented to further limit exposure

of sensitive receptors to criteria pollutants, consistent with SDAPCD Rule 55. Construction BMPs are as follows:

BMP AQ-1 Consistent with San Diego Air Pollution Control District (SDAPCD) Rule 55, the project applicant shall ensure that fugitive dust generated by grading and construction activities shall be kept to a minimum with a goal of retaining dust on the site, by following the dust control best management practices listed below:

a. During clearing, grading, earthmoving, excavation, or transportation of cut or fill materials, the project applicant shall use water trucks or sprinkler systems to prevent dust from leaving the site and to create a crust after each day's activities cease.

b. During construction, the project applicant shall use water truck or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this would include wetting down such areas at least twice per day, later in the morning and after work is completed for the day, and whenever winds exceed 15 miles per hour.

c. The project applicant shall ensure that soil stockpiled for more than 2 days shall be covered, kept moist, or treated with soil binders to prevent dust generation.

d. The project applicant shall post signs on site to limit speeds on unpaved roads to not more than 15 miles per hour.

e. The project applicant shall halt all grading and excavation operations when wind speeds exceed 25 miles per hour.

f. The project applicant shall ensure that dirt and debris spilled onto paved surfaces at the project site and on the adjacent roadways shall be swept, vacuumed, and/or washed at the end of each workday.

g. The project applicant shall ensure that all trucks hauling dirt, sand, soil, or other loose material to and from the construction site shall be tarped and maintain a minimum 2 feet of freeboard.

h. The project applicant shall, at a minimum, at each vehicle egress from the project site to a paved public road, install a pad consisting of washed gravel (minimum-size: 1 inch) maintained in a clean condition.

BMP AQ-2 The project applicant shall implement the following best management practices during construction to reduce VOC and NO_x emissions from construction equipment to the extent feasible:

a. The engine size of construction equipment shall be the minimum size necessary to accomplish the task for which it is used.

b. The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practicable number is operating at any one time.

c. Construction equipment shall be maintained in tune per the manufacturer's specifications.

d. Electric equipment shall be utilized in lieu of diesel-powered equipment, where feasible.

f. Delivery or haul truck idling time shall not exceed 5 minutes at any single location per CARB's ACTM 13 (CCR Chapter 10 Section 2485), unless additional time is required for safety reasons, per engine manufacturers' specifications or reasons stated in the Final Regulation Order of CCR Chapter 10 Section 2485.

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7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The construction of the proposed project and Alternative would result in a potentially significant impact to sensitive receptors prior to mitigation. With implementation of MM-AQ-1, the emissions of DPM are significantly reduced compared to the unmitigated scenario. The detailed emissions assumptions and model outputs using CalEEMod are provided in Appendix A and B. Table 15 shows the results of the HRA after implementation of MM-AQ-1 for the proposed project and Alternative.

Table 15
Construction Activity Health Risk Assessment Results – Mitigated

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Proposed Project				
MICR – Residential On Site	Per Million	6.21	10.0	Less than Significant
HIC – On Site	Not Applicable	0.036	1.0	Less than Significant
MICR – Residential Off Site	Per Million	7.38	10.0	Less than Significant
HIC – Off Site	Not Applicable	0.036	1.0	Less than Significant
Alternative				
MICR – Residential Off Site	Per Million	9.68	10.0	Less than Significant
HIC – Off Site	Not Applicable	0.0057	1.0	Less than Significant

Sources: Attachment C
Notes: MICR – Maximum Individual Cancer Risk; HIC – Chronic Hazard Index

The mitigated results shown in Table 15 demonstrate that the construction mobile sources exhibit maximum individual cancer risks (MICR) below the 10 in a million threshold and chronic hazard indices (HIC) less than 1. AERMOD and HARP2 outputs are contained in Attachment C.

Therefore, with respect to CEQA Appendix G, Air Quality question (d), TAC emissions from construction of the proposed project and Alternative would not expose sensitive receptors to substantial pollutant concentrations and would result in a less than significant impact with mitigation.

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9 LIST OF PREPARERS

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FIGURE 1

Regional Map

Air Quality Technical Report for the Solana Highlands Revitalization Project

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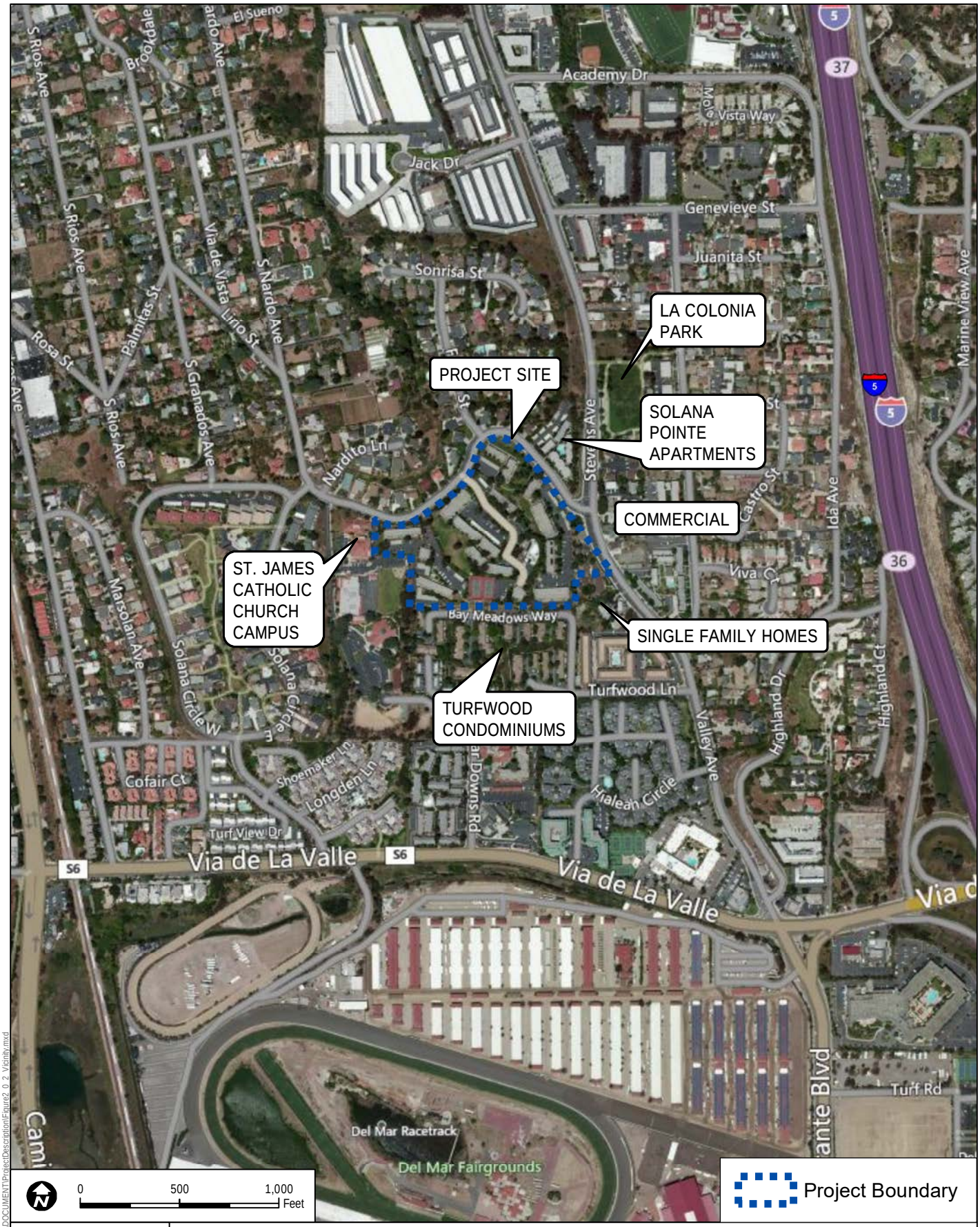

SOURCE: BING Maps 2014; USGS 7.5-Minute Series - Del Mar Quadrangle.

FIGURE 2
Vicinity Map

8607

Air Quality Technical Report for the Solana Highlands Revitalization Project

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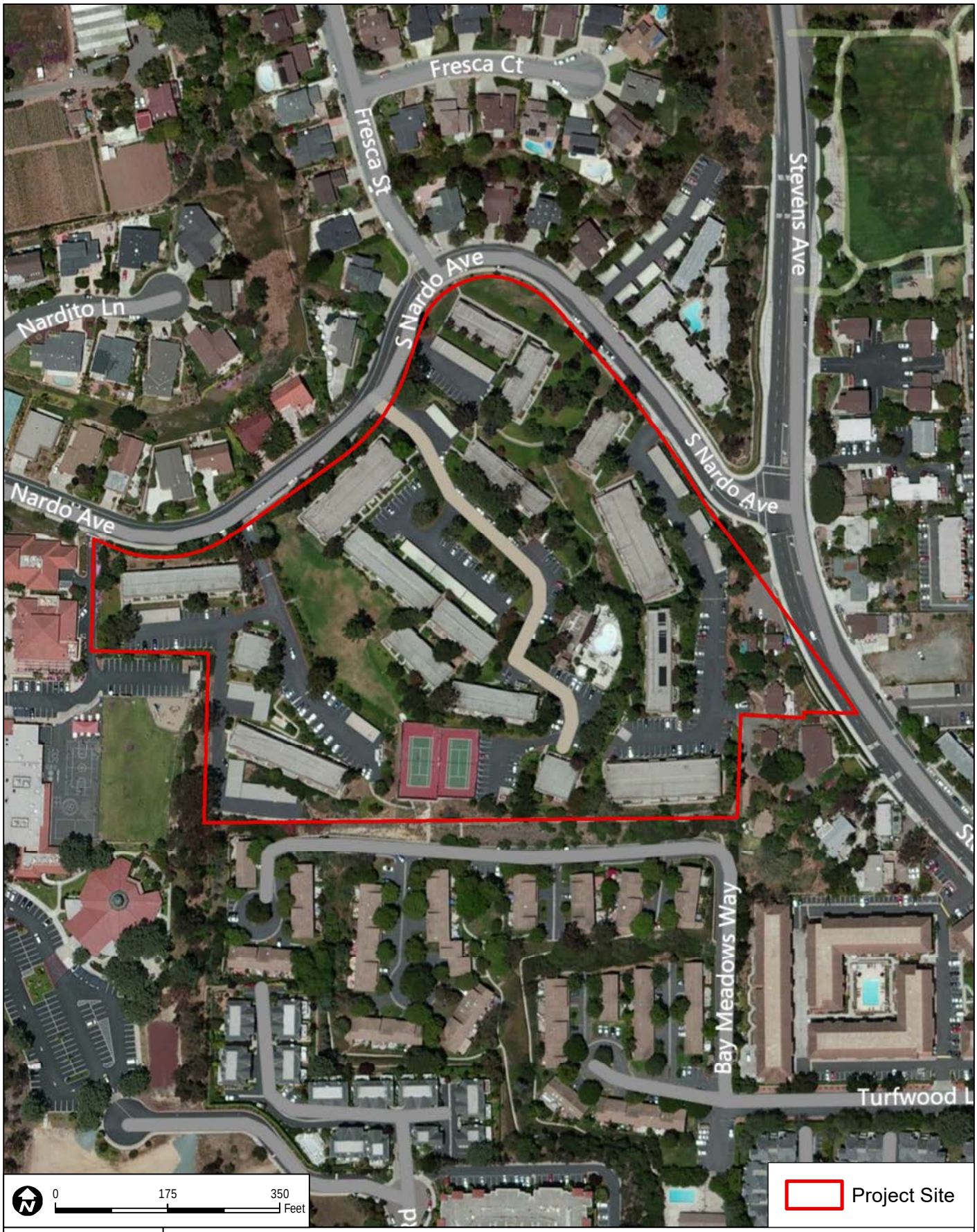

SOURCE: BING Maps, 2014.

FIGURE 3
Existing Site Layout

8607

Air Quality Technical Report for the Solana Highlands Revitalization Project

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1 SITE PLAN
1"=40'-0"

SOURCE: Stephen Dalton Architects 2014

FIGURE 4

Site Plan

8607

Air Quality Technical Report for the Solana Highlands Revitalization Project

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APPENDIX A

CalEEMod Output Files, Proposed Project

Solana Highlands - Existing Uses

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	150.00	1000sqft	3.44	150,000.00	0
Apartments Low Rise	4.00	Dwelling Unit	0.25	4,000.00	11
Apartments Mid Rise	194.00	Dwelling Unit	5.11	142,292.00	555

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2014
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - existing uses

Construction Phase - operational only

Off-road Equipment - operational only

Trips and VMT - operational only

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - trip gen - F&P

Woodstoves - based on PD

Consumer Products - CalEEMod defaults.

Area Coating - SDAPCD Rule 67.0.1

Landscape Equipment - CalEEMod defaults.

Energy Use - Historical data.

Water And Wastewater - water use provided by applicant

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50

tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintParkingValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblFireplaces	NumberGas	2.20	4.00
tblFireplaces	NumberGas	106.70	155.00
tblFireplaces	NumberNoFireplace	0.40	4.00
tblFireplaces	NumberNoFireplace	19.40	155.00
tblFireplaces	NumberWood	1.40	0.00
tblFireplaces	NumberWood	67.90	39.00
tblLandUse	LandUseSquareFeet	194,000.00	142,292.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	ST_TR	7.16	7.68
tblVehicleTrips	ST_TR	6.39	7.68
tblVehicleTrips	SU_TR	6.07	7.04
tblVehicleTrips	SU_TR	5.86	7.04
tblVehicleTrips	WD_TR	6.59	8.00
tblVehicleTrips	WD_TR	6.65	8.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00

tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	260,616.10	37,400.00
tblWater	IndoorWaterUseRate	12,639,880.97	11,944,887.00
tblWater	OutdoorWaterUseRate	164,301.46	0.00
tblWater	OutdoorWaterUseRate	7,968,620.61	5,119,237.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	0.20	0.00
tblWoodstoves	NumberCatalytic	9.70	0.00
tblWoodstoves	NumberNoncatalytic	0.20	0.00
tblWoodstoves	NumberNoncatalytic	9.70	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2013	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2013	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.5756	0.2040	9.1352	0.0128		1.0552	1.0552		1.0552	1.0552	92.5773	127.6405	220.2178	4.9700e-003	0.0105	223.4604
Energy	6.2800e-003	0.0537	0.0228	3.4000e-004		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	288.5939	288.5939	0.0103	3.0300e-003	289.7531
Mobile	0.9272	3.7335	11.3090	0.0234	1.6679	0.0483	1.7162	0.4471	0.0458	0.4929	0.0000	2,136.6374	2,136.6374	0.1536	0.0000	2,140.4780
Waste						0.0000	0.0000		0.0000	0.0000	18.4884	0.0000	18.4884	1.0926	0.0000	45.8043
Water						0.0000	0.0000		0.0000	0.0000	4.2394	69.5763	73.8157	0.0174	9.8000e-003	77.1704
Total	**8.5090**	**3.9912**	**20.4670**	**0.0365**	**1.6679**	**1.1079**	**2.7757**	**0.4471**	**1.1054**	**1.5525**	**115.3050**	**2,622.4482**	**2,737.7532**	**1.2789**	**0.0233**	**2,776.6663**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.5756	0.2040	9.1352	0.0128		1.0552	1.0552		1.0552	1.0552	92.5773	127.6405	220.2178	4.9700e-003	0.0105	223.4604
Energy	6.2800e-003	0.0537	0.0228	3.4000e-004		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	288.5939	288.5939	0.0103	3.0300e-003	289.7531
Mobile	0.9272	3.7335	11.3090	0.0234	1.6679	0.0483	1.7162	0.4471	0.0458	0.4929	0.0000	2,136.6374	2,136.6374	0.1536	0.0000	2,140.4780
Waste						0.0000	0.0000		0.0000	0.0000	18.4884	0.0000	18.4884	1.0926	0.0000	45.8043
Water						0.0000	0.0000		0.0000	0.0000	4.2394	69.5763	73.8157	0.0174	9.8000e-003	77.1704
Total	**8.5090**	**3.9912**	**20.4670**	**0.0365**	**1.6679**	**1.1079**	**2.7757**	**0.4471**	**1.1054**	**1.5525**	**115.3050**	**2,622.4482**	**2,737.7532**	**1.2789**	**0.0233**	**2,776.6663**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/30/2012	1/25/2013	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.44

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.9272	3.7335	11.3090	0.0234	1.6679	0.0483	1.7162	0.4471	0.0458	0.4929	0.0000	2,136.6374	2,136.6374	0.1536	0.0000	2,140.4780
Unmitigated	0.9272	3.7335	11.3090	0.0234	1.6679	0.0483	1.7162	0.4471	0.0458	0.4929	0.0000	2,136.6374	2,136.6374	0.1536	0.0000	2,140.4780

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	32.00	30.72	28.16	89,281	89,281
Apartments Mid Rise	1,552.00	1,489.92	1365.76	4,330,141	4,330,141
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	1,584.00	1,520.64	1,393.92	4,419,422	4,419,422

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.536433	0.053575	0.200220	0.130814	0.024671	0.005832	0.013762	0.020690	0.001840	0.002510	0.007051	0.000678	0.001924
Apartments Mid Rise	0.536433	0.053575	0.200220	0.130814	0.024671	0.005832	0.013762	0.020690	0.001840	0.002510	0.007051	0.000678	0.001924
Other Asphalt Surfaces	0.536433	0.053575	0.200220	0.130814	0.024671	0.005832	0.013762	0.020690	0.001840	0.002510	0.007051	0.000678	0.001924

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	226.4244	226.4244	9.1100e-003	1.8900e-003	227.2141
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	226.4244	226.4244	9.1100e-003	1.8900e-003	227.2141
NaturalGas Mitigated	6.2800e-003	0.0537	0.0228	3.4000e-004		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	62.1696	62.1696	1.1900e-003	1.1400e-003	62.5390
NaturalGas Unmitigated	6.2800e-003	0.0537	0.0228	3.4000e-004		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	62.1696	62.1696	1.1900e-003	1.1400e-003	62.5390

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	45628.1	2.5000e-004	2.1000e-003	8.9000e-004	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.4349	2.4349	5.0000e-005	4.0000e-005	2.4494
Apartments Mid Rise	1.11939e+006	6.0400e-003	0.0516	0.0220	3.3000e-004		4.1700e-003	4.1700e-003		4.1700e-003	4.1700e-003	0.0000	59.7347	59.7347	1.1400e-003	1.1000e-003	60.0897
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**6.2900e-003**	**0.0537**	**0.0228**	**3.4000e-004**		**4.3400e-003**	**4.3400e-003**		**4.3400e-003**	**4.3400e-003**	**0.0000**	**62.1696**	**62.1696**	**1.1900e-003**	**1.1400e-003**	**62.5390**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	45628.1	2.5000e-004	2.1000e-003	8.9000e-004	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.4349	2.4349	5.0000e-005	4.0000e-005	2.4494
Apartments Mid Rise	1.11939e+006	6.0400e-003	0.0516	0.0220	3.3000e-004		4.1700e-003	4.1700e-003		4.1700e-003	4.1700e-003	0.0000	59.7347	59.7347	1.1400e-003	1.1000e-003	60.0897
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**6.2900e-003**	**0.0537**	**0.0228**	**3.4000e-004**		**4.3400e-003**	**4.3400e-003**		**4.3400e-003**	**4.3400e-003**	**0.0000**	**62.1696**	**62.1696**	**1.1900e-003**	**1.1400e-003**	**62.5390**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	14705.4	4.8059	1.9000e-004	4.0000e-005	4.8226
Apartments Mid Rise	678129	221.6185	8.9200e-003	1.8500e-003	222.3915
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**226.4244**	**9.1100e-003**	**1.8900e-003**	**227.2141**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	14705.4	4.8059	1.9000e-004	4.0000e-005	4.8226
Apartments Mid Rise	678129	221.6185	8.9200e-003	1.8500e-003	222.3915
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**226.4244**	**9.1100e-003**	**1.8900e-003**	**227.2141**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	7.5756	0.2040	9.1352	0.0128		1.0552	1.0552		1.0552	1.0552	92.5773	127.6405	220.2178	4.9700e-003	0.0105	223.4604
Unmitigated	7.5756	0.2040	9.1352	0.0128		1.0552	1.0552		1.0552	1.0552	92.5773	127.6405	220.2178	4.9700e-003	0.0105	223.4604

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0593					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5810					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.8860	0.1862	7.6277	0.0127		1.0472	1.0472		1.0472	1.0472	92.5773	125.2363	217.8136	2.4000e-003	0.0105	220.9920
Landscaping	0.0493	0.0179	1.5075	8.0000e-005		8.0000e-003	8.0000e-003		8.0000e-003	8.0000e-003	0.0000	2.4042	2.4042	2.5700e-003	0.0000	2.4684
Total	**7.5756**	**0.2041**	**9.1352**	**0.0128**		**1.0552**	**1.0552**		**1.0552**	**1.0552**	**92.5773**	**127.6405**	**220.2178**	**4.9700e-003**	**0.0105**	**223.4604**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0593					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5810					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.8860	0.1862	7.6277	0.0127		1.0472	1.0472		1.0472	1.0472	92.5773	125.2363	217.8136	2.4000e-003	0.0105	220.9920
Landscaping	0.0493	0.0179	1.5075	8.0000e-005		8.0000e-003	8.0000e-003		8.0000e-003	8.0000e-003	0.0000	2.4042	2.4042	2.5700e-003	0.0000	2.4684
Total	**7.5756**	**0.2041**	**9.1352**	**0.0128**		**1.0552**	**1.0552**		**1.0552**	**1.0552**	**92.5773**	**127.6405**	**220.2178**	**4.9700e-003**	**0.0105**	**223.4604**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	73.8157	0.0174	9.8000e-003	77.1704
Unmitigated	73.8157	0.0174	9.8000e-003	77.1704

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.0374 / 0	0.1724	5.0000e-005	3.0000e-005	0.1827
Apartments Mid Rise	11.9449 / 5.11924	73.6433	0.0173	9.7700e-003	76.9878
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**73.8157**	**0.0174**	**9.8000e-003**	**77.1704**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.0374 / 0	0.1724	5.0000e-005	3.0000e-005	0.1827
Apartments Mid Rise	11.9449 / 5.11924	73.6433	0.0173	9.7700e-003	76.9878
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**73.8157**	**0.0174**	**9.8000e-003**	**77.1704**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	18.4884	1.0926	0.0000	45.8043
Unmitigated	18.4884	1.0926	0.0000	45.8043

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	1.84	0.3735	0.0221	0.0000	0.9253
Apartments Mid Rise	89.24	18.1149	1.0706	0.0000	44.8789
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**18.4884**	**1.0926**	**0.0000**	**45.8043**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	1.84	0.3735	0.0221	0.0000	0.9253
Apartments Mid Rise	89.24	18.1149	1.0706	0.0000	44.8789
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**18.4884**	**1.0926**	**0.0000**	**45.8043**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Solana Highlands - Existing Uses

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	150.00	1000sqft	3.44	150,000.00	0
Apartments Low Rise	4.00	Dwelling Unit	0.25	4,000.00	11
Apartments Mid Rise	194.00	Dwelling Unit	5.11	142,292.00	555

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2014
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - existing uses

Construction Phase - operational only

Off-road Equipment - operational only

Trips and VMT - operational only

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - trip gen - F&P

Woodstoves - based on PD

Consumer Products - CalEEMod defaults.

Area Coating - SDAPCD Rule 67.0.1

Landscape Equipment - CalEEMod defaults.

Energy Use - Historical data.

Water And Wastewater - water use provided by applicant

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50

tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintParkingValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblFireplaces	NumberGas	2.20	4.00
tblFireplaces	NumberGas	106.70	155.00
tblFireplaces	NumberNoFireplace	0.40	4.00
tblFireplaces	NumberNoFireplace	19.40	155.00
tblFireplaces	NumberWood	1.40	0.00
tblFireplaces	NumberWood	67.90	39.00
tblLandUse	LandUseSquareFeet	194,000.00	142,292.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	ST_TR	7.16	7.68
tblVehicleTrips	ST_TR	6.39	7.68
tblVehicleTrips	SU_TR	6.07	7.04
tblVehicleTrips	SU_TR	5.86	7.04
tblVehicleTrips	WD_TR	6.59	8.00
tblVehicleTrips	WD_TR	6.65	8.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00

tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	260,616.10	37,400.00
tblWater	IndoorWaterUseRate	12,639,880.97	11,944,887.00
tblWater	OutdoorWaterUseRate	164,301.46	0.00
tblWater	OutdoorWaterUseRate	7,968,620.61	5,119,237.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	0.20	0.00
tblWoodstoves	NumberCatalytic	9.70	0.00
tblWoodstoves	NumberNoncatalytic	0.20	0.00
tblWoodstoves	NumberNoncatalytic	9.70	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2013	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2013	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	172.0061	4.7394	202.7906	0.3105		25.6314	25.6314		25.6314	25.6314	2,488.9990	3,396.5050	5,885.5040	0.0960	0.2814	5,971.7453
Energy	0.0344	0.2942	0.1252	1.8800e-003		0.0238	0.0238		0.0238	0.0238		375.5081	375.5081	7.2000e-003	6.8800e-003	377.7396
Mobile	5.4208	20.1177	64.8351	0.1375	9.6036	0.2707	9.8743	2.5693	0.2570	2.8262		13,844.5042	13,844.5042	0.9600		13,868.5035
Total	**177.4613**	**25.1513**	**267.7509**	**0.4499**	**9.6036**	**25.9259**	**35.5295**	**2.5693**	**25.9121**	**28.4814**	**2,488.9990**	**17,616.5173**	**20,105.5164**	**1.0632**	**0.2882**	**20,217.9884**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	172.0061	4.7394	202.7906	0.3105		25.6314	25.6314		25.6314	25.6314	2,488.9990	3,396.5050	5,885.5040	0.0960	0.2814	5,971.7453
Energy	0.0344	0.2942	0.1252	1.8800e-003		0.0238	0.0238		0.0238	0.0238		375.5081	375.5081	7.2000e-003	6.8800e-003	377.7396
Mobile	5.4208	20.1177	64.8351	0.1375	9.6036	0.2707	9.8743	2.5693	0.2570	2.8262		13,844.5042	13,844.5042	0.9600		13,868.5035
Total	**177.4613**	**25.1513**	**267.7509**	**0.4499**	**9.6036**	**25.9259**	**35.5295**	**2.5693**	**25.9121**	**28.4814**	**2,488.9990**	**17,616.5173**	**20,105.5164**	**1.0632**	**0.2882**	**20,217.9884**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/30/2012	1/25/2013	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.44

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.4208	20.1177	64.8351	0.1375	9.6036	0.2707	9.8743	2.5693	0.2570	2.8262		13,844.5042	13,844.5042	0.9600		13,868.5035
Unmitigated	5.4208	20.1177	64.8351	0.1375	9.6036	0.2707	9.8743	2.5693	0.2570	2.8262		13,844.5042	13,844.5042	0.9600		13,868.5035

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	32.00	30.72	28.16	89,281	89,281
Apartments Mid Rise	1,552.00	1,489.92	1365.76	4,330,141	4,330,141
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	1,584.00	1,520.64	1,393.92	4,419,422	4,419,422

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.536433	0.053575	0.200220	0.130814	0.024671	0.005832	0.013762	0.020690	0.001840	0.002510	0.007051	0.000678	0.001924
Apartments Mid Rise	0.536433	0.053575	0.200220	0.130814	0.024671	0.005832	0.013762	0.020690	0.001840	0.002510	0.007051	0.000678	0.001924
Other Asphalt Surfaces	0.536433	0.053575	0.200220	0.130814	0.024671	0.005832	0.013762	0.020690	0.001840	0.002510	0.007051	0.000678	0.001924

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0344	0.2942	0.1252	1.8800e-003		0.0238	0.0238		0.0238	0.0238		375.5081	375.5081	7.2000e-003	6.8800e-003	377.7396
NaturalGas Unmitigated	0.0344	0.2942	0.1252	1.8800e-003		0.0238	0.0238		0.0238	0.0238		375.5081	375.5081	7.2000e-003	6.8800e-003	377.7396

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	125.009	1.3500e-003	0.0115	4.9000e-003	7.0000e-005		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004		14.7069	14.7069	2.8000e-004	2.7000e-004	14.7943
Apartments Mid Rise	3066.81	0.0331	0.2826	0.1203	1.8000e-003		0.0229	0.0229		0.0229	0.0229		360.8012	360.8012	6.9200e-003	6.6100e-003	362.9453
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0344**	**0.2942**	**0.1252**	**1.8700e-003**		**0.0238**	**0.0238**		**0.0238**	**0.0238**		**375.5081**	**375.5081**	**7.2000e-003**	**6.8800e-003**	**377.7396**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	0.125009	1.3500e-003	0.0115	4.9000e-003	7.0000e-005		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004		14.7069	14.7069	2.8000e-004	2.7000e-004	14.7943
Apartments Mid Rise	3.06681	0.0331	0.2826	0.1203	1.8000e-003		0.0229	0.0229		0.0229	0.0229		360.8012	360.8012	6.9200e-003	6.6100e-003	362.9453
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0344**	**0.2942**	**0.1252**	**1.8700e-003**		**0.0238**	**0.0238**		**0.0238**	**0.0238**		**375.5081**	**375.5081**	**7.2000e-003**	**6.8800e-003**	**377.7396**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	172.0061	4.7394	202.7906	0.3105		25.6314	25.6314		25.6314	25.6314	2,488.9990	3,396.5050	5,885.5040	0.0960	0.2814	5,971.7453
Unmitigated	172.0061	4.7394	202.7906	0.3105		25.6314	25.6314		25.6314	25.6314	2,488.9990	3,396.5050	5,885.5040	0.0960	0.2814	5,971.7453

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1838					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	167.9501	4.5409	186.0403	0.3097		25.5425	25.5425		25.5425	25.5425	2,488.9990	3,367.0588	5,856.0579	0.0645	0.2814	5,941.5126
Landscaping	0.5473	0.1985	16.7503	8.6000e-004		0.0889	0.0889		0.0889	0.0889		29.4462	29.4462	0.0315		30.2327
Total	**172.0061**	**4.7394**	**202.7906**	**0.3105**		**25.6314**	**25.6314**		**25.6314**	**25.6314**	**2,488.9990**	**3,396.5050**	**5,885.5040**	**0.0960**	**0.2814**	**5,971.7453**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1838					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	167.9501	4.5409	186.0403	0.3097		25.5425	25.5425		25.5425	25.5425	2,488.9990	3,367.0588	5,856.0579	0.0645	0.2814	5,941.5126
Landscaping	0.5473	0.1985	16.7503	8.6000e-004		0.0889	0.0889		0.0889	0.0889		29.4462	29.4462	0.0315		30.2327
Total	**172.0061**	**4.7394**	**202.7906**	**0.3105**		**25.6314**	**25.6314**		**25.6314**	**25.6314**	**2,488.9990**	**3,396.5050**	**5,885.5040**	**0.0960**	**0.2814**	**5,971.7453**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Solana Highlands - Existing Uses

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	150.00	1000sqft	3.44	150,000.00	0
Apartments Low Rise	4.00	Dwelling Unit	0.25	4,000.00	11
Apartments Mid Rise	194.00	Dwelling Unit	5.11	142,292.00	555

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2014
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - existing uses

Construction Phase - operational only

Off-road Equipment - operational only

Trips and VMT - operational only

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - trip gen - F&P

Woodstoves - based on PD

Consumer Products - CalEEMod defaults.

Area Coating - SDAPCD Rule 67.0.1

Landscape Equipment - CalEEMod defaults.

Energy Use - Historical data.

Water And Wastewater - water use provided by applicant

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50

Solana Highlands - Existing Uses - San Diego County, Winter

tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintParkingValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblFireplaces	NumberGas	2.20	4.00
tblFireplaces	NumberGas	106.70	155.00
tblFireplaces	NumberNoFireplace	0.40	4.00
tblFireplaces	NumberNoFireplace	19.40	155.00
tblFireplaces	NumberWood	1.40	0.00
tblFireplaces	NumberWood	67.90	39.00
tblLandUse	LandUseSquareFeet	194,000.00	142,292.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	ST_TR	7.16	7.68
tblVehicleTrips	ST_TR	6.39	7.68
tblVehicleTrips	SU_TR	6.07	7.04
tblVehicleTrips	SU_TR	5.86	7.04
tblVehicleTrips	WD_TR	6.59	8.00
tblVehicleTrips	WD_TR	6.65	8.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00

tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	260,616.10	37,400.00
tblWater	IndoorWaterUseRate	12,639,880.97	11,944,887.00
tblWater	OutdoorWaterUseRate	164,301.46	0.00
tblWater	OutdoorWaterUseRate	7,968,620.61	5,119,237.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	0.20	0.00
tblWoodstoves	NumberCatalytic	9.70	0.00
tblWoodstoves	NumberNoncatalytic	0.20	0.00
tblWoodstoves	NumberNoncatalytic	9.70	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2013	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2013	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	172.0061	4.7394	202.7906	0.3105		25.6314	25.6314		25.6314	25.6314	2,488.9990	3,396.5050	5,885.5040	0.0960	0.2814	5,971.7453
Energy	0.0344	0.2942	0.1252	1.8800e-003		0.0238	0.0238		0.0238	0.0238		375.5081	375.5081	7.2000e-003	6.8800e-003	377.7396
Mobile	5.4047	20.9984	64.5115	0.1304	9.6036	0.2732	9.8768	2.5693	0.2593	2.8286		13,133.3190	13,133.3190	0.9605		13,157.3318
Total	**177.4452**	**26.0319**	**267.4273**	**0.4428**	**9.6036**	**25.9284**	**35.5319**	**2.5693**	**25.9145**	**28.4838**	**2,488.9990**	**16,905.3321**	**19,394.3311**	**1.0637**	**0.2882**	**19,506.8166**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	172.0061	4.7394	202.7906	0.3105		25.6314	25.6314		25.6314	25.6314	2,488.9990	3,396.5050	5,885.5040	0.0960	0.2814	5,971.7453
Energy	0.0344	0.2942	0.1252	1.8800e-003		0.0238	0.0238		0.0238	0.0238		375.5081	375.5081	7.2000e-003	6.8800e-003	377.7396
Mobile	5.4047	20.9984	64.5115	0.1304	9.6036	0.2732	9.8768	2.5693	0.2593	2.8286		13,133.3190	13,133.3190	0.9605		13,157.3318
Total	**177.4452**	**26.0319**	**267.4273**	**0.4428**	**9.6036**	**25.9284**	**35.5319**	**2.5693**	**25.9145**	**28.4838**	**2,488.9990**	**16,905.3321**	**19,394.3311**	**1.0637**	**0.2882**	**19,506.8166**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/30/2012	1/25/2013	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.44

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.4047	20.9984	64.5115	0.1304	9.6036	0.2732	9.8768	2.5693	0.2593	2.8286		13,133.3190	13,133.3190	0.9605		13,157.3318
Unmitigated	5.4047	20.9984	64.5115	0.1304	9.6036	0.2732	9.8768	2.5693	0.2593	2.8286		13,133.3190	13,133.3190	0.9605		13,157.3318

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	32.00	30.72	28.16	89,281	89,281
Apartments Mid Rise	1,552.00	1,489.92	1365.76	4,330,141	4,330,141
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	1,584.00	1,520.64	1,393.92	4,419,422	4,419,422

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.536433	0.053575	0.200220	0.130814	0.024671	0.005832	0.013762	0.020690	0.001840	0.002510	0.007051	0.000678	0.001924
Apartments Mid Rise	0.536433	0.053575	0.200220	0.130814	0.024671	0.005832	0.013762	0.020690	0.001840	0.002510	0.007051	0.000678	0.001924
Other Asphalt Surfaces	0.536433	0.053575	0.200220	0.130814	0.024671	0.005832	0.013762	0.020690	0.001840	0.002510	0.007051	0.000678	0.001924

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0344	0.2942	0.1252	1.8800e-003		0.0238	0.0238		0.0238	0.0238		375.5081	375.5081	7.2000e-003	6.8800e-003	377.7396
NaturalGas Unmitigated	0.0344	0.2942	0.1252	1.8800e-003		0.0238	0.0238		0.0238	0.0238		375.5081	375.5081	7.2000e-003	6.8800e-003	377.7396

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	125.009	1.3500e-003	0.0115	4.9000e-003	7.0000e-005		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004		14.7069	14.7069	2.8000e-004	2.7000e-004	14.7943
Apartments Mid Rise	3066.81	0.0331	0.2826	0.1203	1.8000e-003		0.0229	0.0229		0.0229	0.0229		360.8012	360.8012	6.9200e-003	6.6100e-003	362.9453
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0344**	**0.2942**	**0.1252**	**1.8700e-003**		**0.0238**	**0.0238**		**0.0238**	**0.0238**		**375.5081**	**375.5081**	**7.2000e-003**	**6.8800e-003**	**377.7396**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	0.125009	1.3500e-003	0.0115	4.9000e-003	7.0000e-005		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004		14.7069	14.7069	2.8000e-004	2.7000e-004	14.7943
Apartments Mid Rise	3.06681	0.0331	0.2826	0.1203	1.8000e-003		0.0229	0.0229		0.0229	0.0229		360.8012	360.8012	6.9200e-003	6.6100e-003	362.9453
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0344**	**0.2942**	**0.1252**	**1.8700e-003**		**0.0238**	**0.0238**		**0.0238**	**0.0238**		**375.5081**	**375.5081**	**7.2000e-003**	**6.8800e-003**	**377.7396**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	172.0061	4.7394	202.7906	0.3105		25.6314	25.6314		25.6314	25.6314	2,488.9990	3,396.5050	5,885.5040	0.0960	0.2814	5,971.7453
Unmitigated	172.0061	4.7394	202.7906	0.3105		25.6314	25.6314		25.6314	25.6314	2,488.9990	3,396.5050	5,885.5040	0.0960	0.2814	5,971.7453

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1838					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	167.9501	4.5409	186.0403	0.3097		25.5425	25.5425		25.5425	25.5425	2,488.9990	3,367.0588	5,856.0579	0.0645	0.2814	5,941.5126
Landscaping	0.5473	0.1985	16.7503	8.6000e-004		0.0889	0.0889		0.0889	0.0889		29.4462	29.4462	0.0315		30.2327
Total	**172.0061**	**4.7394**	**202.7906**	**0.3105**		**25.6314**	**25.6314**		**25.6314**	**25.6314**	**2,488.9990**	**3,396.5050**	**5,885.5040**	**0.0960**	**0.2814**	**5,971.7453**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1838					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	167.9501	4.5409	186.0403	0.3097		25.5425	25.5425		25.5425	25.5425	2,488.9990	3,367.0588	5,856.0579	0.0645	0.2814	5,941.5126
Landscaping	0.5473	0.1985	16.7503	8.6000e-004		0.0889	0.0889		0.0889	0.0889		29.4462	29.4462	0.0315		30.2327
Total	**172.0061**	**4.7394**	**202.7906**	**0.3105**		**25.6314**	**25.6314**		**25.6314**	**25.6314**	**2,488.9990**	**3,396.5050**	**5,885.5040**	**0.0960**	**0.2814**	**5,971.7453**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Solana Highlands - Proposed Project

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	57.37	1000sqft	1.32	57,365.00	0
Other Non-Asphalt Surfaces	1.90	1000sqft	0.04	1,900.00	0
Parking Lot	272.00	Space	2.45	108,800.00	0
Unenclosed Parking Structure	50.60	1000sqft	1.16	50,600.00	0
Apartments Mid Rise	260.00	Dwelling Unit	6.84	326,156.00	744

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS

Land Use - project-specific land uses

Construction Phase - construction schedule per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Trips and VMT - Trips per applicant.

Demolition - demo quantities per applicant

Grading - grading quantities per applicant

Architectural Coating - SDAPCD Rule 67.0.1

Vehicle Trips - F&P 2016

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - No fireplaces.

Consumer Products - CalEEMod defaults.

Area Coating - SDAPCD Rule 67.0.1

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - water use per applicant

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - All construction equipment will be Tier 4 Interim except air compressors and pavers which are Tier 3.

Mobile Land Use Mitigation -

Water Mitigation -

Waste Mitigation - AB 341

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
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tblOffRoadEquipment	UsageHours	8.00	4.00

tblOffRoadEquipment	UsageHours	8.00	4.00
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tblOffRoadEquipment	UsageHours	8.00	4.00
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tblTripsAndVMT	WorkerTripNumber	15.00	12.00
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tblWoodstoves	NumberCatalytic	13.00	0.00

tblWoodstoves	NumberNoncatalytic	13.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1304	2.1068	1.0102	5.0700e-003	0.2418	0.0461	0.2879	0.0777	0.0425	0.1203	0.0000	487.8971	487.8971	0.0616	0.0000	489.4372
2021	1.5300	2.9083	1.9300	7.7100e-003	0.2756	0.0769	0.3525	0.0931	0.0711	0.1642	0.0000	735.1224	735.1224	0.0986	0.0000	737.5868
2022	1.5177	2.9034	1.9606	8.7800e-003	0.3347	0.0643	0.3990	0.1050	0.0595	0.1645	0.0000	843.8724	843.8724	0.1080	0.0000	846.5724
2023	1.3852	0.5518	0.8361	1.7300e-003	0.0658	0.0250	0.0909	0.0176	0.0232	0.0408	0.0000	155.7263	155.7263	0.0288	0.0000	156.4467
Maximum	**1.5300**	**2.9083**	**1.9606**	**8.7800e-003**	**0.3347**	**0.0769**	**0.3990**	**0.1050**	**0.0711**	**0.1645**	**0.0000**	**843.8724**	**843.8724**	**0.1080**	**0.0000**	**846.5724**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0695	1.6137	1.0618	5.0700e-003	0.1734	6.4400e-003	0.1799	0.0526	6.2200e-003	0.0588	0.0000	487.8970	487.8970	0.0616	0.0000	489.4371
2021	1.4346	2.3325	2.0639	7.7100e-003	0.2366	0.0155	0.2521	0.0725	0.0152	0.0877	0.0000	735.1222	735.1222	0.0986	0.0000	737.5866
2022	1.4401	2.5262	2.1275	8.7800e-003	0.2789	0.0156	0.2945	0.0821	0.0154	0.0975	0.0000	843.8722	843.8722	0.1080	0.0000	846.5722
2023	1.3564	0.5160	0.9073	1.7300e-003	0.0658	8.4700e-003	0.0743	0.0176	8.4300e-003	0.0261	0.0000	155.7262	155.7262	0.0288	0.0000	156.4466
Maximum	**1.4401**	**2.5262**	**2.1275**	**8.7800e-003**	**0.2789**	**0.0156**	**0.2945**	**0.0821**	**0.0154**	**0.0975**	**0.0000**	**843.8722**	**843.8722**	**0.1080**	**0.0000**	**846.5722**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**5.76**	**17.49**	**-7.38**	**0.00**	**17.79**	**78.31**	**29.15**	**23.42**	**76.95**	**44.87**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**6-1-2020**	**8-31-2020**	1.9369	1.4618
2	**9-1-2020**	**11-30-2020**	0.2044	0.1456
3	**12-1-2020**	**2-28-2021**	0.1650	0.1205
4	**3-1-2021**	**5-31-2021**	0.1615	0.1201
5	**6-1-2021**	**8-31-2021**	3.8658	3.3240
6	**9-1-2021**	**11-30-2021**	0.2178	0.1703
7	**12-1-2021**	**2-28-2022**	0.1492	0.1168
8	**3-1-2022**	**5-31-2022**	0.1460	0.1171

9	**6-1-2022**	**8-31-2022**	3.9687	3.5996
10	**9-1-2022**	**11-30-2022**	0.1450	0.1164
11	**12-1-2022**	**2-28-2023**	0.1334	0.1106
12	**3-1-2023**	**5-31-2023**	0.1296	0.1092
13	**6-1-2023**	**8-31-2023**	1.7327	1.7016
		Highest	3.9687	3.5996

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4769	0.0223	1.9332	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0400e-003	0.0000	3.2364
Energy	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	387.2106	387.2106	0.0136	4.5400e-003	388.9038
Mobile	0.6707	3.0095	8.0730	0.0263	2.1880	0.0265	2.2145	0.5860	0.0248	0.6108	0.0000	2,420.6093	2,420.6093	0.1317	0.0000	2,423.9007
Waste						0.0000	0.0000		0.0000	0.0000	24.2777	0.0000	24.2777	1.4348	0.0000	60.1470
Water						0.0000	0.0000		0.0000	0.0000	5.6638	59.8416	65.5054	0.0220	0.0129	69.8908
Total	**2.1580**	**3.1207**	**10.0441**	**0.0270**	**2.1880**	**0.0444**	**2.2324**	**0.5860**	**0.0427**	**0.6287**	**29.9415**	**2,870.8218**	**2,900.7633**	**1.6051**	**0.0174**	**2,946.0788**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4769	0.0223	1.9332	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0400e-003	0.0000	3.2364
Energy	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	387.2106	387.2106	0.0136	4.5400e-003	388.9038
Mobile	0.6245	2.7086	7.0813	0.0223	1.8380	0.0226	1.8606	0.4922	0.0212	0.5134	0.0000	2,054.9724	2,054.9724	0.1148	0.0000	2,057.8419
Waste						0.0000	0.0000		0.0000	0.0000	6.0694	0.0000	6.0694	0.3587	0.0000	15.0368
Water						0.0000	0.0000		0.0000	0.0000	4.5311	42.1904	46.7214	0.0173	0.0103	50.2082
Total	**2.1118**	**2.8199**	**9.0523**	**0.0230**	**1.8380**	**0.0405**	**1.8785**	**0.4922**	**0.0391**	**0.5314**	**10.6005**	**2,487.5337**	**2,498.1342**	**0.5075**	**0.0148**	**2,515.2270**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.14**	**9.64**	**9.87**	**14.73**	**16.00**	**8.68**	**15.85**	**16.00**	**8.47**	**15.49**	**64.60**	**13.35**	**13.88**	**68.38**	**15.05**	**14.62**

3.0 Construction Detail

Construction Phase

Solana Highlands - Proposed Project - San Diego County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Ph 1 - Demolition	Demolition	6/1/2020	6/29/2020	5	21	
2	Ph 1 - Grading	Grading	7/1/2020	9/1/2020	5	45	
3	Ph 1 - Building Construction	Building Construction	9/1/2020	8/30/2021	5	260	
4	Ph 2 - Demolition	Demolition	6/1/2021	6/28/2021	5	20	
5	Ph 2 - Grading	Grading	7/1/2021	9/1/2021	5	45	
6	Ph 1 - Paving	Paving	7/1/2021	9/1/2021	5	45	
7	Ph 1 - Architectural Coating	Architectural Coating	7/1/2021	9/1/2021	5	45	
8	Ph 2 - Building Construction	Building Construction	9/1/2021	8/31/2022	5	261	
9	Ph 3 - Demolition	Demolition	6/1/2022	6/30/2022	5	22	
10	Ph 3 - Grading	Grading	7/1/2022	8/31/2022	5	44	
11	Ph 2 - Paving	Paving	7/1/2022	8/31/2022	5	44	
12	Ph 2 - Architectural Coating	Architectural Coating	7/1/2022	8/31/2022	5	44	
13	Ph 3 - Building Construction	Building Construction	9/1/2022	8/31/2023	5	261	
14	Ph 3 - Paving	Paving	7/1/2023	8/31/2023	5	44	
15	Ph 3 - Architectural Coating	Architectural Coating	7/1/2023	8/31/2023	5	44	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.97

Residential Indoor: 660,466; Residential Outdoor: 220,155; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 13,120 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Ph 1 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73

Ph 1 - Demolition	Excavators	1	5.00	158	0.38
Ph 1 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 1 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading	Excavators	2	5.00	158	0.38
Ph 1 - Grading	Graders	0	8.00	187	0.41
Ph 1 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading	Scrapers	2	5.00	367	0.48
Ph 1 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Building Construction	Cranes	0	7.00	231	0.29
Ph 1 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 1 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 1 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Ph 1 - Building Construction	Welders	0	8.00	46	0.45
Ph 2 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 2 - Demolition	Excavators	1	5.00	158	0.38
Ph 2 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 2 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 2 - Grading	Excavators	2	5.00	158	0.38
Ph 2 - Grading	Graders	0	8.00	187	0.41
Ph 2 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 2 - Grading	Scrapers	2	5.00	367	0.48
Ph 2 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Paving	Pavers	2	8.00	130	0.42
Ph 1 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 1 - Paving	Rollers	2	8.00	80	0.38
Ph 1 - Architectural Coating	Air Compressors	1	6.00	78	0.48
Ph 2 - Building Construction	Cranes	0	7.00	231	0.29

Ph 2 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 2 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 2 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Ph 2 - Building Construction	Welders	0	8.00	46	0.45
Ph 3 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 3 - Demolition	Excavators	1	5.00	158	0.38
Ph 3 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 3 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 3 - Grading	Excavators	2	5.00	158	0.38
Ph 3 - Grading	Graders	0	8.00	187	0.41
Ph 3 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 3 - Grading	Scrapers	2	5.00	367	0.48
Ph 3 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 2 - Paving	Pavers	2	8.00	130	0.42
Ph 2 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 2 - Paving	Rollers	2	8.00	80	0.38
Ph 2 - Architectural Coating	Air Compressors	1	6.00	78	0.48
Ph 3 - Building Construction	Cranes	0	7.00	231	0.29
Ph 3 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 3 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 3 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Ph 3 - Building Construction	Welders	0	8.00	46	0.45
Ph 3 - Paving	Pavers	2	8.00	130	0.42
Ph 3 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 3 - Paving	Rollers	2	8.00	80	0.38
Ph 3 - Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Ph 1 - Demolition	4	12.00	2.00	490.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading	6	12.00	0.00	5,393.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Building Construction	4	80.00	10.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Demolition	4	12.00	2.00	8.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Grading	6	12.00	0.00	7,436.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Paving	6	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Building Construction	4	80.00	10.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Demolition	4	12.00	2.00	297.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Grading	6	12.00	0.00	9,171.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Paving	6	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Building Construction	4	80.00	10.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Paving	6	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0542	0.0000	0.0542	8.2100e-003	0.0000	8.2100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0140	0.1459	0.0768	1.4000e-004		7.2900e-003	7.2900e-003		6.7100e-003	6.7100e-003	0.0000	12.2907	12.2907	3.9800e-003	0.0000	12.3901
Total	**0.0140**	**0.1459**	**0.0768**	**1.4000e-004**	**0.0542**	**7.2900e-003**	**0.0615**	**8.2100e-003**	**6.7100e-003**	**0.0149**	**0.0000**	**12.2907**	**12.2907**	**3.9800e-003**	**0.0000**	**12.3901**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9400e-003	0.0998	0.0240	3.0000e-004	6.9100e-003	3.5000e-004	7.2700e-003	1.9000e-003	3.4000e-004	2.2400e-003	0.0000	29.6047	29.6047	2.5100e-003	0.0000	29.6674
Vendor	8.0000e-005	2.3900e-003	6.4000e-004	1.0000e-005	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.5541	0.5541	4.0000e-005	0.0000	0.5552
Worker	4.6000e-004	3.4000e-004	3.3700e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.9133	0.9133	3.0000e-005	0.0000	0.9140
Total	**3.4800e-003**	**0.1026**	**0.0281**	**3.2000e-004**	**8.0600e-003**	**3.7000e-004**	**8.4400e-003**	**2.2100e-003**	**3.6000e-004**	**2.5700e-003**	**0.0000**	**31.0722**	**31.0722**	**2.5800e-003**	**0.0000**	**31.1366**

3.2 Ph 1 - Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0244	0.0000	0.0244	3.7000e-003	0.0000	3.7000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2500e-003	0.0457	0.0856	1.4000e-004		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	12.2907	12.2907	3.9800e-003	0.0000	12.3900
Total	**2.2500e-003**	**0.0457**	**0.0856**	**1.4000e-004**	**0.0244**	**2.3000e-004**	**0.0246**	**3.7000e-003**	**2.3000e-004**	**3.9300e-003**	**0.0000**	**12.2907**	**12.2907**	**3.9800e-003**	**0.0000**	**12.3900**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9400e-003	0.0998	0.0240	3.0000e-004	6.9100e-003	3.5000e-004	7.2700e-003	1.9000e-003	3.4000e-004	2.2400e-003	0.0000	29.6047	29.6047	2.5100e-003	0.0000	29.6674
Vendor	8.0000e-005	2.3900e-003	6.4000e-004	1.0000e-005	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.5541	0.5541	4.0000e-005	0.0000	0.5552
Worker	4.6000e-004	3.4000e-004	3.3700e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.9133	0.9133	3.0000e-005	0.0000	0.9140
Total	**3.4800e-003**	**0.1026**	**0.0281**	**3.2000e-004**	**8.0600e-003**	**3.7000e-004**	**8.4400e-003**	**2.2100e-003**	**3.6000e-004**	**2.5700e-003**	**0.0000**	**31.0722**	**31.0722**	**2.5800e-003**	**0.0000**	**31.1366**

3.3 Ph 1 - Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0701	0.0000	0.0701	0.0375	0.0000	0.0375	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0493	0.5496	0.3738	7.0000e-004		0.0239	0.0239		0.0220	0.0220	0.0000	61.7039	61.7039	0.0200	0.0000	62.2028
Total	**0.0493**	**0.5496**	**0.3738**	**7.0000e-004**	**0.0701**	**0.0239**	**0.0941**	**0.0375**	**0.0220**	**0.0595**	**0.0000**	**61.7039**	**61.7039**	**0.0200**	**0.0000**	**62.2028**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0324	1.0986	0.2646	3.2800e-003	0.0761	3.8900e-003	0.0800	0.0209	3.7200e-003	0.0246	0.0000	325.8334	325.8334	0.0276	0.0000	326.5231
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-003	7.4000e-004	7.2200e-003	2.0000e-005	2.1700e-003	2.0000e-005	2.1800e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.9572	1.9572	6.0000e-005	0.0000	1.9586
Total	**0.0334**	**1.0993**	**0.2718**	**3.3000e-003**	**0.0783**	**3.9100e-003**	**0.0822**	**0.0215**	**3.7300e-003**	**0.0252**	**0.0000**	**327.7905**	**327.7905**	**0.0277**	**0.0000**	**328.4817**

3.3 Ph 1 - Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0316	0.0000	0.0316	0.0169	0.0000	0.0169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.2173	0.4147	7.0000e-004		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003	0.0000	61.7038	61.7038	0.0200	0.0000	62.2027
Total	**0.0111**	**0.2173**	**0.4147**	**7.0000e-004**	**0.0316**	**1.1500e-003**	**0.0327**	**0.0169**	**1.1500e-003**	**0.0180**	**0.0000**	**61.7038**	**61.7038**	**0.0200**	**0.0000**	**62.2027**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0324	1.0986	0.2646	3.2800e-003	0.0761	3.8900e-003	0.0800	0.0209	3.7200e-003	0.0246	0.0000	325.8334	325.8334	0.0276	0.0000	326.5231
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-003	7.4000e-004	7.2200e-003	2.0000e-005	2.1700e-003	2.0000e-005	2.1800e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.9572	1.9572	6.0000e-005	0.0000	1.9586
Total	**0.0334**	**1.0993**	**0.2718**	**3.3000e-003**	**0.0783**	**3.9100e-003**	**0.0822**	**0.0215**	**3.7300e-003**	**0.0252**	**0.0000**	**327.7905**	**327.7905**	**0.0277**	**0.0000**	**328.4817**

3.4 Ph 1 - Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0156	0.1497	0.1522	2.0000e-004		0.0101	0.0101		9.3000e-003	9.3000e-003	0.0000	17.9143	17.9143	5.7900e-003	0.0000	18.0592
Total	**0.0156**	**0.1497**	**0.1522**	**2.0000e-004**		**0.0101**	**0.0101**		**9.3000e-003**	**9.3000e-003**	**0.0000**	**17.9143**	**17.9143**	**5.7900e-003**	**0.0000**	**18.0592**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6800e-003	0.0502	0.0133	1.2000e-004	2.9200e-003	2.4000e-004	3.1700e-003	8.4000e-004	2.3000e-004	1.0800e-003	0.0000	11.6099	11.6099	8.9000e-004	0.0000	11.6322
Worker	0.0130	9.6100e-003	0.0942	2.8000e-004	0.0282	2.0000e-004	0.0284	7.5000e-003	1.9000e-004	7.6900e-003	0.0000	25.5156	25.5156	7.7000e-004	0.0000	25.5348
Total	**0.0147**	**0.0598**	**0.1075**	**4.0000e-004**	**0.0312**	**4.4000e-004**	**0.0316**	**8.3400e-003**	**4.2000e-004**	**8.7700e-003**	**0.0000**	**37.1255**	**37.1255**	**1.6600e-003**	**0.0000**	**37.1669**

3.4 Ph 1 - Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.5800e-003	0.0892	0.1542	2.0000e-004		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	17.9143	17.9143	5.7900e-003	0.0000	18.0592
Total	**4.5800e-003**	**0.0892**	**0.1542**	**2.0000e-004**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**	**0.0000**	**17.9143**	**17.9143**	**5.7900e-003**	**0.0000**	**18.0592**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6800e-003	0.0502	0.0133	1.2000e-004	2.9200e-003	2.4000e-004	3.1700e-003	8.4000e-004	2.3000e-004	1.0800e-003	0.0000	11.6099	11.6099	8.9000e-004	0.0000	11.6322
Worker	0.0130	9.6100e-003	0.0942	2.8000e-004	0.0282	2.0000e-004	0.0284	7.5000e-003	1.9000e-004	7.6900e-003	0.0000	25.5156	25.5156	7.7000e-004	0.0000	25.5348
Total	**0.0147**	**0.0598**	**0.1075**	**4.0000e-004**	**0.0312**	**4.4000e-004**	**0.0316**	**8.3400e-003**	**4.2000e-004**	**8.7700e-003**	**0.0000**	**37.1255**	**37.1255**	**1.6600e-003**	**0.0000**	**37.1669**

3.4 Ph 1 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0272	0.2644	0.2948	4.0000e-004		0.0168	0.0168		0.0155	0.0155	0.0000	35.0246	35.0246	0.0113	0.0000	35.3078
Total	**0.0272**	**0.2644**	**0.2948**	**4.0000e-004**		**0.0168**	**0.0168**		**0.0155**	**0.0155**	**0.0000**	**35.0246**	**35.0246**	**0.0113**	**0.0000**	**35.3078**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6600e-003	0.0884	0.0236	2.3000e-004	5.7100e-003	1.9000e-004	5.9000e-003	1.6500e-003	1.8000e-004	1.8300e-003	0.0000	22.4838	22.4838	1.6700e-003	0.0000	22.5256
Worker	0.0239	0.0171	0.1719	5.3000e-004	0.0552	3.9000e-004	0.0556	0.0147	3.6000e-004	0.0150	0.0000	48.1960	48.1960	1.3800e-003	0.0000	48.2305
Total	**0.0266**	**0.1054**	**0.1955**	**7.6000e-004**	**0.0609**	**5.8000e-004**	**0.0615**	**0.0163**	**5.4000e-004**	**0.0169**	**0.0000**	**70.6798**	**70.6798**	**3.0500e-003**	**0.0000**	**70.7561**

3.4 Ph 1 - Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.9600e-003	0.1743	0.3013	4.0000e-004		6.5000e-004	6.5000e-004		6.5000e-004	6.5000e-004	0.0000	35.0246	35.0246	0.0113	0.0000	35.3078
Total	**8.9600e-003**	**0.1743**	**0.3013**	**4.0000e-004**		**6.5000e-004**	**6.5000e-004**		**6.5000e-004**	**6.5000e-004**	**0.0000**	**35.0246**	**35.0246**	**0.0113**	**0.0000**	**35.3078**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6600e-003	0.0884	0.0236	2.3000e-004	5.7100e-003	1.9000e-004	5.9000e-003	1.6500e-003	1.8000e-004	1.8300e-003	0.0000	22.4838	22.4838	1.6700e-003	0.0000	22.5256
Worker	0.0239	0.0171	0.1719	5.3000e-004	0.0552	3.9000e-004	0.0556	0.0147	3.6000e-004	0.0150	0.0000	48.1960	48.1960	1.3800e-003	0.0000	48.2305
Total	**0.0266**	**0.1054**	**0.1955**	**7.6000e-004**	**0.0609**	**5.8000e-004**	**0.0615**	**0.0163**	**5.4000e-004**	**0.0169**	**0.0000**	**70.6798**	**70.6798**	**3.0500e-003**	**0.0000**	**70.7561**

3.5 Ph 2 - Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.2000e-004	0.0000	8.2000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0128	0.1327	0.0721	1.3000e-004		6.5400e-003	6.5400e-003		6.0100e-003	6.0100e-003	0.0000	11.7065	11.7065	3.7900e-003	0.0000	11.8012
Total	**0.0128**	**0.1327**	**0.0721**	**1.3000e-004**	**8.2000e-004**	**6.5400e-003**	**7.3600e-003**	**1.2000e-004**	**6.0100e-003**	**6.1300e-003**	**0.0000**	**11.7065**	**11.7065**	**3.7900e-003**	**0.0000**	**11.8012**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.4800e-003	3.9000e-004	0.0000	1.1000e-004	1.0000e-005	1.2000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.4772	0.4772	4.0000e-005	0.0000	0.4783
Vendor	6.0000e-005	2.0600e-003	5.5000e-004	1.0000e-005	1.3000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.5229	0.5229	4.0000e-005	0.0000	0.5239
Worker	4.2000e-004	3.0000e-004	3.0000e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8406	0.8406	2.0000e-005	0.0000	0.8412
Total	**5.3000e-004**	**3.8400e-003**	**3.9400e-003**	**2.0000e-005**	**1.2000e-003**	**2.0000e-005**	**1.2300e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.8407**	**1.8407**	**1.0000e-004**	**0.0000**	**1.8433**

3.5 Ph 2 - Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.7000e-004	0.0000	3.7000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1400e-003	0.0435	0.0815	1.3000e-004		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	11.7065	11.7065	3.7900e-003	0.0000	11.8012
Total	**2.1400e-003**	**0.0435**	**0.0815**	**1.3000e-004**	**3.7000e-004**	**2.2000e-004**	**5.9000e-004**	**6.0000e-005**	**2.2000e-004**	**2.8000e-004**	**0.0000**	**11.7065**	**11.7065**	**3.7900e-003**	**0.0000**	**11.8012**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.4800e-003	3.9000e-004	0.0000	1.1000e-004	1.0000e-005	1.2000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.4772	0.4772	4.0000e-005	0.0000	0.4783
Vendor	6.0000e-005	2.0600e-003	5.5000e-004	1.0000e-005	1.3000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.5229	0.5229	4.0000e-005	0.0000	0.5239
Worker	4.2000e-004	3.0000e-004	3.0000e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8406	0.8406	2.0000e-005	0.0000	0.8412
Total	**5.3000e-004**	**3.8400e-003**	**3.9400e-003**	**2.0000e-005**	**1.2000e-003**	**2.0000e-005**	**1.2300e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.8407**	**1.8407**	**1.0000e-004**	**0.0000**	**1.8433**

3.6 Ph 2 - Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0701	0.0000	0.0701	0.0375	0.0000	0.0375	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0465	0.5063	0.3599	7.0000e-004		0.0219	0.0219		0.0201	0.0201	0.0000	61.7301	61.7301	0.0200	0.0000	62.2292
Total	**0.0465**	**0.5063**	**0.3599**	**7.0000e-004**	**0.0701**	**0.0219**	**0.0920**	**0.0375**	**0.0201**	**0.0576**	**0.0000**	**61.7301**	**61.7301**	**0.0200**	**0.0000**	**62.2292**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0420	1.3793	0.3622	4.4600e-003	0.1049	4.7100e-003	0.1096	0.0288	4.5100e-003	0.0333	0.0000	443.5874	443.5874	0.0379	0.0000	444.5339
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	6.7000e-004	6.7500e-003	2.0000e-005	2.1700e-003	2.0000e-005	2.1800e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.8914	1.8914	5.0000e-005	0.0000	1.8928
Total	**0.0429**	**1.3800**	**0.3689**	**4.4800e-003**	**0.1071**	**4.7300e-003**	**0.1118**	**0.0294**	**4.5200e-003**	**0.0339**	**0.0000**	**445.4788**	**445.4788**	**0.0379**	**0.0000**	**446.4267**

3.6 Ph 2 - Grading - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0316	0.0000	0.0316	0.0169	0.0000	0.0169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.2173	0.4147	7.0000e-004		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003	0.0000	61.7300	61.7300	0.0200	0.0000	62.2291
Total	**0.0111**	**0.2173**	**0.4147**	**7.0000e-004**	**0.0316**	**1.1500e-003**	**0.0327**	**0.0169**	**1.1500e-003**	**0.0180**	**0.0000**	**61.7300**	**61.7300**	**0.0200**	**0.0000**	**62.2291**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0420	1.3793	0.3622	4.4600e-003	0.1049	4.7100e-003	0.1096	0.0288	4.5100e-003	0.0333	0.0000	443.5874	443.5874	0.0379	0.0000	444.5339
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	6.7000e-004	6.7500e-003	2.0000e-005	2.1700e-003	2.0000e-005	2.1800e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.8914	1.8914	5.0000e-005	0.0000	1.8928
Total	**0.0429**	**1.3800**	**0.3689**	**4.4800e-003**	**0.1071**	**4.7300e-003**	**0.1118**	**0.0294**	**4.5200e-003**	**0.0339**	**0.0000**	**445.4788**	**445.4788**	**0.0379**	**0.0000**	**446.4267**

3.7 Ph 1 - Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0283	0.2907	0.3297	5.1000e-004		0.0153	0.0153		0.0140	0.0140	0.0000	45.0528	45.0528	0.0146	0.0000	45.4171
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0332**	**0.2907**	**0.3297**	**5.1000e-004**		**0.0153**	**0.0153**		**0.0140**	**0.0140**	**0.0000**	**45.0528**	**45.0528**	**0.0146**	**0.0000**	**45.4171**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	6.7000e-004	6.7500e-003	2.0000e-005	2.1700e-003	2.0000e-005	2.1800e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.8914	1.8914	5.0000e-005	0.0000	1.8928
Total	**9.4000e-004**	**6.7000e-004**	**6.7500e-003**	**2.0000e-005**	**2.1700e-003**	**2.0000e-005**	**2.1800e-003**	**5.8000e-004**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**1.8914**	**1.8914**	**5.0000e-005**	**0.0000**	**1.8928**

3.7 Ph 1 - Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0101	0.2333	0.3892	5.1000e-004		5.3500e-003	5.3500e-003		5.3500e-003	5.3500e-003	0.0000	45.0528	45.0528	0.0146	0.0000	45.4171
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0151**	**0.2333**	**0.3892**	**5.1000e-004**		**5.3500e-003**	**5.3500e-003**		**5.3500e-003**	**5.3500e-003**	**0.0000**	**45.0528**	**45.0528**	**0.0146**	**0.0000**	**45.4171**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	6.7000e-004	6.7500e-003	2.0000e-005	2.1700e-003	2.0000e-005	2.1800e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.8914	1.8914	5.0000e-005	0.0000	1.8928
Total	**9.4000e-004**	**6.7000e-004**	**6.7500e-003**	**2.0000e-005**	**2.1700e-003**	**2.0000e-005**	**2.1800e-003**	**5.8000e-004**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**1.8914**	**1.8914**	**5.0000e-005**	**0.0000**	**1.8928**

3.8 Ph 1 - Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9300e-003	0.0344	0.0409	7.0000e-005		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	5.7448	5.7448	3.9000e-004	0.0000	5.7547
Total	**1.3109**	**0.0344**	**0.0409**	**7.0000e-005**		**2.1200e-003**	**2.1200e-003**		**2.1200e-003**	**2.1200e-003**	**0.0000**	**5.7448**	**5.7448**	**3.9000e-004**	**0.0000**	**5.7547**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	6.7000e-004	6.7500e-003	2.0000e-005	2.1700e-003	2.0000e-005	2.1800e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.8914	1.8914	5.0000e-005	0.0000	1.8928
Total	**9.4000e-004**	**6.7000e-004**	**6.7500e-003**	**2.0000e-005**	**2.1700e-003**	**2.0000e-005**	**2.1800e-003**	**5.8000e-004**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**1.8914**	**1.8914**	**5.0000e-005**	**0.0000**	**1.8928**

3.8 Ph 1 - Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3400e-003	0.0305	0.0412	7.0000e-005		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	5.7448	5.7448	3.9000e-004	0.0000	5.7547
Total	**1.3073**	**0.0305**	**0.0412**	**7.0000e-005**		**2.1400e-003**	**2.1400e-003**		**2.1400e-003**	**2.1400e-003**	**0.0000**	**5.7448**	**5.7448**	**3.9000e-004**	**0.0000**	**5.7547**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	6.7000e-004	6.7500e-003	2.0000e-005	2.1700e-003	2.0000e-005	2.1800e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.8914	1.8914	5.0000e-005	0.0000	1.8928
Total	**9.4000e-004**	**6.7000e-004**	**6.7500e-003**	**2.0000e-005**	**2.1700e-003**	**2.0000e-005**	**2.1800e-003**	**5.8000e-004**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**1.8914**	**1.8914**	**5.0000e-005**	**0.0000**	**1.8928**

3.9 Ph 2 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0139	0.1353	0.1508	2.0000e-004		8.6000e-003	8.6000e-003		7.9100e-003	7.9100e-003	0.0000	17.9196	17.9196	5.8000e-003	0.0000	18.0645
Total	**0.0139**	**0.1353**	**0.1508**	**2.0000e-004**		**8.6000e-003**	**8.6000e-003**		**7.9100e-003**	**7.9100e-003**	**0.0000**	**17.9196**	**17.9196**	**5.8000e-003**	**0.0000**	**18.0645**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3600e-003	0.0452	0.0121	1.2000e-004	2.9200e-003	1.0000e-004	3.0200e-003	8.4000e-004	9.0000e-005	9.3000e-004	0.0000	11.5034	11.5034	8.5000e-004	0.0000	11.5247
Worker	0.0122	8.7300e-003	0.0879	2.7000e-004	0.0282	2.0000e-004	0.0284	7.5000e-003	1.8000e-004	7.6800e-003	0.0000	24.6584	24.6584	7.1000e-004	0.0000	24.6761
Total	**0.0136**	**0.0540**	**0.1000**	**3.9000e-004**	**0.0312**	**3.0000e-004**	**0.0315**	**8.3400e-003**	**2.7000e-004**	**8.6100e-003**	**0.0000**	**36.1618**	**36.1618**	**1.5600e-003**	**0.0000**	**36.2008**

3.9 Ph 2 - Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.5800e-003	0.0892	0.1542	2.0000e-004		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	17.9196	17.9196	5.8000e-003	0.0000	18.0645
Total	**4.5800e-003**	**0.0892**	**0.1542**	**2.0000e-004**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**	**0.0000**	**17.9196**	**17.9196**	**5.8000e-003**	**0.0000**	**18.0645**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3600e-003	0.0452	0.0121	1.2000e-004	2.9200e-003	1.0000e-004	3.0200e-003	8.4000e-004	9.0000e-005	9.3000e-004	0.0000	11.5034	11.5034	8.5000e-004	0.0000	11.5247
Worker	0.0122	8.7300e-003	0.0879	2.7000e-004	0.0282	2.0000e-004	0.0284	7.5000e-003	1.8000e-004	7.6800e-003	0.0000	24.6584	24.6584	7.1000e-004	0.0000	24.6761
Total	**0.0136**	**0.0540**	**0.1000**	**3.9000e-004**	**0.0312**	**3.0000e-004**	**0.0315**	**8.3400e-003**	**2.7000e-004**	**8.6100e-003**	**0.0000**	**36.1618**	**36.1618**	**1.5600e-003**	**0.0000**	**36.2008**

3.9 Ph 2 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0241	0.2362	0.2934	4.0000e-004		0.0138	0.0138		0.0127	0.0127	0.0000	35.2549	35.2549	0.0114	0.0000	35.5399
Total	**0.0241**	**0.2362**	**0.2934**	**4.0000e-004**		**0.0138**	**0.0138**		**0.0127**	**0.0127**	**0.0000**	**35.2549**	**35.2549**	**0.0114**	**0.0000**	**35.5399**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4900e-003	0.0839	0.0224	2.3000e-004	5.7400e-003	1.6000e-004	5.9000e-003	1.6600e-003	1.5000e-004	1.8100e-003	0.0000	22.4004	22.4004	1.6300e-003	0.0000	22.4411
Worker	0.0228	0.0157	0.1605	5.2000e-004	0.0555	3.8000e-004	0.0559	0.0148	3.5000e-004	0.0151	0.0000	46.6991	46.6991	1.2700e-003	0.0000	46.7310
Total	**0.0253**	**0.0996**	**0.1829**	**7.5000e-004**	**0.0612**	**5.4000e-004**	**0.0618**	**0.0164**	**5.0000e-004**	**0.0169**	**0.0000**	**69.0995**	**69.0995**	**2.9000e-003**	**0.0000**	**69.1720**

3.9 Ph 2 - Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.0100e-003	0.1753	0.3031	4.0000e-004		6.6000e-004	6.6000e-004		6.6000e-004	6.6000e-004	0.0000	35.2548	35.2548	0.0114	0.0000	35.5399
Total	**9.0100e-003**	**0.1753**	**0.3031**	**4.0000e-004**		**6.6000e-004**	**6.6000e-004**		**6.6000e-004**	**6.6000e-004**	**0.0000**	**35.2548**	**35.2548**	**0.0114**	**0.0000**	**35.5399**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4900e-003	0.0839	0.0224	2.3000e-004	5.7400e-003	1.6000e-004	5.9000e-003	1.6600e-003	1.5000e-004	1.8100e-003	0.0000	22.4004	22.4004	1.6300e-003	0.0000	22.4411
Worker	0.0228	0.0157	0.1605	5.2000e-004	0.0555	3.8000e-004	0.0559	0.0148	3.5000e-004	0.0151	0.0000	46.6991	46.6991	1.2700e-003	0.0000	46.7310
Total	**0.0253**	**0.0996**	**0.1829**	**7.5000e-004**	**0.0612**	**5.4000e-004**	**0.0618**	**0.0164**	**5.0000e-004**	**0.0169**	**0.0000**	**69.0995**	**69.0995**	**2.9000e-003**	**0.0000**	**69.1720**

3.10 Ph 3 - Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0329	0.0000	0.0329	4.9800e-003	0.0000	4.9800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0115	0.1182	0.0741	1.5000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	12.8746	12.8746	4.1600e-003	0.0000	12.9787
Total	**0.0115**	**0.1182**	**0.0741**	**1.5000e-004**	**0.0329**	**5.6800e-003**	**0.0386**	**4.9800e-003**	**5.2200e-003**	**0.0102**	**0.0000**	**12.8746**	**12.8746**	**4.1600e-003**	**0.0000**	**12.9787**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5700e-003	0.0499	0.0144	1.8000e-004	4.1900e-003	1.6000e-004	4.3500e-003	1.1500e-003	1.5000e-004	1.3000e-003	0.0000	17.4808	17.4808	1.5100e-003	0.0000	17.5185
Vendor	6.0000e-005	2.1400e-003	5.7000e-004	1.0000e-005	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.5697	0.5697	4.0000e-005	0.0000	0.5708
Worker	4.3000e-004	3.0000e-004	3.0600e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0700e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8908	0.8908	2.0000e-005	0.0000	0.8914
Total	**2.0600e-003**	**0.0523**	**0.0180**	**2.0000e-004**	**5.4000e-003**	**1.7000e-004**	**5.5700e-003**	**1.4700e-003**	**1.6000e-004**	**1.6400e-003**	**0.0000**	**18.9414**	**18.9414**	**1.5700e-003**	**0.0000**	**18.9806**

3.10 Ph 3 - Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0148	0.0000	0.0148	2.2400e-003	0.0000	2.2400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3500e-003	0.0478	0.0897	1.5000e-004		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	12.8746	12.8746	4.1600e-003	0.0000	12.9787
Total	**2.3500e-003**	**0.0478**	**0.0897**	**1.5000e-004**	**0.0148**	**2.4000e-004**	**0.0150**	**2.2400e-003**	**2.4000e-004**	**2.4800e-003**	**0.0000**	**12.8746**	**12.8746**	**4.1600e-003**	**0.0000**	**12.9787**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5700e-003	0.0499	0.0144	1.8000e-004	4.1900e-003	1.6000e-004	4.3500e-003	1.1500e-003	1.5000e-004	1.3000e-003	0.0000	17.4808	17.4808	1.5100e-003	0.0000	17.5185
Vendor	6.0000e-005	2.1400e-003	5.7000e-004	1.0000e-005	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.5697	0.5697	4.0000e-005	0.0000	0.5708
Worker	4.3000e-004	3.0000e-004	3.0600e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0700e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8908	0.8908	2.0000e-005	0.0000	0.8914
Total	**2.0600e-003**	**0.0523**	**0.0180**	**2.0000e-004**	**5.4000e-003**	**1.7000e-004**	**5.5700e-003**	**1.4700e-003**	**1.6000e-004**	**1.6400e-003**	**0.0000**	**18.9414**	**18.9414**	**1.5700e-003**	**0.0000**	**18.9806**

3.11 Ph 3 - Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0686	0.0000	0.0686	0.0367	0.0000	0.0367	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0391	0.4100	0.3289	6.9000e-004		0.0176	0.0176		0.0161	0.0161	0.0000	60.4135	60.4135	0.0195	0.0000	60.9020
Total	**0.0391**	**0.4100**	**0.3289**	**6.9000e-004**	**0.0686**	**0.0176**	**0.0862**	**0.0367**	**0.0161**	**0.0528**	**0.0000**	**60.4135**	**60.4135**	**0.0195**	**0.0000**	**60.9020**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0486	1.5408	0.4447	5.4100e-003	0.1294	4.9300e-003	0.1343	0.0355	4.7100e-003	0.0403	0.0000	539.7872	539.7872	0.0465	0.0000	540.9490
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	6.0000e-004	6.1200e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7816	1.7816	5.0000e-005	0.0000	1.7828
Total	**0.0495**	**1.5414**	**0.4508**	**5.4300e-003**	**0.1315**	**4.9400e-003**	**0.1365**	**0.0361**	**4.7200e-003**	**0.0408**	**0.0000**	**541.5688**	**541.5688**	**0.0465**	**0.0000**	**542.7318**

3.11 Ph 3 - Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0309	0.0000	0.0309	0.0165	0.0000	0.0165	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0109	0.2125	0.4055	6.9000e-004		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	60.4135	60.4135	0.0195	0.0000	60.9019
Total	**0.0109**	**0.2125**	**0.4055**	**6.9000e-004**	**0.0309**	**1.1300e-003**	**0.0320**	**0.0165**	**1.1300e-003**	**0.0176**	**0.0000**	**60.4135**	**60.4135**	**0.0195**	**0.0000**	**60.9019**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0486	1.5408	0.4447	5.4100e-003	0.1294	4.9300e-003	0.1343	0.0355	4.7100e-003	0.0403	0.0000	539.7872	539.7872	0.0465	0.0000	540.9490
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	6.0000e-004	6.1200e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7816	1.7816	5.0000e-005	0.0000	1.7828
Total	**0.0495**	**1.5414**	**0.4508**	**5.4300e-003**	**0.1315**	**4.9400e-003**	**0.1365**	**0.0361**	**4.7200e-003**	**0.0408**	**0.0000**	**541.5688**	**541.5688**	**0.0465**	**0.0000**	**542.7318**

3.12 Ph 2 - Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0243	0.2448	0.3208	5.0000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	44.0606	44.0606	0.0143	0.0000	44.4169
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0292**	**0.2448**	**0.3208**	**5.0000e-004**		**0.0125**	**0.0125**		**0.0115**	**0.0115**	**0.0000**	**44.0606**	**44.0606**	**0.0143**	**0.0000**	**44.4169**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	6.0000e-004	6.1200e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7816	1.7816	5.0000e-005	0.0000	1.7828
Total	**8.7000e-004**	**6.0000e-004**	**6.1200e-003**	**2.0000e-005**	**2.1200e-003**	**1.0000e-005**	**2.1300e-003**	**5.6000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7816**	**1.7816**	**5.0000e-005**	**0.0000**	**1.7828**

3.12 Ph 2 - Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8900e-003	0.2281	0.3805	5.0000e-004		5.2300e-003	5.2300e-003		5.2300e-003	5.2300e-003	0.0000	44.0606	44.0606	0.0143	0.0000	44.4168
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0148**	**0.2281**	**0.3805**	**5.0000e-004**		**5.2300e-003**	**5.2300e-003**		**5.2300e-003**	**5.2300e-003**	**0.0000**	**44.0606**	**44.0606**	**0.0143**	**0.0000**	**44.4168**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	6.0000e-004	6.1200e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7816	1.7816	5.0000e-005	0.0000	1.7828
Total	**8.7000e-004**	**6.0000e-004**	**6.1200e-003**	**2.0000e-005**	**2.1200e-003**	**1.0000e-005**	**2.1300e-003**	**5.6000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7816**	**1.7816**	**5.0000e-005**	**0.0000**	**1.7828**

3.13 Ph 2 - Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-003	0.0310	0.0399	7.0000e-005		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	5.6172	5.6172	3.7000e-004	0.0000	5.6263
Total	**1.3104**	**0.0310**	**0.0399**	**7.0000e-005**		**1.8000e-003**	**1.8000e-003**		**1.8000e-003**	**1.8000e-003**	**0.0000**	**5.6172**	**5.6172**	**3.7000e-004**	**0.0000**	**5.6263**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	6.0000e-004	6.1200e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7816	1.7816	5.0000e-005	0.0000	1.7828
Total	**8.7000e-004**	**6.0000e-004**	**6.1200e-003**	**2.0000e-005**	**2.1200e-003**	**1.0000e-005**	**2.1300e-003**	**5.6000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7816**	**1.7816**	**5.0000e-005**	**0.0000**	**1.7828**

3.13 Ph 2 - Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	0.0299	0.0403	7.0000e-005		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	5.6172	5.6172	3.7000e-004	0.0000	5.6263
Total	**1.3072**	**0.0299**	**0.0403**	**7.0000e-005**		**2.0900e-003**	**2.0900e-003**		**2.0900e-003**	**2.0900e-003**	**0.0000**	**5.6172**	**5.6172**	**3.7000e-004**	**0.0000**	**5.6263**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	6.0000e-004	6.1200e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7816	1.7816	5.0000e-005	0.0000	1.7828
Total	**8.7000e-004**	**6.0000e-004**	**6.1200e-003**	**2.0000e-005**	**2.1200e-003**	**1.0000e-005**	**2.1300e-003**	**5.6000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7816**	**1.7816**	**5.0000e-005**	**0.0000**	**1.7828**

3.14 Ph 3 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0121	0.1188	0.1475	2.0000e-004		6.9600e-003	6.9600e-003		6.4000e-003	6.4000e-003	0.0000	17.7293	17.7293	5.7300e-003	0.0000	17.8727
Total	**0.0121**	**0.1188**	**0.1475**	**2.0000e-004**		**6.9600e-003**	**6.9600e-003**		**6.4000e-003**	**6.4000e-003**	**0.0000**	**17.7293**	**17.7293**	**5.7300e-003**	**0.0000**	**17.8727**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2500e-003	0.0422	0.0113	1.2000e-004	2.8900e-003	8.0000e-005	2.9700e-003	8.3000e-004	8.0000e-005	9.1000e-004	0.0000	11.2649	11.2649	8.2000e-004	0.0000	11.2854
Worker	0.0115	7.8700e-003	0.0807	2.6000e-004	0.0279	1.9000e-004	0.0281	7.4200e-003	1.8000e-004	7.5900e-003	0.0000	23.4845	23.4845	6.4000e-004	0.0000	23.5005
Total	**0.0127**	**0.0501**	**0.0920**	**3.8000e-004**	**0.0308**	**2.7000e-004**	**0.0311**	**8.2500e-003**	**2.6000e-004**	**8.5000e-003**	**0.0000**	**34.7495**	**34.7495**	**1.4600e-003**	**0.0000**	**34.7859**

3.14 Ph 3 - Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.5300e-003	0.0882	0.1524	2.0000e-004		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	17.7293	17.7293	5.7300e-003	0.0000	17.8727
Total	**4.5300e-003**	**0.0882**	**0.1524**	**2.0000e-004**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**	**0.0000**	**17.7293**	**17.7293**	**5.7300e-003**	**0.0000**	**17.8727**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2500e-003	0.0422	0.0113	1.2000e-004	2.8900e-003	8.0000e-005	2.9700e-003	8.3000e-004	8.0000e-005	9.1000e-004	0.0000	11.2649	11.2649	8.2000e-004	0.0000	11.2854
Worker	0.0115	7.8700e-003	0.0807	2.6000e-004	0.0279	1.9000e-004	0.0281	7.4200e-003	1.8000e-004	7.5900e-003	0.0000	23.4845	23.4845	6.4000e-004	0.0000	23.5005
Total	**0.0127**	**0.0501**	**0.0920**	**3.8000e-004**	**0.0308**	**2.7000e-004**	**0.0311**	**8.2500e-003**	**2.6000e-004**	**8.5000e-003**	**0.0000**	**34.7495**	**34.7495**	**1.4600e-003**	**0.0000**	**34.7859**

3.14 Ph 3 - Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0221	0.2171	0.2937	4.0000e-004		0.0118	0.0118		0.0108	0.0108	0.0000	35.4853	35.4853	0.0115	0.0000	35.7722
Total	**0.0221**	**0.2171**	**0.2937**	**4.0000e-004**		**0.0118**	**0.0118**		**0.0108**	**0.0108**	**0.0000**	**35.4853**	**35.4853**	**0.0115**	**0.0000**	**35.7722**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9300e-003	0.0663	0.0206	2.2000e-004	5.7700e-003	8.0000e-005	5.8500e-003	1.6700e-003	8.0000e-005	1.7400e-003	0.0000	21.9627	21.9627	1.4900e-003	0.0000	22.0001
Worker	0.0217	0.0144	0.1497	5.0000e-004	0.0558	3.8000e-004	0.0562	0.0148	3.5000e-004	0.0152	0.0000	45.1750	45.1750	1.1700e-003	0.0000	45.2042
Total	**0.0236**	**0.0807**	**0.1703**	**7.2000e-004**	**0.0616**	**4.6000e-004**	**0.0620**	**0.0165**	**4.3000e-004**	**0.0169**	**0.0000**	**67.1377**	**67.1377**	**2.6600e-003**	**0.0000**	**67.2043**

3.14 Ph 3 - Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.0600e-003	0.1763	0.3048	4.0000e-004		6.6000e-004	6.6000e-004		6.6000e-004	6.6000e-004	0.0000	35.4853	35.4853	0.0115	0.0000	35.7722
Total	**9.0600e-003**	**0.1763**	**0.3048**	**4.0000e-004**		**6.6000e-004**	**6.6000e-004**		**6.6000e-004**	**6.6000e-004**	**0.0000**	**35.4853**	**35.4853**	**0.0115**	**0.0000**	**35.7722**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9300e-003	0.0663	0.0206	2.2000e-004	5.7700e-003	8.0000e-005	5.8500e-003	1.6700e-003	8.0000e-005	1.7400e-003	0.0000	21.9627	21.9627	1.4900e-003	0.0000	22.0001
Worker	0.0217	0.0144	0.1497	5.0000e-004	0.0558	3.8000e-004	0.0562	0.0148	3.5000e-004	0.0152	0.0000	45.1750	45.1750	1.1700e-003	0.0000	45.2042
Total	**0.0236**	**0.0807**	**0.1703**	**7.2000e-004**	**0.0616**	**4.6000e-004**	**0.0620**	**0.0165**	**4.3000e-004**	**0.0169**	**0.0000**	**67.1377**	**67.1377**	**2.6600e-003**	**0.0000**	**67.2043**

3.15 Ph 3 - Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0227	0.2242	0.3209	5.0000e-004		0.0112	0.0112		0.0103	0.0103	0.0000	44.0591	44.0591	0.0143	0.0000	44.4154
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0277**	**0.2242**	**0.3209**	**5.0000e-004**		**0.0112**	**0.0112**		**0.0103**	**0.0103**	**0.0000**	**44.0591**	**44.0591**	**0.0143**	**0.0000**	**44.4154**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	5.5000e-004	5.6800e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7135	1.7135	4.0000e-005	0.0000	1.7146
Total	**8.2000e-004**	**5.5000e-004**	**5.6800e-003**	**2.0000e-005**	**2.1200e-003**	**1.0000e-005**	**2.1300e-003**	**5.6000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7135**	**1.7135**	**4.0000e-005**	**0.0000**	**1.7146**

3.15 Ph 3 - Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8900e-003	0.2281	0.3805	5.0000e-004		5.2300e-003	5.2300e-003		5.2300e-003	5.2300e-003	0.0000	44.0591	44.0591	0.0143	0.0000	44.4153
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0148**	**0.2281**	**0.3805**	**5.0000e-004**		**5.2300e-003**	**5.2300e-003**		**5.2300e-003**	**5.2300e-003**	**0.0000**	**44.0591**	**44.0591**	**0.0143**	**0.0000**	**44.4153**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	5.5000e-004	5.6800e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7135	1.7135	4.0000e-005	0.0000	1.7146
Total	**8.2000e-004**	**5.5000e-004**	**5.6800e-003**	**2.0000e-005**	**2.1200e-003**	**1.0000e-005**	**2.1300e-003**	**5.6000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7135**	**1.7135**	**4.0000e-005**	**0.0000**	**1.7146**

3.16 Ph 3 - Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2200e-003	0.0287	0.0398	7.0000e-005		1.5600e-003	1.5600e-003		1.5600e-003	1.5600e-003	0.0000	5.6172	5.6172	3.4000e-004	0.0000	5.6256
Total	**1.3102**	**0.0287**	**0.0398**	**7.0000e-005**		**1.5600e-003**	**1.5600e-003**		**1.5600e-003**	**1.5600e-003**	**0.0000**	**5.6172**	**5.6172**	**3.4000e-004**	**0.0000**	**5.6256**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	5.5000e-004	5.6800e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7135	1.7135	4.0000e-005	0.0000	1.7146
Total	**8.2000e-004**	**5.5000e-004**	**5.6800e-003**	**2.0000e-005**	**2.1200e-003**	**1.0000e-005**	**2.1300e-003**	**5.6000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7135**	**1.7135**	**4.0000e-005**	**0.0000**	**1.7146**

3.16 Ph 3 - Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	0.0299	0.0403	7.0000e-005		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	5.6172	5.6172	3.4000e-004	0.0000	5.6256
Total	**1.3072**	**0.0299**	**0.0403**	**7.0000e-005**		**2.0900e-003**	**2.0900e-003**		**2.0900e-003**	**2.0900e-003**	**0.0000**	**5.6172**	**5.6172**	**3.4000e-004**	**0.0000**	**5.6256**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	5.5000e-004	5.6800e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7135	1.7135	4.0000e-005	0.0000	1.7146
Total	**8.2000e-004**	**5.5000e-004**	**5.6800e-003**	**2.0000e-005**	**2.1200e-003**	**1.0000e-005**	**2.1300e-003**	**5.6000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7135**	**1.7135**	**4.0000e-005**	**0.0000**	**1.7146**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

Integrate Below Market Rate Housing

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6245	2.7086	7.0813	0.0223	1.8380	0.0226	1.8606	0.4922	0.0212	0.5134	0.0000	2,054.9724	2,054.9724	0.1148	0.0000	2,057.8419
Unmitigated	0.6707	3.0095	8.0730	0.0263	2.1880	0.0265	2.2145	0.5860	0.0248	0.6108	0.0000	2,420.6093	2,420.6093	0.1317	0.0000	2,423.9007

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,080.00	1,999.40	1833.00	5,805,403	4,876,674
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	2,080.00	1,999.40	1,833.00	5,805,403	4,876,674

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Non-Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Parking Lot	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Unenclosed Parking Structure	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Solana Highlands - Proposed Project - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	284.1399	284.1399	0.0117	2.6500e-003	285.2206
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	284.1399	284.1399	0.0117	2.6500e-003	285.2206
NaturalGas Mitigated	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	103.0707	103.0707	1.9800e-003	1.8900e-003	103.6832
NaturalGas Unmitigated	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	103.0707	103.0707	1.9800e-003	1.8900e-003	103.6832

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.93147e+006	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	103.0707	103.0707	1.9800e-003	1.8900e-003	103.6832
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0104**	**0.0890**	**0.0379**	**5.7000e-004**		**7.2000e-003**	**7.2000e-003**		**7.2000e-003**	**7.2000e-003**	**0.0000**	**103.0707**	**103.0707**	**1.9800e-003**	**1.8900e-003**	**103.6832**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.93147e+006	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	103.0707	103.0707	1.9800e-003	1.8900e-003	103.6832
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0104**	**0.0890**	**0.0379**	**5.7000e-004**		**7.2000e-003**	**7.2000e-003**		**7.2000e-003**	**7.2000e-003**	**0.0000**	**103.0707**	**103.0707**	**1.9800e-003**	**1.8900e-003**	**103.6832**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.04128e+006	253.3322	0.0104	2.3600e-003	254.2957
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	38080	9.2644	3.8000e-004	9.0000e-005	9.2997
Unenclosed Parking Structure	88550	21.5432	8.8000e-004	2.0000e-004	21.6252
Total		**284.1399**	**0.0117**	**2.6500e-003**	**285.2206**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.04128e+006	253.3322	0.0104	2.3600e-003	254.2957
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	38080	9.2644	3.8000e-004	9.0000e-005	9.2997
Unenclosed Parking Structure	88550	21.5432	8.8000e-004	2.0000e-004	21.6252
Total		**284.1399**	**0.0117**	**2.6500e-003**	**285.2206**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4769	0.0223	1.9332	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0400e-003	0.0000	3.2364
Unmitigated	1.4769	0.0223	1.9332	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0400e-003	0.0000	3.2364

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2879					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0584	0.0223	1.9332	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0400e-003	0.0000	3.2364
Total	**1.4769**	**0.0223**	**1.9332**	**1.0000e-004**		**0.0107**	**0.0107**		**0.0107**	**0.0107**	**0.0000**	**3.1603**	**3.1603**	**3.0400e-003**	**0.0000**	**3.2364**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2879					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0584	0.0223	1.9332	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0400e-003	0.0000	3.2364
Total	**1.4769**	**0.0223**	**1.9332**	**1.0000e-004**		**0.0107**	**0.0107**		**0.0107**	**0.0107**	**0.0000**	**3.1603**	**3.1603**	**3.0400e-003**	**0.0000**	**3.2364**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	46.7214	0.0173	0.0103	50.2082
Unmitigated	65.5054	0.0220	0.0129	69.8908

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	16.0085 / 3.37743	65.5054	0.0220	0.0129	69.8908
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**65.5054**	**0.0220**	**0.0129**	**69.8908**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	12.8068 / 0.599455	46.7214	0.0173	0.0103	50.2082
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**46.7214**	**0.0173**	**0.0103**	**50.2082**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.0694	0.3587	0.0000	15.0368
Unmitigated	24.2777	1.4348	0.0000	60.1470

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	119.6	24.2777	1.4348	0.0000	60.1470
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**24.2777**	**1.4348**	**0.0000**	**60.1470**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	29.9	6.0694	0.3587	0.0000	15.0368
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**6.0694**	**0.3587**	**0.0000**	**15.0368**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Solana Highlands - Proposed Project

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	57.37	1000sqft	1.32	57,365.00	0
Other Non-Asphalt Surfaces	1.90	1000sqft	0.04	1,900.00	0
Parking Lot	272.00	Space	2.45	108,800.00	0
Unenclosed Parking Structure	50.60	1000sqft	1.16	50,600.00	0
Apartments Mid Rise	260.00	Dwelling Unit	6.84	326,156.00	744

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS

Land Use - project-specific land uses

Construction Phase - construction schedule per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Trips and VMT - Trips per applicant.

Demolition - demo quantities per applicant

Grading - grading quantities per applicant

Architectural Coating - SDAPCD Rule 67.0.1

Vehicle Trips - F&P 2016

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - No fireplaces.

Consumer Products - CalEEMod defaults.

Area Coating - SDAPCD Rule 67.0.1

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - water use per applicant

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - All construction equipment will be Tier 4 Interim except air compressors and pavers which are Tier 3.

Mobile Land Use Mitigation -

Water Mitigation -

Waste Mitigation - AB 341

Table Name	Column Name	Default Value	New Value
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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstructionPhase	NumDays	30.00	45.00
tblConstructionPhase	NumDays	30.00	45.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	45.00
tblFireplaces	NumberGas	143.00	0.00
tblFireplaces	NumberNoFireplace	26.00	0.00
tblFireplaces	NumberWood	91.00	0.00
tblGrading	AcresOfGrading	55.00	4.50
tblGrading	AcresOfGrading	56.25	4.50
tblGrading	AcresOfGrading	56.25	4.50
tblGrading	MaterialExported	0.00	154.00
tblLandUse	LandUseSquareFeet	57,370.00	57,365.00
tblLandUse	LandUseSquareFeet	260,000.00	326,156.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00

tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	720.49	536.36
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00

tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripNumber	495.00	490.00
tblTripsAndVMT	HaulingTripNumber	19.00	9,171.00
tblTripsAndVMT	HaulingTripNumber	0.00	5,393.00
tblTripsAndVMT	HaulingTripNumber	0.00	7,436.00
tblTripsAndVMT	HaulingTripNumber	300.00	297.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	64.00	10.00
tblTripsAndVMT	VendorTripNumber	64.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	64.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	10.00	12.00
tblTripsAndVMT	WorkerTripNumber	15.00	12.00
tblTripsAndVMT	WorkerTripNumber	15.00	12.00
tblTripsAndVMT	WorkerTripNumber	56.00	12.00
tblTripsAndVMT	WorkerTripNumber	279.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	12.00
tblTripsAndVMT	WorkerTripNumber	56.00	12.00
tblTripsAndVMT	WorkerTripNumber	15.00	12.00
tblTripsAndVMT	WorkerTripNumber	279.00	80.00

tblTripsAndVMT	WorkerTripNumber	10.00	12.00
tblTripsAndVMT	WorkerTripNumber	15.00	12.00
tblTripsAndVMT	WorkerTripNumber	15.00	12.00
tblTripsAndVMT	WorkerTripNumber	56.00	12.00
tblTripsAndVMT	WorkerTripNumber	279.00	80.00
tblTripsAndVMT	WorkerTripNumber	10.00	12.00
tblVehicleTrips	ST_TR	6.39	7.69
tblVehicleTrips	SU_TR	5.86	7.05
tblVehicleTrips	WD_TR	6.65	8.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	16,940,046.66	16,008,460.00
tblWater	OutdoorWaterUseRate	10,679,594.63	3,377,428.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	13.00	0.00

tblWoodstoves	NumberNoncatalytic	13.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.3489	76.8017	34.5357	0.1929	7.3942	1.4756	8.8698	2.8329	1.3641	4.1969	0.0000	20,578.1894	20,578.1894	2.5059	0.0000	20,640.8377
2021	64.3998	101.1297	55.0778	0.2728	8.8997	2.1575	11.0572	3.2437	2.0001	5.2438	0.0000	29,031.4167	29,031.4167	3.7416	0.0000	29,124.9574
2022	65.5494	103.4984	57.7579	0.3206	10.1472	1.8381	11.9852	3.5850	1.7058	5.2908	0.0000	34,337.6816	34,337.6816	4.2093	0.0000	34,442.9146
2023	61.4069	14.9422	22.3793	0.0409	0.9220	0.7227	1.6447	0.2461	0.6706	0.9167	0.0000	4,004.7063	4,004.7063	0.9150	0.0000	4,027.5810
Maximum	**65.5494**	**103.4984**	**57.7579**	**0.3206**	**10.1472**	**2.1575**	**11.9852**	**3.5850**	**2.0001**	**5.2908**	**0.0000**	**34,337.6816**	**34,337.6816**	**4.2093**	**0.0000**	**34,442.9146**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.4023	60.6579	36.3971	0.1929	5.6798	0.2414	5.9212	1.9163	0.2333	2.1496	0.0000	20,578.1894	20,578.1894	2.5059	0.0000	20,640.8377
2021	61.6515	84.5124	60.2474	0.2728	7.1853	0.6086	7.7939	2.3271	0.5989	2.9260	0.0000	29,031.4166	29,031.4166	3.7416	0.0000	29,124.9574
2022	63.2936	93.0065	64.0866	0.3206	8.4312	0.6224	9.0536	2.6682	0.6122	3.2804	0.0000	34,337.6816	34,337.6816	4.2093	0.0000	34,442.9146
2023	60.5418	14.7025	25.2396	0.0409	0.9220	0.3469	1.2690	0.2461	0.3464	0.5925	0.0000	4,004.7063	4,004.7063	0.9150	0.0000	4,027.5810
Maximum	**63.2936**	**93.0065**	**64.0866**	**0.3206**	**8.4312**	**0.6224**	**9.0536**	**2.6682**	**0.6122**	**3.2804**	**0.0000**	**34,337.6816**	**34,337.6816**	**4.2093**	**0.0000**	**34,442.9146**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**3.99**	**14.68**	**-9.56**	**0.00**	**18.80**	**70.63**	**28.37**	**27.76**	**68.80**	**42.81**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.4211	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190	0.0000	38.7072	38.7072	0.0373	0.0000	39.6391
Energy	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Mobile	3.9718	16.3650	46.6332	0.1545	12.5942	0.1484	12.7426	3.3663	0.1393	3.5056		15,672.0407	15,672.0407	0.8219		15,692.5875
Total	**12.4499**	**17.1001**	**68.3209**	**0.1588**	**12.5942**	**0.3068**	**12.9010**	**3.3663**	**0.2977**	**3.6640**	**0.0000**	**16,333.3014**	**16,333.3014**	**0.8711**	**0.0114**	**16,358.4797**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.4211	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190	0.0000	38.7072	38.7072	0.0373	0.0000	39.6391
Energy	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Mobile	3.7074	14.7657	40.5923	0.1311	10.5794	0.1268	10.7062	2.8278	0.1189	2.9467		13,303.7690	13,303.7690	0.7143		13,321.6269
Total	**12.1855**	**15.5008**	**62.2801**	**0.1354**	**10.5794**	**0.2852**	**10.8646**	**2.8278**	**0.2774**	**3.1051**	**0.0000**	**13,965.0298**	**13,965.0298**	**0.7635**	**0.0114**	**13,987.5191**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.12**	**9.35**	**8.84**	**14.72**	**16.00**	**7.06**	**15.79**	**16.00**	**6.84**	**15.25**	**0.00**	**14.50**	**14.50**	**12.35**	**0.00**	**14.49**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Ph 1 - Demolition	Demolition	6/1/2020	6/29/2020	5	21	
2	Ph 1 - Grading	Grading	7/1/2020	9/1/2020	5	45	
3	Ph 1 - Building Construction	Building Construction	9/1/2020	8/30/2021	5	260	
4	Ph 2 - Demolition	Demolition	6/1/2021	6/28/2021	5	20	
5	Ph 2 - Grading	Grading	7/1/2021	9/1/2021	5	45	
6	Ph 1 - Paving	Paving	7/1/2021	9/1/2021	5	45	
7	Ph 1 - Architectural Coating	Architectural Coating	7/1/2021	9/1/2021	5	45	
8	Ph 2 - Building Construction	Building Construction	9/1/2021	8/31/2022	5	261	
9	Ph 3 - Demolition	Demolition	6/1/2022	6/30/2022	5	22	
10	Ph 3 - Grading	Grading	7/1/2022	8/31/2022	5	44	
11	Ph 2 - Paving	Paving	7/1/2022	8/31/2022	5	44	
12	Ph 2 - Architectural Coating	Architectural Coating	7/1/2022	8/31/2022	5	44	
13	Ph 3 - Building Construction	Building Construction	9/1/2022	8/31/2023	5	261	
14	Ph 3 - Paving	Paving	7/1/2023	8/31/2023	5	44	
15	Ph 3 - Architectural Coating	Architectural Coating	7/1/2023	8/31/2023	5	44	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.97

Residential Indoor: 660,466; Residential Outdoor: 220,155; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 13,120 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Ph 1 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 1 - Demolition	Excavators	1	5.00	158	0.38
Ph 1 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 1 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading	Excavators	2	5.00	158	0.38
Ph 1 - Grading	Graders	0	8.00	187	0.41
Ph 1 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading	Scrapers	2	5.00	367	0.48
Ph 1 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Building Construction	Cranes	0	7.00	231	0.29
Ph 1 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 1 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 1 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Ph 1 - Building Construction	Welders	0	8.00	46	0.45
Ph 2 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 2 - Demolition	Excavators	1	5.00	158	0.38
Ph 2 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 2 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 2 - Grading	Excavators	2	5.00	158	0.38
Ph 2 - Grading	Graders	0	8.00	187	0.41
Ph 2 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 2 - Grading	Scrapers	2	5.00	367	0.48

Ph 2 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Paving	Pavers	2	8.00	130	0.42
Ph 1 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 1 - Paving	Rollers	2	8.00	80	0.38
Ph 1 - Architectural Coating	Air Compressors	1	6.00	78	0.48
Ph 2 - Building Construction	Cranes	0	7.00	231	0.29
Ph 2 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 2 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 2 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Ph 2 - Building Construction	Welders	0	8.00	46	0.45
Ph 3 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 3 - Demolition	Excavators	1	5.00	158	0.38
Ph 3 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 3 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 3 - Grading	Excavators	2	5.00	158	0.38
Ph 3 - Grading	Graders	0	8.00	187	0.41
Ph 3 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 3 - Grading	Scrapers	2	5.00	367	0.48
Ph 3 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 2 - Paving	Pavers	2	8.00	130	0.42
Ph 2 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 2 - Paving	Rollers	2	8.00	80	0.38
Ph 2 - Architectural Coating	Air Compressors	1	6.00	78	0.48
Ph 3 - Building Construction	Cranes	0	7.00	231	0.29
Ph 3 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 3 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 3 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37

Ph 3 - Building Construction	Welders	0	8.00	46	0.45
Ph 3 - Paving	Pavers	2	8.00	130	0.42
Ph 3 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 3 - Paving	Rollers	2	8.00	80	0.38
Ph 3 - Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Ph 1 - Demolition	4	12.00	2.00	490.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading	6	12.00	0.00	5,393.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Building Construction	4	80.00	10.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Demolition	4	12.00	2.00	8.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Grading	6	12.00	0.00	7,436.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Paving	6	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Building Construction	4	80.00	10.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Demolition	4	12.00	2.00	297.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Grading	6	12.00	0.00	9,171.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Paving	6	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Building Construction	4	80.00	10.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Paving	6	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.1651	0.0000	5.1651	0.7822	0.0000	0.7822			0.0000			0.0000
Off-Road	1.3374	13.8927	7.3138	0.0133		0.6946	0.6946		0.6390	0.6390		1,290.3008	1,290.3008	0.4173		1,300.7335
Total	**1.3374**	**13.8927**	**7.3138**	**0.0133**	**5.1651**	**0.6946**	**5.8597**	**0.7822**	**0.6390**	**1.4212**		**1,290.3008**	**1,290.3008**	**0.4173**		**1,300.7335**

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2781	9.2714	2.2521	0.0285	0.6724	0.0335	0.7059	0.1843	0.0320	0.2163		3,122.3628	3,122.3628	0.2606		3,128.8767
Vendor	7.4700e-003	0.2255	0.0575	5.5000e-004	0.0135	1.1000e-003	0.0146	3.9000e-003	1.0600e-003	4.9500e-003		58.8080	58.8080	4.3400e-003		58.9165
Worker	0.0440	0.0297	0.3402	1.0100e-003	0.0986	6.9000e-004	0.0993	0.0262	6.4000e-004	0.0268		101.1297	101.1297	3.0200e-003		101.2051
Total	**0.3296**	**9.5265**	**2.6497**	**0.0301**	**0.7845**	**0.0353**	**0.8198**	**0.2143**	**0.0337**	**0.2480**		**3,282.3005**	**3,282.3005**	**0.2679**		**3,288.9983**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3243	0.0000	2.3243	0.3520	0.0000	0.3520			0.0000			0.0000
Off-Road	0.2139	4.3481	8.1504	0.0133		0.0218	0.0218		0.0218	0.0218	0.0000	1,290.3008	1,290.3008	0.4173		1,300.7335
Total	**0.2139**	**4.3481**	**8.1504**	**0.0133**	**2.3243**	**0.0218**	**2.3461**	**0.3520**	**0.0218**	**0.3738**	**0.0000**	**1,290.3008**	**1,290.3008**	**0.4173**		**1,300.7335**

3.2 Ph 1 - Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2781	9.2714	2.2521	0.0285	0.6724	0.0335	0.7059	0.1843	0.0320	0.2163		3,122.3628	3,122.3628	0.2606		3,128.8767
Vendor	7.4700e-003	0.2255	0.0575	5.5000e-004	0.0135	1.1000e-003	0.0146	3.9000e-003	1.0600e-003	4.9500e-003		58.8080	58.8080	4.3400e-003		58.9165
Worker	0.0440	0.0297	0.3402	1.0100e-003	0.0986	6.9000e-004	0.0993	0.0262	6.4000e-004	0.0268		101.1297	101.1297	3.0200e-003		101.2051
Total	**0.3296**	**9.5265**	**2.6497**	**0.0301**	**0.7845**	**0.0353**	**0.8198**	**0.2143**	**0.0337**	**0.2480**		**3,282.3005**	**3,282.3005**	**0.2679**		**3,288.9983**

3.3 Ph 1 - Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1171	0.0000	3.1171	1.6666	0.0000	1.6666			0.0000			0.0000
Off-Road	2.1919	24.4246	16.6137	0.0312		1.0631	1.0631		0.9780	0.9780		3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**2.1919**	**24.4246**	**16.6137**	**0.0312**	**3.1171**	**1.0631**	**4.1802**	**1.6666**	**0.9780**	**2.6446**		**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.3 Ph 1 - Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4286	47.6194	11.5670	0.1466	3.4537	0.1719	3.6255	0.9464	0.1644	1.1108		16,037.0503	16,037.0503	1.3383		16,070.5064
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0440	0.0297	0.3402	1.0100e-003	0.0986	6.9000e-004	0.0993	0.0262	6.4000e-004	0.0268		101.1297	101.1297	3.0200e-003		101.2051
Total	**1.4726**	**47.6491**	**11.9072**	**0.1476**	**3.5522**	**0.1726**	**3.7248**	**0.9725**	**0.1651**	**1.1376**		**16,138.1799**	**16,138.1799**	**1.3413**		**16,171.7116**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4027	0.0000	1.4027	0.7500	0.0000	0.7500			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**1.4027**	**0.0512**	**1.4539**	**0.7500**	**0.0512**	**0.8011**	**0.0000**	**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.3 Ph 1 - Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4286	47.6194	11.5670	0.1466	3.4537	0.1719	3.6255	0.9464	0.1644	1.1108		16,037.0503	16,037.0503	1.3383		16,070.5064
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0440	0.0297	0.3402	1.0100e-003	0.0986	6.9000e-004	0.0993	0.0262	6.4000e-004	0.0268		101.1297	101.1297	3.0200e-003		101.2051
Total	**1.4726**	**47.6491**	**11.9072**	**0.1476**	**3.5522**	**0.1726**	**3.7248**	**0.9725**	**0.1651**	**1.1376**		**16,138.1799**	**16,138.1799**	**1.3413**		**16,171.7116**

3.4 Ph 1 - Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3535	3.4027	3.4600	4.6300e-003		0.2298	0.2298		0.2114	0.2114		448.7993	448.7993	0.1452		452.4281
Total	**0.3535**	**3.4027**	**3.4600**	**4.6300e-003**		**0.2298**	**0.2298**		**0.2114**	**0.2114**		**448.7993**	**448.7993**	**0.1452**		**452.4281**

3.4 Ph 1 - Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0374	1.1276	0.2873	2.7400e-003	0.0677	5.5200e-003	0.0732	0.0195	5.2800e-003	0.0248		294.0401	294.0401	0.0217		294.5824
Worker	0.2936	0.1978	2.2677	6.7700e-003	0.6572	4.6100e-003	0.6618	0.1743	4.2500e-003	0.1786		674.1976	674.1976	0.0201		674.7009
Total	**0.3309**	**1.3254**	**2.5549**	**9.5100e-003**	**0.7249**	**0.0101**	**0.7350**	**0.1938**	**9.5300e-003**	**0.2033**		**968.2377**	**968.2377**	**0.0418**		**969.2833**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6300e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	448.7993	448.7993	0.1452		452.4281
Total	**0.1042**	**2.0264**	**3.5036**	**4.6300e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**448.7993**	**448.7993**	**0.1452**		**452.4281**

3.4 Ph 1 - Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0374	1.1276	0.2873	2.7400e-003	0.0677	5.5200e-003	0.0732	0.0195	5.2800e-003	0.0248		294.0401	294.0401	0.0217		294.5824
Worker	0.2936	0.1978	2.2677	6.7700e-003	0.6572	4.6100e-003	0.6618	0.1743	4.2500e-003	0.1786		674.1976	674.1976	0.0201		674.7009
Total	**0.3309**	**1.3254**	**2.5549**	**9.5100e-003**	**0.7249**	**0.0101**	**0.7350**	**0.1938**	**9.5300e-003**	**0.2033**		**968.2377**	**968.2377**	**0.0418**		**969.2833**

3.4 Ph 1 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3166	3.0749	3.4281	4.6300e-003		0.1955	0.1955		0.1798	0.1798		448.9309	448.9309	0.1452		452.5607
Total	**0.3166**	**3.0749**	**3.4281**	**4.6300e-003**		**0.1955**	**0.1955**		**0.1798**	**0.1798**		**448.9309**	**448.9309**	**0.1452**		**452.5607**

3.4 Ph 1 - Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	1.0183	0.2595	2.7100e-003	0.0677	2.1400e-003	0.0698	0.0195	2.0500e-003	0.0215		291.3520	291.3520	0.0208		291.8724
Worker	0.2767	0.1798	2.1219	6.5400e-003	0.6572	4.5400e-003	0.6617	0.1743	4.1800e-003	0.1785		651.5527	651.5527	0.0186		652.0176
Total	**0.3070**	**1.1981**	**2.3814**	**9.2500e-003**	**0.7249**	**6.6800e-003**	**0.7316**	**0.1938**	**6.2300e-003**	**0.2000**		**942.9047**	**942.9047**	**0.0394**		**943.8900**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6300e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	448.9309	448.9309	0.1452		452.5607
Total	**0.1042**	**2.0264**	**3.5036**	**4.6300e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**448.9309**	**448.9309**	**0.1452**		**452.5607**

3.4 Ph 1 - Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	1.0183	0.2595	2.7100e-003	0.0677	2.1400e-003	0.0698	0.0195	2.0500e-003	0.0215		291.3520	291.3520	0.0208		291.8724
Worker	0.2767	0.1798	2.1219	6.5400e-003	0.6572	4.5400e-003	0.6617	0.1743	4.1800e-003	0.1785		651.5527	651.5527	0.0186		652.0176
Total	**0.3070**	**1.1981**	**2.3814**	**9.2500e-003**	**0.7249**	**6.6800e-003**	**0.7316**	**0.1938**	**6.2300e-003**	**0.2000**		**942.9047**	**942.9047**	**0.0394**		**943.8900**

3.5 Ph 2 - Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0822	0.0000	0.0822	0.0125	0.0000	0.0125			0.0000			0.0000
Off-Road	1.2832	13.2651	7.2128	0.0133		0.6536	0.6536		0.6013	0.6013		1,290.4222	1,290.4222	0.4174		1,300.8559
Total	**1.2832**	**13.2651**	**7.2128**	**0.0133**	**0.0822**	**0.6536**	**0.7358**	**0.0125**	**0.6013**	**0.6138**		**1,290.4222**	**1,290.4222**	**0.4174**		**1,300.8559**

3.5 Ph 2 - Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.4800e-003	0.1448	0.0384	4.8000e-004	0.0115	5.0000e-004	0.0120	3.1600e-003	4.8000e-004	3.6400e-003		52.8513	52.8513	4.4500e-003		52.9625
Vendor	6.0500e-003	0.2037	0.0519	5.4000e-004	0.0135	4.3000e-004	0.0140	3.9000e-003	4.1000e-004	4.3100e-003		58.2704	58.2704	4.1600e-003		58.3745
Worker	0.0415	0.0270	0.3183	9.8000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		97.7329	97.7329	2.7900e-003		97.8026
Total	**0.0520**	**0.3755**	**0.4086**	**2.0000e-003**	**0.1237**	**1.6100e-003**	**0.1253**	**0.0332**	**1.5200e-003**	**0.0347**		**208.8546**	**208.8546**	**0.0114**		**209.1396**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0370	0.0000	0.0370	5.6000e-003	0.0000	5.6000e-003			0.0000			0.0000
Off-Road	0.2139	4.3481	8.1504	0.0133		0.0218	0.0218		0.0218	0.0218	0.0000	1,290.4222	1,290.4222	0.4174		1,300.8559
Total	**0.2139**	**4.3481**	**8.1504**	**0.0133**	**0.0370**	**0.0218**	**0.0588**	**5.6000e-003**	**0.0218**	**0.0274**	**0.0000**	**1,290.4222**	**1,290.4222**	**0.4174**		**1,300.8559**

3.5 Ph 2 - Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.4800e-003	0.1448	0.0384	4.8000e-004	0.0115	5.0000e-004	0.0120	3.1600e-003	4.8000e-004	3.6400e-003		52.8513	52.8513	4.4500e-003		52.9625
Vendor	6.0500e-003	0.2037	0.0519	5.4000e-004	0.0135	4.3000e-004	0.0140	3.9000e-003	4.1000e-004	4.3100e-003		58.2704	58.2704	4.1600e-003		58.3745
Worker	0.0415	0.0270	0.3183	9.8000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		97.7329	97.7329	2.7900e-003		97.8026
Total	**0.0520**	**0.3755**	**0.4086**	**2.0000e-003**	**0.1237**	**1.6100e-003**	**0.1253**	**0.0332**	**1.5200e-003**	**0.0347**		**208.8546**	**208.8546**	**0.0114**		**209.1396**

3.6 Ph 2 - Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1171	0.0000	3.1171	1.6666	0.0000	1.6666			0.0000			0.0000
Off-Road	2.0651	22.5038	15.9946	0.0312		0.9731	0.9731		0.8953	0.8953		3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**2.0651**	**22.5038**	**15.9946**	**0.0312**	**3.1171**	**0.9731**	**4.0902**	**1.6666**	**0.8953**	**2.5619**		**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.6 Ph 2 - Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8513	59.8261	15.8480	0.1990	4.7620	0.2083	4.9703	1.3049	0.1993	1.5042		21,833.4680	21,833.4680	1.8374		21,879.4025
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0415	0.0270	0.3183	9.8000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		97.7329	97.7329	2.7900e-003		97.8026
Total	**1.8928**	**59.8531**	**16.1663**	**0.2000**	**4.8606**	**0.2090**	**5.0696**	**1.3310**	**0.1999**	**1.5309**		**21,931.2009**	**21,931.2009**	**1.8402**		**21,977.2051**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4027	0.0000	1.4027	0.7500	0.0000	0.7500			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**1.4027**	**0.0512**	**1.4539**	**0.7500**	**0.0512**	**0.8011**	**0.0000**	**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.6 Ph 2 - Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8513	59.8261	15.8480	0.1990	4.7620	0.2083	4.9703	1.3049	0.1993	1.5042		21,833.4680	21,833.4680	1.8374		21,879.4025
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0415	0.0270	0.3183	9.8000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		97.7329	97.7329	2.7900e-003		97.8026
Total	**1.8928**	**59.8531**	**16.1663**	**0.2000**	**4.8606**	**0.2090**	**5.0696**	**1.3310**	**0.1999**	**1.5309**		**21,931.2009**	**21,931.2009**	**1.8402**		**21,977.2051**

3.7 Ph 1 - Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.2195					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4751**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**		**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.7 Ph 1 - Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0415	0.0270	0.3183	9.8000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		97.7329	97.7329	2.7900e-003		97.8026
Total	**0.0415**	**0.0270**	**0.3183**	**9.8000e-004**	**0.0986**	**6.8000e-004**	**0.0993**	**0.0262**	**6.3000e-004**	**0.0268**		**97.7329**	**97.7329**	**2.7900e-003**		**97.8026**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4496	10.3669	17.2957	0.0228		0.2377	0.2377		0.2377	0.2377	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.2195					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6691**	**10.3669**	**17.2957**	**0.0228**		**0.2377**	**0.2377**		**0.2377**	**0.2377**	**0.0000**	**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.7 Ph 1 - Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0415	0.0270	0.3183	9.8000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		97.7329	97.7329	2.7900e-003		97.8026
Total	**0.0415**	**0.0270**	**0.3183**	**9.8000e-004**	**0.0986**	**6.8000e-004**	**0.0993**	**0.0262**	**6.3000e-004**	**0.0268**		**97.7329**	**97.7329**	**2.7900e-003**		**97.8026**

3.8 Ph 1 - Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	58.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**58.2602**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.8 Ph 1 - Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0415	0.0270	0.3183	9.8000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		97.7329	97.7329	2.7900e-003		97.8026
Total	**0.0415**	**0.0270**	**0.3183**	**9.8000e-004**	**0.0986**	**6.8000e-004**	**0.0993**	**0.0262**	**6.3000e-004**	**0.0268**		**97.7329**	**97.7329**	**2.7900e-003**		**97.8026**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	58.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**58.1008**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.8 Ph 1 - Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0415	0.0270	0.3183	9.8000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		97.7329	97.7329	2.7900e-003		97.8026
Total	**0.0415**	**0.0270**	**0.3183**	**9.8000e-004**	**0.0986**	**6.8000e-004**	**0.0993**	**0.0262**	**6.3000e-004**	**0.0268**		**97.7329**	**97.7329**	**2.7900e-003**		**97.8026**

3.9 Ph 2 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3166	3.0749	3.4281	4.6300e-003		0.1955	0.1955		0.1798	0.1798		448.9309	448.9309	0.1452		452.5607
Total	**0.3166**	**3.0749**	**3.4281**	**4.6300e-003**		**0.1955**	**0.1955**		**0.1798**	**0.1798**		**448.9309**	**448.9309**	**0.1452**		**452.5607**

3.9 Ph 2 - Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	1.0183	0.2595	2.7100e-003	0.0677	2.1400e-003	0.0698	0.0195	2.0500e-003	0.0215		291.3520	291.3520	0.0208		291.8724
Worker	0.2767	0.1798	2.1219	6.5400e-003	0.6572	4.5400e-003	0.6617	0.1743	4.1800e-003	0.1785		651.5527	651.5527	0.0186		652.0176
Total	**0.3070**	**1.1981**	**2.3814**	**9.2500e-003**	**0.7249**	**6.6800e-003**	**0.7316**	**0.1938**	**6.2300e-003**	**0.2000**		**942.9047**	**942.9047**	**0.0394**		**943.8900**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6300e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	448.9309	448.9309	0.1452		452.5607
Total	**0.1042**	**2.0264**	**3.5036**	**4.6300e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**448.9309**	**448.9309**	**0.1452**		**452.5607**

3.9 Ph 2 - Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	1.0183	0.2595	2.7100e-003	0.0677	2.1400e-003	0.0698	0.0195	2.0500e-003	0.0215		291.3520	291.3520	0.0208		291.8724
Worker	0.2767	0.1798	2.1219	6.5400e-003	0.6572	4.5400e-003	0.6617	0.1743	4.1800e-003	0.1785		651.5527	651.5527	0.0186		652.0176
Total	**0.3070**	**1.1981**	**2.3814**	**9.2500e-003**	**0.7249**	**6.6800e-003**	**0.7316**	**0.1938**	**6.2300e-003**	**0.2000**		**942.9047**	**942.9047**	**0.0394**		**943.8900**

3.9 Ph 2 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2783	2.7305	3.3917	4.6400e-003		0.1600	0.1600		0.1472	0.1472		449.2698	449.2698	0.1453		452.9024
Total	**0.2783**	**2.7305**	**3.3917**	**4.6400e-003**		**0.1600**	**0.1600**		**0.1472**	**0.1472**		**449.2698**	**449.2698**	**0.1453**		**452.9024**

3.9 Ph 2 - Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0281	0.9623	0.2458	2.6800e-003	0.0677	1.8400e-003	0.0695	0.0195	1.7600e-003	0.0213		288.6138	288.6138	0.0202		289.1183
Worker	0.2616	0.1639	1.9731	6.3000e-003	0.6572	4.4400e-003	0.6616	0.1743	4.0900e-003	0.1784		627.6478	627.6478	0.0171		628.0740
Total	**0.2897**	**1.1263**	**2.2189**	**8.9800e-003**	**0.7249**	**6.2800e-003**	**0.7312**	**0.1938**	**5.8500e-003**	**0.1997**		**916.2616**	**916.2616**	**0.0372**		**917.1922**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6400e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	449.2698	449.2698	0.1453		452.9024
Total	**0.1042**	**2.0264**	**3.5036**	**4.6400e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**449.2698**	**449.2698**	**0.1453**		**452.9024**

3.9 Ph 2 - Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0281	0.9623	0.2458	2.6800e-003	0.0677	1.8400e-003	0.0695	0.0195	1.7600e-003	0.0213		288.6138	288.6138	0.0202		289.1183
Worker	0.2616	0.1639	1.9731	6.3000e-003	0.6572	4.4400e-003	0.6616	0.1743	4.0900e-003	0.1784		627.6478	627.6478	0.0171		628.0740
Total	**0.2897**	**1.1263**	**2.2189**	**8.9800e-003**	**0.7249**	**6.2800e-003**	**0.7312**	**0.1938**	**5.8500e-003**	**0.1997**		**916.2616**	**916.2616**	**0.0372**		**917.1922**

3.10 Ph 3 - Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9899	0.0000	2.9899	0.4528	0.0000	0.4528			0.0000			0.0000
Off-Road	1.0460	10.7421	6.7354	0.0133		0.5161	0.5161		0.4748	0.4748		1,290.1644	1,290.1644	0.4173		1,300.5960
Total	**1.0460**	**10.7421**	**6.7354**	**0.0133**	**2.9899**	**0.5161**	**3.5060**	**0.4528**	**0.4748**	**0.9276**		**1,290.1644**	**1,290.1644**	**0.4173**		**1,300.5960**

3.10 Ph 3 - Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1421	4.4302	1.2900	0.0160	0.3890	0.0144	0.4035	0.1066	0.0138	0.1204		1,760.0158	1,760.0158	0.1495		1,763.7526
Vendor	5.6200e-003	0.1925	0.0492	5.4000e-004	0.0135	3.7000e-004	0.0139	3.9000e-003	3.5000e-004	4.2500e-003		57.7228	57.7228	4.0400e-003		57.8237
Worker	0.0392	0.0246	0.2960	9.4000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		94.1472	94.1472	2.5600e-003		94.2111
Total	**0.1869**	**4.6472**	**1.6351**	**0.0175**	**0.5012**	**0.0155**	**0.5166**	**0.1367**	**0.0148**	**0.1514**		**1,911.8857**	**1,911.8857**	**0.1561**		**1,915.7874**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3455	0.0000	1.3455	0.2038	0.0000	0.2038			0.0000			0.0000
Off-Road	0.2139	4.3481	8.1504	0.0133		0.0218	0.0218		0.0218	0.0218	0.0000	1,290.1644	1,290.1644	0.4173		1,300.5960
Total	**0.2139**	**4.3481**	**8.1504**	**0.0133**	**1.3455**	**0.0218**	**1.3672**	**0.2038**	**0.0218**	**0.2255**	**0.0000**	**1,290.1644**	**1,290.1644**	**0.4173**		**1,300.5960**

3.10 Ph 3 - Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1421	4.4302	1.2900	0.0160	0.3890	0.0144	0.4035	0.1066	0.0138	0.1204		1,760.0158	1,760.0158	0.1495		1,763.7526
Vendor	5.6200e-003	0.1925	0.0492	5.4000e-004	0.0135	3.7000e-004	0.0139	3.9000e-003	3.5000e-004	4.2500e-003		57.7228	57.7228	4.0400e-003		57.8237
Worker	0.0392	0.0246	0.2960	9.4000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		94.1472	94.1472	2.5600e-003		94.2111
Total	**0.1869**	**4.6472**	**1.6351**	**0.0175**	**0.5012**	**0.0155**	**0.5166**	**0.1367**	**0.0148**	**0.1514**		**1,911.8857**	**1,911.8857**	**0.1561**		**1,915.7874**

3.11 Ph 3 - Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1200	0.0000	3.1200	1.6669	0.0000	1.6669			0.0000			0.0000
Off-Road	1.7780	18.6352	14.9486	0.0313		0.7975	0.7975		0.7337	0.7337		3,027.0236	3,027.0236	0.9790		3,051.4986
Total	**1.7780**	**18.6352**	**14.9486**	**0.0313**	**3.1200**	**0.7975**	**3.9175**	**1.6669**	**0.7337**	**2.4006**		**3,027.0236**	**3,027.0236**	**0.9790**		**3,051.4986**

3.11 Ph 3 - Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1934	68.3992	19.9167	0.2471	6.0066	0.2226	6.2292	1.6459	0.2130	1.8589		27,173.5768	27,173.5768	2.3078		27,231.2716
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0246	0.2960	9.4000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		94.1472	94.1472	2.5600e-003		94.2111
Total	**2.2326**	**68.4238**	**20.2127**	**0.2480**	**6.1051**	**0.2233**	**6.3284**	**1.6720**	**0.2136**	**1.8856**		**27,267.7240**	**27,267.7240**	**2.3104**		**27,325.4827**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4040	0.0000	1.4040	0.7501	0.0000	0.7501			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0313		0.0512	0.0512		0.0512	0.0512	0.0000	3,027.0236	3,027.0236	0.9790		3,051.4986
Total	**0.4946**	**9.6570**	**18.4314**	**0.0313**	**1.4040**	**0.0512**	**1.4552**	**0.7501**	**0.0512**	**0.8013**	**0.0000**	**3,027.0236**	**3,027.0236**	**0.9790**		**3,051.4986**

3.11 Ph 3 - Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1934	68.3992	19.9167	0.2471	6.0066	0.2226	6.2292	1.6459	0.2130	1.8589		27,173.5768	27,173.5768	2.3078		27,231.2716
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0246	0.2960	9.4000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		94.1472	94.1472	2.5600e-003		94.2111
Total	**2.2326**	**68.4238**	**20.2127**	**0.2480**	**6.1051**	**0.2233**	**6.3284**	**1.6720**	**0.2136**	**1.8856**		**27,267.7240**	**27,267.7240**	**2.3104**		**27,325.4827**

3.12 Ph 2 - Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.2245					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3273**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.12 Ph 2 - Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0246	0.2960	9.4000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		94.1472	94.1472	2.5600e-003		94.2111
Total	**0.0392**	**0.0246**	**0.2960**	**9.4000e-004**	**0.0986**	**6.7000e-004**	**0.0992**	**0.0262**	**6.1000e-004**	**0.0268**		**94.1472**	**94.1472**	**2.5600e-003**		**94.2111**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4496	10.3669	17.2957	0.0228		0.2377	0.2377		0.2377	0.2377	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.2245					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6741**	**10.3669**	**17.2957**	**0.0228**		**0.2377**	**0.2377**		**0.2377**	**0.2377**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.12 Ph 2 - Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0246	0.2960	9.4000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		94.1472	94.1472	2.5600e-003		94.2111
Total	**0.0392**	**0.0246**	**0.2960**	**9.4000e-004**	**0.0986**	**6.7000e-004**	**0.0992**	**0.0262**	**6.1000e-004**	**0.0268**		**94.1472**	**94.1472**	**2.5600e-003**		**94.2111**

3.13 Ph 2 - Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.3605					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**59.5650**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.13 Ph 2 - Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0246	0.2960	9.4000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		94.1472	94.1472	2.5600e-003		94.2111
Total	**0.0392**	**0.0246**	**0.2960**	**9.4000e-004**	**0.0986**	**6.7000e-004**	**0.0992**	**0.0262**	**6.1000e-004**	**0.0268**		**94.1472**	**94.1472**	**2.5600e-003**		**94.2111**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.3605					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**59.4199**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.13 Ph 2 - Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0246	0.2960	9.4000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		94.1472	94.1472	2.5600e-003		94.2111
Total	**0.0392**	**0.0246**	**0.2960**	**9.4000e-004**	**0.0986**	**6.7000e-004**	**0.0992**	**0.0262**	**6.1000e-004**	**0.0268**		**94.1472**	**94.1472**	**2.5600e-003**		**94.2111**

3.14 Ph 3 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2783	2.7305	3.3917	4.6400e-003		0.1600	0.1600		0.1472	0.1472		449.2698	449.2698	0.1453		452.9024
Total	**0.2783**	**2.7305**	**3.3917**	**4.6400e-003**		**0.1600**	**0.1600**		**0.1472**	**0.1472**		**449.2698**	**449.2698**	**0.1453**		**452.9024**

3.14 Ph 3 - Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0281	0.9623	0.2458	2.6800e-003	0.0677	1.8400e-003	0.0695	0.0195	1.7600e-003	0.0213		288.6138	288.6138	0.0202		289.1183
Worker	0.2616	0.1639	1.9731	6.3000e-003	0.6572	4.4400e-003	0.6616	0.1743	4.0900e-003	0.1784		627.6478	627.6478	0.0171		628.0740
Total	**0.2897**	**1.1263**	**2.2189**	**8.9800e-003**	**0.7249**	**6.2800e-003**	**0.7312**	**0.1938**	**5.8500e-003**	**0.1997**		**916.2616**	**916.2616**	**0.0372**		**917.1922**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6400e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	449.2698	449.2698	0.1453		452.9024
Total	**0.1042**	**2.0264**	**3.5036**	**4.6400e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**449.2698**	**449.2698**	**0.1453**		**452.9024**

3.14 Ph 3 - Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0281	0.9623	0.2458	2.6800e-003	0.0677	1.8400e-003	0.0695	0.0195	1.7600e-003	0.0213		288.6138	288.6138	0.0202		289.1183
Worker	0.2616	0.1639	1.9731	6.3000e-003	0.6572	4.4400e-003	0.6616	0.1743	4.0900e-003	0.1784		627.6478	627.6478	0.0171		628.0740
Total	**0.2897**	**1.1263**	**2.2189**	**8.9800e-003**	**0.7249**	**6.2800e-003**	**0.7312**	**0.1938**	**5.8500e-003**	**0.1997**		**916.2616**	**916.2616**	**0.0372**		**917.1922**

3.14 Ph 3 - Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2539	2.4954	3.3761	4.6400e-003		0.1351	0.1351		0.1243	0.1243		449.6073	449.6073	0.1454		453.2426
Total	**0.2539**	**2.4954**	**3.3761**	**4.6400e-003**		**0.1351**	**0.1351**		**0.1243**	**0.1243**		**449.6073**	**449.6073**	**0.1454**		**453.2426**

3.14 Ph 3 - Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0217	0.7576	0.2251	2.6000e-003	0.0677	8.9000e-004	0.0686	0.0195	8.5000e-004	0.0203		281.3170	281.3170	0.0185		281.7789
Worker	0.2477	0.1497	1.8329	6.0500e-003	0.6572	4.3500e-003	0.6615	0.1743	4.0100e-003	0.1783		603.6537	603.6537	0.0156		604.0438
Total	**0.2694**	**0.9073**	**2.0580**	**8.6500e-003**	**0.7249**	**5.2400e-003**	**0.7301**	**0.1938**	**4.8600e-003**	**0.1987**		**884.9707**	**884.9707**	**0.0341**		**885.8227**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6400e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	449.6073	449.6073	0.1454		453.2426
Total	**0.1042**	**2.0264**	**3.5036**	**4.6400e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**449.6073**	**449.6073**	**0.1454**		**453.2426**

3.14 Ph 3 - Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0217	0.7576	0.2251	2.6000e-003	0.0677	8.9000e-004	0.0686	0.0195	8.5000e-004	0.0203		281.3170	281.3170	0.0185		281.7789
Worker	0.2477	0.1497	1.8329	6.0500e-003	0.6572	4.3500e-003	0.6615	0.1743	4.0100e-003	0.1783		603.6537	603.6537	0.0156		604.0438
Total	**0.2694**	**0.9073**	**2.0580**	**8.6500e-003**	**0.7249**	**5.2400e-003**	**0.7301**	**0.1938**	**4.8600e-003**	**0.1987**		**884.9707**	**884.9707**	**0.0341**		**885.8227**

3.15 Ph 3 - Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.2245					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2572**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.15 Ph 3 - Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0225	0.2749	9.1000e-004	0.0986	6.5000e-004	0.0992	0.0262	6.0000e-004	0.0268		90.5481	90.5481	2.3400e-003		90.6066
Total	**0.0372**	**0.0225**	**0.2749**	**9.1000e-004**	**0.0986**	**6.5000e-004**	**0.0992**	**0.0262**	**6.0000e-004**	**0.0268**		**90.5481**	**90.5481**	**2.3400e-003**		**90.6066**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4496	10.3669	17.2957	0.0228		0.2377	0.2377		0.2377	0.2377	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.2245					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6741**	**10.3669**	**17.2957**	**0.0228**		**0.2377**	**0.2377**		**0.2377**	**0.2377**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.15 Ph 3 - Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0225	0.2749	9.1000e-004	0.0986	6.5000e-004	0.0992	0.0262	6.0000e-004	0.0268		90.5481	90.5481	2.3400e-003		90.6066
Total	**0.0372**	**0.0225**	**0.2749**	**9.1000e-004**	**0.0986**	**6.5000e-004**	**0.0992**	**0.0262**	**6.0000e-004**	**0.0268**		**90.5481**	**90.5481**	**2.3400e-003**		**90.6066**

3.16 Ph 3 - Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.3605					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**59.5521**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.16 Ph 3 - Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0225	0.2749	9.1000e-004	0.0986	6.5000e-004	0.0992	0.0262	6.0000e-004	0.0268		90.5481	90.5481	2.3400e-003		90.6066
Total	**0.0372**	**0.0225**	**0.2749**	**9.1000e-004**	**0.0986**	**6.5000e-004**	**0.0992**	**0.0262**	**6.0000e-004**	**0.0268**		**90.5481**	**90.5481**	**2.3400e-003**		**90.6066**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.3605					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**59.4199**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.16 Ph 3 - Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0225	0.2749	9.1000e-004	0.0986	6.5000e-004	0.0992	0.0262	6.0000e-004	0.0268		90.5481	90.5481	2.3400e-003		90.6066
Total	**0.0372**	**0.0225**	**0.2749**	**9.1000e-004**	**0.0986**	**6.5000e-004**	**0.0992**	**0.0262**	**6.0000e-004**	**0.0268**		**90.5481**	**90.5481**	**2.3400e-003**		**90.6066**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

Integrate Below Market Rate Housing

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.7074	14.7657	40.5923	0.1311	10.5794	0.1268	10.7062	2.8278	0.1189	2.9467		13,303.7690	13,303.7690	0.7143		13,321.6269
Unmitigated	3.9718	16.3650	46.6332	0.1545	12.5942	0.1484	12.7426	3.3663	0.1393	3.5056		15,672.0407	15,672.0407	0.8219		15,692.5875

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,080.00	1,999.40	1833.00	5,805,403	4,876,674
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	2,080.00	1,999.40	1,833.00	5,805,403	4,876,674

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Non-Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Parking Lot	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Unenclosed Parking Structure	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
NaturalGas Unmitigated	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5291.71	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0571**	**0.4877**	**0.2075**	**3.1100e-003**		**0.0394**	**0.0394**		**0.0394**	**0.0394**		**622.5536**	**622.5536**	**0.0119**	**0.0114**	**626.2531**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5.29171	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0571**	**0.4877**	**0.2075**	**3.1100e-003**		**0.0394**	**0.0394**		**0.0394**	**0.0394**		**622.5536**	**622.5536**	**0.0119**	**0.0114**	**626.2531**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.4211	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190	0.0000	38.7072	38.7072	0.0373	0.0000	39.6391
Unmitigated	8.4211	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190	0.0000	38.7072	38.7072	0.0373	0.0000	39.6391

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0572					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6483	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190		38.7072	38.7072	0.0373		39.6391
Total	**8.4211**	**0.2474**	**21.4802**	**1.1400e-003**		**0.1190**	**0.1190**		**0.1190**	**0.1190**	**0.0000**	**38.7072**	**38.7072**	**0.0373**	**0.0000**	**39.6391**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0572					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6483	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190		38.7072	38.7072	0.0373		39.6391
Total	**8.4211**	**0.2474**	**21.4802**	**1.1400e-003**		**0.1190**	**0.1190**		**0.1190**	**0.1190**	**0.0000**	**38.7072**	**38.7072**	**0.0373**	**0.0000**	**39.6391**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Solana Highlands - Proposed Project

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	57.37	1000sqft	1.32	57,365.00	0
Other Non-Asphalt Surfaces	1.90	1000sqft	0.04	1,900.00	0
Parking Lot	272.00	Space	2.45	108,800.00	0
Unenclosed Parking Structure	50.60	1000sqft	1.16	50,600.00	0
Apartments Mid Rise	260.00	Dwelling Unit	6.84	326,156.00	744

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS

Land Use - project-specific land uses

Construction Phase - construction schedule per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Trips and VMT - Trips per applicant.

Demolition - demo quantities per applicant

Grading - grading quantities per applicant

Architectural Coating - SDAPCD Rule 67.0.1

Vehicle Trips - F&P 2016

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - No fireplaces.

Consumer Products - CalEEMod defaults.

Area Coating - SDAPCD Rule 67.0.1

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - water use per applicant

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - All construction equipment will be Tier 4 Interim except air compressors and pavers which are Tier 3.

Mobile Land Use Mitigation -

Water Mitigation -

Waste Mitigation - AB 341

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	45.00
tblConstructionPhase	NumDays	300.00	261.00

tblConstructionPhase	NumDays	300.00	260.00
tblConstructionPhase	NumDays	300.00	261.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	30.00	44.00
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tblConstructionPhase	NumDays	30.00	45.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	45.00
tblFireplaces	NumberGas	143.00	0.00
tblFireplaces	NumberNoFireplace	26.00	0.00
tblFireplaces	NumberWood	91.00	0.00
tblGrading	AcresOfGrading	55.00	4.50
tblGrading	AcresOfGrading	56.25	4.50
tblGrading	AcresOfGrading	56.25	4.50
tblGrading	MaterialExported	0.00	154.00
tblLandUse	LandUseSquareFeet	57,370.00	57,365.00
tblLandUse	LandUseSquareFeet	260,000.00	326,156.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
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tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00

tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
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tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
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tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	720.49	536.36
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
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tblTripsAndVMT	HaulingTripLength	20.00	33.00
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tblTripsAndVMT	HaulingTripNumber	495.00	490.00
tblTripsAndVMT	HaulingTripNumber	19.00	9,171.00
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tblTripsAndVMT	HaulingTripNumber	0.00	7,436.00
tblTripsAndVMT	HaulingTripNumber	300.00	297.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
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tblTripsAndVMT	VendorTripNumber	64.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	10.00	12.00
tblTripsAndVMT	WorkerTripNumber	15.00	12.00
tblTripsAndVMT	WorkerTripNumber	15.00	12.00
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tblTripsAndVMT	WorkerTripNumber	15.00	12.00
tblTripsAndVMT	WorkerTripNumber	56.00	12.00
tblTripsAndVMT	WorkerTripNumber	15.00	12.00
tblTripsAndVMT	WorkerTripNumber	279.00	80.00

tblTripsAndVMT	WorkerTripNumber	10.00	12.00
tblTripsAndVMT	WorkerTripNumber	15.00	12.00
tblTripsAndVMT	WorkerTripNumber	15.00	12.00
tblTripsAndVMT	WorkerTripNumber	56.00	12.00
tblTripsAndVMT	WorkerTripNumber	279.00	80.00
tblTripsAndVMT	WorkerTripNumber	10.00	12.00
tblVehicleTrips	ST_TR	6.39	7.69
tblVehicleTrips	SU_TR	5.86	7.05
tblVehicleTrips	WD_TR	6.65	8.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
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tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	16,940,046.66	16,008,460.00
tblWater	OutdoorWaterUseRate	10,679,594.63	3,377,428.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	13.00	0.00

tblWoodstoves	NumberNoncatalytic	13.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.4214	77.6540	34.8846	0.1908	7.3942	1.4779	8.8721	2.8329	1.3663	4.1991	0.0000	20,347.0594	20,347.0594	2.5368	0.0000	20,410.4787
2021	64.4886	102.1467	55.5257	0.2700	8.8997	2.1603	11.0600	3.2437	2.0028	5.2465	0.0000	28,724.5681	28,724.5681	3.7817	0.0000	28,819.1105
2022	65.6429	104.5886	58.3289	0.3172	10.1472	1.8413	11.9884	3.5850	1.7089	5.2939	0.0000	33,970.8628	33,970.8628	4.2572	0.0000	34,077.2937
2023	61.4532	14.9625	22.2487	0.0403	0.9220	0.7227	1.6448	0.2461	0.6706	0.9167	0.0000	3,949.4409	3,949.4409	0.9148	0.0000	3,972.3115
Maximum	**65.6429**	**104.5886**	**58.3289**	**0.3172**	**10.1472**	**2.1603**	**11.9884**	**3.5850**	**2.0028**	**5.2939**	**0.0000**	**33,970.8628**	**33,970.8628**	**4.2572**	**0.0000**	**34,077.2937**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.4748	61.5102	36.7460	0.1908	5.6798	0.2438	5.9236	1.9163	0.2356	2.1518	0.0000	20,347.0594	20,347.0594	2.5368	0.0000	20,410.4787
2021	61.7403	85.5293	60.6953	0.2700	7.1853	0.6114	7.7967	2.3271	0.6016	2.9287	0.0000	28,724.5680	28,724.5680	3.7817	0.0000	28,819.1105
2022	63.3871	94.0968	64.6576	0.3172	8.4312	0.6256	9.0568	2.6682	0.6153	3.2835	0.0000	33,970.8628	33,970.8628	4.2572	0.0000	34,077.2937
2023	60.5881	14.7228	25.1090	0.0403	0.9220	0.3470	1.2690	0.2461	0.3465	0.5926	0.0000	3,949.4409	3,949.4409	0.9148	0.0000	3,972.3115
Maximum	**63.3871**	**94.0968**	**64.6576**	**0.3172**	**8.4312**	**0.6256**	**9.0568**	**2.6682**	**0.6153**	**3.2835**	**0.0000**	**33,970.8628**	**33,970.8628**	**4.2572**	**0.0000**	**34,077.2937**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**3.99**	**14.53**	**-9.49**	**0.00**	**18.80**	**70.53**	**28.36**	**27.76**	**68.71**	**42.79**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.4211	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190	0.0000	38.7072	38.7072	0.0373	0.0000	39.6391
Energy	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Mobile	3.8652	16.8727	45.8971	0.1465	12.5942	0.1494	12.7436	3.3663	0.1402	3.5065		14,860.9429	14,860.9429	0.8240		14,881.5419
Total	**12.3433**	**17.6078**	**67.5849**	**0.1507**	**12.5942**	**0.3078**	**12.9020**	**3.3663**	**0.2986**	**3.6649**	**0.0000**	**15,522.2036**	**15,522.2036**	**0.8732**	**0.0114**	**15,547.4341**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.4211	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190	0.0000	38.7072	38.7072	0.0373	0.0000	39.6391
Energy	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Mobile	3.6057	15.1758	40.3705	0.1243	10.5794	0.1278	10.7072	2.8278	0.1199	2.9476		12,610.8346	12,610.8346	0.7197		12,628.8274
Total	**12.0839**	**15.9108**	**62.0582**	**0.1285**	**10.5794**	**0.2862**	**10.8656**	**2.8278**	**0.2783**	**3.1061**	**0.0000**	**13,272.0953**	**13,272.0953**	**0.7689**	**0.0114**	**13,294.7196**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.10**	**9.64**	**8.18**	**14.72**	**16.00**	**7.04**	**15.78**	**16.00**	**6.81**	**15.25**	**0.00**	**14.50**	**14.50**	**11.94**	**0.00**	**14.49**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Ph 1 - Demolition	Demolition	6/1/2020	6/29/2020	5	21	
2	Ph 1 - Grading	Grading	7/1/2020	9/1/2020	5	45	
3	Ph 1 - Building Construction	Building Construction	9/1/2020	8/30/2021	5	260	
4	Ph 2 - Demolition	Demolition	6/1/2021	6/28/2021	5	20	
5	Ph 2 - Grading	Grading	7/1/2021	9/1/2021	5	45	
6	Ph 1 - Paving	Paving	7/1/2021	9/1/2021	5	45	
7	Ph 1 - Architectural Coating	Architectural Coating	7/1/2021	9/1/2021	5	45	
8	Ph 2 - Building Construction	Building Construction	9/1/2021	8/31/2022	5	261	
9	Ph 3 - Demolition	Demolition	6/1/2022	6/30/2022	5	22	
10	Ph 3 - Grading	Grading	7/1/2022	8/31/2022	5	44	
11	Ph 2 - Paving	Paving	7/1/2022	8/31/2022	5	44	
12	Ph 2 - Architectural Coating	Architectural Coating	7/1/2022	8/31/2022	5	44	
13	Ph 3 - Building Construction	Building Construction	9/1/2022	8/31/2023	5	261	
14	Ph 3 - Paving	Paving	7/1/2023	8/31/2023	5	44	
15	Ph 3 - Architectural Coating	Architectural Coating	7/1/2023	8/31/2023	5	44	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.97

Residential Indoor: 660,466; Residential Outdoor: 220,155; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 13,120 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Ph 1 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 1 - Demolition	Excavators	1	5.00	158	0.38
Ph 1 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 1 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading	Excavators	2	5.00	158	0.38
Ph 1 - Grading	Graders	0	8.00	187	0.41
Ph 1 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading	Scrapers	2	5.00	367	0.48
Ph 1 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Building Construction	Cranes	0	7.00	231	0.29
Ph 1 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 1 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 1 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Ph 1 - Building Construction	Welders	0	8.00	46	0.45
Ph 2 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 2 - Demolition	Excavators	1	5.00	158	0.38
Ph 2 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 2 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 2 - Grading	Excavators	2	5.00	158	0.38
Ph 2 - Grading	Graders	0	8.00	187	0.41
Ph 2 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 2 - Grading	Scrapers	2	5.00	367	0.48

Ph 2 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Paving	Pavers	2	8.00	130	0.42
Ph 1 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 1 - Paving	Rollers	2	8.00	80	0.38
Ph 1 - Architectural Coating	Air Compressors	1	6.00	78	0.48
Ph 2 - Building Construction	Cranes	0	7.00	231	0.29
Ph 2 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 2 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 2 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Ph 2 - Building Construction	Welders	0	8.00	46	0.45
Ph 3 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 3 - Demolition	Excavators	1	5.00	158	0.38
Ph 3 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 3 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 3 - Grading	Excavators	2	5.00	158	0.38
Ph 3 - Grading	Graders	0	8.00	187	0.41
Ph 3 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 3 - Grading	Scrapers	2	5.00	367	0.48
Ph 3 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 2 - Paving	Pavers	2	8.00	130	0.42
Ph 2 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 2 - Paving	Rollers	2	8.00	80	0.38
Ph 2 - Architectural Coating	Air Compressors	1	6.00	78	0.48
Ph 3 - Building Construction	Cranes	0	7.00	231	0.29
Ph 3 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 3 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 3 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37

Ph 3 - Building Construction	Welders	0	8.00	46	0.45
Ph 3 - Paving	Pavers	2	8.00	130	0.42
Ph 3 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 3 - Paving	Rollers	2	8.00	80	0.38
Ph 3 - Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Ph 1 - Demolition	4	12.00	2.00	490.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading	6	12.00	0.00	5,393.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Building Construction	4	80.00	10.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Demolition	4	12.00	2.00	8.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Grading	6	12.00	0.00	7,436.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Paving	6	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Building Construction	4	80.00	10.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Demolition	4	12.00	2.00	297.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Grading	6	12.00	0.00	9,171.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Paving	6	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Building Construction	4	80.00	10.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Paving	6	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.1651	0.0000	5.1651	0.7822	0.0000	0.7822			0.0000			0.0000
Off-Road	1.3374	13.8927	7.3138	0.0133		0.6946	0.6946		0.6390	0.6390		1,290.3008	1,290.3008	0.4173		1,300.7335
Total	**1.3374**	**13.8927**	**7.3138**	**0.0133**	**5.1651**	**0.6946**	**5.8597**	**0.7822**	**0.6390**	**1.4212**		**1,290.3008**	**1,290.3008**	**0.4173**		**1,300.7335**

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2832	9.4320	2.3429	0.0282	0.6724	0.0339	0.7063	0.1843	0.0324	0.2167		3,088.0833	3,088.0833	0.2665		3,094.7466
Vendor	7.8300e-003	0.2253	0.0638	5.3000e-004	0.0135	1.1200e-003	0.0147	3.9000e-003	1.0800e-003	4.9700e-003		57.2924	57.2924	4.6100e-003		57.4077
Worker	0.0499	0.0333	0.3207	9.5000e-004	0.0986	6.9000e-004	0.0993	0.0262	6.4000e-004	0.0268		94.9358	94.9358	2.8600e-003		95.0073
Total	**0.3409**	**9.6907**	**2.7273**	**0.0297**	**0.7845**	**0.0357**	**0.8202**	**0.2143**	**0.0342**	**0.2484**		**3,240.3116**	**3,240.3116**	**0.2740**		**3,247.1616**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3243	0.0000	2.3243	0.3520	0.0000	0.3520			0.0000			0.0000
Off-Road	0.2139	4.3481	8.1504	0.0133		0.0218	0.0218		0.0218	0.0218	0.0000	1,290.3008	1,290.3008	0.4173		1,300.7335
Total	**0.2139**	**4.3481**	**8.1504**	**0.0133**	**2.3243**	**0.0218**	**2.3461**	**0.3520**	**0.0218**	**0.3738**	**0.0000**	**1,290.3008**	**1,290.3008**	**0.4173**		**1,300.7335**

3.2 Ph 1 - Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2832	9.4320	2.3429	0.0282	0.6724	0.0339	0.7063	0.1843	0.0324	0.2167		3,088.0833	3,088.0833	0.2665		3,094.7466
Vendor	7.8300e-003	0.2253	0.0638	5.3000e-004	0.0135	1.1200e-003	0.0147	3.9000e-003	1.0800e-003	4.9700e-003		57.2924	57.2924	4.6100e-003		57.4077
Worker	0.0499	0.0333	0.3207	9.5000e-004	0.0986	6.9000e-004	0.0993	0.0262	6.4000e-004	0.0268		94.9358	94.9358	2.8600e-003		95.0073
Total	**0.3409**	**9.6907**	**2.7273**	**0.0297**	**0.7845**	**0.0357**	**0.8202**	**0.2143**	**0.0342**	**0.2484**		**3,240.3116**	**3,240.3116**	**0.2740**		**3,247.1616**

3.3 Ph 1 - Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1171	0.0000	3.1171	1.6666	0.0000	1.6666			0.0000			0.0000
Off-Road	2.1919	24.4246	16.6137	0.0312		1.0631	1.0631		0.9780	0.9780		3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**2.1919**	**24.4246**	**16.6137**	**0.0312**	**3.1171**	**1.0631**	**4.1802**	**1.6666**	**0.9780**	**2.6446**		**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.3 Ph 1 - Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4545	48.4447	12.0335	0.1450	3.4537	0.1741	3.6278	0.9464	0.1666	1.1129		15,860.9840	15,860.9840	1.3690		15,895.2082
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0499	0.0333	0.3207	9.5000e-004	0.0986	6.9000e-004	0.0993	0.0262	6.4000e-004	0.0268		94.9358	94.9358	2.8600e-003		95.0073
Total	**1.5044**	**48.4780**	**12.3542**	**0.1459**	**3.5522**	**0.1748**	**3.7270**	**0.9725**	**0.1672**	**1.1397**		**15,955.9199**	**15,955.9199**	**1.3718**		**15,990.2155**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4027	0.0000	1.4027	0.7500	0.0000	0.7500			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**1.4027**	**0.0512**	**1.4539**	**0.7500**	**0.0512**	**0.8011**	**0.0000**	**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.3 Ph 1 - Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4545	48.4447	12.0335	0.1450	3.4537	0.1741	3.6278	0.9464	0.1666	1.1129		15,860.9840	15,860.9840	1.3690		15,895.2082
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0499	0.0333	0.3207	9.5000e-004	0.0986	6.9000e-004	0.0993	0.0262	6.4000e-004	0.0268		94.9358	94.9358	2.8600e-003		95.0073
Total	**1.5044**	**48.4780**	**12.3542**	**0.1459**	**3.5522**	**0.1748**	**3.7270**	**0.9725**	**0.1672**	**1.1397**		**15,955.9199**	**15,955.9199**	**1.3718**		**15,990.2155**

3.4 Ph 1 - Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3535	3.4027	3.4600	4.6300e-003		0.2298	0.2298		0.2114	0.2114		448.7993	448.7993	0.1452		452.4281
Total	**0.3535**	**3.4027**	**3.4600**	**4.6300e-003**		**0.2298**	**0.2298**		**0.2114**	**0.2114**		**448.7993**	**448.7993**	**0.1452**		**452.4281**

3.4 Ph 1 - Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0391	1.1267	0.3188	2.6700e-003	0.0677	5.6200e-003	0.0733	0.0195	5.3800e-003	0.0249		286.4622	286.4622	0.0231		287.0385
Worker	0.3325	0.2221	2.1380	6.3500e-003	0.6572	4.6100e-003	0.6618	0.1743	4.2500e-003	0.1786		632.9056	632.9056	0.0191		633.3819
Total	**0.3716**	**1.3488**	**2.4568**	**9.0200e-003**	**0.7249**	**0.0102**	**0.7351**	**0.1938**	**9.6300e-003**	**0.2034**		**919.3678**	**919.3678**	**0.0421**		**920.4204**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6300e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	448.7993	448.7993	0.1452		452.4281
Total	**0.1042**	**2.0264**	**3.5036**	**4.6300e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**448.7993**	**448.7993**	**0.1452**		**452.4281**

3.4 Ph 1 - Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0391	1.1267	0.3188	2.6700e-003	0.0677	5.6200e-003	0.0733	0.0195	5.3800e-003	0.0249		286.4622	286.4622	0.0231		287.0385
Worker	0.3325	0.2221	2.1380	6.3500e-003	0.6572	4.6100e-003	0.6618	0.1743	4.2500e-003	0.1786		632.9056	632.9056	0.0191		633.3819
Total	**0.3716**	**1.3488**	**2.4568**	**9.0200e-003**	**0.7249**	**0.0102**	**0.7351**	**0.1938**	**9.6300e-003**	**0.2034**		**919.3678**	**919.3678**	**0.0421**		**920.4204**

3.4 Ph 1 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3166	3.0749	3.4281	4.6300e-003		0.1955	0.1955		0.1798	0.1798		448.9309	448.9309	0.1452		452.5607
Total	**0.3166**	**3.0749**	**3.4281**	**4.6300e-003**		**0.1955**	**0.1955**		**0.1798**	**0.1798**		**448.9309**	**448.9309**	**0.1452**		**452.5607**

3.4 Ph 1 - Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0319	1.0156	0.2890	2.6400e-003	0.0677	2.2300e-003	0.0699	0.0195	2.1300e-003	0.0216		283.8193	283.8193	0.0221		284.3721
Worker	0.3138	0.2018	1.9946	6.1400e-003	0.6572	4.5400e-003	0.6617	0.1743	4.1800e-003	0.1785		611.6381	611.6381	0.0176		612.0774
Total	**0.3457**	**1.2174**	**2.2836**	**8.7800e-003**	**0.7249**	**6.7700e-003**	**0.7316**	**0.1938**	**6.3100e-003**	**0.2001**		**895.4574**	**895.4574**	**0.0397**		**896.4494**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6300e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	448.9309	448.9309	0.1452		452.5607
Total	**0.1042**	**2.0264**	**3.5036**	**4.6300e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**448.9309**	**448.9309**	**0.1452**		**452.5607**

3.4 Ph 1 - Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0319	1.0156	0.2890	2.6400e-003	0.0677	2.2300e-003	0.0699	0.0195	2.1300e-003	0.0216		283.8193	283.8193	0.0221		284.3721
Worker	0.3138	0.2018	1.9946	6.1400e-003	0.6572	4.5400e-003	0.6617	0.1743	4.1800e-003	0.1785		611.6381	611.6381	0.0176		612.0774
Total	**0.3457**	**1.2174**	**2.2836**	**8.7800e-003**	**0.7249**	**6.7700e-003**	**0.7316**	**0.1938**	**6.3100e-003**	**0.2001**		**895.4574**	**895.4574**	**0.0397**		**896.4494**

3.5 Ph 2 - Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0822	0.0000	0.0822	0.0125	0.0000	0.0125			0.0000			0.0000
Off-Road	1.2832	13.2651	7.2128	0.0133		0.6536	0.6536		0.6013	0.6013		1,290.4222	1,290.4222	0.4174		1,300.8559
Total	**1.2832**	**13.2651**	**7.2128**	**0.0133**	**0.0822**	**0.6536**	**0.7358**	**0.0125**	**0.6013**	**0.6138**		**1,290.4222**	**1,290.4222**	**0.4174**		**1,300.8559**

3.5 Ph 2 - Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.5600e-003	0.1472	0.0398	4.8000e-004	0.0115	5.1000e-004	0.0120	3.1600e-003	4.9000e-004	3.6500e-003		52.2669	52.2669	4.5500e-003		52.3805
Vendor	6.3700e-003	0.2031	0.0578	5.3000e-004	0.0135	4.5000e-004	0.0140	3.9000e-003	4.3000e-004	4.3200e-003		56.7639	56.7639	4.4200e-003		56.8744
Worker	0.0471	0.0303	0.2992	9.2000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		91.7457	91.7457	2.6400e-003		91.8116
Total	**0.0580**	**0.3806**	**0.3968**	**1.9300e-003**	**0.1237**	**1.6400e-003**	**0.1253**	**0.0332**	**1.5500e-003**	**0.0347**		**200.7765**	**200.7765**	**0.0116**		**201.0665**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0370	0.0000	0.0370	5.6000e-003	0.0000	5.6000e-003			0.0000			0.0000
Off-Road	0.2139	4.3481	8.1504	0.0133		0.0218	0.0218		0.0218	0.0218	0.0000	1,290.4222	1,290.4222	0.4174		1,300.8559
Total	**0.2139**	**4.3481**	**8.1504**	**0.0133**	**0.0370**	**0.0218**	**0.0588**	**5.6000e-003**	**0.0218**	**0.0274**	**0.0000**	**1,290.4222**	**1,290.4222**	**0.4174**		**1,300.8559**

3.5 Ph 2 - Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.5600e-003	0.1472	0.0398	4.8000e-004	0.0115	5.1000e-004	0.0120	3.1600e-003	4.9000e-004	3.6500e-003		52.2669	52.2669	4.5500e-003		52.3805
Vendor	6.3700e-003	0.2031	0.0578	5.3000e-004	0.0135	4.5000e-004	0.0140	3.9000e-003	4.3000e-004	4.3200e-003		56.7639	56.7639	4.4200e-003		56.8744
Worker	0.0471	0.0303	0.2992	9.2000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		91.7457	91.7457	2.6400e-003		91.8116
Total	**0.0580**	**0.3806**	**0.3968**	**1.9300e-003**	**0.1237**	**1.6400e-003**	**0.1253**	**0.0332**	**1.5500e-003**	**0.0347**		**200.7765**	**200.7765**	**0.0116**		**201.0665**

3.6 Ph 2 - Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1171	0.0000	3.1171	1.6666	0.0000	1.6666			0.0000			0.0000
Off-Road	2.0651	22.5038	15.9946	0.0312		0.9731	0.9731		0.8953	0.8953		3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**2.0651**	**22.5038**	**15.9946**	**0.0312**	**3.1171**	**0.9731**	**4.0902**	**1.6666**	**0.8953**	**2.5619**		**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.6 Ph 2 - Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8848	60.8138	16.4510	0.1968	4.7620	0.2111	4.9731	1.3049	0.2019	1.5068		21,592.0282	21,592.0282	1.8776		21,638.9692
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0471	0.0303	0.2992	9.2000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		91.7457	91.7457	2.6400e-003		91.8116
Total	**1.9319**	**60.8441**	**16.7502**	**0.1977**	**4.8606**	**0.2118**	**5.0723**	**1.3310**	**0.2026**	**1.5336**		**21,683.7740**	**21,683.7740**	**1.8803**		**21,730.7808**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4027	0.0000	1.4027	0.7500	0.0000	0.7500			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**1.4027**	**0.0512**	**1.4539**	**0.7500**	**0.0512**	**0.8011**	**0.0000**	**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.6 Ph 2 - Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8848	60.8138	16.4510	0.1968	4.7620	0.2111	4.9731	1.3049	0.2019	1.5068		21,592.0282	21,592.0282	1.8776		21,638.9692
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0471	0.0303	0.2992	9.2000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		91.7457	91.7457	2.6400e-003		91.8116
Total	**1.9319**	**60.8441**	**16.7502**	**0.1977**	**4.8606**	**0.2118**	**5.0723**	**1.3310**	**0.2026**	**1.5336**		**21,683.7740**	**21,683.7740**	**1.8803**		**21,730.7808**

3.7 Ph 1 - Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.2195					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4751**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**		**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.7 Ph 1 - Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0471	0.0303	0.2992	9.2000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		91.7457	91.7457	2.6400e-003		91.8116
Total	**0.0471**	**0.0303**	**0.2992**	**9.2000e-004**	**0.0986**	**6.8000e-004**	**0.0993**	**0.0262**	**6.3000e-004**	**0.0268**		**91.7457**	**91.7457**	**2.6400e-003**		**91.8116**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4496	10.3669	17.2957	0.0228		0.2377	0.2377		0.2377	0.2377	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.2195					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6691**	**10.3669**	**17.2957**	**0.0228**		**0.2377**	**0.2377**		**0.2377**	**0.2377**	**0.0000**	**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.7 Ph 1 - Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0471	0.0303	0.2992	9.2000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		91.7457	91.7457	2.6400e-003		91.8116
Total	**0.0471**	**0.0303**	**0.2992**	**9.2000e-004**	**0.0986**	**6.8000e-004**	**0.0993**	**0.0262**	**6.3000e-004**	**0.0268**		**91.7457**	**91.7457**	**2.6400e-003**		**91.8116**

3.8 Ph 1 - Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	58.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**58.2602**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.8 Ph 1 - Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0471	0.0303	0.2992	9.2000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		91.7457	91.7457	2.6400e-003		91.8116
Total	**0.0471**	**0.0303**	**0.2992**	**9.2000e-004**	**0.0986**	**6.8000e-004**	**0.0993**	**0.0262**	**6.3000e-004**	**0.0268**		**91.7457**	**91.7457**	**2.6400e-003**		**91.8116**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	58.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**58.1008**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.8 Ph 1 - Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0471	0.0303	0.2992	9.2000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		91.7457	91.7457	2.6400e-003		91.8116
Total	**0.0471**	**0.0303**	**0.2992**	**9.2000e-004**	**0.0986**	**6.8000e-004**	**0.0993**	**0.0262**	**6.3000e-004**	**0.0268**		**91.7457**	**91.7457**	**2.6400e-003**		**91.8116**

3.9 Ph 2 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3166	3.0749	3.4281	4.6300e-003		0.1955	0.1955		0.1798	0.1798		448.9309	448.9309	0.1452		452.5607
Total	**0.3166**	**3.0749**	**3.4281**	**4.6300e-003**		**0.1955**	**0.1955**		**0.1798**	**0.1798**		**448.9309**	**448.9309**	**0.1452**		**452.5607**

3.9 Ph 2 - Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0319	1.0156	0.2890	2.6400e-003	0.0677	2.2300e-003	0.0699	0.0195	2.1300e-003	0.0216		283.8193	283.8193	0.0221		284.3721
Worker	0.3138	0.2018	1.9946	6.1400e-003	0.6572	4.5400e-003	0.6617	0.1743	4.1800e-003	0.1785		611.6381	611.6381	0.0176		612.0774
Total	**0.3457**	**1.2174**	**2.2836**	**8.7800e-003**	**0.7249**	**6.7700e-003**	**0.7316**	**0.1938**	**6.3100e-003**	**0.2001**		**895.4574**	**895.4574**	**0.0397**		**896.4494**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6300e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	448.9309	448.9309	0.1452		452.5607
Total	**0.1042**	**2.0264**	**3.5036**	**4.6300e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**448.9309**	**448.9309**	**0.1452**		**452.5607**

3.9 Ph 2 - Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0319	1.0156	0.2890	2.6400e-003	0.0677	2.2300e-003	0.0699	0.0195	2.1300e-003	0.0216		283.8193	283.8193	0.0221		284.3721
Worker	0.3138	0.2018	1.9946	6.1400e-003	0.6572	4.5400e-003	0.6617	0.1743	4.1800e-003	0.1785		611.6381	611.6381	0.0176		612.0774
Total	**0.3457**	**1.2174**	**2.2836**	**8.7800e-003**	**0.7249**	**6.7700e-003**	**0.7316**	**0.1938**	**6.3100e-003**	**0.2001**		**895.4574**	**895.4574**	**0.0397**		**896.4494**

3.9 Ph 2 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2783	2.7305	3.3917	4.6400e-003		0.1600	0.1600		0.1472	0.1472		449.2698	449.2698	0.1453		452.9024
Total	**0.2783**	**2.7305**	**3.3917**	**4.6400e-003**		**0.1600**	**0.1600**		**0.1472**	**0.1472**		**449.2698**	**449.2698**	**0.1453**		**452.9024**

3.9 Ph 2 - Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0297	0.9591	0.2736	2.6100e-003	0.0677	1.9200e-003	0.0696	0.0195	1.8300e-003	0.0213		281.1026	281.1026	0.0214		281.6377
Worker	0.2974	0.1840	1.8508	5.9100e-003	0.6572	4.4400e-003	0.6616	0.1743	4.0900e-003	0.1784		589.2205	589.2205	0.0161		589.6227
Total	**0.3270**	**1.1430**	**2.1244**	**8.5200e-003**	**0.7249**	**6.3600e-003**	**0.7312**	**0.1938**	**5.9200e-003**	**0.1997**		**870.3231**	**870.3231**	**0.0375**		**871.2604**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6400e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	449.2698	449.2698	0.1453		452.9024
Total	**0.1042**	**2.0264**	**3.5036**	**4.6400e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**449.2698**	**449.2698**	**0.1453**		**452.9024**

3.9 Ph 2 - Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0297	0.9591	0.2736	2.6100e-003	0.0677	1.9200e-003	0.0696	0.0195	1.8300e-003	0.0213		281.1026	281.1026	0.0214		281.6377
Worker	0.2974	0.1840	1.8508	5.9100e-003	0.6572	4.4400e-003	0.6616	0.1743	4.0900e-003	0.1784		589.2205	589.2205	0.0161		589.6227
Total	**0.3270**	**1.1430**	**2.1244**	**8.5200e-003**	**0.7249**	**6.3600e-003**	**0.7312**	**0.1938**	**5.9200e-003**	**0.1997**		**870.3231**	**870.3231**	**0.0375**		**871.2604**

3.10 Ph 3 - Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9899	0.0000	2.9899	0.4528	0.0000	0.4528			0.0000			0.0000
Off-Road	1.0460	10.7421	6.7354	0.0133		0.5161	0.5161		0.4748	0.4748		1,290.1644	1,290.1644	0.4173		1,300.5960
Total	**1.0460**	**10.7421**	**6.7354**	**0.0133**	**2.9899**	**0.5161**	**3.5060**	**0.4528**	**0.4748**	**0.9276**		**1,290.1644**	**1,290.1644**	**0.4173**		**1,300.5960**

3.10 Ph 3 - Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1447	4.4991	1.3367	0.0158	0.3890	0.0146	0.4037	0.1066	0.0140	0.1206		1,740.3526	1,740.3526	0.1526		1,744.1673
Vendor	5.9300e-003	0.1918	0.0547	5.2000e-004	0.0135	3.8000e-004	0.0139	3.9000e-003	3.7000e-004	4.2600e-003		56.2205	56.2205	4.2800e-003		56.3276
Worker	0.0446	0.0276	0.2776	8.9000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		88.3831	88.3831	2.4100e-003		88.4434
Total	**0.1952**	**4.7185**	**1.6690**	**0.0172**	**0.5012**	**0.0157**	**0.5168**	**0.1367**	**0.0150**	**0.1516**		**1,884.9562**	**1,884.9562**	**0.1593**		**1,888.9382**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3455	0.0000	1.3455	0.2038	0.0000	0.2038			0.0000			0.0000
Off-Road	0.2139	4.3481	8.1504	0.0133		0.0218	0.0218		0.0218	0.0218	0.0000	1,290.1644	1,290.1644	0.4173		1,300.5960
Total	**0.2139**	**4.3481**	**8.1504**	**0.0133**	**1.3455**	**0.0218**	**1.3672**	**0.2038**	**0.0218**	**0.2255**	**0.0000**	**1,290.1644**	**1,290.1644**	**0.4173**		**1,300.5960**

3.10 Ph 3 - Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1447	4.4991	1.3367	0.0158	0.3890	0.0146	0.4037	0.1066	0.0140	0.1206		1,740.3526	1,740.3526	0.1526		1,744.1673
Vendor	5.9300e-003	0.1918	0.0547	5.2000e-004	0.0135	3.8000e-004	0.0139	3.9000e-003	3.7000e-004	4.2600e-003		56.2205	56.2205	4.2800e-003		56.3276
Worker	0.0446	0.0276	0.2776	8.9000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		88.3831	88.3831	2.4100e-003		88.4434
Total	**0.1952**	**4.7185**	**1.6690**	**0.0172**	**0.5012**	**0.0157**	**0.5168**	**0.1367**	**0.0150**	**0.1516**		**1,884.9562**	**1,884.9562**	**0.1593**		**1,888.9382**

3.11 Ph 3 - Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1200	0.0000	3.1200	1.6669	0.0000	1.6669			0.0000			0.0000
Off-Road	1.7780	18.6352	14.9486	0.0313		0.7975	0.7975		0.7337	0.7337		3,027.0236	3,027.0236	0.9790		3,051.4986
Total	**1.7780**	**18.6352**	**14.9486**	**0.0313**	**3.1200**	**0.7975**	**3.9175**	**1.6669**	**0.7337**	**2.4006**		**3,027.0236**	**3,027.0236**	**0.9790**		**3,051.4986**

3.11 Ph 3 - Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2335	69.4636	20.6373	0.2443	6.0066	0.2258	6.2323	1.6459	0.2160	1.8619		26,869.9887	26,869.9887	2.3559		26,928.8856
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0276	0.2776	8.9000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		88.3831	88.3831	2.4100e-003		88.4434
Total	**2.2781**	**69.4912**	**20.9149**	**0.2452**	**6.1051**	**0.2264**	**6.3316**	**1.6720**	**0.2166**	**1.8886**		**26,958.3718**	**26,958.3718**	**2.3583**		**27,017.3290**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4040	0.0000	1.4040	0.7501	0.0000	0.7501			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0313		0.0512	0.0512		0.0512	0.0512	0.0000	3,027.0236	3,027.0236	0.9790		3,051.4986
Total	**0.4946**	**9.6570**	**18.4314**	**0.0313**	**1.4040**	**0.0512**	**1.4552**	**0.7501**	**0.0512**	**0.8013**	**0.0000**	**3,027.0236**	**3,027.0236**	**0.9790**		**3,051.4986**

3.11 Ph 3 - Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2335	69.4636	20.6373	0.2443	6.0066	0.2258	6.2323	1.6459	0.2160	1.8619		26,869.9887	26,869.9887	2.3559		26,928.8856
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0276	0.2776	8.9000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		88.3831	88.3831	2.4100e-003		88.4434
Total	**2.2781**	**69.4912**	**20.9149**	**0.2452**	**6.1051**	**0.2264**	**6.3316**	**1.6720**	**0.2166**	**1.8886**		**26,958.3718**	**26,958.3718**	**2.3583**		**27,017.3290**

3.12 Ph 2 - Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.2245					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3273**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.12 Ph 2 - Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0276	0.2776	8.9000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		88.3831	88.3831	2.4100e-003		88.4434
Total	**0.0446**	**0.0276**	**0.2776**	**8.9000e-004**	**0.0986**	**6.7000e-004**	**0.0992**	**0.0262**	**6.1000e-004**	**0.0268**		**88.3831**	**88.3831**	**2.4100e-003**		**88.4434**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4496	10.3669	17.2957	0.0228		0.2377	0.2377		0.2377	0.2377	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.2245					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6741**	**10.3669**	**17.2957**	**0.0228**		**0.2377**	**0.2377**		**0.2377**	**0.2377**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.12 Ph 2 - Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0276	0.2776	8.9000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		88.3831	88.3831	2.4100e-003		88.4434
Total	**0.0446**	**0.0276**	**0.2776**	**8.9000e-004**	**0.0986**	**6.7000e-004**	**0.0992**	**0.0262**	**6.1000e-004**	**0.0268**		**88.3831**	**88.3831**	**2.4100e-003**		**88.4434**

3.13 Ph 2 - Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.3605					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**59.5650**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.13 Ph 2 - Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0276	0.2776	8.9000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		88.3831	88.3831	2.4100e-003		88.4434
Total	**0.0446**	**0.0276**	**0.2776**	**8.9000e-004**	**0.0986**	**6.7000e-004**	**0.0992**	**0.0262**	**6.1000e-004**	**0.0268**		**88.3831**	**88.3831**	**2.4100e-003**		**88.4434**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.3605					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**59.4199**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.13 Ph 2 - Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0276	0.2776	8.9000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		88.3831	88.3831	2.4100e-003		88.4434
Total	**0.0446**	**0.0276**	**0.2776**	**8.9000e-004**	**0.0986**	**6.7000e-004**	**0.0992**	**0.0262**	**6.1000e-004**	**0.0268**		**88.3831**	**88.3831**	**2.4100e-003**		**88.4434**

3.14 Ph 3 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2783	2.7305	3.3917	4.6400e-003		0.1600	0.1600		0.1472	0.1472		449.2698	449.2698	0.1453		452.9024
Total	**0.2783**	**2.7305**	**3.3917**	**4.6400e-003**		**0.1600**	**0.1600**		**0.1472**	**0.1472**		**449.2698**	**449.2698**	**0.1453**		**452.9024**

3.14 Ph 3 - Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0297	0.9591	0.2736	2.6100e-003	0.0677	1.9200e-003	0.0696	0.0195	1.8300e-003	0.0213		281.1026	281.1026	0.0214		281.6377
Worker	0.2974	0.1840	1.8508	5.9100e-003	0.6572	4.4400e-003	0.6616	0.1743	4.0900e-003	0.1784		589.2205	589.2205	0.0161		589.6227
Total	**0.3270**	**1.1430**	**2.1244**	**8.5200e-003**	**0.7249**	**6.3600e-003**	**0.7312**	**0.1938**	**5.9200e-003**	**0.1997**		**870.3231**	**870.3231**	**0.0375**		**871.2604**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6400e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	449.2698	449.2698	0.1453		452.9024
Total	**0.1042**	**2.0264**	**3.5036**	**4.6400e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**449.2698**	**449.2698**	**0.1453**		**452.9024**

3.14 Ph 3 - Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0297	0.9591	0.2736	2.6100e-003	0.0677	1.9200e-003	0.0696	0.0195	1.8300e-003	0.0213		281.1026	281.1026	0.0214		281.6377
Worker	0.2974	0.1840	1.8508	5.9100e-003	0.6572	4.4400e-003	0.6616	0.1743	4.0900e-003	0.1784		589.2205	589.2205	0.0161		589.6227
Total	**0.3270**	**1.1430**	**2.1244**	**8.5200e-003**	**0.7249**	**6.3600e-003**	**0.7312**	**0.1938**	**5.9200e-003**	**0.1997**		**870.3231**	**870.3231**	**0.0375**		**871.2604**

3.14 Ph 3 - Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2539	2.4954	3.3761	4.6400e-003		0.1351	0.1351		0.1243	0.1243		449.6073	449.6073	0.1454		453.2426
Total	**0.2539**	**2.4954**	**3.3761**	**4.6400e-003**		**0.1351**	**0.1351**		**0.1243**	**0.1243**		**449.6073**	**449.6073**	**0.1454**		**453.2426**

3.14 Ph 3 - Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0229	0.7542	0.2471	2.5400e-003	0.0677	9.4000e-004	0.0686	0.0195	9.0000e-004	0.0204		274.0693	274.0693	0.0195		274.5564
Worker	0.2824	0.1680	1.7155	5.6800e-003	0.6572	4.3500e-003	0.6615	0.1743	4.0100e-003	0.1783		566.7170	566.7170	0.0147		567.0846
Total	**0.3053**	**0.9222**	**1.9626**	**8.2200e-003**	**0.7249**	**5.2900e-003**	**0.7302**	**0.1938**	**4.9100e-003**	**0.1987**		**840.7863**	**840.7863**	**0.0342**		**841.6410**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6400e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	449.6073	449.6073	0.1454		453.2426
Total	**0.1042**	**2.0264**	**3.5036**	**4.6400e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**449.6073**	**449.6073**	**0.1454**		**453.2426**

3.14 Ph 3 - Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0229	0.7542	0.2471	2.5400e-003	0.0677	9.4000e-004	0.0686	0.0195	9.0000e-004	0.0204		274.0693	274.0693	0.0195		274.5564
Worker	0.2824	0.1680	1.7155	5.6800e-003	0.6572	4.3500e-003	0.6615	0.1743	4.0100e-003	0.1783		566.7170	566.7170	0.0147		567.0846
Total	**0.3053**	**0.9222**	**1.9626**	**8.2200e-003**	**0.7249**	**5.2900e-003**	**0.7302**	**0.1938**	**4.9100e-003**	**0.1987**		**840.7863**	**840.7863**	**0.0342**		**841.6410**

3.15 Ph 3 - Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.2245					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2572**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.15 Ph 3 - Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0424	0.0252	0.2573	8.5000e-004	0.0986	6.5000e-004	0.0992	0.0262	6.0000e-004	0.0268		85.0075	85.0075	2.2100e-003		85.0627
Total	**0.0424**	**0.0252**	**0.2573**	**8.5000e-004**	**0.0986**	**6.5000e-004**	**0.0992**	**0.0262**	**6.0000e-004**	**0.0268**		**85.0075**	**85.0075**	**2.2100e-003**		**85.0627**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4496	10.3669	17.2957	0.0228		0.2377	0.2377		0.2377	0.2377	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.2245					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6741**	**10.3669**	**17.2957**	**0.0228**		**0.2377**	**0.2377**		**0.2377**	**0.2377**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.15 Ph 3 - Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0424	0.0252	0.2573	8.5000e-004	0.0986	6.5000e-004	0.0992	0.0262	6.0000e-004	0.0268		85.0075	85.0075	2.2100e-003		85.0627
Total	**0.0424**	**0.0252**	**0.2573**	**8.5000e-004**	**0.0986**	**6.5000e-004**	**0.0992**	**0.0262**	**6.0000e-004**	**0.0268**		**85.0075**	**85.0075**	**2.2100e-003**		**85.0627**

3.16 Ph 3 - Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.3605					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**59.5521**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.16 Ph 3 - Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0424	0.0252	0.2573	8.5000e-004	0.0986	6.5000e-004	0.0992	0.0262	6.0000e-004	0.0268		85.0075	85.0075	2.2100e-003		85.0627
Total	**0.0424**	**0.0252**	**0.2573**	**8.5000e-004**	**0.0986**	**6.5000e-004**	**0.0992**	**0.0262**	**6.0000e-004**	**0.0268**		**85.0075**	**85.0075**	**2.2100e-003**		**85.0627**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.3605					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**59.4199**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.16 Ph 3 - Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0424	0.0252	0.2573	8.5000e-004	0.0986	6.5000e-004	0.0992	0.0262	6.0000e-004	0.0268		85.0075	85.0075	2.2100e-003		85.0627
Total	**0.0424**	**0.0252**	**0.2573**	**8.5000e-004**	**0.0986**	**6.5000e-004**	**0.0992**	**0.0262**	**6.0000e-004**	**0.0268**		**85.0075**	**85.0075**	**2.2100e-003**		**85.0627**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

Integrate Below Market Rate Housing

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.6057	15.1758	40.3705	0.1243	10.5794	0.1278	10.7072	2.8278	0.1199	2.9476		12,610.8346	12,610.8346	0.7197		12,628.8274
Unmitigated	3.8652	16.8727	45.8971	0.1465	12.5942	0.1494	12.7436	3.3663	0.1402	3.5065		14,860.9429	14,860.9429	0.8240		14,881.5419

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,080.00	1,999.40	1833.00	5,805,403	4,876,674
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	2,080.00	1,999.40	1,833.00	5,805,403	4,876,674

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Non-Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Parking Lot	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Unenclosed Parking Structure	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
NaturalGas Unmitigated	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5291.71	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0571**	**0.4877**	**0.2075**	**3.1100e-003**		**0.0394**	**0.0394**		**0.0394**	**0.0394**		**622.5536**	**622.5536**	**0.0119**	**0.0114**	**626.2531**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5.29171	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0571**	**0.4877**	**0.2075**	**3.1100e-003**		**0.0394**	**0.0394**		**0.0394**	**0.0394**		**622.5536**	**622.5536**	**0.0119**	**0.0114**	**626.2531**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.4211	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190	0.0000	38.7072	38.7072	0.0373	0.0000	39.6391
Unmitigated	8.4211	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190	0.0000	38.7072	38.7072	0.0373	0.0000	39.6391

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0572					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6483	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190		38.7072	38.7072	0.0373		39.6391
Total	**8.4211**	**0.2474**	**21.4802**	**1.1400e-003**		**0.1190**	**0.1190**		**0.1190**	**0.1190**	**0.0000**	**38.7072**	**38.7072**	**0.0373**	**0.0000**	**39.6391**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0572					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6483	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190		38.7072	38.7072	0.0373		39.6391
Total	**8.4211**	**0.2474**	**21.4802**	**1.1400e-003**		**0.1190**	**0.1190**		**0.1190**	**0.1190**	**0.0000**	**38.7072**	**38.7072**	**0.0373**	**0.0000**	**39.6391**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX B

CalEEMod Output Files,
Single Phase Construction Alternative

Solana Highlands - Single Phase Construction Alternative

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	57.37	1000sqft	1.32	57,365.00	0
Other Non-Asphalt Surfaces	1.90	1000sqft	0.04	1,900.00	0
Parking Lot	272.00	Space	2.45	108,800.00	0
Unenclosed Parking Structure	50.60	1000sqft	1.16	50,600.00	0
Apartments Mid Rise	260.00	Dwelling Unit	6.84	326,156.00	744

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS

Land Use - project-specific land uses

Construction Phase - construction schedule per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Trips and VMT - trips per applicant

Demolition - demo quantities per applicant

Grading - grading quantities per applicant

Architectural Coating - SDAPCD Rule 67.0.1

Vehicle Trips - F&P 2016

Woodstoves - no fireplaces

Consumer Products - CalEEMod defaults.

Area Coating - SDAPCD Rule 67.0.1

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - water use per applicant

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - All construction equipment will meet Tier 4 Interim engine standards except air compressors and pavers which will be Tier 3.

Mobile Land Use Mitigation -

Water Mitigation -

Waste Mitigation - AB 341

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	64.00
tblConstructionPhase	NumDays	300.00	321.00
tblConstructionPhase	NumDays	20.00	66.00
tblConstructionPhase	NumDays	30.00	45.00
tblConstructionPhase	NumDays	30.00	45.00
tblConstructionPhase	NumDays	30.00	44.00
tblConstructionPhase	NumDays	20.00	64.00
tblFireplaces	NumberGas	143.00	0.00
tblFireplaces	NumberNoFireplace	26.00	0.00
tblFireplaces	NumberWood	91.00	0.00
tblGrading	AcresOfGrading	56.25	270.00
tblGrading	AcresOfGrading	56.25	112.50
tblGrading	AcresOfGrading	55.00	110.00
tblGrading	MaterialExported	0.00	19,500.00
tblLandUse	LandUseSquareFeet	57,370.00	57,365.00
tblLandUse	LandUseSquareFeet	260,000.00	326,156.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00

tblOffRoadEquipment	UsageHours	8.00	4.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	720.49	536.36
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripNumber	803.00	794.00
tblTripsAndVMT	HaulingTripNumber	2,438.00	7,334.00
tblTripsAndVMT	HaulingTripNumber	0.00	7,334.00
tblTripsAndVMT	HaulingTripNumber	0.00	7,332.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	64.00	60.00
tblTripsAndVMT	WorkerTripNumber	10.00	36.00
tblTripsAndVMT	WorkerTripNumber	15.00	36.00
tblTripsAndVMT	WorkerTripNumber	15.00	36.00
tblTripsAndVMT	WorkerTripNumber	15.00	36.00
tblTripsAndVMT	WorkerTripNumber	30.00	36.00
tblTripsAndVMT	WorkerTripNumber	56.00	36.00
tblTripsAndVMT	WorkerTripNumber	279.00	240.00
tblVehicleTrips	ST_TR	6.39	7.69
tblVehicleTrips	SU_TR	5.86	7.05
tblVehicleTrips	WD_TR	6.65	8.00

tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	16,940,046.66	16,008,460.00
tblWater	OutdoorWaterUseRate	10,679,594.63	3,377,428.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	13.00	0.00
tblWoodstoves	NumberNoncatalytic	13.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.2424	4.6466	1.7951	0.0113	0.6652	0.0809	0.7461	0.1740	0.0748	0.2489	0.0000	1,099.0982	1,099.0982	0.1300	0.0000	1,102.3470
2021	1.7016	4.4236	3.6159	0.0122	0.6445	0.1322	0.7767	0.1727	0.1224	0.2951	0.0000	1,145.1769	1,145.1769	0.1557	0.0000	1,149.0692
2022	0.0879	0.6992	0.8269	2.4100e-003	0.1231	0.0225	0.1456	0.0332	0.0207	0.0539	0.0000	222.1938	222.1938	0.0258	0.0000	222.8383
Maximum	**1.7016**	**4.6466**	**3.6159**	**0.0122**	**0.6652**	**0.1322**	**0.7767**	**0.1740**	**0.1224**	**0.2951**	**0.0000**	**1,145.1769**	**1,145.1769**	**0.1557**	**0.0000**	**1,149.0692**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1307	3.6818	1.9027	0.0113	0.4317	0.0142	0.4458	0.1145	0.0137	0.1282	0.0000	1,099.0980	1,099.0980	0.1300	0.0000	1,102.3468
2021	1.5466	3.6721	3.8623	0.0122	0.5415	0.0324	0.5739	0.1448	0.0320	0.1768	0.0000	1,145.1766	1,145.1766	0.1557	0.0000	1,149.0688
2022	0.0648	0.6059	0.8418	2.4100e-003	0.1231	2.3100e-003	0.1254	0.0332	2.2200e-003	0.0354	0.0000	222.1937	222.1937	0.0258	0.0000	222.8383
Maximum	**1.5466**	**3.6818**	**3.8623**	**0.0122**	**0.5415**	**0.0324**	**0.5739**	**0.1448**	**0.0320**	**0.1768**	**0.0000**	**1,145.1766**	**1,145.1766**	**0.1557**	**0.0000**	**1,149.0688**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**14.26**	**18.52**	**-5.91**	**0.00**	**23.49**	**79.26**	**31.36**	**23.02**	**78.02**	**43.07**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**6-1-2020**	**8-31-2020**	0.6924	0.3419
2	**9-1-2020**	**11-30-2020**	3.0658	2.5307
3	**12-1-2020**	**2-28-2021**	2.9016	2.4155
4	**3-1-2021**	**5-31-2021**	2.9619	2.6065
5	**6-1-2021**	**8-31-2021**	0.5303	0.4267
6	**9-1-2021**	**11-30-2021**	0.5283	0.4258
7	**12-1-2021**	**2-28-2022**	0.4945	0.4133
8	**3-1-2022**	**5-31-2022**	0.4808	0.4095
		Highest	3.0658	2.6065

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4770	0.0223	1.9345	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0500e-003	0.0000	3.2366
Energy	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	387.2106	387.2106	0.0136	4.5400e-003	388.9038
Mobile	0.6707	3.0095	8.0730	0.0263	2.1880	0.0265	2.2145	0.5860	0.0248	0.6108	0.0000	2,420.6093	2,420.6093	0.1317	0.0000	2,423.9007
Waste						0.0000	0.0000		0.0000	0.0000	24.2777	0.0000	24.2777	1.4348	0.0000	60.1470
Water						0.0000	0.0000		0.0000	0.0000	5.6638	59.8416	65.5054	0.0220	0.0129	69.8908
Total	**2.1582**	**3.1208**	**10.0454**	**0.0270**	**2.1880**	**0.0444**	**2.2324**	**0.5860**	**0.0427**	**0.6287**	**29.9415**	**2,870.8218**	**2,900.7633**	**1.6051**	**0.0174**	**2,946.0790**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4770	0.0223	1.9345	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0500e-003	0.0000	3.2366
Energy	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	387.2106	387.2106	0.0136	4.5400e-003	388.9038
Mobile	0.6245	2.7086	7.0813	0.0223	1.8380	0.0226	1.8606	0.4922	0.0212	0.5134	0.0000	2,054.9724	2,054.9724	0.1148	0.0000	2,057.8419
Waste						0.0000	0.0000		0.0000	0.0000	6.0694	0.0000	6.0694	0.3587	0.0000	15.0368
Water						0.0000	0.0000		0.0000	0.0000	4.5311	42.1904	46.7214	0.0173	0.0103	50.2082
Total	**2.1119**	**2.8199**	**9.0536**	**0.0230**	**1.8380**	**0.0405**	**1.8785**	**0.4922**	**0.0391**	**0.5313**	**10.6005**	**2,487.5337**	**2,498.1342**	**0.5075**	**0.0148**	**2,515.2272**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.14**	**9.64**	**9.87**	**14.73**	**16.00**	**8.68**	**15.85**	**16.00**	**8.47**	**15.49**	**64.60**	**13.35**	**13.88**	**68.38**	**15.05**	**14.62**

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Ph 1 - Demolition	Demolition	6/1/2020	8/31/2020	5	66	
2	Ph 1 - Grading - 1	Grading	9/1/2020	11/2/2020	5	45	
3	Ph 1 - Grading - 2	Grading	11/3/2020	1/4/2021	5	45	
4	Ph 1 - Grading - 3	Grading	1/5/2021	3/5/2021	5	44	
5	Ph 1 - Paving	Paving	3/1/2021	5/27/2021	5	64	
6	Ph 1 - Architectural Coating	Architectural Coating	3/1/2021	5/27/2021	5	64	
7	Ph 1 - Building Construction	Building Construction	3/6/2021	5/30/2022	5	321	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.97

Residential Indoor: 660,466; Residential Outdoor: 220,155; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 13,120 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Ph 1 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 1 - Demolition	Excavators	1	5.00	158	0.38
Ph 1 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 1 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading - 1	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 1	Graders	0	8.00	187	0.41
Ph 1 - Grading - 1	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 1	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 1	Tractors/Loaders/Backhoes	1	4.00	97	0.37

Ph 1 - Grading - 2	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 2	Graders	0	8.00	187	0.41
Ph 1 - Grading - 2	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 2	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 2	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading - 3	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 3	Graders	0	8.00	187	0.41
Ph 1 - Grading - 3	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 3	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 3	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Paving	Pavers	4	8.00	130	0.42
Ph 1 - Paving	Paving Equipment	4	8.00	132	0.36
Ph 1 - Paving	Rollers	4	8.00	80	0.38
Ph 1 - Architectural Coating	Air Compressors	2	6.00	78	0.48
Ph 1 - Building Construction	Cranes	0	7.00	231	0.29
Ph 1 - Building Construction	Forklifts	5	4.00	89	0.20
Ph 1 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 1 - Building Construction	Tractors/Loaders/Backhoes	5	4.00	97	0.37
Ph 1 - Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Ph 1 - Demolition	4	36.00	6.00	794.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 1	6	36.00	0.00	7,334.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 2	6	36.00	0.00	7,334.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 3	6	36.00	0.00	7,332.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Paving	12	36.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Architectural Coating	2	36.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Building Construction	10	240.00	60.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0880	0.0000	0.0880	0.0133	0.0000	0.0133	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0441	0.4585	0.2414	4.4000e-004		0.0229	0.0229		0.0211	0.0211	0.0000	38.6279	38.6279	0.0125	0.0000	38.9402
Total	**0.0441**	**0.4585**	**0.2414**	**4.4000e-004**	**0.0880**	**0.0229**	**0.1109**	**0.0133**	**0.0211**	**0.0344**	**0.0000**	**38.6279**	**38.6279**	**0.0125**	**0.0000**	**38.9402**

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.7700e-003	0.1617	0.0390	4.8000e-004	0.0112	5.7000e-004	0.0118	3.0800e-003	5.5000e-004	3.6200e-003	0.0000	47.9718	47.9718	4.0600e-003	0.0000	48.0733
Vendor	7.5000e-004	0.0226	6.0000e-003	5.0000e-005	1.3100e-003	1.1000e-004	1.4200e-003	3.8000e-004	1.1000e-004	4.8000e-004	0.0000	5.2245	5.2245	4.0000e-004	0.0000	5.2345
Worker	4.3800e-003	3.2400e-003	0.0318	1.0000e-004	9.5300e-003	7.0000e-005	9.6000e-003	2.5300e-003	6.0000e-005	2.5900e-003	0.0000	8.6115	8.6115	2.6000e-004	0.0000	8.6180
Total	**9.9000e-003**	**0.1876**	**0.0768**	**6.3000e-004**	**0.0220**	**7.5000e-004**	**0.0228**	**5.9900e-003**	**7.2000e-004**	**6.6900e-003**	**0.0000**	**61.8077**	**61.8077**	**4.7200e-003**	**0.0000**	**61.9258**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0396	0.0000	0.0396	5.9900e-003	0.0000	5.9900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.0600e-003	0.1435	0.2690	4.4000e-004		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	38.6278	38.6278	0.0125	0.0000	38.9401
Total	**7.0600e-003**	**0.1435**	**0.2690**	**4.4000e-004**	**0.0396**	**7.2000e-004**	**0.0403**	**5.9900e-003**	**7.2000e-004**	**6.7100e-003**	**0.0000**	**38.6278**	**38.6278**	**0.0125**	**0.0000**	**38.9401**

3.2 Ph 1 - Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.7700e-003	0.1617	0.0390	4.8000e-004	0.0112	5.7000e-004	0.0118	3.0800e-003	5.5000e-004	3.6200e-003	0.0000	47.9718	47.9718	4.0600e-003	0.0000	48.0733
Vendor	7.5000e-004	0.0226	6.0000e-003	5.0000e-005	1.3100e-003	1.1000e-004	1.4200e-003	3.8000e-004	1.1000e-004	4.8000e-004	0.0000	5.2245	5.2245	4.0000e-004	0.0000	5.2345
Worker	4.3800e-003	3.2400e-003	0.0318	1.0000e-004	9.5300e-003	7.0000e-005	9.6000e-003	2.5300e-003	6.0000e-005	2.5900e-003	0.0000	8.6115	8.6115	2.6000e-004	0.0000	8.6180
Total	**9.9000e-003**	**0.1876**	**0.0768**	**6.3000e-004**	**0.0220**	**7.5000e-004**	**0.0228**	**5.9900e-003**	**7.2000e-004**	**6.6900e-003**	**0.0000**	**61.8077**	**61.8077**	**4.7200e-003**	**0.0000**	**61.9258**

3.3 Ph 1 - Grading - 1 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2123	0.0000	0.2123	0.0529	0.0000	0.0529	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0493	0.5496	0.3738	7.0000e-004		0.0239	0.0239		0.0220	0.0220	0.0000	61.7039	61.7039	0.0200	0.0000	62.2028
Total	**0.0493**	**0.5496**	**0.3738**	**7.0000e-004**	**0.2123**	**0.0239**	**0.2362**	**0.0529**	**0.0220**	**0.0749**	**0.0000**	**61.7039**	**61.7039**	**0.0200**	**0.0000**	**62.2028**

3.3 Ph 1 - Grading - 1 - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0440	1.4940	0.3598	4.4600e-003	0.1035	5.2900e-003	0.1088	0.0284	5.0600e-003	0.0335	0.0000	443.1044	443.1044	0.0375	0.0000	444.0423
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9900e-003	2.2100e-003	0.0217	6.0000e-005	6.5000e-003	5.0000e-005	6.5400e-003	1.7300e-003	4.0000e-005	1.7700e-003	0.0000	5.8715	5.8715	1.8000e-004	0.0000	5.8759
Total	**0.0470**	**1.4962**	**0.3815**	**4.5200e-003**	**0.1100**	**5.3400e-003**	**0.1153**	**0.0302**	**5.1000e-003**	**0.0353**	**0.0000**	**448.9759**	**448.9759**	**0.0377**	**0.0000**	**449.9182**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0955	0.0000	0.0955	0.0238	0.0000	0.0238	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.2173	0.4147	7.0000e-004		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003	0.0000	61.7038	61.7038	0.0200	0.0000	62.2027
Total	**0.0111**	**0.2173**	**0.4147**	**7.0000e-004**	**0.0955**	**1.1500e-003**	**0.0967**	**0.0238**	**1.1500e-003**	**0.0250**	**0.0000**	**61.7038**	**61.7038**	**0.0200**	**0.0000**	**62.2027**

3.3 Ph 1 - Grading - 1 - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0440	1.4940	0.3598	4.4600e-003	0.1035	5.2900e-003	0.1088	0.0284	5.0600e-003	0.0335	0.0000	443.1044	443.1044	0.0375	0.0000	444.0423
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9900e-003	2.2100e-003	0.0217	6.0000e-005	6.5000e-003	5.0000e-005	6.5400e-003	1.7300e-003	4.0000e-005	1.7700e-003	0.0000	5.8715	5.8715	1.8000e-004	0.0000	5.8759
Total	**0.0470**	**1.4962**	**0.3815**	**4.5200e-003**	**0.1100**	**5.3400e-003**	**0.1153**	**0.0302**	**5.1000e-003**	**0.0353**	**0.0000**	**448.9759**	**448.9759**	**0.0377**	**0.0000**	**449.9182**

3.4 Ph 1 - Grading - 2 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1244	0.0000	0.1244	0.0420	0.0000	0.0420	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0471	0.5251	0.3572	6.7000e-004		0.0229	0.0229		0.0210	0.0210	0.0000	58.9615	58.9615	0.0191	0.0000	59.4382
Total	**0.0471**	**0.5251**	**0.3572**	**6.7000e-004**	**0.1244**	**0.0229**	**0.1473**	**0.0420**	**0.0210**	**0.0631**	**0.0000**	**58.9615**	**58.9615**	**0.0191**	**0.0000**	**59.4382**

3.4 Ph 1 - Grading - 2 - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0421	1.4276	0.3438	4.2700e-003	0.1023	5.0500e-003	0.1074	0.0280	4.8300e-003	0.0328	0.0000	423.4109	423.4109	0.0359	0.0000	424.3071
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8500e-003	2.1100e-003	0.0207	6.0000e-005	6.2100e-003	4.0000e-005	6.2500e-003	1.6500e-003	4.0000e-005	1.6900e-003	0.0000	5.6105	5.6105	1.7000e-004	0.0000	5.6148
Total	**0.0449**	**1.4297**	**0.3645**	**4.3300e-003**	**0.1086**	**5.0900e-003**	**0.1136**	**0.0297**	**4.8700e-003**	**0.0345**	**0.0000**	**429.0214**	**429.0214**	**0.0360**	**0.0000**	**429.9219**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0560	0.0000	0.0560	0.0189	0.0000	0.0189	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0106	0.2076	0.3963	6.7000e-004		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003	0.0000	58.9614	58.9614	0.0191	0.0000	59.4381
Total	**0.0106**	**0.2076**	**0.3963**	**6.7000e-004**	**0.0560**	**1.1000e-003**	**0.0571**	**0.0189**	**1.1000e-003**	**0.0200**	**0.0000**	**58.9614**	**58.9614**	**0.0191**	**0.0000**	**59.4381**

3.4 Ph 1 - Grading - 2 - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0421	1.4276	0.3438	4.2700e-003	0.1023	5.0500e-003	0.1074	0.0280	4.8300e-003	0.0328	0.0000	423.4109	423.4109	0.0359	0.0000	424.3071
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8500e-003	2.1100e-003	0.0207	6.0000e-005	6.2100e-003	4.0000e-005	6.2500e-003	1.6500e-003	4.0000e-005	1.6900e-003	0.0000	5.6105	5.6105	1.7000e-004	0.0000	5.6148
Total	**0.0449**	**1.4297**	**0.3645**	**4.3300e-003**	**0.1086**	**5.0900e-003**	**0.1136**	**0.0297**	**4.8700e-003**	**0.0345**	**0.0000**	**429.0214**	**429.0214**	**0.0360**	**0.0000**	**429.9219**

3.4 Ph 1 - Grading - 2 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0627	0.0000	0.0627	8.1000e-003	0.0000	8.1000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0700e-003	0.0225	0.0160	3.0000e-005		9.7000e-004	9.7000e-004		9.0000e-004	9.0000e-004	0.0000	2.7436	2.7436	8.9000e-004	0.0000	2.7657
Total	**2.0700e-003**	**0.0225**	**0.0160**	**3.0000e-005**	**0.0627**	**9.7000e-004**	**0.0636**	**8.1000e-003**	**9.0000e-004**	**9.0000e-003**	**0.0000**	**2.7436**	**2.7436**	**8.9000e-004**	**0.0000**	**2.7657**

3.4 Ph 1 - Grading - 2 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.8400e-003	0.0605	0.0159	2.0000e-004	0.0789	2.1000e-004	0.0792	0.0195	2.0000e-004	0.0197	0.0000	19.4446	19.4446	1.6600e-003	0.0000	19.4861
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	9.0000e-005	9.0000e-004	0.0000	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2522	0.2522	1.0000e-005	0.0000	0.2524
Total	**1.9700e-003**	**0.0606**	**0.0168**	**2.0000e-004**	**0.0792**	**2.1000e-004**	**0.0794**	**0.0196**	**2.0000e-004**	**0.0198**	**0.0000**	**19.6968**	**19.6968**	**1.6700e-003**	**0.0000**	**19.7384**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0282	0.0000	0.0282	3.6400e-003	0.0000	3.6400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9000e-004	9.6600e-003	0.0184	3.0000e-005		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	2.7436	2.7436	8.9000e-004	0.0000	2.7657
Total	**4.9000e-004**	**9.6600e-003**	**0.0184**	**3.0000e-005**	**0.0282**	**5.0000e-005**	**0.0283**	**3.6400e-003**	**5.0000e-005**	**3.6900e-003**	**0.0000**	**2.7436**	**2.7436**	**8.9000e-004**	**0.0000**	**2.7657**

3.4 Ph 1 - Grading - 2 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.8400e-003	0.0605	0.0159	2.0000e-004	0.0789	2.1000e-004	0.0792	0.0195	2.0000e-004	0.0197	0.0000	19.4446	19.4446	1.6600e-003	0.0000	19.4861
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	9.0000e-005	9.0000e-004	0.0000	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2522	0.2522	1.0000e-005	0.0000	0.2524
Total	**1.9700e-003**	**0.0606**	**0.0168**	**2.0000e-004**	**0.0792**	**2.1000e-004**	**0.0794**	**0.0196**	**2.0000e-004**	**0.0198**	**0.0000**	**19.6968**	**19.6968**	**1.6700e-003**	**0.0000**	**19.7384**

3.5 Ph 1 - Grading - 3 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1246	0.0000	0.1246	0.0427	0.0000	0.0427	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0454	0.4951	0.3519	6.9000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	60.3583	60.3583	0.0195	0.0000	60.8463
Total	**0.0454**	**0.4951**	**0.3519**	**6.9000e-004**	**0.1246**	**0.0214**	**0.1460**	**0.0427**	**0.0197**	**0.0624**	**0.0000**	**60.3583**	**60.3583**	**0.0195**	**0.0000**	**60.8463**

3.5 Ph 1 - Grading - 3 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0414	1.3600	0.3571	4.4000e-003	0.1035	4.6500e-003	0.1081	0.0284	4.4500e-003	0.0329	0.0000	437.3834	437.3834	0.0373	0.0000	438.3166
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7500e-003	1.9600e-003	0.0198	6.0000e-005	6.3500e-003	4.0000e-005	6.4000e-003	1.6900e-003	4.0000e-005	1.7300e-003	0.0000	5.5481	5.5481	1.6000e-004	0.0000	5.5521
Total	**0.0441**	**1.3620**	**0.3769**	**4.4600e-003**	**0.1098**	**4.6900e-003**	**0.1145**	**0.0301**	**4.4900e-003**	**0.0346**	**0.0000**	**442.9315**	**442.9315**	**0.0375**	**0.0000**	**443.8688**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0561	0.0000	0.0561	0.0192	0.0000	0.0192	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0109	0.2125	0.4055	6.9000e-004		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	60.3582	60.3582	0.0195	0.0000	60.8462
Total	**0.0109**	**0.2125**	**0.4055**	**6.9000e-004**	**0.0561**	**1.1300e-003**	**0.0572**	**0.0192**	**1.1300e-003**	**0.0204**	**0.0000**	**60.3582**	**60.3582**	**0.0195**	**0.0000**	**60.8462**

3.5 Ph 1 - Grading - 3 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0414	1.3600	0.3571	4.4000e-003	0.1035	4.6500e-003	0.1081	0.0284	4.4500e-003	0.0329	0.0000	437.3834	437.3834	0.0373	0.0000	438.3166
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7500e-003	1.9600e-003	0.0198	6.0000e-005	6.3500e-003	4.0000e-005	6.4000e-003	1.6900e-003	4.0000e-005	1.7300e-003	0.0000	5.5481	5.5481	1.6000e-004	0.0000	5.5521
Total	**0.0441**	**1.3620**	**0.3769**	**4.4600e-003**	**0.1098**	**4.6900e-003**	**0.1145**	**0.0301**	**4.4900e-003**	**0.0346**	**0.0000**	**442.9315**	**442.9315**	**0.0375**	**0.0000**	**443.8688**

3.6 Ph 1 - Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0804	0.8268	0.9378	1.4600e-003		0.0434	0.0434		0.0399	0.0399	0.0000	128.1503	128.1503	0.0415	0.0000	129.1864
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0853**	**0.8268**	**0.9378**	**1.4600e-003**		**0.0434**	**0.0434**		**0.0399**	**0.0399**	**0.0000**	**128.1503**	**128.1503**	**0.0415**	**0.0000**	**129.1864**

3.6 Ph 1 - Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-003	2.8600e-003	0.0288	9.0000e-005	9.2400e-003	7.0000e-005	9.3000e-003	2.4500e-003	6.0000e-005	2.5200e-003	0.0000	8.0700	8.0700	2.3000e-004	0.0000	8.0758
Total	**4.0000e-003**	**2.8600e-003**	**0.0288**	**9.0000e-005**	**9.2400e-003**	**7.0000e-005**	**9.3000e-003**	**2.4500e-003**	**6.0000e-005**	**2.5200e-003**	**0.0000**	**8.0700**	**8.0700**	**2.3000e-004**	**0.0000**	**8.0758**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0288	0.6635	1.1069	1.4600e-003		0.0152	0.0152		0.0152	0.0152	0.0000	128.1501	128.1501	0.0415	0.0000	129.1863
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0337**	**0.6635**	**1.1069**	**1.4600e-003**		**0.0152**	**0.0152**		**0.0152**	**0.0152**	**0.0000**	**128.1501**	**128.1501**	**0.0415**	**0.0000**	**129.1863**

3.6 Ph 1 - Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-003	2.8600e-003	0.0288	9.0000e-005	9.2400e-003	7.0000e-005	9.3000e-003	2.4500e-003	6.0000e-005	2.5200e-003	0.0000	8.0700	8.0700	2.3000e-004	0.0000	8.0758
Total	**4.0000e-003**	**2.8600e-003**	**0.0288**	**9.0000e-005**	**9.2400e-003**	**7.0000e-005**	**9.3000e-003**	**2.4500e-003**	**6.0000e-005**	**2.5200e-003**	**0.0000**	**8.0700**	**8.0700**	**2.3000e-004**	**0.0000**	**8.0758**

3.7 Ph 1 - Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0140	0.0977	0.1163	1.9000e-004		6.0200e-003	6.0200e-003		6.0200e-003	6.0200e-003	0.0000	16.3408	16.3408	1.1200e-003	0.0000	16.3689
Total	**1.3199**	**0.0977**	**0.1163**	**1.9000e-004**		**6.0200e-003**	**6.0200e-003**		**6.0200e-003**	**6.0200e-003**	**0.0000**	**16.3408**	**16.3408**	**1.1200e-003**	**0.0000**	**16.3689**

3.7 Ph 1 - Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-003	2.8600e-003	0.0288	9.0000e-005	9.2400e-003	7.0000e-005	9.3000e-003	2.4500e-003	6.0000e-005	2.5200e-003	0.0000	8.0700	8.0700	2.3000e-004	0.0000	8.0758
Total	**4.0000e-003**	**2.8600e-003**	**0.0288**	**9.0000e-005**	**9.2400e-003**	**7.0000e-005**	**9.3000e-003**	**2.4500e-003**	**6.0000e-005**	**2.5200e-003**	**0.0000**	**8.0700**	**8.0700**	**2.3000e-004**	**0.0000**	**8.0758**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8000e-003	0.0869	0.1173	1.9000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	16.3408	16.3408	1.1200e-003	0.0000	16.3688
Total	**1.3097**	**0.0869**	**0.1173**	**1.9000e-004**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**16.3408**	**16.3408**	**1.1200e-003**	**0.0000**	**16.3688**

3.7 Ph 1 - Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-003	2.8600e-003	0.0288	9.0000e-005	9.2400e-003	7.0000e-005	9.3000e-003	2.4500e-003	6.0000e-005	2.5200e-003	0.0000	8.0700	8.0700	2.3000e-004	0.0000	8.0758
Total	**4.0000e-003**	**2.8600e-003**	**0.0288**	**9.0000e-005**	**9.2400e-003**	**7.0000e-005**	**9.3000e-003**	**2.4500e-003**	**6.0000e-005**	**2.5200e-003**	**0.0000**	**8.0700**	**8.0700**	**2.3000e-004**	**0.0000**	**8.0758**

3.8 Ph 1 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0851	0.8264	0.9213	1.2500e-003		0.0525	0.0525		0.0483	0.0483	0.0000	109.4520	109.4520	0.0354	0.0000	110.3370
Total	**0.0851**	**0.8264**	**0.9213**	**1.2500e-003**		**0.0525**	**0.0525**		**0.0483**	**0.0483**	**0.0000**	**109.4520**	**109.4520**	**0.0354**	**0.0000**	**110.3370**

3.8 Ph 1 - Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0199	0.6628	0.1768	1.7300e-003	0.0428	1.4000e-003	0.0442	0.0124	1.3400e-003	0.0137	0.0000	168.6288	168.6288	0.0125	0.0000	168.9417
Worker	0.0897	0.0640	0.6446	2.0000e-003	0.2069	1.4600e-003	0.2084	0.0550	1.3500e-003	0.0563	0.0000	180.7348	180.7348	5.1800e-003	0.0000	180.8643
Total	**0.1096**	**0.7268**	**0.8213**	**3.7300e-003**	**0.2497**	**2.8600e-003**	**0.2526**	**0.0673**	**2.6900e-003**	**0.0700**	**0.0000**	**349.3637**	**349.3637**	**0.0177**	**0.0000**	**349.8061**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0280	0.5446	0.9416	1.2500e-003		2.0400e-003	2.0400e-003		2.0400e-003	2.0400e-003	0.0000	109.4519	109.4519	0.0354	0.0000	110.3369
Total	**0.0280**	**0.5446**	**0.9416**	**1.2500e-003**		**2.0400e-003**	**2.0400e-003**		**2.0400e-003**	**2.0400e-003**	**0.0000**	**109.4519**	**109.4519**	**0.0354**	**0.0000**	**110.3369**

3.8 Ph 1 - Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0199	0.6628	0.1768	1.7300e-003	0.0428	1.4000e-003	0.0442	0.0124	1.3400e-003	0.0137	0.0000	168.6288	168.6288	0.0125	0.0000	168.9417
Worker	0.0897	0.0640	0.6446	2.0000e-003	0.2069	1.4600e-003	0.2084	0.0550	1.3500e-003	0.0563	0.0000	180.7348	180.7348	5.1800e-003	0.0000	180.8643
Total	**0.1096**	**0.7268**	**0.8213**	**3.7300e-003**	**0.2497**	**2.8600e-003**	**0.2526**	**0.0673**	**2.6900e-003**	**0.0700**	**0.0000**	**349.3637**	**349.3637**	**0.0177**	**0.0000**	**349.8061**

3.8 Ph 1 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0369	0.3618	0.4494	6.1000e-004		0.0212	0.0212		0.0195	0.0195	0.0000	54.0031	54.0031	0.0175	0.0000	54.4398
Total	**0.0369**	**0.3618**	**0.4494**	**6.1000e-004**		**0.0212**	**0.0212**		**0.0195**	**0.0195**	**0.0000**	**54.0031**	**54.0031**	**0.0175**	**0.0000**	**54.4398**

3.8 Ph 1 - Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.1500e-003	0.3086	0.0825	8.4000e-004	0.0211	6.0000e-004	0.0217	6.0900e-003	5.7000e-004	6.6600e-003	0.0000	82.3506	82.3506	5.9800e-003	0.0000	82.5001
Worker	0.0418	0.0288	0.2950	9.5000e-004	0.1020	7.1000e-004	0.1027	0.0271	6.5000e-004	0.0278	0.0000	85.8400	85.8400	2.3400e-003	0.0000	85.8985
Total	**0.0510**	**0.3374**	**0.3775**	**1.7900e-003**	**0.1231**	**1.3100e-003**	**0.1244**	**0.0332**	**1.2200e-003**	**0.0344**	**0.0000**	**168.1906**	**168.1906**	**8.3200e-003**	**0.0000**	**168.3986**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0138	0.2685	0.4642	6.1000e-004		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	54.0031	54.0031	0.0175	0.0000	54.4397
Total	**0.0138**	**0.2685**	**0.4642**	**6.1000e-004**		**1.0000e-003**	**1.0000e-003**		**1.0000e-003**	**1.0000e-003**	**0.0000**	**54.0031**	**54.0031**	**0.0175**	**0.0000**	**54.4397**

3.8 Ph 1 - Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.1500e-003	0.3086	0.0825	8.4000e-004	0.0211	6.0000e-004	0.0217	6.0900e-003	5.7000e-004	6.6600e-003	0.0000	82.3506	82.3506	5.9800e-003	0.0000	82.5001
Worker	0.0418	0.0288	0.2950	9.5000e-004	0.1020	7.1000e-004	0.1027	0.0271	6.5000e-004	0.0278	0.0000	85.8400	85.8400	2.3400e-003	0.0000	85.8985
Total	**0.0510**	**0.3374**	**0.3775**	**1.7900e-003**	**0.1231**	**1.3100e-003**	**0.1244**	**0.0332**	**1.2200e-003**	**0.0344**	**0.0000**	**168.1906**	**168.1906**	**8.3200e-003**	**0.0000**	**168.3986**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

Integrate Below Market Rate Housing

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6245	2.7086	7.0813	0.0223	1.8380	0.0226	1.8606	0.4922	0.0212	0.5134	0.0000	2,054.9724	2,054.9724	0.1148	0.0000	2,057.8419
Unmitigated	0.6707	3.0095	8.0730	0.0263	2.1880	0.0265	2.2145	0.5860	0.0248	0.6108	0.0000	2,420.6093	2,420.6093	0.1317	0.0000	2,423.9007

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,080.00	1,999.40	1833.00	5,805,403	4,876,674
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	2,080.00	1,999.40	1,833.00	5,805,403	4,876,674

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Non-Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Parking Lot	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Unenclosed Parking Structure	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	284.1399	284.1399	0.0117	2.6500e-003	285.2206
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	284.1399	284.1399	0.0117	2.6500e-003	285.2206
NaturalGas Mitigated	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	103.0707	103.0707	1.9800e-003	1.8900e-003	103.6832
NaturalGas Unmitigated	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	103.0707	103.0707	1.9800e-003	1.8900e-003	103.6832

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.93147e+006	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	103.0707	103.0707	1.9800e-003	1.8900e-003	103.6832
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0104**	**0.0890**	**0.0379**	**5.7000e-004**		**7.2000e-003**	**7.2000e-003**		**7.2000e-003**	**7.2000e-003**	**0.0000**	**103.0707**	**103.0707**	**1.9800e-003**	**1.8900e-003**	**103.6832**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.93147e+006	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	103.0707	103.0707	1.9800e-003	1.8900e-003	103.6832
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0104**	**0.0890**	**0.0379**	**5.7000e-004**		**7.2000e-003**	**7.2000e-003**		**7.2000e-003**	**7.2000e-003**	**0.0000**	**103.0707**	**103.0707**	**1.9800e-003**	**1.8900e-003**	**103.6832**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.04128e+006	253.3322	0.0104	2.3600e-003	254.2957
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	38080	9.2644	3.8000e-004	9.0000e-005	9.2997
Unenclosed Parking Structure	88550	21.5432	8.8000e-004	2.0000e-004	21.6252
Total		**284.1399**	**0.0117**	**2.6500e-003**	**285.2206**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.04128e+006	253.3322	0.0104	2.3600e-003	254.2957
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	38080	9.2644	3.8000e-004	9.0000e-005	9.2997
Unenclosed Parking Structure	88550	21.5432	8.8000e-004	2.0000e-004	21.6252
Total		**284.1399**	**0.0117**	**2.6500e-003**	**285.2206**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4770	0.0223	1.9345	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0500e-003	0.0000	3.2366
Unmitigated	1.4770	0.0223	1.9345	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0500e-003	0.0000	3.2366

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2879					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0585	0.0223	1.9345	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0500e-003	0.0000	3.2366
Total	**1.4770**	**0.0223**	**1.9345**	**1.0000e-004**		**0.0107**	**0.0107**		**0.0107**	**0.0107**	**0.0000**	**3.1603**	**3.1603**	**3.0500e-003**	**0.0000**	**3.2366**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2879					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0585	0.0223	1.9345	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0500e-003	0.0000	3.2366
Total	**1.4770**	**0.0223**	**1.9345**	**1.0000e-004**		**0.0107**	**0.0107**		**0.0107**	**0.0107**	**0.0000**	**3.1603**	**3.1603**	**3.0500e-003**	**0.0000**	**3.2366**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	46.7214	0.0173	0.0103	50.2082
Unmitigated	65.5054	0.0220	0.0129	69.8908

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	16.0085 / 3.37743	65.5054	0.0220	0.0129	69.8908
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**65.5054**	**0.0220**	**0.0129**	**69.8908**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	12.8068 / 0.599455	46.7214	0.0173	0.0103	50.2082
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**46.7214**	**0.0173**	**0.0103**	**50.2082**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.0694	0.3587	0.0000	15.0368
Unmitigated	24.2777	1.4348	0.0000	60.1470

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	119.6	24.2777	1.4348	0.0000	60.1470
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**24.2777**	**1.4348**	**0.0000**	**60.1470**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	29.9	6.0694	0.3587	0.0000	15.0368
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**6.0694**	**0.3587**	**0.0000**	**15.0368**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Solana Highlands - Single Phase Construction Alternative

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	57.37	1000sqft	1.32	57,365.00	0
Other Non-Asphalt Surfaces	1.90	1000sqft	0.04	1,900.00	0
Parking Lot	272.00	Space	2.45	108,800.00	0
Unenclosed Parking Structure	50.60	1000sqft	1.16	50,600.00	0
Apartments Mid Rise	260.00	Dwelling Unit	6.84	326,156.00	744

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS

Land Use - project-specific land uses

Construction Phase - construction schedule per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Trips and VMT - trips per applicant

Demolition - demo quantities per applicant

Grading - grading quantities per applicant

Architectural Coating - SDAPCD Rule 67.0.1

Vehicle Trips - F&P 2016

Woodstoves - no fireplaces

Consumer Products - CalEEMod defaults.

Area Coating - SDAPCD Rule 67.0.1

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - water use per applicant

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - All construction equipment will meet Tier 4 Interim engine standards except air compressors and pavers which will be Tier 3.

Mobile Land Use Mitigation -

Water Mitigation -

Waste Mitigation - AB 341

Solana Highlands - Single Phase Construction Alternative - San Diego County, Summer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstructionPhase	NumDays	300.00	321.00
tblConstructionPhase	NumDays	20.00	66.00
tblConstructionPhase	NumDays	30.00	45.00
tblConstructionPhase	NumDays	30.00	45.00
tblConstructionPhase	NumDays	30.00	44.00
tblConstructionPhase	NumDays	20.00	64.00
tblFireplaces	NumberGas	143.00	0.00
tblFireplaces	NumberNoFireplace	26.00	0.00
tblFireplaces	NumberWood	91.00	0.00
tblGrading	AcresOfGrading	56.25	270.00
tblGrading	AcresOfGrading	56.25	112.50
tblGrading	AcresOfGrading	55.00	110.00
tblGrading	MaterialExported	0.00	19,500.00
tblLandUse	LandUseSquareFeet	57,370.00	57,365.00
tblLandUse	LandUseSquareFeet	260,000.00	326,156.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
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tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
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tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
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tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00

tblOffRoadEquipment	UsageHours	8.00	4.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	720.49	536.36
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripNumber	803.00	794.00
tblTripsAndVMT	HaulingTripNumber	2,438.00	7,334.00
tblTripsAndVMT	HaulingTripNumber	0.00	7,334.00
tblTripsAndVMT	HaulingTripNumber	0.00	7,332.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	64.00	60.00
tblTripsAndVMT	WorkerTripNumber	10.00	36.00
tblTripsAndVMT	WorkerTripNumber	15.00	36.00
tblTripsAndVMT	WorkerTripNumber	15.00	36.00
tblTripsAndVMT	WorkerTripNumber	15.00	36.00
tblTripsAndVMT	WorkerTripNumber	30.00	36.00
tblTripsAndVMT	WorkerTripNumber	56.00	36.00
tblTripsAndVMT	WorkerTripNumber	279.00	240.00
tblVehicleTrips	ST_TR	6.39	7.69
tblVehicleTrips	SU_TR	5.86	7.05
tblVehicleTrips	WD_TR	6.65	8.00

tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	16,940,046.66	16,008,460.00
tblWater	OutdoorWaterUseRate	10,679,594.63	3,377,428.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	13.00	0.00
tblWoodstoves	NumberNoncatalytic	13.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.2667	89.2718	33.3643	0.2336	14.4273	1.2989	15.7263	3.7168	1.2036	4.9204	0.0000	25,135.3224	25,135.3224	2.8067	0.0000	25,205.4885
2021	48.2191	111.9684	67.7823	0.2923	87.0944	2.7330	88.2750	22.0693	2.5371	23.1630	0.0000	30,898.5494	30,898.5494	4.3224	0.0000	31,006.6096
2022	1.6493	13.0921	15.8732	0.0466	2.3777	0.4244	2.8021	0.6399	0.3908	1.0307	0.0000	4,737.8005	4,737.8005	0.5355	0.0000	4,751.1874
Maximum	**48.2191**	**111.9684**	**67.7823**	**0.2923**	**87.0944**	**2.7330**	**88.2750**	**22.0693**	**2.5371**	**23.1630**	**0.0000**	**30,898.5494**	**30,898.5494**	**4.3224**	**0.0000**	**31,006.6096**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.5695	74.5042	35.1820	0.2336	9.2381	0.2870	9.5251	2.4235	0.2767	2.7002	0.0000	25,135.3224	25,135.3224	2.8067	0.0000	25,205.4885
2021	44.7179	93.6774	75.5336	0.2923	83.9801	0.9329	84.2388	21.0015	0.9234	21.2511	0.0000	30,898.5494	30,898.5494	4.3224	0.0000	31,006.6096
2022	1.2139	11.3318	16.1531	0.0466	2.3777	0.0433	2.4210	0.6399	0.0418	0.6816	0.0000	4,737.8005	4,737.8005	0.5355	0.0000	4,751.1874
Maximum	**44.7179**	**93.6774**	**75.5336**	**0.2923**	**83.9801**	**0.9329**	**84.2388**	**21.0015**	**0.9234**	**21.2511**	**0.0000**	**30,898.5494**	**30,898.5494**	**4.3224**	**0.0000**	**31,006.6096**

Solana Highlands - Single Phase Construction Alternative - San Diego County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**10.41**	**16.25**	**-8.42**	**0.00**	**7.99**	**71.65**	**9.94**	**8.93**	**69.94**	**15.39**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.4228	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189	0.0000	38.7072	38.7072	0.0374	0.0000	39.6412
Energy	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Mobile	3.9718	16.3650	46.6332	0.1545	12.5942	0.1484	12.7426	3.3663	0.1393	3.5056		15,672.0407	15,672.0407	0.8219		15,692.5875
Total	**12.4516**	**17.1004**	**68.3348**	**0.1588**	**12.5942**	**0.3068**	**12.9009**	**3.3663**	**0.2976**	**3.6639**	**0.0000**	**16,333.3014**	**16,333.3014**	**0.8712**	**0.0114**	**16,358.4818**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.4228	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189	0.0000	38.7072	38.7072	0.0374	0.0000	39.6412
Energy	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Mobile	3.7074	14.7657	40.5923	0.1311	10.5794	0.1268	10.7062	2.8278	0.1189	2.9467		13,303.7690	13,303.7690	0.7143		13,321.6269
Total	**12.1872**	**15.5010**	**62.2940**	**0.1354**	**10.5794**	**0.2851**	**10.8645**	**2.8278**	**0.2773**	**3.1050**	**0.0000**	**13,965.0298**	**13,965.0298**	**0.7636**	**0.0114**	**13,987.5212**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.12**	**9.35**	**8.84**	**14.72**	**16.00**	**7.06**	**15.79**	**16.00**	**6.84**	**15.25**	**0.00**	**14.50**	**14.50**	**12.35**	**0.00**	**14.49**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Ph 1 - Demolition	Demolition	6/1/2020	8/31/2020	5	66	
2	Ph 1 - Grading - 1	Grading	9/1/2020	11/2/2020	5	45	
3	Ph 1 - Grading - 2	Grading	11/3/2020	1/4/2021	5	45	
4	Ph 1 - Grading - 3	Grading	1/5/2021	3/5/2021	5	44	
5	Ph 1 - Paving	Paving	3/1/2021	5/27/2021	5	64	
6	Ph 1 - Architectural Coating	Architectural Coating	3/1/2021	5/27/2021	5	64	
7	Ph 1 - Building Construction	Building Construction	3/6/2021	5/30/2022	5	321	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.97

Residential Indoor: 660,466; Residential Outdoor: 220,155; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 13,120 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Ph 1 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 1 - Demolition	Excavators	1	5.00	158	0.38
Ph 1 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40

Ph 1 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading - 1	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 1	Graders	0	8.00	187	0.41
Ph 1 - Grading - 1	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 1	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 1	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading - 2	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 2	Graders	0	8.00	187	0.41
Ph 1 - Grading - 2	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 2	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 2	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading - 3	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 3	Graders	0	8.00	187	0.41
Ph 1 - Grading - 3	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 3	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 3	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Paving	Pavers	4	8.00	130	0.42
Ph 1 - Paving	Paving Equipment	4	8.00	132	0.36
Ph 1 - Paving	Rollers	4	8.00	80	0.38
Ph 1 - Architectural Coating	Air Compressors	2	6.00	78	0.48
Ph 1 - Building Construction	Cranes	0	7.00	231	0.29
Ph 1 - Building Construction	Forklifts	5	4.00	89	0.20
Ph 1 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 1 - Building Construction	Tractors/Loaders/Backhoes	5	4.00	97	0.37
Ph 1 - Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Ph 1 - Demolition	4	36.00	6.00	794.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 1	6	36.00	0.00	7,334.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 2	6	36.00	0.00	7,334.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 3	6	36.00	0.00	7,332.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Paving	12	36.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Architectural Coating	2	36.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Building Construction	10	240.00	60.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6650	0.0000	2.6650	0.4036	0.0000	0.4036			0.0000			0.0000
Off-Road	1.3374	13.8927	7.3138	0.0133		0.6946	0.6946		0.6390	0.6390		1,290.3008	1,290.3008	0.4173		1,300.7335
Total	**1.3374**	**13.8927**	**7.3138**	**0.0133**	**2.6650**	**0.6946**	**3.3596**	**0.4036**	**0.6390**	**1.0426**		**1,290.3008**	**1,290.3008**	**0.4173**		**1,300.7335**

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1434	4.7802	1.1611	0.0147	0.3467	0.0173	0.3639	0.0950	0.0165	0.1115		1,609.8416	1,609.8416	0.1343		1,613.2000
Vendor	0.0224	0.6766	0.1724	1.6400e-003	0.0406	3.3100e-003	0.0439	0.0117	3.1700e-003	0.0149		176.4241	176.4241	0.0130		176.7494
Worker	0.1321	0.0890	1.0205	3.0400e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		303.3889	303.3889	9.0600e-003		303.6154
Total	**0.2979**	**5.5457**	**2.3539**	**0.0194**	**0.6830**	**0.0226**	**0.7057**	**0.1851**	**0.0216**	**0.2067**		**2,089.6546**	**2,089.6546**	**0.1564**		**2,093.5649**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1993	0.0000	1.1993	0.1816	0.0000	0.1816			0.0000			0.0000
Off-Road	0.2139	4.3481	8.1504	0.0133		0.0218	0.0218		0.0218	0.0218	0.0000	1,290.3008	1,290.3008	0.4173		1,300.7335
Total	**0.2139**	**4.3481**	**8.1504**	**0.0133**	**1.1993**	**0.0218**	**1.2210**	**0.1816**	**0.0218**	**0.2034**	**0.0000**	**1,290.3008**	**1,290.3008**	**0.4173**		**1,300.7335**

3.2 Ph 1 - Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1434	4.7802	1.1611	0.0147	0.3467	0.0173	0.3639	0.0950	0.0165	0.1115		1,609.8416	1,609.8416	0.1343		1,613.2000
Vendor	0.0224	0.6766	0.1724	1.6400e-003	0.0406	3.3100e-003	0.0439	0.0117	3.1700e-003	0.0149		176.4241	176.4241	0.0130		176.7494
Worker	0.1321	0.0890	1.0205	3.0400e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		303.3889	303.3889	9.0600e-003		303.6154
Total	**0.2979**	**5.5457**	**2.3539**	**0.0194**	**0.6830**	**0.0226**	**0.7057**	**0.1851**	**0.0216**	**0.2067**		**2,089.6546**	**2,089.6546**	**0.1564**		**2,093.5649**

3.3 Ph 1 - Grading - 1 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.4349	0.0000	9.4349	2.3514	0.0000	2.3514			0.0000			0.0000
Off-Road	2.1919	24.4246	16.6137	0.0312		1.0631	1.0631		0.9780	0.9780		3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**2.1919**	**24.4246**	**16.6137**	**0.0312**	**9.4349**	**1.0631**	**10.4980**	**2.3514**	**0.9780**	**3.3294**		**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.3 Ph 1 - Grading - 1 - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9427	64.7582	15.7302	0.1993	4.6967	0.2337	4.9304	1.2870	0.2236	1.5106		21,808.9610	21,808.9610	1.8199		21,854.4584
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1321	0.0890	1.0205	3.0400e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		303.3889	303.3889	9.0600e-003		303.6154
Total	**2.0748**	**64.8472**	**16.7506**	**0.2024**	**4.9924**	**0.2358**	**5.2282**	**1.3654**	**0.2255**	**1.5909**		**22,112.3500**	**22,112.3500**	**1.8290**		**22,158.0738**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.2457	0.0000	4.2457	1.0581	0.0000	1.0581			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**4.2457**	**0.0512**	**4.2969**	**1.0581**	**0.0512**	**1.1093**	**0.0000**	**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.3 Ph 1 - Grading - 1 - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9427	64.7582	15.7302	0.1993	4.6967	0.2337	4.9304	1.2870	0.2236	1.5106		21,808.9610	21,808.9610	1.8199		21,854.4584
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1321	0.0890	1.0205	3.0400e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		303.3889	303.3889	9.0600e-003		303.6154
Total	**2.0748**	**64.8472**	**16.7506**	**0.2024**	**4.9924**	**0.2358**	**5.2282**	**1.3654**	**0.2255**	**1.5909**		**22,112.3500**	**22,112.3500**	**1.8290**		**22,158.0738**

3.4 Ph 1 - Grading - 2 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.6623	0.0000	5.6623	1.9414	0.0000	1.9414			0.0000			0.0000
Off-Road	2.1919	24.4246	16.6137	0.0312		1.0631	1.0631		0.9780	0.9780		3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**2.1919**	**24.4246**	**16.6137**	**0.0312**	**5.6623**	**1.0631**	**6.7254**	**1.9414**	**0.9780**	**2.9194**		**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.4 Ph 1 - Grading - 2 - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9427	64.7582	15.7302	0.1993	4.8620	0.2337	5.0958	1.3275	0.2236	1.5512		21,808.9610	21,808.9610	1.8199		21,854.4584
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1321	0.0890	1.0205	3.0400e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		303.3889	303.3889	9.0600e-003		303.6154
Total	**2.0748**	**64.8472**	**16.7506**	**0.2024**	**5.1578**	**0.2358**	**5.3936**	**1.4060**	**0.2255**	**1.6315**		**22,112.3500**	**22,112.3500**	**1.8290**		**22,158.0738**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5480	0.0000	2.5480	0.8736	0.0000	0.8736			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**2.5480**	**0.0512**	**2.5992**	**0.8736**	**0.0512**	**0.9248**	**0.0000**	**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.4 Ph 1 - Grading - 2 - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9427	64.7582	15.7302	0.1993	4.8620	0.2337	5.0958	1.3275	0.2236	1.5512		21,808.9610	21,808.9610	1.8199		21,854.4584
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1321	0.0890	1.0205	3.0400e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		303.3889	303.3889	9.0600e-003		303.6154
Total	**2.0748**	**64.8472**	**16.7506**	**0.2024**	**5.1578**	**0.2358**	**5.3936**	**1.4060**	**0.2255**	**1.6315**		**22,112.3500**	**22,112.3500**	**1.8290**		**22,158.0738**

3.4 Ph 1 - Grading - 2 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.6623	0.0000	5.6623	1.9414	0.0000	1.9414			0.0000			0.0000
Off-Road	2.0651	22.5038	15.9946	0.0312		0.9731	0.9731		0.8953	0.8953		3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**2.0651**	**22.5038**	**15.9946**	**0.0312**	**5.6623**	**0.9731**	**6.6354**	**1.9414**	**0.8953**	**2.8367**		**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.4 Ph 1 - Grading - 2 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8259	59.0054	15.6306	0.1963	81.1364	0.2055	81.3418	20.0494	0.1966	20.2460		21,533.9771	21,533.9771	1.8122		21,579.2816
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1245	0.0809	0.9549	2.9400e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		293.1987	293.1987	8.3700e-003		293.4079
Total	**1.9504**	**59.0863**	**16.5855**	**0.1992**	**81.4321**	**0.2075**	**81.6396**	**20.1279**	**0.1985**	**20.3263**		**21,827.1759**	**21,827.1759**	**1.8206**		**21,872.6895**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5480	0.0000	2.5480	0.8736	0.0000	0.8736			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**2.5480**	**0.0512**	**2.5992**	**0.8736**	**0.0512**	**0.9248**	**0.0000**	**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.4 Ph 1 - Grading - 2 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8259	59.0054	15.6306	0.1963	81.1364	0.2055	81.3418	20.0494	0.1966	20.2460		21,533.9771	21,533.9771	1.8122		21,579.2816
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1245	0.0809	0.9549	2.9400e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		293.1987	293.1987	8.3700e-003		293.4079
Total	**1.9504**	**59.0863**	**16.5855**	**0.1992**	**81.4321**	**0.2075**	**81.6396**	**20.1279**	**0.1985**	**20.3263**		**21,827.1759**	**21,827.1759**	**1.8206**		**21,872.6895**

3.5 Ph 1 - Grading - 3 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.6623	0.0000	5.6623	1.9414	0.0000	1.9414			0.0000			0.0000
Off-Road	2.0651	22.5038	15.9946	0.0312		0.9731	0.9731		0.8953	0.8953		3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**2.0651**	**22.5038**	**15.9946**	**0.0312**	**5.6623**	**0.9731**	**6.6354**	**1.9414**	**0.8953**	**2.8367**		**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.5 Ph 1 - Grading - 3 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8669	60.3300	15.9815	0.2007	4.8021	0.2101	5.0122	1.3158	0.2010	1.5168		22,017.3799	22,017.3799	1.8529		22,063.7013
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1245	0.0809	0.9549	2.9400e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		293.1987	293.1987	8.3700e-003		293.4079
Total	**1.9914**	**60.4109**	**16.9364**	**0.2037**	**5.0978**	**0.2121**	**5.3100**	**1.3943**	**0.2029**	**1.5971**		**22,310.5786**	**22,310.5786**	**1.8612**		**22,357.1092**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5480	0.0000	2.5480	0.8736	0.0000	0.8736			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**2.5480**	**0.0512**	**2.5992**	**0.8736**	**0.0512**	**0.9248**	**0.0000**	**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.5 Ph 1 - Grading - 3 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8669	60.3300	15.9815	0.2007	4.8021	0.2101	5.0122	1.3158	0.2010	1.5168		22,017.3799	22,017.3799	1.8529		22,063.7013
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1245	0.0809	0.9549	2.9400e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		293.1987	293.1987	8.3700e-003		293.4079
Total	**1.9914**	**60.4109**	**16.9364**	**0.2037**	**5.0978**	**0.2121**	**5.3100**	**1.3943**	**0.2029**	**1.5971**		**22,310.5786**	**22,310.5786**	**1.8612**		**22,357.1092**

3.6 Ph 1 - Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5111	25.8382	29.3065	0.0456		1.3555	1.3555		1.2470	1.2470		4,414.4217	4,414.4217	1.4277		4,450.1146
Paving	0.1543					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.6654**	**25.8382**	**29.3065**	**0.0456**		**1.3555**	**1.3555**		**1.2470**	**1.2470**		**4,414.4217**	**4,414.4217**	**1.4277**		**4,450.1146**

3.6 Ph 1 - Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1245	0.0809	0.9549	2.9400e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		293.1987	293.1987	8.3700e-003		293.4079
Total	**0.1245**	**0.0809**	**0.9549**	**2.9400e-003**	**0.2957**	**2.0400e-003**	**0.2978**	**0.0784**	**1.8800e-003**	**0.0803**		**293.1987**	**293.1987**	**8.3700e-003**		**293.4079**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8993	20.7338	34.5913	0.0456		0.4754	0.4754		0.4754	0.4754	0.0000	4,414.4217	4,414.4217	1.4277		4,450.1146
Paving	0.1543					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0536**	**20.7338**	**34.5913**	**0.0456**		**0.4754**	**0.4754**		**0.4754**	**0.4754**	**0.0000**	**4,414.4217**	**4,414.4217**	**1.4277**		**4,450.1146**

3.6 Ph 1 - Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1245	0.0809	0.9549	2.9400e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		293.1987	293.1987	8.3700e-003		293.4079
Total	**0.1245**	**0.0809**	**0.9549**	**2.9400e-003**	**0.2957**	**2.0400e-003**	**0.2978**	**0.0784**	**1.8800e-003**	**0.0803**		**293.1987**	**293.1987**	**8.3700e-003**		**293.4079**

3.7 Ph 1 - Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	40.8103					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4378	3.0537	3.6351	5.9400e-003		0.1882	0.1882		0.1882	0.1882		562.8961	562.8961	0.0386		563.8618
Total	**41.2481**	**3.0537**	**3.6351**	**5.9400e-003**		**0.1882**	**0.1882**		**0.1882**	**0.1882**		**562.8961**	**562.8961**	**0.0386**		**563.8618**

3.7 Ph 1 - Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1245	0.0809	0.9549	2.9400e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		293.1987	293.1987	8.3700e-003		293.4079
Total	**0.1245**	**0.0809**	**0.9549**	**2.9400e-003**	**0.2957**	**2.0400e-003**	**0.2978**	**0.0784**	**1.8800e-003**	**0.0803**		**293.1987**	**293.1987**	**8.3700e-003**		**293.4079**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	40.8103					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0386		563.8618
Total	**40.9292**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0386**		**563.8618**

3.7 Ph 1 - Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1245	0.0809	0.9549	2.9400e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		293.1987	293.1987	8.3700e-003		293.4079
Total	**0.1245**	**0.0809**	**0.9549**	**2.9400e-003**	**0.2957**	**2.0400e-003**	**0.2978**	**0.0784**	**1.8800e-003**	**0.0803**		**293.1987**	**293.1987**	**8.3700e-003**		**293.4079**

3.8 Ph 1 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7915	7.6873	8.5702	0.0116		0.4887	0.4887		0.4496	0.4496		1,122.3273	1,122.3273	0.3630		1,131.4019
Total	**0.7915**	**7.6873**	**8.5702**	**0.0116**		**0.4887**	**0.4887**		**0.4496**	**0.4496**		**1,122.3273**	**1,122.3273**	**0.3630**		**1,131.4019**

3.8 Ph 1 - Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1814	6.1098	1.5570	0.0163	0.4062	0.0128	0.4190	0.1169	0.0123	0.1292		1,748.1117	1,748.1117	0.1249		1,751.2344
Worker	0.8301	0.5393	6.3657	0.0196	1.9715	0.0136	1.9852	0.5230	0.0126	0.5355		1,954.6581	1,954.6581	0.0558		1,956.0527
Total	**1.0116**	**6.6491**	**7.9227**	**0.0359**	**2.3777**	**0.0265**	**2.4042**	**0.6399**	**0.0248**	**0.6647**		**3,702.7698**	**3,702.7698**	**0.1807**		**3,707.2871**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2604	5.0661	8.7591	0.0116		0.0189	0.0189		0.0189	0.0189	0.0000	1,122.3273	1,122.3273	0.3630		1,131.4018
Total	**0.2604**	**5.0661**	**8.7591**	**0.0116**		**0.0189**	**0.0189**		**0.0189**	**0.0189**	**0.0000**	**1,122.3273**	**1,122.3273**	**0.3630**		**1,131.4018**

3.8 Ph 1 - Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1814	6.1098	1.5570	0.0163	0.4062	0.0128	0.4190	0.1169	0.0123	0.1292		1,748.1117	1,748.1117	0.1249		1,751.2344
Worker	0.8301	0.5393	6.3657	0.0196	1.9715	0.0136	1.9852	0.5230	0.0126	0.5355		1,954.6581	1,954.6581	0.0558		1,956.0527
Total	**1.0116**	**6.6491**	**7.9227**	**0.0359**	**2.3777**	**0.0265**	**2.4042**	**0.6399**	**0.0248**	**0.6647**		**3,702.7698**	**3,702.7698**	**0.1807**		**3,707.2871**

3.8 Ph 1 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6958	6.8263	8.4792	0.0116		0.4000	0.4000		0.3680	0.3680		1,123.1744	1,123.1744	0.3633		1,132.2559
Total	**0.6958**	**6.8263**	**8.4792**	**0.0116**		**0.4000**	**0.4000**		**0.3680**	**0.3680**		**1,123.1744**	**1,123.1744**	**0.3633**		**1,132.2559**

3.8 Ph 1 - Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1687	5.7740	1.4746	0.0161	0.4062	0.0110	0.4172	0.1169	0.0106	0.1275		1,731.6827	1,731.6827	0.1211		1,734.7097
Worker	0.7848	0.4918	5.9193	0.0189	1.9715	0.0133	1.9849	0.5230	0.0123	0.5352		1,882.9434	1,882.9434	0.0511		1,884.2218
Total	**0.9535**	**6.2658**	**7.3940**	**0.0350**	**2.3777**	**0.0244**	**2.4021**	**0.6399**	**0.0228**	**0.6627**		**3,614.6261**	**3,614.6261**	**0.1722**		**3,618.9316**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2604	5.0661	8.7591	0.0116		0.0189	0.0189		0.0189	0.0189	0.0000	1,123.1744	1,123.1744	0.3633		1,132.2559
Total	**0.2604**	**5.0661**	**8.7591**	**0.0116**		**0.0189**	**0.0189**		**0.0189**	**0.0189**	**0.0000**	**1,123.1744**	**1,123.1744**	**0.3633**		**1,132.2559**

3.8 Ph 1 - Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1687	5.7740	1.4746	0.0161	0.4062	0.0110	0.4172	0.1169	0.0106	0.1275		1,731.6827	1,731.6827	0.1211		1,734.7097
Worker	0.7848	0.4918	5.9193	0.0189	1.9715	0.0133	1.9849	0.5230	0.0123	0.5352		1,882.9434	1,882.9434	0.0511		1,884.2218
Total	**0.9535**	**6.2658**	**7.3940**	**0.0350**	**2.3777**	**0.0244**	**2.4021**	**0.6399**	**0.0228**	**0.6627**		**3,614.6261**	**3,614.6261**	**0.1722**		**3,618.9316**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

Integrate Below Market Rate Housing

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.7074	14.7657	40.5923	0.1311	10.5794	0.1268	10.7062	2.8278	0.1189	2.9467		13,303.7690	13,303.7690	0.7143		13,321.6269
Unmitigated	3.9718	16.3650	46.6332	0.1545	12.5942	0.1484	12.7426	3.3663	0.1393	3.5056		15,672.0407	15,672.0407	0.8219		15,692.5875

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,080.00	1,999.40	1833.00	5,805,403	4,876,674
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	2,080.00	1,999.40	1,833.00	5,805,403	4,876,674

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Non-Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Parking Lot	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Unenclosed Parking Structure	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
NaturalGas Unmitigated	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5291.71	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0571**	**0.4877**	**0.2075**	**3.1100e-003**		**0.0394**	**0.0394**		**0.0394**	**0.0394**		**622.5536**	**622.5536**	**0.0119**	**0.0114**	**626.2531**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5.29171	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0571**	**0.4877**	**0.2075**	**3.1100e-003**		**0.0394**	**0.0394**		**0.0394**	**0.0394**		**622.5536**	**622.5536**	**0.0119**	**0.0114**	**626.2531**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.4228	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189	0.0000	38.7072	38.7072	0.0374	0.0000	39.6412
Unmitigated	8.4228	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189	0.0000	38.7072	38.7072	0.0374	0.0000	39.6412

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0572					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6500	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189		38.7072	38.7072	0.0374		39.6412
Total	**8.4228**	**0.2477**	**21.4941**	**1.1400e-003**		**0.1189**	**0.1189**		**0.1189**	**0.1189**	**0.0000**	**38.7072**	**38.7072**	**0.0374**	**0.0000**	**39.6412**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0572					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6500	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189		38.7072	38.7072	0.0374		39.6412
Total	**8.4228**	**0.2477**	**21.4941**	**1.1400e-003**		**0.1189**	**0.1189**		**0.1189**	**0.1189**	**0.0000**	**38.7072**	**38.7072**	**0.0374**	**0.0000**	**39.6412**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Solana Highlands - Single Phase Construction Alternative

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	57.37	1000sqft	1.32	57,365.00	0
Other Non-Asphalt Surfaces	1.90	1000sqft	0.04	1,900.00	0
Parking Lot	272.00	Space	2.45	108,800.00	0
Unenclosed Parking Structure	50.60	1000sqft	1.16	50,600.00	0
Apartments Mid Rise	260.00	Dwelling Unit	6.84	326,156.00	744

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS

Land Use - project-specific land uses

Construction Phase - construction schedule per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Trips and VMT - trips per applicant

Demolition - demo quantities per applicant

Grading - grading quantities per applicant

Architectural Coating - SDAPCD Rule 67.0.1

Vehicle Trips - F&P 2016

Woodstoves - no fireplaces

Consumer Products - CalEEMod defaults.

Area Coating - SDAPCD Rule 67.0.1

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - water use per applicant

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - All construction equipment will meet Tier 4 Interim engine standards except air compressors and pavers which will be Tier 3.

Mobile Land Use Mitigation -

Water Mitigation -

Waste Mitigation - AB 341

Solana Highlands - Single Phase Construction Alternative - San Diego County, Winter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 3

Solana Highlands - Single Phase Construction Alternative - San Diego County, Winter

tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstructionPhase	NumDays	20.00	66.00
tblConstructionPhase	NumDays	30.00	45.00
tblConstructionPhase	NumDays	30.00	45.00
tblConstructionPhase	NumDays	30.00	44.00
tblConstructionPhase	NumDays	20.00	64.00
tblFireplaces	NumberGas	143.00	0.00
tblFireplaces	NumberNoFireplace	26.00	0.00
tblFireplaces	NumberWood	91.00	0.00
tblGrading	AcresOfGrading	56.25	270.00
tblGrading	AcresOfGrading	56.25	112.50
tblGrading	AcresOfGrading	55.00	110.00
tblGrading	MaterialExported	0.00	19,500.00
tblLandUse	LandUseSquareFeet	57,370.00	57,365.00
tblLandUse	LandUseSquareFeet	260,000.00	326,156.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
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tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
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tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
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tblOffRoadEquipment	UsageHours	8.00	4.00

tblOffRoadEquipment	UsageHours	8.00	4.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	720.49	536.36
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
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tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
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tblTripsAndVMT	HaulingTripNumber	803.00	794.00
tblTripsAndVMT	HaulingTripNumber	2,438.00	7,334.00
tblTripsAndVMT	HaulingTripNumber	0.00	7,334.00
tblTripsAndVMT	HaulingTripNumber	0.00	7,332.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	64.00	60.00
tblTripsAndVMT	WorkerTripNumber	10.00	36.00
tblTripsAndVMT	WorkerTripNumber	15.00	36.00
tblTripsAndVMT	WorkerTripNumber	15.00	36.00
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tblTripsAndVMT	WorkerTripNumber	56.00	36.00
tblTripsAndVMT	WorkerTripNumber	279.00	240.00
tblVehicleTrips	ST_TR	6.39	7.69
tblVehicleTrips	SU_TR	5.86	7.05
tblVehicleTrips	WD_TR	6.65	8.00

tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	16,940,046.66	16,008,460.00
tblWater	OutdoorWaterUseRate	10,679,594.63	3,377,428.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	13.00	0.00
tblWoodstoves	NumberNoncatalytic	13.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.3195	90.4050	33.9402	0.2312	14.4273	1.3019	15.7293	3.7168	1.2065	4.9232	0.0000	24,877.3065	24,877.3065	2.8479	0.0000	24,948.5050
2021	48.3030	112.9942	68.2185	0.2895	87.0944	2.7358	88.2777	22.0693	2.5398	23.1656	0.0000	30,601.1911	30,601.1911	4.3616	0.0000	30,710.2317
2022	1.7658	13.1327	15.6731	0.0450	2.3777	0.4248	2.8026	0.6399	0.3913	1.0312	0.0000	4,577.4516	4,577.4516	0.5400	0.0000	4,590.9502
Maximum	**48.3030**	**112.9942**	**68.2185**	**0.2895**	**87.0944**	**2.7358**	**88.2777**	**22.0693**	**2.5398**	**23.1656**	**0.0000**	**30,601.1911**	**30,601.1911**	**4.3616**	**0.0000**	**30,710.2317**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.6222	75.6374	35.7579	0.2312	9.2381	0.2900	9.5281	2.4235	0.2796	2.7031	0.0000	24,877.3065	24,877.3065	2.8479	0.0000	24,948.5050
2021	44.8017	94.7032	75.9699	0.2895	83.9801	0.9357	84.2415	21.0015	0.9260	21.2537	0.0000	30,601.1911	30,601.1911	4.3616	0.0000	30,710.2317
2022	1.3304	11.3724	15.9530	0.0450	2.3777	0.0438	2.4215	0.6399	0.0422	0.6821	0.0000	4,577.4516	4,577.4516	0.5400	0.0000	4,590.9502
Maximum	**44.8017**	**94.7032**	**75.9699**	**0.2895**	**83.9801**	**0.9357**	**84.2415**	**21.0015**	**0.9260**	**21.2537**	**0.0000**	**30,601.1911**	**30,601.1911**	**4.3616**	**0.0000**	**30,710.2317**

Solana Highlands - Single Phase Construction Alternative - San Diego County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**10.36**	**16.08**	**-8.36**	**0.00**	**7.99**	**71.55**	**9.94**	**8.93**	**69.84**	**15.39**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.4228	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189	0.0000	38.7072	38.7072	0.0374	0.0000	39.6412
Energy	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Mobile	3.8652	16.8727	45.8971	0.1465	12.5942	0.1494	12.7436	3.3663	0.1402	3.5065		14,860.9429	14,860.9429	0.8240		14,881.5419
Total	**12.3450**	**17.6081**	**67.5987**	**0.1507**	**12.5942**	**0.3077**	**12.9019**	**3.3663**	**0.2986**	**3.6649**	**0.0000**	**15,522.2036**	**15,522.2036**	**0.8733**	**0.0114**	**15,547.4362**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.4228	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189	0.0000	38.7072	38.7072	0.0374	0.0000	39.6412
Energy	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Mobile	3.6057	15.1758	40.3705	0.1243	10.5794	0.1278	10.7072	2.8278	0.1199	2.9476		12,610.8346	12,610.8346	0.7197		12,628.8274
Total	**12.0856**	**15.9111**	**62.0721**	**0.1285**	**10.5794**	**0.2861**	**10.8655**	**2.8278**	**0.2782**	**3.1060**	**0.0000**	**13,272.0953**	**13,272.0953**	**0.7690**	**0.0114**	**13,294.7216**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.10**	**9.64**	**8.18**	**14.72**	**16.00**	**7.04**	**15.78**	**16.00**	**6.82**	**15.25**	**0.00**	**14.50**	**14.50**	**11.94**	**0.00**	**14.49**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Ph 1 - Demolition	Demolition	6/1/2020	8/31/2020	5	66	
2	Ph 1 - Grading - 1	Grading	9/1/2020	11/2/2020	5	45	
3	Ph 1 - Grading - 2	Grading	11/3/2020	1/4/2021	5	45	
4	Ph 1 - Grading - 3	Grading	1/5/2021	3/5/2021	5	44	
5	Ph 1 - Paving	Paving	3/1/2021	5/27/2021	5	64	
6	Ph 1 - Architectural Coating	Architectural Coating	3/1/2021	5/27/2021	5	64	
7	Ph 1 - Building Construction	Building Construction	3/6/2021	5/30/2022	5	321	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.97

Residential Indoor: 660,466; Residential Outdoor: 220,155; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 13,120 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Ph 1 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 1 - Demolition	Excavators	1	5.00	158	0.38
Ph 1 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40

Ph 1 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading - 1	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 1	Graders	0	8.00	187	0.41
Ph 1 - Grading - 1	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 1	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 1	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading - 2	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 2	Graders	0	8.00	187	0.41
Ph 1 - Grading - 2	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 2	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 2	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading - 3	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 3	Graders	0	8.00	187	0.41
Ph 1 - Grading - 3	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 3	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 3	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Paving	Pavers	4	8.00	130	0.42
Ph 1 - Paving	Paving Equipment	4	8.00	132	0.36
Ph 1 - Paving	Rollers	4	8.00	80	0.38
Ph 1 - Architectural Coating	Air Compressors	2	6.00	78	0.48
Ph 1 - Building Construction	Cranes	0	7.00	231	0.29
Ph 1 - Building Construction	Forklifts	5	4.00	89	0.20
Ph 1 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 1 - Building Construction	Tractors/Loaders/Backhoes	5	4.00	97	0.37
Ph 1 - Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Solana Highlands - Single Phase Construction Alternative - San Diego County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Ph 1 - Demolition	4	36.00	6.00	794.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 1	6	36.00	0.00	7,334.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 2	6	36.00	0.00	7,334.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 3	6	36.00	0.00	7,332.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Paving	12	36.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Architectural Coating	2	36.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Building Construction	10	240.00	60.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6650	0.0000	2.6650	0.4036	0.0000	0.4036			0.0000			0.0000
Off-Road	1.3374	13.8927	7.3138	0.0133		0.6946	0.6946		0.6390	0.6390		1,290.3008	1,290.3008	0.4173		1,300.7335
Total	**1.3374**	**13.8927**	**7.3138**	**0.0133**	**2.6650**	**0.6946**	**3.3596**	**0.4036**	**0.6390**	**1.0426**		**1,290.3008**	**1,290.3008**	**0.4173**		**1,300.7335**

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1460	4.8630	1.2080	0.0146	0.3467	0.0175	0.3642	0.0950	0.0167	0.1117		1,592.1676	1,592.1676	0.1374		1,595.6031
Vendor	0.0235	0.6760	0.1913	1.6000e-003	0.0406	3.3700e-003	0.0440	0.0117	3.2300e-003	0.0149		171.8773	171.8773	0.0138		172.2231
Worker	0.1496	0.0999	0.9621	2.8600e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		284.8075	284.8075	8.5700e-003		285.0219
Total	**0.3191**	**5.6390**	**2.3613**	**0.0190**	**0.6830**	**0.0229**	**0.7060**	**0.1851**	**0.0219**	**0.2070**		**2,048.8525**	**2,048.8525**	**0.1598**		**2,052.8481**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1993	0.0000	1.1993	0.1816	0.0000	0.1816			0.0000			0.0000
Off-Road	0.2139	4.3481	8.1504	0.0133		0.0218	0.0218		0.0218	0.0218	0.0000	1,290.3008	1,290.3008	0.4173		1,300.7335
Total	**0.2139**	**4.3481**	**8.1504**	**0.0133**	**1.1993**	**0.0218**	**1.2210**	**0.1816**	**0.0218**	**0.2034**	**0.0000**	**1,290.3008**	**1,290.3008**	**0.4173**		**1,300.7335**

3.2 Ph 1 - Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1460	4.8630	1.2080	0.0146	0.3467	0.0175	0.3642	0.0950	0.0167	0.1117		1,592.1676	1,592.1676	0.1374		1,595.6031
Vendor	0.0235	0.6760	0.1913	1.6000e-003	0.0406	3.3700e-003	0.0440	0.0117	3.2300e-003	0.0149		171.8773	171.8773	0.0138		172.2231
Worker	0.1496	0.0999	0.9621	2.8600e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		284.8075	284.8075	8.5700e-003		285.0219
Total	**0.3191**	**5.6390**	**2.3613**	**0.0190**	**0.6830**	**0.0229**	**0.7060**	**0.1851**	**0.0219**	**0.2070**		**2,048.8525**	**2,048.8525**	**0.1598**		**2,052.8481**

3.3 Ph 1 - Grading - 1 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.4349	0.0000	9.4349	2.3514	0.0000	2.3514			0.0000			0.0000
Off-Road	2.1919	24.4246	16.6137	0.0312		1.0631	1.0631		0.9780	0.9780		3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**2.1919**	**24.4246**	**16.6137**	**0.0312**	**9.4349**	**1.0631**	**10.4980**	**2.3514**	**0.9780**	**3.3294**		**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.3 Ph 1 - Grading - 1 - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9780	65.8805	16.3644	0.1971	4.6967	0.2368	4.9334	1.2870	0.2265	1.5135		21,569.5266	21,569.5266	1.8617		21,616.0684
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1496	0.0999	0.9621	2.8600e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		284.8075	284.8075	8.5700e-003		285.0219
Total	**2.1276**	**65.9804**	**17.3265**	**0.2000**	**4.9924**	**0.2388**	**5.2312**	**1.3654**	**0.2284**	**1.5938**		**21,854.3341**	**21,854.3341**	**1.8702**		**21,901.0903**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.2457	0.0000	4.2457	1.0581	0.0000	1.0581			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**4.2457**	**0.0512**	**4.2969**	**1.0581**	**0.0512**	**1.1093**	**0.0000**	**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.3 Ph 1 - Grading - 1 - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9780	65.8805	16.3644	0.1971	4.6967	0.2368	4.9334	1.2870	0.2265	1.5135		21,569.5266	21,569.5266	1.8617		21,616.0684
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1496	0.0999	0.9621	2.8600e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		284.8075	284.8075	8.5700e-003		285.0219
Total	**2.1276**	**65.9804**	**17.3265**	**0.2000**	**4.9924**	**0.2388**	**5.2312**	**1.3654**	**0.2284**	**1.5938**		**21,854.3341**	**21,854.3341**	**1.8702**		**21,901.0903**

3.4 Ph 1 - Grading - 2 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.6623	0.0000	5.6623	1.9414	0.0000	1.9414			0.0000			0.0000
Off-Road	2.1919	24.4246	16.6137	0.0312		1.0631	1.0631		0.9780	0.9780		3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**2.1919**	**24.4246**	**16.6137**	**0.0312**	**5.6623**	**1.0631**	**6.7254**	**1.9414**	**0.9780**	**2.9194**		**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.4 Ph 1 - Grading - 2 - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9780	65.8805	16.3644	0.1971	4.8620	0.2368	5.0988	1.3275	0.2265	1.5541		21,569.5266	21,569.5266	1.8617		21,616.0684
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1496	0.0999	0.9621	2.8600e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		284.8075	284.8075	8.5700e-003		285.0219
Total	**2.1276**	**65.9804**	**17.3265**	**0.2000**	**5.1578**	**0.2388**	**5.3966**	**1.4060**	**0.2284**	**1.6344**		**21,854.3341**	**21,854.3341**	**1.8702**		**21,901.0903**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5480	0.0000	2.5480	0.8736	0.0000	0.8736			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**2.5480**	**0.0512**	**2.5992**	**0.8736**	**0.0512**	**0.9248**	**0.0000**	**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.4 Ph 1 - Grading - 2 - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9780	65.8805	16.3644	0.1971	4.8620	0.2368	5.0988	1.3275	0.2265	1.5541		21,569.5266	21,569.5266	1.8617		21,616.0684
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1496	0.0999	0.9621	2.8600e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		284.8075	284.8075	8.5700e-003		285.0219
Total	**2.1276**	**65.9804**	**17.3265**	**0.2000**	**5.1578**	**0.2388**	**5.3966**	**1.4060**	**0.2284**	**1.6344**		**21,854.3341**	**21,854.3341**	**1.8702**		**21,901.0903**

3.4 Ph 1 - Grading - 2 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.6623	0.0000	5.6623	1.9414	0.0000	1.9414			0.0000			0.0000
Off-Road	2.0651	22.5038	15.9946	0.0312		0.9731	0.9731		0.8953	0.8953		3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**2.0651**	**22.5038**	**15.9946**	**0.0312**	**5.6623**	**0.9731**	**6.6354**	**1.9414**	**0.8953**	**2.8367**		**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.4 Ph 1 - Grading - 2 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8589	59.9797	16.2254	0.1941	81.1364	0.2082	81.3445	20.0494	0.1992	20.2486		21,295.8493	21,295.8493	1.8519		21,342.1463
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1412	0.0908	0.8976	2.7600e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		275.2371	275.2371	7.9100e-003		275.4348
Total	**2.0001**	**60.0705**	**17.1229**	**0.1969**	**81.4321**	**0.2102**	**81.6423**	**20.1279**	**0.2010**	**20.3289**		**21,571.0864**	**21,571.0864**	**1.8598**		**21,617.5811**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5480	0.0000	2.5480	0.8736	0.0000	0.8736			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**2.5480**	**0.0512**	**2.5992**	**0.8736**	**0.0512**	**0.9248**	**0.0000**	**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.4 Ph 1 - Grading - 2 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8589	59.9797	16.2254	0.1941	81.1364	0.2082	81.3445	20.0494	0.1992	20.2486		21,295.8493	21,295.8493	1.8519		21,342.1463
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1412	0.0908	0.8976	2.7600e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		275.2371	275.2371	7.9100e-003		275.4348
Total	**2.0001**	**60.0705**	**17.1229**	**0.1969**	**81.4321**	**0.2102**	**81.6423**	**20.1279**	**0.2010**	**20.3289**		**21,571.0864**	**21,571.0864**	**1.8598**		**21,617.5811**

3.5 Ph 1 - Grading - 3 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.6623	0.0000	5.6623	1.9414	0.0000	1.9414			0.0000			0.0000
Off-Road	2.0651	22.5038	15.9946	0.0312		0.9731	0.9731		0.8953	0.8953		3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**2.0651**	**22.5038**	**15.9946**	**0.0312**	**5.6623**	**0.9731**	**6.6354**	**1.9414**	**0.8953**	**2.8367**		**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.5 Ph 1 - Grading - 3 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9007	61.3261	16.5896	0.1985	4.8021	0.2128	5.0150	1.3158	0.2036	1.5195		21,773.9064	21,773.9064	1.8935		21,821.2428
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1412	0.0908	0.8976	2.7600e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		275.2371	275.2371	7.9100e-003		275.4348
Total	**2.0419**	**61.4169**	**17.4872**	**0.2012**	**5.0978**	**0.2149**	**5.3127**	**1.3943**	**0.2055**	**1.5998**		**22,049.1435**	**22,049.1435**	**1.9014**		**22,096.6776**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5480	0.0000	2.5480	0.8736	0.0000	0.8736			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**2.5480**	**0.0512**	**2.5992**	**0.8736**	**0.0512**	**0.9248**	**0.0000**	**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.5 Ph 1 - Grading - 3 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9007	61.3261	16.5896	0.1985	4.8021	0.2128	5.0150	1.3158	0.2036	1.5195		21,773.9064	21,773.9064	1.8935		21,821.2428
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1412	0.0908	0.8976	2.7600e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		275.2371	275.2371	7.9100e-003		275.4348
Total	**2.0419**	**61.4169**	**17.4872**	**0.2012**	**5.0978**	**0.2149**	**5.3127**	**1.3943**	**0.2055**	**1.5998**		**22,049.1435**	**22,049.1435**	**1.9014**		**22,096.6776**

3.6 Ph 1 - Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5111	25.8382	29.3065	0.0456		1.3555	1.3555		1.2470	1.2470		4,414.4217	4,414.4217	1.4277		4,450.1146
Paving	0.1543					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.6654**	**25.8382**	**29.3065**	**0.0456**		**1.3555**	**1.3555**		**1.2470**	**1.2470**		**4,414.4217**	**4,414.4217**	**1.4277**		**4,450.1146**

3.6 Ph 1 - Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1412	0.0908	0.8976	2.7600e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		275.2371	275.2371	7.9100e-003		275.4348
Total	**0.1412**	**0.0908**	**0.8976**	**2.7600e-003**	**0.2957**	**2.0400e-003**	**0.2978**	**0.0784**	**1.8800e-003**	**0.0803**		**275.2371**	**275.2371**	**7.9100e-003**		**275.4348**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8993	20.7338	34.5913	0.0456		0.4754	0.4754		0.4754	0.4754	0.0000	4,414.4217	4,414.4217	1.4277		4,450.1146
Paving	0.1543					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0536**	**20.7338**	**34.5913**	**0.0456**		**0.4754**	**0.4754**		**0.4754**	**0.4754**	**0.0000**	**4,414.4217**	**4,414.4217**	**1.4277**		**4,450.1146**

3.6 Ph 1 - Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1412	0.0908	0.8976	2.7600e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		275.2371	275.2371	7.9100e-003		275.4348
Total	**0.1412**	**0.0908**	**0.8976**	**2.7600e-003**	**0.2957**	**2.0400e-003**	**0.2978**	**0.0784**	**1.8800e-003**	**0.0803**		**275.2371**	**275.2371**	**7.9100e-003**		**275.4348**

3.7 Ph 1 - Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	40.8103					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4378	3.0537	3.6351	5.9400e-003		0.1882	0.1882		0.1882	0.1882		562.8961	562.8961	0.0386		563.8618
Total	**41.2481**	**3.0537**	**3.6351**	**5.9400e-003**		**0.1882**	**0.1882**		**0.1882**	**0.1882**		**562.8961**	**562.8961**	**0.0386**		**563.8618**

3.7 Ph 1 - Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1412	0.0908	0.8976	2.7600e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		275.2371	275.2371	7.9100e-003		275.4348
Total	**0.1412**	**0.0908**	**0.8976**	**2.7600e-003**	**0.2957**	**2.0400e-003**	**0.2978**	**0.0784**	**1.8800e-003**	**0.0803**		**275.2371**	**275.2371**	**7.9100e-003**		**275.4348**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	40.8103					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0386		563.8618
Total	**40.9292**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0386**		**563.8618**

3.7 Ph 1 - Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1412	0.0908	0.8976	2.7600e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		275.2371	275.2371	7.9100e-003		275.4348
Total	**0.1412**	**0.0908**	**0.8976**	**2.7600e-003**	**0.2957**	**2.0400e-003**	**0.2978**	**0.0784**	**1.8800e-003**	**0.0803**		**275.2371**	**275.2371**	**7.9100e-003**		**275.4348**

3.8 Ph 1 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7915	7.6873	8.5702	0.0116		0.4887	0.4887		0.4496	0.4496		1,122.3273	1,122.3273	0.3630		1,131.4019
Total	**0.7915**	**7.6873**	**8.5702**	**0.0116**		**0.4887**	**0.4887**		**0.4496**	**0.4496**		**1,122.3273**	**1,122.3273**	**0.3630**		**1,131.4019**

3.8 Ph 1 - Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1913	6.0935	1.7337	0.0158	0.4062	0.0134	0.4195	0.1169	0.0128	0.1297		1,702.9158	1,702.9158	0.1327		1,706.2324
Worker	0.9414	0.6054	5.9838	0.0184	1.9715	0.0136	1.9852	0.5230	0.0126	0.5355		1,834.9142	1,834.9142	0.0527		1,836.2321
Total	**1.1326**	**6.6989**	**7.7175**	**0.0343**	**2.3777**	**0.0270**	**2.4047**	**0.6399**	**0.0253**	**0.6652**		**3,537.8300**	**3,537.8300**	**0.1854**		**3,542.4645**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2604	5.0661	8.7591	0.0116		0.0189	0.0189		0.0189	0.0189	0.0000	1,122.3273	1,122.3273	0.3630		1,131.4018
Total	**0.2604**	**5.0661**	**8.7591**	**0.0116**		**0.0189**	**0.0189**		**0.0189**	**0.0189**	**0.0000**	**1,122.3273**	**1,122.3273**	**0.3630**		**1,131.4018**

3.8 Ph 1 - Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1913	6.0935	1.7337	0.0158	0.4062	0.0134	0.4195	0.1169	0.0128	0.1297		1,702.9158	1,702.9158	0.1327		1,706.2324
Worker	0.9414	0.6054	5.9838	0.0184	1.9715	0.0136	1.9852	0.5230	0.0126	0.5355		1,834.9142	1,834.9142	0.0527		1,836.2321
Total	**1.1326**	**6.6989**	**7.7175**	**0.0343**	**2.3777**	**0.0270**	**2.4047**	**0.6399**	**0.0253**	**0.6652**		**3,537.8300**	**3,537.8300**	**0.1854**		**3,542.4645**

3.8 Ph 1 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6958	6.8263	8.4792	0.0116		0.4000	0.4000		0.3680	0.3680		1,123.1744	1,123.1744	0.3633		1,132.2559
Total	**0.6958**	**6.8263**	**8.4792**	**0.0116**		**0.4000**	**0.4000**		**0.3680**	**0.3680**		**1,123.1744**	**1,123.1744**	**0.3633**		**1,132.2559**

3.8 Ph 1 - Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1779	5.7544	1.6415	0.0157	0.4062	0.0115	0.4177	0.1169	0.0110	0.1279		1,686.6157	1,686.6157	0.1284		1,689.8264
Worker	0.8921	0.5519	5.5524	0.0177	1.9715	0.0133	1.9849	0.5230	0.0123	0.5352		1,767.6614	1,767.6614	0.0483		1,768.8680
Total	**1.0700**	**6.3063**	**7.1939**	**0.0334**	**2.3777**	**0.0248**	**2.4026**	**0.6399**	**0.0233**	**0.6632**		**3,454.2771**	**3,454.2771**	**0.1767**		**3,458.6944**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2604	5.0661	8.7591	0.0116		0.0189	0.0189		0.0189	0.0189	0.0000	1,123.1744	1,123.1744	0.3633		1,132.2559
Total	**0.2604**	**5.0661**	**8.7591**	**0.0116**		**0.0189**	**0.0189**		**0.0189**	**0.0189**	**0.0000**	**1,123.1744**	**1,123.1744**	**0.3633**		**1,132.2559**

3.8 Ph 1 - Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1779	5.7544	1.6415	0.0157	0.4062	0.0115	0.4177	0.1169	0.0110	0.1279		1,686.6157	1,686.6157	0.1284		1,689.8264
Worker	0.8921	0.5519	5.5524	0.0177	1.9715	0.0133	1.9849	0.5230	0.0123	0.5352		1,767.6614	1,767.6614	0.0483		1,768.8680
Total	**1.0700**	**6.3063**	**7.1939**	**0.0334**	**2.3777**	**0.0248**	**2.4026**	**0.6399**	**0.0233**	**0.6632**		**3,454.2771**	**3,454.2771**	**0.1767**		**3,458.6944**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

Integrate Below Market Rate Housing

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.6057	15.1758	40.3705	0.1243	10.5794	0.1278	10.7072	2.8278	0.1199	2.9476		12,610.8346	12,610.8346	0.7197		12,628.8274
Unmitigated	3.8652	16.8727	45.8971	0.1465	12.5942	0.1494	12.7436	3.3663	0.1402	3.5065		14,860.9429	14,860.9429	0.8240		14,881.5419

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,080.00	1,999.40	1833.00	5,805,403	4,876,674
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	2,080.00	1,999.40	1,833.00	5,805,403	4,876,674

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Non-Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Parking Lot	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Unenclosed Parking Structure	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
NaturalGas Unmitigated	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5291.71	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0571**	**0.4877**	**0.2075**	**3.1100e-003**		**0.0394**	**0.0394**		**0.0394**	**0.0394**		**622.5536**	**622.5536**	**0.0119**	**0.0114**	**626.2531**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5.29171	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0571**	**0.4877**	**0.2075**	**3.1100e-003**		**0.0394**	**0.0394**		**0.0394**	**0.0394**		**622.5536**	**622.5536**	**0.0119**	**0.0114**	**626.2531**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.4228	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189	0.0000	38.7072	38.7072	0.0374	0.0000	39.6412
Unmitigated	8.4228	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189	0.0000	38.7072	38.7072	0.0374	0.0000	39.6412

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0572					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6500	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189		38.7072	38.7072	0.0374		39.6412
Total	**8.4228**	**0.2477**	**21.4941**	**1.1400e-003**		**0.1189**	**0.1189**		**0.1189**	**0.1189**	**0.0000**	**38.7072**	**38.7072**	**0.0374**	**0.0000**	**39.6412**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0572					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6500	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189		38.7072	38.7072	0.0374		39.6412
Total	**8.4228**	**0.2477**	**21.4941**	**1.1400e-003**		**0.1189**	**0.1189**		**0.1189**	**0.1189**	**0.0000**	**38.7072**	**38.7072**	**0.0374**	**0.0000**	**39.6412**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX C

Construction Health Risk Assessment

HEALTH RISK ASSESSMENT
for the
Solana Highlands Revitalization Project
Solana Beach, California

Prepared for:

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SUMMARY

The Solana Highlands Revitalization Project (proposed project) involves demolition of the existing development on site (which includes 194 multifamily residential units in 16 buildings and 4 single-family residences) and construction of 260 new multifamily residential units in 24 buildings, covered and open parking, landscaped areas and open space.

The purpose of the health risk assessment (HRA) is to determine the potential cancer risk and non-cancer health impacts to the closest sensitive receptors of the proposed project and the Single Phase Construction Alternative (Alternative) due to diesel particulate matter (DPM) emissions resulting from diesel construction equipment and on-site diesel trucks.

Dispersion modeling was conducted using the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD). The San Diego Air Pollution Control District's (SDAPCD's) *Supplemental Guidelines for Submission of Air Toxics "Hot Spots" Program Health Risk Assessments (SDAPCD 2015)* and the Office of Environmental Health Hazard Assessment's (OEHHA's) *Air Toxics Hot Spots Program Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments* (2015 Risk Assessment Guidelines Manual; OEHHA 2015) were used to prepare this HRA. The analysis considers a 3-year exposure scenario consistent with guidance from the SDAPCD and the construction schedule.

The HRA finds that the maximally exposed on-site receptor of the proposed project would be exposed to a cancer risk of approximately 57.10 in 1 million, which exceeds the SDAPCD's evaluation criterion and therefore would result in a potentially significant impact. The results of the Alternative showed the maximally exposed off-site receptor would be exposed to a cancer risk of approximately 92.20 in 1 million, and therefore would also result in a potentially significant impact. Mitigation Measure (MM) AQ-1 was included to reduce the emissions of DPM from the project and thus reduce risk to project receptors. With implementation of MM-AQ-1, the HRA finds that maximally exposed receptor of the proposed project would be exposed to a cancer risk of approximately 6.21 in 1 million, which is less than SDAPCD's evaluation criterion. Similarly, with MM-AQ-1 the results of the Alternative showed the maximally exposed off-site receptor would be exposed to a cancer risk of approximately 9.68 in 1 million. Also, the chronic hazard index was less than 1 prior to mitigation for both the proposed project and the Alternative, which is less than the SDAPCD's evaluation criterion. It should be noted that there is no reference exposure level for acute health impacts from DPM and thus acute risk was not evaluated. Therefore, the proposed project and Alternative would result a less than significant impact with mitigation.

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1 INTRODUCTION

1.1 Purpose

In support of the air quality technical report preparation, Dudek has prepared a health risk assessment (HRA) modeling analysis to estimate health risk impacts from construction of the Solana Highlands Revitalization Project (proposed project).

The analysis presented in this report uses air dispersion modeling methodology to evaluate potential ambient air quality impacts and public health risks associated with construction of the proposed project. Results of the modeling analysis are compared with the most recent California Environmental Quality Act (CEQA) significance thresholds established by the SDAPCD.

Per CEQA Guidelines Appendix G, the HRA directly addresses question (d): Would the project expose sensitive receptors to substantial pollutant concentrations?

Although the proposed project's construction activity is short-term and therefore unlikely to pose a risk of health impacts to the nearest sensitive receptors (the residents to the south and west of the proposed project site), in an abundance of caution, a voluntary HRA was performed.

1.2 Project Description

The proposed project involves demolition of the existing development on site (which includes 194 multifamily residential units in 16 buildings and 4 single-family residences) and construction of 260 new multifamily residential units in 24 buildings in the City of Solana Beach (City), California.

Residential buildings would range in height from two stories to three stories and would have a total of 121 one-bedroom units and 139 two-bedroom units. All units would have private outdoor space in the form of balconies (for upper-floor units) or patios (for ground-floor units), laundry facilities and storage space in all homes, and parking garages and surface parking. Proposed project amenities would include a recreation facility/clubhouse building and associated recreation facilities, such as a pool, Jacuzzi, barbecue areas, walking paths, and passive usable open space. The proposed project site would be broken into three neighborhood areas—Bungalow, Valley View, and Lifestyle. The Bungalow neighborhood would be two stories in height and would feature 24 one-bedroom/one-bathroom units and 48 two-bedroom/two-bathroom units. The Bungalow neighborhood would be located along South Nardo Avenue, with setbacks of a minimum of 25 feet from the property line. The Valley View neighborhood would all be three stories in height and would feature 47 one-bedroom/one-bathroom units and 51 two-bedroom/two-bathroom units. The Valley View neighborhood would be internal to the proposed

project site. The Lifestyle neighborhood would be three stories in height and would feature 45 one-bedroom/one-bathroom units and 49 two-bedroom/two-bathroom units. The Lifestyle neighborhood would be located along the southern edge and southeastern slope of the proposed project site toward Stevens Avenue. The proposed project location is provided in Figure 1.

1.3 Local Conditions

The proposed project site is located at 661 to 781 South Nardo Avenue in the City of Solana Beach in north coastal San Diego County (County), California. The proposed project site encompasses approximately 13.4 acres on three parcels (Assessor's Parcel Numbers 298-260-33, 298-164-22, and 298-281-10 (with listed address as 821 Stephens Avenue)). The proposed project is located in an urban setting and is surrounded by residential neighborhoods to the north, Solana Pointe Apartments to the northeast, commercial area to the east, single-family homes to the southeast, Turfwood Apartments to the south, and St. James Catholic Church and school campus to the west. Major circulation corridors surrounding the proposed project in less than a mile radius include Interstate 5 (I-5) and Stevens Avenue to the east, Via De La Valle to the south, Lomas Santa Fe Drive to the north, and Highway 101 to the west.

In a regional setting, the proposed project is approximately 0.75 mile east of the Pacific Ocean, approximately 20 miles northwest of downtown San Diego, approximately 4 miles south of the neighboring City of Encinitas, and approximately 4 miles west of the Fairbanks Ranch community.

1.3.1 Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Facilities and structures where these air pollution-sensitive people live or spend considerable amounts of time are known as sensitive receptors. Land uses where air pollution-sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses) (CARB 2005). SDAPCD considers schools (kindergarten through grade 12), daycare centers, nursing homes, retirement homes, health clinics, and hospitals within 2 kilometers of the facility as sensitive receptor land uses (SDAPCD 2015). The proposed project was assumed have residents' on site during construction. Both the proposed project and the Alternative have off-site residential (100 feet) sensitive receptors surrounding all sides of the project and a school (St. James Academy) to the west of the project site (50 feet).

SOURCE: BING Maps (Accessed in 2017); USGS 7.5-Minute Series - Del Mar Quadrangle.

FIGURE 1

Project Location

Health Risk Assessment for the Solana Highlands Revitalization Project

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1.4 Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$), and lead (Pb). These pollutants, as well as toxic air contaminants (TACs), are discussed in the following text.[1] In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.

Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Coarse particulate matter (PM_{10}) is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Fine particulate matter ($PM_{2.5}$) is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can form in the atmosphere from gases such as sulfur oxides (SO_x), nitrogen oxides (NO_x), and reactive organic gases (ROGs).

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as Pb, sulfates, and nitrates can cause lung damage directly or be absorbed into the blood stream, causing damage elsewhere in the body. Additionally, these substances can transport adsorbed gases such as chlorides or ammonium into

[1] The descriptions of each of the criteria air pollutants and associated health effects are based on the U.S. Environmental Protection Agency's (EPA's) Criteria Air Pollutants (EPA 2016) and the California Air Resources Board (CARB) Glossary of Air Pollutant Terms (CARB 2016).

the lungs, also causing injury. PM_{10} tends to collect in the upper portion of the respiratory system, whereas $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissue. Suspended particulates also damage and discolor surfaces on which they settle and produce haze and reduce regional visibility.

People with influenza, people with chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death as a result of breathing particulate matter. People with bronchitis can expect aggravated symptoms from breathing particulate matter. Children may experience a decline in lung function due to breathing PM_{10} and $PM_{2.5}$. Other groups considered sensitive are smokers, people who cannot breathe well through their noses, and exercising athletes (because many breathe through their mouths).

1.5 Toxic Air Contaminants

A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute (short term) and/or chronic (long term) non-cancer health effects. A toxic substance released into the air is considered a TAC. Examples include certain aromatic and chlorinated hydrocarbons, diesel particulate matter (DPM), certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources such as automobiles; and area sources such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ system and may be experienced either on acute or chronic exposure to a given TAC.

California's air toxics control program began in 1983 with the passage of the Toxic Air Contaminant Identification and Control Act, Assembly Bill (AB) 1807, better known as the Tanner Bill. The Tanner Bill established a regulatory process for the scientific and public review of individual toxic compounds. When a compound becomes listed as a TAC under the Tanner process, CARB normally establishes minimum statewide emission-control measures to be adopted by air quality management districts and air pollution control districts. By 1992, 18 of the 189 federal hazardous air pollutants had been listed by the CARB as state TACs. In April 1993, CARB added 171 substances to the state program to make the state TAC list equivalent to the federal list of hazardous air pollutants. In 1998, CARB designated diesel engine exhaust particulate matter (DPM) as a TAC (CARB 1998). The exhaust from diesel engines is a complex mixture of gases, vapors, and particles, many of which are known human carcinogens. DPM has established cancer risk factors and relative exposure values for long term chronic health hazard impacts. No short term, acute relative exposure values are established and regulated and are therefore not addressed in this assessment.

The second major component of California's air toxics program, supplementing the Tanner process, was provided by the passage of AB 2588, the Air Toxics "Hot Spots" Information and Assessment Act of 1987. AB 2588 currently regulates over 600 compounds, including all of the Tanner-designated TACs.

Additionally, Proposition 65, passed by California voters in 1986, required that a list of carcinogenic and reproductive toxicants found in the environment be compiled, the discharge of these toxicants into drinking water be prohibited, and warnings of public exposure by air, land, or water be posted if a significant adverse public health risk is posed. The emission of any of listed substances by a facility would require a public warning unless health risks could be demonstrated to be less than significant. For carcinogens, Proposition 65 defines the "no significant risk level" as the level of exposure that would result in an increased cancer risk of greater than 10 in 1 million over a 70-year lifetime. The "no significant risk level" is 1/1000 of the No Observable Effect Level for reproductive toxicants.

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines. The regulation is anticipated to result in an 80% decrease in statewide diesel health risk in 2020 compared with the diesel risk in 2000. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, On-Road Heavy Duty (New) Vehicle Program, In-Use Off-Road Diesel Vehicle Regulation, and New Off-Road Compression-Ignition (Diesel) Engines and Equipment program. These regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel powered equipment. Several Airborne Toxic Control Measures reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

1.6 Cancer Risk

Cancer risk is defined as the increase in lifetime probability (chance) of an individual developing cancer due to exposure to a carcinogenic compound, typically expressed as the increased probability in 1 million. The cancer risk from inhalation of a TAC is estimated by calculating the inhalation (and if applicable, ingestion) dose in units of milligrams/kilogram body weight per day based on an ambient concentration in units of micrograms per cubic meter ($\mu g/m^3$), breathing rate, and exposure period, and multiplying the dose by the inhalation cancer potency factor, expressed as (milligrams/kilogram body weight per day)[1].

Cancer risks are typically calculated for all carcinogenic TACs and summed to calculate the overall increase in cancer risk to an individual. The calculation procedure assumes that cancer

risk is proportional to concentrations at any level of exposure and that risks due to different carcinogens are additive. This approach is generally considered a conservative assumption at low doses and is consistent with the current OEHHA regulatory approach. Exposure to carcinogenic TACs does not imply that the exposed individual would contract cancer; rather, the cancer risk is a probability of developing cancer if other factors (e.g., heredity, exposure to environmental or workplace exposures that comprise the immune system, overall health) would result in an increased susceptibility to developing cancer.

1.7 Non-cancer Health Impacts

The non-cancer health impact of an inhaled TAC is measured by the hazard quotient, which is the ratio of the ambient concentration of a TAC in units of $\mu g/m^3$ divided by the reference exposure level (REL), also in units of $\mu g/m^3$. The REL is the concentration at or below which no adverse health effects are anticipated. The REL is typically based on health effects to a particular target organ system, such as the respiratory system, liver, or central nervous system. Hazard quotients of individual TACs are then summed for each target organ system to obtain a hazard index.

2 GUIDANCE AND THRESHOLDS

2.1 OEHHA Guidance

This report includes HRAs associated with construction emissions and emissions from diesel vehicles. All these risk assessments followed the methodologies prescribed in the California Environmental Protection Agency/OEHHA's *Air Toxics Hot Spots Program Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments* (OEHHA 2015), which was adopted in 2015 replacing the previous 2003 guidance manual.

The Children's Environmental Health Protection Act of 1999 (Senate Bill 25), which requires explicit consideration of infants and children in assessing risks from air toxics, required revisions of the methods for both non-cancer and cancer risk assessment and of the exposure assumptions in the 2003 OEHHA health risk assessment guidance manual. In response to SB 25, OEHHA released three technical support documents (TSDs) addressing RELs (OEHHA 2008), cancer potency (OEHHA 2009), and exposure assessment and stochastic analysis (OEHHA 2012) and adopted the revised health risk assessment guidance manual (OEHHA 2015). The TSD for RELs and continuing work to reevaluate TACs to ensure adequate protection for infants and children has led to revisions of RELs for approximately 10 chemicals and chemical families. The basic methodology for evaluating acute and chronic health effects using the RELs otherwise remained the same as in the previous guidance manual. Moreover, RELs are designed to protect the most sensitive individuals in the population, including infants and children, by selecting appropriate toxicological data and including margins of safety. Accordingly, the evaluation methods are assumed to protect children as well as other sensitive subpopulations (groups of more highly susceptible individuals) from adverse health effects in the event of exposure (OEHHA 2008).

The cancer risk methodology described in exposure assessment and stochastic analysis TSD and the OEHHA guidance manual accounts for the higher sensitivity of infants and children by applying age-specific breathing rates and age-sensitivity factors. According to the TSD, "Accounting for effects of early-in life exposure requires accounting for both the increased potency of early in life exposure to carcinogens and the greater exposure on a per [kilogram] body weight that occurs early in life due to behavioral and physiological differences between infants and children, and adults" (OEHHA 2012). As compared to the previous guidance, which relied on a single breathing rate for all ages, the revised guidance also includes age-specific breathing rates that reflect the differences between those for infants, children, and adults. The health risk assessments in this report use the Hotspots Analysis and Reporting Program, Version 2 (HARP 2), which incorporates RELs and cancer potency factors, which are periodically updated, and health risk calculations based on the 2015 OEHHA Risk Assessment Guidelines Manual. Accordingly,

these risk assessments evaluate and reflect conservative, health-protective methodologies to assess health impacts to adults as well as infants, children, and other sensitive subpopulations.

2.2 SDAPCD Guidance

SDAPCD's *Supplemental Guidelines for Submission of Air Toxics "Hot Spots" Program Health Risk Assessments* (SDAPCD 2015) provides guidance to perform HRAs within the San Diego Air Basin. Although the SDAPCD Guidance is specifically targeted towards health risk from air toxic emissions from stationary source operations, the thresholds were adapted here for informational purposes. SDAPCD's current thresholds of significance for TAC emissions from the operations of permitted and non-permitted sources are presented in Table 1. These stationary source thresholds were adapted to be used in this assessment.

Table 1
SDAPCD CEQA TAC Emissions Thresholds

Carcinogens	Non-Carcinogens
	Chronic
Maximally exposed individual risk equals or exceeds 10 in 1 million	Hazard Index equals or exceeds 1.0 for the maximally exposed individual

Source: SDAPCD 2015.
Notes: CEQA = California Environmental Quality Act; SDAPCD = San Diego Air Pollution Control District; TAC = toxic air contaminant

3 EMISSION CALCULATIONS

3.1 Methodology and Assumptions

Construction of the proposed project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and ROG off-gassing) and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Emissions from the construction phase of the proposed project were estimated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2.

Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on information provided by the Applicant. This HRA evaluated the risk from both the proposed project and the Single Phase Construction Alternative (Alternative). As they are two distinct projects and would not occur simultaneously, the following assumptions summarize for the emissions quantification basis for each project.

For purposes of estimating proposed project emissions, and based on information provided by the Applicant, it is assumed that construction of the proposed project would commence in June 2020 and would last approximately 38 months, ending in August 2023. The analysis contained herein is based on the following assumptions (duration of phases is approximate) are shown in Table 2.

Table 2
Proposed Project Construction Phasing Assumptions

Proposed Project Construction Phase	Construction Start Month/Year	Construction End Month/Year
Ph 1 - Demolition	06/2020	06/2020
Ph 1 - Grading	07/2020	09/2020
Ph 1 - Building Construction	09/2020	08/2021
Ph 2 - Demolition	06/2021	06/2021
Ph 2 - Grading	07/2021	09/2021
Ph 1 - Paving	07/2021	09/2021
Ph 1 - Architectural Coating	07/2021	09/2021
Ph 2 - Building Construction	09/2021	08/2022
Ph 3 - Demolition	06/2022	06/2022
Ph 3 - Grading	07/2022	08/2022
Ph 2 - Paving	07/2022	08/2022
Ph 2 - Architectural Coating	07/2022	08/2022
Ph 3 - Building Construction	09/2022	08/2023
Ph 3 - Paving	07/2023	08/2023
Ph 3 - Architectural Coating	07/2023	08/2023

Source: H.G. Fenton Company 2018

For purposes of estimating Alternative emissions, and based on information provided by the Applicant, it is assumed that construction of the Alternative would commence in June 2020 and would last approximately 24 months, ending in May 2021. The analysis contained herein is based on the following assumptions (duration of phases is approximate) are shown in Table 3.

Table 3
Single Phase Construction Alternative Construction Phasing Assumptions

Single Phase Construction Alternative Construction Phase	Construction Start Month/Year	Construction End Month/Year
Demolition	06/2020	08/2020
Grading	09/2020	03/2021
Paving	03/2021	05/2021
Building Construction	03/2021	05/2022
Architectural Coating	03/2021	05/2021

Source: H.G. Fenton Company 2018

For the analysis, it was generally assumed that heavy construction equipment would be operating at the site for 5 days per week (22 days per month), during construction. For the HRA and dispersion modeling, only on-site emissions were accounted for from haul and vendor diesel trucks.

3.2 Estimated Emissions

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts.

Construction emissions were calculated for the estimated worst-case day over the construction period associated with each phase and reported as the maximum daily emissions estimated during each year of construction. Construction schedule assumptions, including phase type, duration, and sequencing, were based on information provided by the Applicant and are intended to represent a reasonable scenario based on the best information available.

Construction would generate air pollutant emissions from entrained dust, off-road equipment, and vehicle emissions. Internal combustion engines used by construction equipment, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of ROG, NO_x, CO, PM_{10}, and $PM_{2.5}$. For the HRA, we are concerned with DPM emitted from exhaust from on-site construction equipment and diesel vehicles. To include on-site emissions from diesel haul and vendor trucks, they were conservatively assumed to operate for 0.25-miles on site.

Table 4 presents the estimated unmitigated annual construction PM_{10} emissions generated during construction of the proposed project. Details of the emission calculations are provided in Attachment A.

Table 4
Estimated Proposed Project Annual On-Site Construction Emissions – Exhaust Only

Year	PM_{10}
	Tons per year
2020	0.04
2021	0.07
2022	0.06
2023	0.03
Total	**0.20**

Notes: CO = carbon monoxide; NO_x = oxides of nitrogen; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SO_x = sulfur oxides; ROG = reactive organic compound
See Attachment A for complete results.

The estimated construction PM_{10} emissions from the Alternative are shown in Table 5.

Table 5
Estimated Single Phase Construction Alternative Annual On-Site Construction Emissions – Exhaust Only

Year	PM_{10}
	Tons per year
2020	0.07
2021	0.13
2022	0.02
Total	**0.22**

Notes: CO = carbon monoxide; NO_x = oxides of nitrogen; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SO_x = sulfur oxides; ROG = reactive organic compound
See Attachment A for complete results.

As shown in Table 5, PM_{10} emissions from the Alternative are slightly higher than that of the proposed project. This is due to an increased use of construction equipment in order to meet the compressed schedule. As shown in Section 6, HRA Results, the results of the HRA using the default construction emission factors in CalEEMod result in a potentially significance impact. As such, the following mitigation is included to reduce DPM emissions from construction equipment.

Mitigation Measure

AQ-1: To reduce the potential for health risks as a result of construction of the proposed project and Alternative the Applicant shall:

A. Prior to the start of construction activities, the project applicant, or its designee, shall ensure that all diesel-powered excavators, forklifts, paving equipment, rollers, rubber tired dozers, scrapers, and tractors/loaders/backhoes are powered with CARB certified Tier 4 Interim engines, except where the project applicant establishes to the satisfaction of the City that Tier 4 Interim equipment is not available.

- All other diesel-powered construction equipment will be classified as Tier 3 or higher, at a minimum, except where the project applicant establishes to the satisfaction of the City that Tier 3 equipment is not available.

In the case where the applicant is unable to secure a piece of equipment that meets the Tier 4 Interim requirement, the applicant may upgrade another piece of equipment to compensate (from Tier 4 Interim to Tier 4 Final).

Engine Tier requirements in accordance with this measure shall be incorporated on all construction plans. As the construction fleet details assumed for this analysis were based on best available data at the time of preparation (June 2018), construction fleet and operating scenarios may change once a contractor is selected prior to construction anticipated to be mid-2020.

B. Prior to the commencement of any demolition, grading, or construction activity on the project site, the applicant shall demonstrate that:

- The applicant will conduct a supplemental health risk assessment (HRA) to ensure that the health risk associated with the construction scenario at the time of construction is no greater risk than the 10 in one million stated in the EIR.

Mitigated Emissions

The proposed project emissions incorporating the tiered equipment as outlined in mitigation measure (MM) AQ-1 are shown in Table 6.

Table 6
Estimated Proposed Project Annual On-Site Mitigated Construction Emissions – Exhaust Only

Year	PM_{10}
	Tons per year
2020	0.00
2021	0.01
2022	0.01
2023	0.01
Total	**0.03**

Notes: CO = carbon monoxide; NO_x = oxides of nitrogen; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SO_x = sulfur oxides; ROG = reactive organic compound
See Attachment A for complete results.

The estimated mitigated construction emissions from the Alternative are shown in Table 7.

Table 7
Estimated Single Phase Construction Alternative Annual On-Site Mitigated Construction Emissions – Exhaust Only

Year	PM_{10}
	Tons per year
2020	0.00
2021	0.03
2022	0.00
Total	**0.03**

Notes: CO = carbon monoxide; NO_x = oxides of nitrogen; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SO_x = sulfur oxides; ROG = reactive organic compound
See Attachment A for complete results.

The proposed project currently includes and is designed to include application of minimum efficiency reporting value (MERV) 8 air filters, which reduce at least 60% of particulate emissions 3 to 10 microns in size, which includes PM_{10} (National Air Filtration Association 2017). To account for exposure of DPM inside and outside the residence for residents' on site during construction of the proposed project, the emissions incorporated an 87% time spent inside factor based on the CARB and University of California, Berkeley, study *Activity Patterns of California Residents* (CARB 1991). The mass emissions calculated using the CalEEMod were adjusted based on the efficiency of the air filters and the time spent inside for on-site residents. The emissions and exposure assumption for off-site residents in the proposed project and the Alternative were not adjusted as there is no basis for estimating filtration on surrounding residences. The Alternative would not have residents on site during construction. The calculated PM_{10} emissions, as shown in Section 3.2, were then used in the dispersion model, as explained in Section 4.

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4 MODELING METHODOLOGY

4.1 Dispersion Model

Dudek conducted a dispersion modeling analysis of PM_{10} emitted from diesel vehicles and equipment on the proposed project site for the HRA. The dispersion modeling was performed using the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD), View Version 9.6.1, which is the model SDAPCD recommends for atmospheric dispersion of emissions. AERMOD is a steady-state Gaussian plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of surface and elevated sources, building downwash, and simple and complex terrain (EPA 2017).

Dispersion of DPM was modeled using AERMOD, and then cancer risk and non-cancer health impacts subsequently using HARP 2, which implements the 2015 OEHHA age-weighting methodology for assessing TAC risks. Dudek evaluated the potential cancer and non-cancer health impacts from diesel exhaust on on-site and nearby residents using exposure periods appropriate to evaluate these emission increases. The health risk results were then compared to SDAPCD thresholds to assess significance. Although SDAPCD Guidance is specifically targeted towards health risk from air toxic emissions from stationary source operations, the thresholds were adapted here for informational purposes.

The HRA was performed as a precautionary measure to evaluate any risk to nearby and on-site sensitive receptors. Principal parameters of AERMOD for the proposed project and Alternative construction operations included the following:

- **Meteorological Data:** The latest 3-year meteorological data (2010–2012) for the Del Mar station (Station ID 3177) were provided by SDAPCD, and then input to AERMOD. A wind rose is provided for this station on Figure 2.
- **Urban and Rural Options:** Typically, urban areas have more surface roughness and structures and low-albedo surfaces that absorb more sunlight, and thus, more heat, relative to rural areas. However, according to SDAPCD guidelines, the rural dispersion option was selected due to the proposed project's proximity to the ocean.
- **Terrain Characteristics:** The terrain in the vicinity of the modeled proposed project site is generally flat. The elevation of the modeled site is approximately 35 meters above sea level. Digital elevation model files were imported into AERMOD so that complex terrain features were evaluated as appropriate (DEM 7.5 minute – 30 meter resolution).

- **Discrete Receptors:** A uniform Cartesian grid was placed over the proposed project site with 20-meter spacing (1,182 meters by 1,182 meters) and converted into discrete Cartesian receptors to represent existing residents' adjacent to the site. For on-site receptors, discrete Cartesian receptors were individually placed on site to represent both current residents and future on-site residents.
- **Source Equipment Operating Scenarios:** Air dispersion modeling of DPM emissions was conducted assuming the equipment would operate in accordance with the modeling scenario estimated in CalEEMod (Attachment A). The DPM emissions were modeled as a series of volume sources.
- **Source Release Characterizations:** For modeling operational emissions dispersion using AERMOD, it was assumed that the total site area would operate in accordance with the respective construction schedules. A unit emission rate of 1.0 gram per second was normalized over the number of volume sources for each AERMOD run.

Table 8 shows the release characteristics used in the AERMOD model.

Table 8
Volume Source Parameters for Health Risk Assessment

Parameter	Units	Value
Emission Rate	grams per second	1.0
Release Height[1]	meters	5.0
Length of Side[2]	meters	25.0
Initial Lateral Dimension[1]	meters	5.81
Initial Vertical Dimension[1]	meters	5.81

Notes:
1 Release height, initial lateral dimension, and initial vertical dimensions based off the Sacramento Metropolitan Air Quality Management District's (SMAQMD's) Dispersion Modeling of Construction Generated PM10 Emissions guidance (SMAQMD 2013)
2 Length of side based on discussion with SDAPCD staff (Pers. Comm. Reeves, B. 2018).

4.2 HRA Methodology

In March 2015 the OEHHA approved the new *Air Toxics Hot Spots Program Risk Guidance Manual for Preparation of Health Risk Assessments*. SDAPCD requires that all HRAs prepared for CEQA documents follow District policies in conjunction with the OEHHA guidance document. In order to implement the OEHHA guidance based on project information, the District has developed a 3-tiered approach where each successive tier is progressively more refined with each progressive level being less conservative.

SDAPCD's HRA Tier 1 approach is a screening assessment methodology that incorporates very conservative assumption methodologies when specific information about a project and its impact

locations to actual or assumed receptor locations are unknown. The Tier 2 option implements the AERMOD dispersion model and HARP 2 Air Dispersion Modeling and Risk Assessment Tool (ADMRT, Version 17320). The Tier 2 approach provides a more accurate analysis. Tier 2 requires specific information modeling input for sources and receptors that refine the Tier 1, screening assessment approach. Tier 3 (refined project specific exposure parameters) is used when specific exposure parameters information about the project and affected receptors is known.

Tier 3 cancer and non-cancer health risk calculations were performed using ground-level unity emission concentration (X/Q) input from AERMOD. This modeling established the emissions dispersion field to surrounding receptors from atmospheric influence of the proposed project emissions. The ground level concentrations (GLC) were then determined by multiplication of annual average emission rates and annually averaged X/Q values determined by AERMOD for the raised area source of emissions from construction activity. HARP2 then assessed the health risk impacts from exposure to DPM from construction emissions.

The HRA results presented in Section 6 reflect the latest OEHHA guidance. This assessment utilized the Tier 3 approach with project-specific information used for exposure. All receptors (on site and off site) were assumed to be residential and began exposure during the 3rd trimester of pregnancy. For on-site receptors (proposed project only), it was conservatively assumed that a residence would move from existing on-site buildings to newly constructed on-site buildings and thus would have the maximum exposure scenario. The emissions from the proposed project and Alternative were portioned out equally between each volume source.

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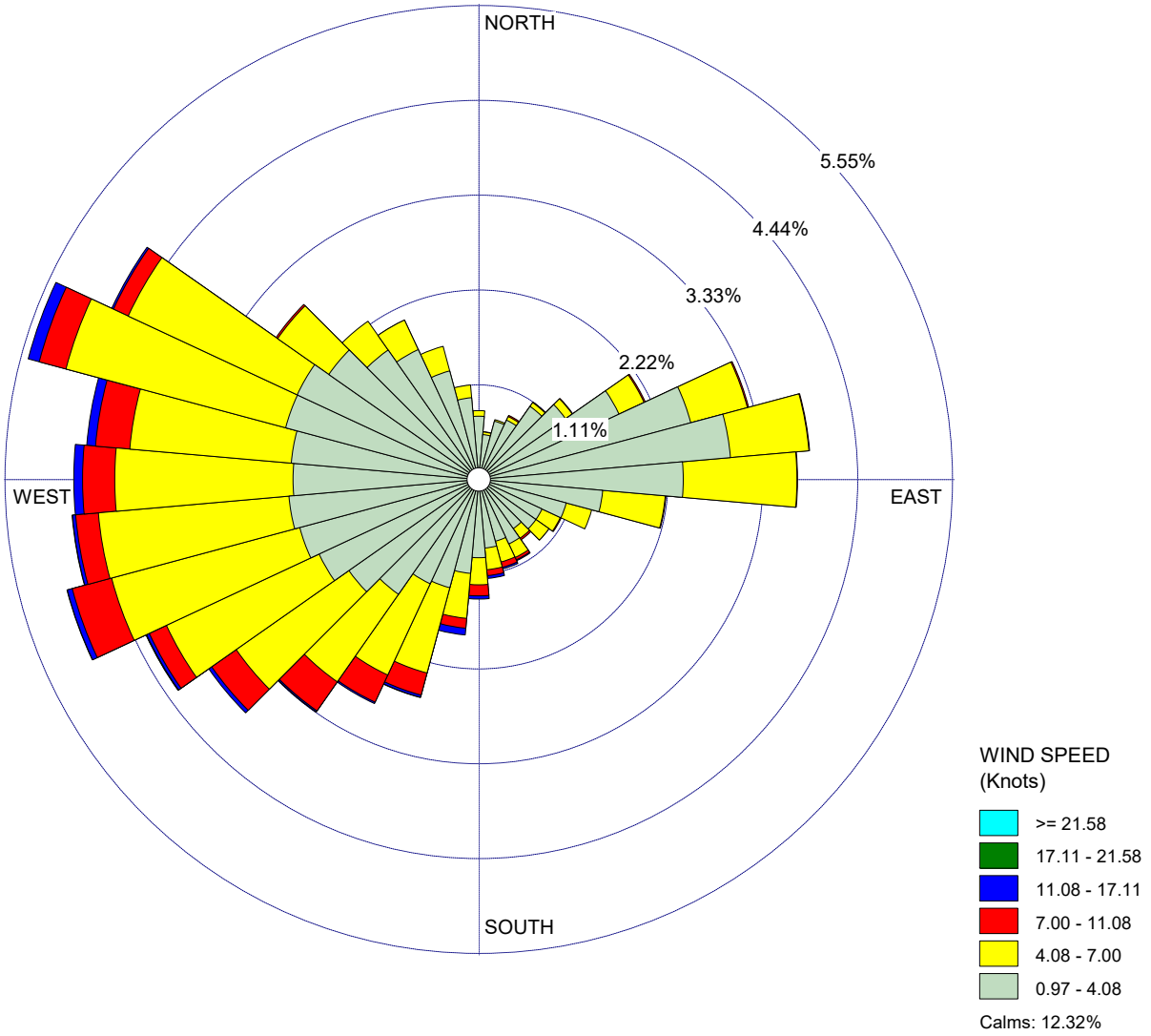
WIND ROSE PLOT:

Station #3177

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:	DATA PERIOD:	COMPANY NAME:	
	Start Date: 1/1/2010 - 00:00 **End Date: 12/31/2012 - 23:59**	MODELER:	
	CALM WINDS: **12.32%**	TOTAL COUNT: **26285 hrs.**	
	AVG. WIND SPEED: **3.32 Knots**	DATE: **6/11/2018**	PROJECT NO.:

WRPLOT View - Lakes Environmental Software

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5 HRA RESULTS

The cancer risk calculations were performed by multiplying the AERMOD-predicted DPM concentrations in $\mu g/m^3$ due to DPM emissions from trucks and construction equipment by the appropriate risk values.

The potential exposure pathway for DPM includes inhalation only. The potential exposure through other pathways (e.g., ingestion) requires substance and site-specific data, and the specific parameters for DPM are not known for these pathways (CARB 1998). Cancer risks were evaluated using the inhalation cancer potency factor published by OEHHA and CARB (CARB 2013). The cancer potency factor for DPM is 1.1 milligram per kilogram of body weight per day (mg/kg-day). In accordance with OEHHA Guidance (OEHHA 2015), the breathing rates for each age bin were used for the cancer risk calculations. Table 9 below summarizes the construction HRA results of the HRA methodology described above and contained in Attachment B.

Table 9
Construction Activity Health Risk Assessment Results - Unmitigated

Impact Parameter	Units	Impact	CEQA Threshold	Level of Significance
Proposed Project				
MICR – Residential On Site	Per Million	57.10	10.0	**Potentially Significant**
HIC – Onsite	Not Applicable	0.12	1.0	Less than Significant
MICR – Residential Off Site	Per Million	56.38	10.0	**Potentially Significant**
HIC – Off Site	Not Applicable	0.17	1.0	Less than Significant
Single Phase Construction Alternative				
MICR – Residential Off Site	Per Million	92.20	10.0	**Potentially Significant**
HIC – Off Site	Not Applicable	0.054	1.0	Less than Significant

Sources: Attachment B
Notes: MICR – Maximum Individual Cancer Risk; HIC – Chronic Hazard Index

As shown in Table 9, the HRA results from the unmitigated scenario show a cancer risk exceeding the 10 in 1 million threshold and thus a potentially significant impact. As such, mitigation is required. The HRA results including MM-AQ-1 are presented in Table 10.

Table 10
Construction Activity Health Risk Assessment Results - Mitigated

Impact Parameter	Units	Impact	CEQA Threshold	Level of Significance
Proposed Project				
MICR – Residential On Site	Per Million	6.21	10.0	Less than Significant

Table 10
Construction Activity Health Risk Assessment Results - Mitigated

Impact Parameter	Units	Impact	CEQA Threshold	Level of Significance
HIC – On Site	Not Applicable	0.036	1.0	Less than Significant
MICR – Residential Off Site	Per Million	7.38	10.0	Less than Significant
HIC – Off Site	Not Applicable	0.036	1.0	Less than Significant
Single Phase Construction Alternative				
MICR – Residential Off Site	Per Million	9.68	10.0	Less than Significant
HIC – Off Site	Not Applicable	0.0057	1.0	Less than Significant

Sources: Attachment B
Notes: MICR – Maximum Individual Cancer Risk; HIC – Chronic Hazard Index

The mitigated results shown in Table 10 demonstrate that the construction mobile sources exhibit maximum individual cancer risks (MICR) below the 10 in a million threshold and chronic hazard indices (HIC) less than 1.0. AERMOD and HARP2 outputs are contained in Attachment B.

Therefore, with respect to CEQA Appendix G, Air Quality question (d), TAC emissions from construction of the proposed project would not expose sensitive receptors to substantial pollutant concentrations and would result in a less than significant impact with mitigation.

6 CONCLUSIONS

Based on this analysis, the closest on-site and offsite sensitive receptors to the proposed project would not be exposed to TACs at levels above significance thresholds established by the SDAPCD with mitigation.

The results determined in this analysis reflect reasonable estimates of exhaust emissions and exhaust characteristics, available meteorological data near the proposed project site, and the use of currently approved air quality models. Given the limits of available tools for such an analysis, the actual impacts may vary from the estimates in this assessment. However, the combined use of the AERMOD dispersion model and the health impact calculations required by OEHHA and SDAPCD tend to overpredict impacts, such that they produce conservative (i.e., health-protective) results. Accordingly, the health impacts are not expected to be higher than those estimated in this assessment.

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ATTACHMENT A

Emissions Outputs

Solana Highlands - Single Phase Construction Alternative

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	57.37	1000sqft	1.32	57,365.00	0
Other Non-Asphalt Surfaces	1.90	1000sqft	0.04	1,900.00	0
Parking Lot	272.00	Space	2.45	108,800.00	0
Unenclosed Parking Structure	50.60	1000sqft	1.16	50,600.00	0
Apartments Mid Rise	260.00	Dwelling Unit	6.84	326,156.00	744

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS

Land Use - project-specific land uses

Construction Phase - construction schedule per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Trips and VMT - trips per applicant

Demolition - demo quantities per applicant

Grading - grading quantities per applicant

Architectural Coating - SDAPCD Rule 67.0.1

Vehicle Trips - F&P 2016

Woodstoves - x

Area Coating - SDAPCD Rule 67.0.1

Energy Use - x

Water And Wastewater - water use per applicant

Construction Off-road Equipment Mitigation - All construction equipment will meet Tier 3 engine standards

Mobile Land Use Mitigation -

Water Mitigation -

Waste Mitigation - AB 341

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00

tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim

Solana Highlands - Single Phase Construction Alternative - San Diego County, Annual

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tblEnergyUse	T24E	209.39	246.93
tblEnergyUse	T24NG	3,248.74	4,687.93
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tblGrading	AcresOfGrading	56.25	112.50
tblGrading	AcresOfGrading	55.00	110.00
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tblLandUse	LandUseSquareFeet	260,000.00	326,156.00
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tblTripsAndVMT	VendorTripLength	7.30	0.19
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tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
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tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	13.00	0.00
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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1551	2.2803	1.0884	2.6300e-003	0.4261	0.0702	0.4963	0.1087	0.0646	0.1733	0.0000	240.0332	240.0332	0.0664	0.0000	241.6930
2021	1.5537	3.0167	2.4935	4.3900e-003	0.1896	0.1248	0.3144	0.0515	0.1153	0.1668	0.0000	394.0805	394.0805	0.1118	0.0000	396.8749
2022	0.0410	0.5484	0.4932	8.0000e-004	6.3000e-004	0.0213	0.0219	1.9000e-004	0.0196	0.0198	0.0000	72.1663	72.1663	0.0204	0.0000	72.6768
Maximum	**1.5537**	**3.0167**	**2.4935**	**4.3900e-003**	**0.4261**	**0.1248**	**0.4963**	**0.1087**	**0.1153**	**0.1733**	**0.0000**	**394.0805**	**394.0805**	**0.1118**	**0.0000**	**396.8749**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0434	1.3156	1.1960	2.6300e-003	0.1925	3.5000e-003	0.1960	0.0491	3.4800e-003	0.0526	0.0000	240.0330	240.0330	0.0664	0.0000	241.6928
2021	1.3987	2.2652	2.7399	4.3900e-003	0.0867	0.0250	0.1116	0.0236	0.0249	0.0485	0.0000	394.0801	394.0801	0.1118	0.0000	396.8746
2022	0.0180	0.4551	0.5081	8.0000e-004	6.3000e-004	1.1000e-003	1.7300e-003	1.9000e-004	1.0900e-003	1.2800e-003	0.0000	72.1662	72.1662	0.0204	0.0000	72.6768
Maximum	**1.3987**	**2.2652**	**2.7399**	**4.3900e-003**	**0.1925**	**0.0250**	**0.1960**	**0.0491**	**0.0249**	**0.0526**	**0.0000**	**394.0801**	**394.0801**	**0.1118**	**0.0000**	**396.8746**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**16.56**	**30.96**	**-9.05**	**0.00**	**54.60**	**86.33**	**62.84**	**54.56**	**85.21**	**71.55**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**6-1-2020**	**8-31-2020**	0.5529	0.2023
2	**9-1-2020**	**11-30-2020**	1.3842	0.8491
3	**12-1-2020**	**2-28-2021**	1.3153	0.8292
4	**3-1-2021**	**5-31-2021**	2.7386	2.3831
5	**6-1-2021**	**8-31-2021**	0.4014	0.2978
6	**9-1-2021**	**11-30-2021**	0.3950	0.2925
7	**12-1-2021**	**2-28-2022**	0.3674	0.2862
8	**3-1-2022**	**5-31-2022**	0.3615	0.2902
		Highest	2.7386	2.3831

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4778	0.0224	1.9405	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0900e-003	0.0000	3.2376
Energy	0.0124	0.1062	0.0452	6.8000e-004		8.5900e-003	8.5900e-003		8.5900e-003	8.5900e-003	0.0000	448.5189	448.5189	0.0157	5.2900e-003	450.4880
Mobile	0.6707	3.0095	8.0730	0.0263	2.1880	0.0265	2.2145	0.5860	0.0248	0.6108	0.0000	2,420.6093	2,420.6093	0.1317	0.0000	2,423.9007
Waste						0.0000	0.0000		0.0000	0.0000	24.2777	0.0000	24.2777	1.4348	0.0000	60.1470
Water						0.0000	0.0000		0.0000	0.0000	5.6638	59.8416	65.5054	0.0220	0.0129	69.8908
Total	**2.1610**	**3.1382**	**10.0587**	**0.0271**	**2.1880**	**0.0457**	**2.2337**	**0.5860**	**0.0441**	**0.6301**	**29.9415**	**2,932.1301**	**2,962.0716**	**1.6072**	**0.0182**	**3,007.6642**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4778	0.0224	1.9405	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0900e-003	0.0000	3.2376
Energy	0.0124	0.1062	0.0452	6.8000e-004		8.5900e-003	8.5900e-003		8.5900e-003	8.5900e-003	0.0000	448.5189	448.5189	0.0157	5.2900e-003	450.4880
Mobile	0.6245	2.7086	7.0813	0.0223	1.8380	0.0226	1.8606	0.4922	0.0212	0.5134	0.0000	2,054.9724	2,054.9724	0.1148	0.0000	2,057.8419
Waste						0.0000	0.0000		0.0000	0.0000	6.0694	0.0000	6.0694	0.3587	0.0000	15.0368
Water						0.0000	0.0000		0.0000	0.0000	5.6638	52.4382	58.1020	0.0217	0.0128	62.4592
Total	**2.1148**	**2.8373**	**9.0669**	**0.0231**	**1.8380**	**0.0419**	**1.8798**	**0.4922**	**0.0405**	**0.5327**	**11.7333**	**2,559.0897**	**2,570.8230**	**0.5139**	**0.0181**	**2,589.0635**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.14**	**9.59**	**9.86**	**14.67**	**16.00**	**8.42**	**15.84**	**16.00**	**8.21**	**15.45**	**60.81**	**12.72**	**13.21**	**68.02**	**0.33**	**13.92**

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Ph 1 - Demolition	Demolition	6/1/2020	8/31/2020	5	66	
2	Ph 1 - Grading - 1	Grading	9/1/2020	11/2/2020	5	45	
3	Ph 1 - Grading - 2	Grading	11/3/2020	1/4/2021	5	45	
4	Ph 1 - Grading - 3	Grading	1/5/2021	3/5/2021	5	44	
5	Ph 1 - Paving	Paving	3/1/2021	5/27/2021	5	64	
6	Ph 1 - Architectural Coating	Architectural Coating	3/1/2021	5/27/2021	5	64	
7	Ph 1 - Building Construction	Building Construction	3/6/2021	5/30/2022	5	321	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.97

Residential Indoor: 660,466; Residential Outdoor: 220,155; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 13,120 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Ph 1 - Grading - 3	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 3	Graders	0	8.00	187	0.41
Ph 1 - Grading - 3	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 3	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 3	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Paving	Pavers	4	8.00	130	0.42
Ph 1 - Paving	Paving Equipment	4	8.00	132	0.36
Ph 1 - Paving	Rollers	4	8.00	80	0.38
Ph 1 - Architectural Coating	Air Compressors	2	6.00	78	0.48

Ph 1 - Building Construction	Cranes	0	7.00	231	0.29
Ph 1 - Building Construction	Forklifts	5	4.00	89	0.20
Ph 1 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 1 - Building Construction	Tractors/Loaders/Backhoes	5	4.00	97	0.37
Ph 1 - Building Construction	Welders	0	8.00	46	0.45
Ph 1 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 1 - Demolition	Excavators	1	5.00	158	0.38
Ph 1 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 1 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading - 1	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 1	Graders	0	8.00	187	0.41
Ph 1 - Grading - 1	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 1	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 1	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading - 2	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 2	Graders	0	8.00	187	0.41
Ph 1 - Grading - 2	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 2	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 2	Tractors/Loaders/Backhoes	1	4.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Ph 1 - Grading - 3	6	0.00	0.00	7,332.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 1 - Paving	12	0.00	0.00	0.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 1 - Architectural Coating	2	0.00	0.00	0.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 1 - Building Construction	10	0.00	60.00	0.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 1 - Demolition	4	0.00	6.00	794.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 1	6	0.00	0.00	7,334.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 2	6	0.00	0.00	7,334.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0880	0.0000	0.0880	0.0133	0.0000	0.0133	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0441	0.4585	0.2414	4.4000e-004		0.0229	0.0229		0.0211	0.0211	0.0000	38.6279	38.6279	0.0125	0.0000	38.9402
Total	**0.0441**	**0.4585**	**0.2414**	**4.4000e-004**	**0.0880**	**0.0229**	**0.1109**	**0.0133**	**0.0211**	**0.0344**	**0.0000**	**38.6279**	**38.6279**	**0.0125**	**0.0000**	**38.9402**

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.5000e-004	0.0385	5.9200e-003	4.0000e-005	7.0000e-005	3.0000e-005	1.0000e-004	2.0000e-005	3.0000e-005	5.0000e-005	0.0000	4.1750	4.1750	7.7000e-004	0.0000	4.1942
Vendor	3.1000e-004	0.0124	3.2000e-003	1.0000e-005	4.0000e-005	1.0000e-005	5.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	1.1518	1.1518	2.1000e-004	0.0000	1.1570
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0600e-003**	**0.0509**	**9.1200e-003**	**5.0000e-005**	**1.1000e-004**	**4.0000e-005**	**1.5000e-004**	**3.0000e-005**	**4.0000e-005**	**7.0000e-005**	**0.0000**	**5.3268**	**5.3268**	**9.8000e-004**	**0.0000**	**5.3512**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0396	0.0000	0.0396	5.9900e-003	0.0000	5.9900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.0600e-003	0.1435	0.2690	4.4000e-004		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	38.6278	38.6278	0.0125	0.0000	38.9401
Total	**7.0600e-003**	**0.1435**	**0.2690**	**4.4000e-004**	**0.0396**	**7.2000e-004**	**0.0403**	**5.9900e-003**	**7.2000e-004**	**6.7100e-003**	**0.0000**	**38.6278**	**38.6278**	**0.0125**	**0.0000**	**38.9401**

3.2 Ph 1 - Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.5000e-004	0.0385	5.9200e-003	4.0000e-005	7.0000e-005	3.0000e-005	1.0000e-004	2.0000e-005	3.0000e-005	5.0000e-005	0.0000	4.1750	4.1750	7.7000e-004	0.0000	4.1942
Vendor	3.1000e-004	0.0124	3.2000e-003	1.0000e-005	4.0000e-005	1.0000e-005	5.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	1.1518	1.1518	2.1000e-004	0.0000	1.1570
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0600e-003**	**0.0509**	**9.1200e-003**	**5.0000e-005**	**1.1000e-004**	**4.0000e-005**	**1.5000e-004**	**3.0000e-005**	**4.0000e-005**	**7.0000e-005**	**0.0000**	**5.3268**	**5.3268**	**9.8000e-004**	**0.0000**	**5.3512**

3.3 Ph 1 - Grading - 1 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2123	0.0000	0.2123	0.0529	0.0000	0.0529	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0493	0.5496	0.3738	7.0000e-004		0.0239	0.0239		0.0220	0.0220	0.0000	61.7039	61.7039	0.0200	0.0000	62.2028
Total	**0.0493**	**0.5496**	**0.3738**	**7.0000e-004**	**0.2123**	**0.0239**	**0.2362**	**0.0529**	**0.0220**	**0.0749**	**0.0000**	**61.7039**	**61.7039**	**0.0200**	**0.0000**	**62.2028**

3.3 Ph 1 - Grading - 1 - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.9000e-003	0.3560	0.0547	3.9000e-004	6.7000e-004	2.5000e-004	9.2000e-004	1.9000e-004	2.4000e-004	4.3000e-004	0.0000	38.5636	38.5636	7.1100e-003	0.0000	38.7412
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.9000e-003**	**0.3560**	**0.0547**	**3.9000e-004**	**6.7000e-004**	**2.5000e-004**	**9.2000e-004**	**1.9000e-004**	**2.4000e-004**	**4.3000e-004**	**0.0000**	**38.5636**	**38.5636**	**7.1100e-003**	**0.0000**	**38.7412**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0955	0.0000	0.0955	0.0238	0.0000	0.0238	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.2173	0.4147	7.0000e-004		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003	0.0000	61.7038	61.7038	0.0200	0.0000	62.2027
Total	**0.0111**	**0.2173**	**0.4147**	**7.0000e-004**	**0.0955**	**1.1500e-003**	**0.0967**	**0.0238**	**1.1500e-003**	**0.0250**	**0.0000**	**61.7038**	**61.7038**	**0.0200**	**0.0000**	**62.2027**

3.3 Ph 1 - Grading - 1 - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.9000e-003	0.3560	0.0547	3.9000e-004	6.7000e-004	2.5000e-004	9.2000e-004	1.9000e-004	2.4000e-004	4.3000e-004	0.0000	38.5636	38.5636	7.1100e-003	0.0000	38.7412
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.9000e-003**	**0.3560**	**0.0547**	**3.9000e-004**	**6.7000e-004**	**2.5000e-004**	**9.2000e-004**	**1.9000e-004**	**2.4000e-004**	**4.3000e-004**	**0.0000**	**38.5636**	**38.5636**	**7.1100e-003**	**0.0000**	**38.7412**

3.4 Ph 1 - Grading - 2 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1244	0.0000	0.1244	0.0420	0.0000	0.0420	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0471	0.5251	0.3572	6.7000e-004		0.0229	0.0229		0.0210	0.0210	0.0000	58.9615	58.9615	0.0191	0.0000	59.4382
Total	**0.0471**	**0.5251**	**0.3572**	**6.7000e-004**	**0.1244**	**0.0229**	**0.1473**	**0.0420**	**0.0210**	**0.0631**	**0.0000**	**58.9615**	**58.9615**	**0.0191**	**0.0000**	**59.4382**

3.4 Ph 1 - Grading - 2 - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.5900e-003	0.3402	0.0522	3.7000e-004	6.6000e-004	2.4000e-004	9.0000e-004	1.9000e-004	2.3000e-004	4.2000e-004	0.0000	36.8497	36.8497	6.7900e-003	0.0000	37.0194
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.5900e-003**	**0.3402**	**0.0522**	**3.7000e-004**	**6.6000e-004**	**2.4000e-004**	**9.0000e-004**	**1.9000e-004**	**2.3000e-004**	**4.2000e-004**	**0.0000**	**36.8497**	**36.8497**	**6.7900e-003**	**0.0000**	**37.0194**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0560	0.0000	0.0560	0.0189	0.0000	0.0189	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0106	0.2076	0.3963	6.7000e-004		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003	0.0000	58.9614	58.9614	0.0191	0.0000	59.4381
Total	**0.0106**	**0.2076**	**0.3963**	**6.7000e-004**	**0.0560**	**1.1000e-003**	**0.0571**	**0.0189**	**1.1000e-003**	**0.0200**	**0.0000**	**58.9614**	**58.9614**	**0.0191**	**0.0000**	**59.4381**

3.4 Ph 1 - Grading - 2 - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.5900e-003	0.3402	0.0522	3.7000e-004	6.6000e-004	2.4000e-004	9.0000e-004	1.9000e-004	2.3000e-004	4.2000e-004	0.0000	36.8497	36.8497	6.7900e-003	0.0000	37.0194
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.5900e-003**	**0.3402**	**0.0522**	**3.7000e-004**	**6.6000e-004**	**2.4000e-004**	**9.0000e-004**	**1.9000e-004**	**2.3000e-004**	**4.2000e-004**	**0.0000**	**36.8497**	**36.8497**	**6.7900e-003**	**0.0000**	**37.0194**

3.4 Ph 1 - Grading - 2 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0627	0.0000	0.0627	8.1000e-003	0.0000	8.1000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0700e-003	0.0225	0.0160	3.0000e-005		9.7000e-004	9.7000e-004		9.0000e-004	9.0000e-004	0.0000	2.7436	2.7436	8.9000e-004	0.0000	2.7657
Total	**2.0700e-003**	**0.0225**	**0.0160**	**3.0000e-005**	**0.0627**	**9.7000e-004**	**0.0636**	**8.1000e-003**	**9.0000e-004**	**9.0000e-003**	**0.0000**	**2.7436**	**2.7436**	**8.9000e-004**	**0.0000**	**2.7657**

3.4 Ph 1 - Grading - 2 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9000e-004	0.0153	2.3100e-003	2.0000e-005	4.6000e-004	1.0000e-005	4.7000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.6973	1.6973	3.0000e-004	0.0000	1.7048
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.9000e-004**	**0.0153**	**2.3100e-003**	**2.0000e-005**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**1.1000e-004**	**1.0000e-005**	**1.2000e-004**	**0.0000**	**1.6973**	**1.6973**	**3.0000e-004**	**0.0000**	**1.7048**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0282	0.0000	0.0282	3.6400e-003	0.0000	3.6400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9000e-004	9.6600e-003	0.0184	3.0000e-005		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	2.7436	2.7436	8.9000e-004	0.0000	2.7657
Total	**4.9000e-004**	**9.6600e-003**	**0.0184**	**3.0000e-005**	**0.0282**	**5.0000e-005**	**0.0283**	**3.6400e-003**	**5.0000e-005**	**3.6900e-003**	**0.0000**	**2.7436**	**2.7436**	**8.9000e-004**	**0.0000**	**2.7657**

3.4 Ph 1 - Grading - 2 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9000e-004	0.0153	2.3100e-003	2.0000e-005	4.6000e-004	1.0000e-005	4.7000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.6973	1.6973	3.0000e-004	0.0000	1.7048
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.9000e-004**	**0.0153**	**2.3100e-003**	**2.0000e-005**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**1.1000e-004**	**1.0000e-005**	**1.2000e-004**	**0.0000**	**1.6973**	**1.6973**	**3.0000e-004**	**0.0000**	**1.7048**

3.5 Ph 1 - Grading - 3 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1246	0.0000	0.1246	0.0427	0.0000	0.0427	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0454	0.4951	0.3519	6.9000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	60.3583	60.3583	0.0195	0.0000	60.8463
Total	**0.0454**	**0.4951**	**0.3519**	**6.9000e-004**	**0.1246**	**0.0214**	**0.1460**	**0.0427**	**0.0197**	**0.0624**	**0.0000**	**60.3583**	**60.3583**	**0.0195**	**0.0000**	**60.8463**

3.5 Ph 1 - Grading - 3 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.4300e-003	0.3440	0.0519	3.9000e-004	6.7000e-004	2.2000e-004	8.9000e-004	1.9000e-004	2.1000e-004	4.0000e-004	0.0000	38.1789	38.1789	6.7100e-003	0.0000	38.3467
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.4300e-003**	**0.3440**	**0.0519**	**3.9000e-004**	**6.7000e-004**	**2.2000e-004**	**8.9000e-004**	**1.9000e-004**	**2.1000e-004**	**4.0000e-004**	**0.0000**	**38.1789**	**38.1789**	**6.7100e-003**	**0.0000**	**38.3467**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0561	0.0000	0.0561	0.0192	0.0000	0.0192	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0109	0.2125	0.4055	6.9000e-004		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	60.3582	60.3582	0.0195	0.0000	60.8462
Total	**0.0109**	**0.2125**	**0.4055**	**6.9000e-004**	**0.0561**	**1.1300e-003**	**0.0572**	**0.0192**	**1.1300e-003**	**0.0204**	**0.0000**	**60.3582**	**60.3582**	**0.0195**	**0.0000**	**60.8462**

3.5 Ph 1 - Grading - 3 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.4300e-003	0.3440	0.0519	3.9000e-004	6.7000e-004	2.2000e-004	8.9000e-004	1.9000e-004	2.1000e-004	4.0000e-004	0.0000	38.1789	38.1789	6.7100e-003	0.0000	38.3467
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.4300e-003**	**0.3440**	**0.0519**	**3.9000e-004**	**6.7000e-004**	**2.2000e-004**	**8.9000e-004**	**1.9000e-004**	**2.1000e-004**	**4.0000e-004**	**0.0000**	**38.1789**	**38.1789**	**6.7100e-003**	**0.0000**	**38.3467**

3.6 Ph 1 - Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0804	0.8268	0.9378	1.4600e-003		0.0434	0.0434		0.0399	0.0399	0.0000	128.1503	128.1503	0.0415	0.0000	129.1864
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0853**	**0.8268**	**0.9378**	**1.4600e-003**		**0.0434**	**0.0434**		**0.0399**	**0.0399**	**0.0000**	**128.1503**	**128.1503**	**0.0415**	**0.0000**	**129.1864**

3.6 Ph 1 - Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0288	0.6635	1.1069	1.4600e-003		0.0152	0.0152		0.0152	0.0152	0.0000	128.1501	128.1501	0.0415	0.0000	129.1863
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0337**	**0.6635**	**1.1069**	**1.4600e-003**		**0.0152**	**0.0152**		**0.0152**	**0.0152**	**0.0000**	**128.1501**	**128.1501**	**0.0415**	**0.0000**	**129.1863**

3.6 Ph 1 - Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Ph 1 - Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0140	0.0977	0.1163	1.9000e-004		6.0200e-003	6.0200e-003		6.0200e-003	6.0200e-003	0.0000	16.3408	16.3408	1.1200e-003	0.0000	16.3689
Total	**1.3199**	**0.0977**	**0.1163**	**1.9000e-004**		**6.0200e-003**	**6.0200e-003**		**6.0200e-003**	**6.0200e-003**	**0.0000**	**16.3408**	**16.3408**	**1.1200e-003**	**0.0000**	**16.3689**

3.7 Ph 1 - Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8000e-003	0.0869	0.1173	1.9000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	16.3408	16.3408	1.1200e-003	0.0000	16.3688
Total	**1.3097**	**0.0869**	**0.1173**	**1.9000e-004**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**16.3408**	**16.3408**	**1.1200e-003**	**0.0000**	**16.3688**

3.7 Ph 1 - Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.8 Ph 1 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0851	0.8264	0.9213	1.2500e-003		0.0525	0.0525		0.0483	0.0483	0.0000	109.4520	109.4520	0.0354	0.0000	110.3370
Total	**0.0851**	**0.8264**	**0.9213**	**1.2500e-003**		**0.0525**	**0.0525**		**0.0483**	**0.0483**	**0.0000**	**109.4520**	**109.4520**	**0.0354**	**0.0000**	**110.3370**

3.8 Ph 1 - Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.1400e-003	0.3889	0.0960	3.8000e-004	1.2800e-003	2.2000e-004	1.5000e-003	3.9000e-004	2.1000e-004	6.0000e-004	0.0000	37.1593	37.1593	6.3900e-003	0.0000	37.3191
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.1400e-003**	**0.3889**	**0.0960**	**3.8000e-004**	**1.2800e-003**	**2.2000e-004**	**1.5000e-003**	**3.9000e-004**	**2.1000e-004**	**6.0000e-004**	**0.0000**	**37.1593**	**37.1593**	**6.3900e-003**	**0.0000**	**37.3191**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0280	0.5446	0.9416	1.2500e-003		2.0400e-003	2.0400e-003		2.0400e-003	2.0400e-003	0.0000	109.4519	109.4519	0.0354	0.0000	110.3369
Total	**0.0280**	**0.5446**	**0.9416**	**1.2500e-003**		**2.0400e-003**	**2.0400e-003**		**2.0400e-003**	**2.0400e-003**	**0.0000**	**109.4519**	**109.4519**	**0.0354**	**0.0000**	**110.3369**

3.8 Ph 1 - Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.1400e-003	0.3889	0.0960	3.8000e-004	1.2800e-003	2.2000e-004	1.5000e-003	3.9000e-004	2.1000e-004	6.0000e-004	0.0000	37.1593	37.1593	6.3900e-003	0.0000	37.3191
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.1400e-003**	**0.3889**	**0.0960**	**3.8000e-004**	**1.2800e-003**	**2.2000e-004**	**1.5000e-003**	**3.9000e-004**	**2.1000e-004**	**6.0000e-004**	**0.0000**	**37.1593**	**37.1593**	**6.3900e-003**	**0.0000**	**37.3191**

3.8 Ph 1 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0369	0.3618	0.4494	6.1000e-004		0.0212	0.0212		0.0195	0.0195	0.0000	54.0031	54.0031	0.0175	0.0000	54.4398
Total	**0.0369**	**0.3618**	**0.4494**	**6.1000e-004**		**0.0212**	**0.0212**		**0.0195**	**0.0195**	**0.0000**	**54.0031**	**54.0031**	**0.0175**	**0.0000**	**54.4398**

3.8 Ph 1 - Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1500e-003	0.1866	0.0438	1.8000e-004	6.3000e-004	9.0000e-005	7.2000e-004	1.9000e-004	9.0000e-005	2.8000e-004	0.0000	18.1632	18.1632	2.9600e-003	0.0000	18.2371
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.1500e-003**	**0.1866**	**0.0438**	**1.8000e-004**	**6.3000e-004**	**9.0000e-005**	**7.2000e-004**	**1.9000e-004**	**9.0000e-005**	**2.8000e-004**	**0.0000**	**18.1632**	**18.1632**	**2.9600e-003**	**0.0000**	**18.2371**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0138	0.2685	0.4642	6.1000e-004		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	54.0031	54.0031	0.0175	0.0000	54.4397
Total	**0.0138**	**0.2685**	**0.4642**	**6.1000e-004**		**1.0000e-003**	**1.0000e-003**		**1.0000e-003**	**1.0000e-003**	**0.0000**	**54.0031**	**54.0031**	**0.0175**	**0.0000**	**54.4397**

3.8 Ph 1 - Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1500e-003	0.1866	0.0438	1.8000e-004	6.3000e-004	9.0000e-005	7.2000e-004	1.9000e-004	9.0000e-005	2.8000e-004	0.0000	18.1632	18.1632	2.9600e-003	0.0000	18.2371
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.1500e-003**	**0.1866**	**0.0438**	**1.8000e-004**	**6.3000e-004**	**9.0000e-005**	**7.2000e-004**	**1.9000e-004**	**9.0000e-005**	**2.8000e-004**	**0.0000**	**18.1632**	**18.1632**	**2.9600e-003**	**0.0000**	**18.2371**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

Integrate Below Market Rate Housing

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6245	2.7086	7.0813	0.0223	1.8380	0.0226	1.8606	0.4922	0.0212	0.5134	0.0000	2,054.9724	2,054.9724	0.1148	0.0000	2,057.8419
Unmitigated	0.6707	3.0095	8.0730	0.0263	2.1880	0.0265	2.2145	0.5860	0.0248	0.6108	0.0000	2,420.6093	2,420.6093	0.1317	0.0000	2,423.9007

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,080.00	1,999.40	1833.00	5,805,403	4,876,674
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	2,080.00	1,999.40	1,833.00	5,805,403	4,876,674

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Non-Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Parking Lot	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Unenclosed Parking Structure	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	325.4800	325.4800	0.0134	3.0300e-003	326.7179
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	325.4800	325.4800	0.0134	3.0300e-003	326.7179
NaturalGas Mitigated	0.0124	0.1062	0.0452	6.8000e-004		8.5900e-003	8.5900e-003		8.5900e-003	8.5900e-003	0.0000	123.0389	123.0389	2.3600e-003	2.2600e-003	123.7701
NaturalGas Unmitigated	0.0124	0.1062	0.0452	6.8000e-004		8.5900e-003	8.5900e-003		8.5900e-003	8.5900e-003	0.0000	123.0389	123.0389	2.3600e-003	2.2600e-003	123.7701

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.30566e+006	0.0124	0.1062	0.0452	6.8000e-004		8.5900e-003	8.5900e-003		8.5900e-003	8.5900e-003	0.0000	123.0389	123.0389	2.3600e-003	2.2600e-003	123.7701
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0124**	**0.1062**	**0.0452**	**6.8000e-004**		**8.5900e-003**	**8.5900e-003**		**8.5900e-003**	**8.5900e-003**	**0.0000**	**123.0389**	**123.0389**	**2.3600e-003**	**2.2600e-003**	**123.7701**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.30566e+006	0.0124	0.1062	0.0452	6.8000e-004		8.5900e-003	8.5900e-003		8.5900e-003	8.5900e-003	0.0000	123.0389	123.0389	2.3600e-003	2.2600e-003	123.7701
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0124**	**0.1062**	**0.0452**	**6.8000e-004**		**8.5900e-003**	**8.5900e-003**		**8.5900e-003**	**8.5900e-003**	**0.0000**	**123.0389**	**123.0389**	**2.3600e-003**	**2.2600e-003**	**123.7701**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.10901e+006	269.8102	0.0111	2.5200e-003	270.8364
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	95744	23.2934	9.6000e-004	2.2000e-004	23.3820
Unenclosed Parking Structure	133078	32.3764	1.3300e-003	3.0000e-004	32.4995
Total		**325.4800**	**0.0134**	**3.0400e-003**	**326.7179**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.10901e+006	269.8102	0.0111	2.5200e-003	270.8364
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	95744	23.2934	9.6000e-004	2.2000e-004	23.3820
Unenclosed Parking Structure	133078	32.3764	1.3300e-003	3.0000e-004	32.4995
Total		**325.4800**	**0.0134**	**3.0400e-003**	**326.7179**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4778	0.0224	1.9405	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0900e-003	0.0000	3.2376
Unmitigated	1.4778	0.0224	1.9405	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0900e-003	0.0000	3.2376

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2879					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0593	0.0224	1.9405	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0900e-003	0.0000	3.2376
Total	**1.4778**	**0.0224**	**1.9405**	**1.0000e-004**		**0.0107**	**0.0107**		**0.0107**	**0.0107**	**0.0000**	**3.1603**	**3.1603**	**3.0900e-003**	**0.0000**	**3.2376**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2879					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0593	0.0224	1.9405	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0900e-003	0.0000	3.2376
Total	**1.4778**	**0.0224**	**1.9405**	**1.0000e-004**		**0.0107**	**0.0107**		**0.0107**	**0.0107**	**0.0000**	**3.1603**	**3.1603**	**3.0900e-003**	**0.0000**	**3.2376**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	58.1020	0.0217	0.0128	62.4592
Unmitigated	65.5054	0.0220	0.0129	69.8908

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	16.0085 / 3.37743	65.5054	0.0220	0.0129	69.8908
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**65.5054**	**0.0220**	**0.0129**	**69.8908**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	16.0085 / 0.638398	58.1020	0.0217	0.0128	62.4592
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**58.1020**	**0.0217**	**0.0128**	**62.4592**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.0694	0.3587	0.0000	15.0368
Unmitigated	24.2777	1.4348	0.0000	60.1470

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	119.6	24.2777	1.4348	0.0000	60.1470
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**24.2777**	**1.4348**	**0.0000**	**60.1470**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	29.9	6.0694	0.3587	0.0000	15.0368
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**6.0694**	**0.3587**	**0.0000**	**15.0368**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Solana Highlands - Proposed Project

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	57.37	1000sqft	1.32	57,365.00	0
Other Non-Asphalt Surfaces	1.90	1000sqft	0.04	1,900.00	0
Parking Lot	272.00	Space	2.45	108,800.00	0
Unenclosed Parking Structure	50.60	1000sqft	1.16	50,600.00	0
Apartments Mid Rise	260.00	Dwelling Unit	6.84	326,156.00	744

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS

Land Use - project-specific land uses

Construction Phase - construction schedule per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Trips and VMT - Assumes 1,000 feet (0.19 miles) trip length for vendor and haul truck trips.

Demolition - demo quantities per applicant

Grading - grading quantities per applicant

Architectural Coating - SDAPCD Rule 67.0.1

Vehicle Trips - F&P 2016

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - x

Area Coating - SDAPCD Rule 67.0.1

Energy Use - x

Water And Wastewater - water use per applicant

Construction Off-road Equipment Mitigation - All construction equipment to be equipped with tier 3 engines

Mobile Land Use Mitigation -

Water Mitigation -

Waste Mitigation - AB 341

Table Name	Column Name	Default Value	New Value
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tblEnergyUse	T24E	209.39	246.93
tblEnergyUse	T24NG	3,248.74	4,687.93
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tblGrading	MaterialExported	0.00	154.00
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tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
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tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
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tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	720.49	536.36
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005

tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripLength	20.00	0.19
tblTripsAndVMT	HaulingTripNumber	495.00	490.00
tblTripsAndVMT	HaulingTripNumber	300.00	297.00
tblTripsAndVMT	HaulingTripNumber	0.00	5,393.00
tblTripsAndVMT	HaulingTripNumber	0.00	7,436.00
tblTripsAndVMT	HaulingTripNumber	19.00	9,171.00
tblTripsAndVMT	VendorTripLength	7.30	0.19
tblTripsAndVMT	VendorTripLength	7.30	0.19
tblTripsAndVMT	VendorTripLength	7.30	0.19
tblTripsAndVMT	VendorTripLength	7.30	0.19
tblTripsAndVMT	VendorTripLength	7.30	0.19
tblTripsAndVMT	VendorTripLength	7.30	0.19
tblTripsAndVMT	VendorTripLength	7.30	0.19

tblTripsAndVMT	VendorTripLength	7.30	0.19
tblTripsAndVMT	VendorTripLength	7.30	0.19
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tblTripsAndVMT	VendorTripNumber	0.00	2.00
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tblTripsAndVMT	VendorTripNumber	64.00	10.00
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tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	279.00	0.00

tblTripsAndVMT	WorkerTripNumber	279.00	0.00
tblTripsAndVMT	WorkerTripNumber	279.00	0.00
tblVehicleTrips	ST_TR	6.39	7.69
tblVehicleTrips	SU_TR	5.86	7.05
tblVehicleTrips	WD_TR	6.65	8.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	16,940,046.66	16,008,460.00
tblWater	OutdoorWaterUseRate	10,679,594.63	3,377,428.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	13.00	0.00
tblWoodstoves	NumberNoncatalytic	13.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0852	1.1596	0.6541	1.3900e-003	0.1476	0.0416	0.1891	0.0583	0.0382	0.0965	0.0000	125.5244	125.5244	0.0359	0.0000	126.4222
2021	1.4529	1.7926	1.3206	2.4900e-003	0.0945	0.0715	0.1660	0.0503	0.0659	0.1163	0.0000	223.5453	223.5453	0.0640	0.0000	225.1443
2022	1.4359	1.6653	1.2873	2.5700e-003	0.1268	0.0586	0.1853	0.0552	0.0541	0.1093	0.0000	232.3497	232.3497	0.0648	0.0000	233.9707
2023	1.3608	0.5150	0.6651	1.0200e-003	1.7000e-004	0.0246	0.0247	5.0000e-005	0.0227	0.0228	0.0000	89.9640	89.9640	0.0267	0.0000	90.6324
Maximum	**1.4529**	**1.7926**	**1.3206**	**2.5700e-003**	**0.1476**	**0.0715**	**0.1891**	**0.0583**	**0.0659**	**0.1163**	**0.0000**	**232.3497**	**232.3497**	**0.0648**	**0.0000**	**233.9707**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0242	0.6666	0.7057	1.3900e-003	0.0668	1.9400e-003	0.0687	0.0263	1.9300e-003	0.0283	0.0000	125.5243	125.5243	0.0359	0.0000	126.4221
2021	1.3575	1.2168	1.4544	2.4900e-003	0.0430	0.0101	0.0532	0.0228	0.0101	0.0329	0.0000	223.5451	223.5451	0.0640	0.0000	225.1441
2022	1.3583	1.2881	1.4542	2.5700e-003	0.0577	9.9500e-003	0.0676	0.0250	9.9400e-003	0.0350	0.0000	232.3495	232.3495	0.0648	0.0000	233.9704
2023	1.3320	0.4793	0.7364	1.0200e-003	1.7000e-004	8.0000e-003	8.1700e-003	5.0000e-005	7.9900e-003	8.0500e-003	0.0000	89.9639	89.9639	0.0267	0.0000	90.6323
Maximum	**1.3583**	**1.2881**	**1.4544**	**2.5700e-003**	**0.0668**	**0.0101**	**0.0687**	**0.0263**	**0.0101**	**0.0350**	**0.0000**	**232.3495**	**232.3495**	**0.0648**	**0.0000**	**233.9704**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**6.06**	**28.87**	**-10.78**	**0.00**	**54.57**	**84.71**	**65.03**	**54.72**	**83.44**	**69.79**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**6-1-2020**	**8-31-2020**	1.0390	0.5640
2	**9-1-2020**	**11-30-2020**	0.1566	0.0979
3	**12-1-2020**	**2-28-2021**	0.1328	0.0883
4	**3-1-2021**	**5-31-2021**	0.1317	0.0903
5	**6-1-2021**	**8-31-2021**	2.8188	2.2770
6	**9-1-2021**	**11-30-2021**	0.1711	0.1237
7	**12-1-2021**	**2-28-2022**	0.1201	0.0876
8	**3-1-2022**	**5-31-2022**	0.1186	0.0897

9	**6-1-2022**	**8-31-2022**	2.7693	2.4002
10	**9-1-2022**	**11-30-2022**	0.1171	0.0886
11	**12-1-2022**	**2-28-2023**	0.1088	0.0860
12	**3-1-2023**	**5-31-2023**	0.1077	0.0874
13	**6-1-2023**	**8-31-2023**	1.7088	1.6777
		Highest	2.8188	2.4002

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4778	0.0224	1.9405	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0900e-003	0.0000	3.2376
Energy	0.0124	0.1062	0.0452	6.8000e-004		8.5900e-003	8.5900e-003		8.5900e-003	8.5900e-003	0.0000	448.5189	448.5189	0.0157	5.2900e-003	450.4880
Mobile	0.6707	3.0095	8.0730	0.0263	2.1880	0.0265	2.2145	0.5860	0.0248	0.6108	0.0000	2,420.6093	2,420.6093	0.1317	0.0000	2,423.9007
Waste						0.0000	0.0000		0.0000	0.0000	24.2777	0.0000	24.2777	1.4348	0.0000	60.1470
Water						0.0000	0.0000		0.0000	0.0000	5.6638	59.8416	65.5054	0.0220	0.0129	69.8908
Total	**2.1610**	**3.1382**	**10.0587**	**0.0271**	**2.1880**	**0.0457**	**2.2337**	**0.5860**	**0.0441**	**0.6301**	**29.9415**	**2,932.1301**	**2,962.0716**	**1.6072**	**0.0182**	**3,007.6642**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4778	0.0224	1.9405	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0900e-003	0.0000	3.2376
Energy	0.0124	0.1062	0.0452	6.8000e-004		8.5900e-003	8.5900e-003		8.5900e-003	8.5900e-003	0.0000	448.5189	448.5189	0.0157	5.2900e-003	450.4880
Mobile	0.6245	2.7086	7.0813	0.0223	1.8380	0.0226	1.8606	0.4922	0.0212	0.5134	0.0000	2,054.9724	2,054.9724	0.1148	0.0000	2,057.8419
Waste						0.0000	0.0000		0.0000	0.0000	6.0694	0.0000	6.0694	0.3587	0.0000	15.0368
Water						0.0000	0.0000		0.0000	0.0000	5.6638	52.4382	58.1020	0.0217	0.0128	62.4592
Total	**2.1148**	**2.8373**	**9.0669**	**0.0231**	**1.8380**	**0.0419**	**1.8798**	**0.4922**	**0.0405**	**0.5327**	**11.7333**	**2,559.0897**	**2,570.8230**	**0.5139**	**0.0181**	**2,589.0635**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.14**	**9.59**	**9.86**	**14.67**	**16.00**	**8.42**	**15.84**	**16.00**	**8.21**	**15.45**	**60.81**	**12.72**	**13.21**	**68.02**	**0.33**	**13.92**

3.0 Construction Detail

Construction Phase

Solana Highlands - Proposed Project - San Diego County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Ph 1 - Demolition	Demolition	6/1/2020	6/29/2020	5	21	
2	Ph 1 - Grading	Grading	7/1/2020	9/1/2020	5	45	
3	Ph 1 - Building Construction	Building Construction	9/1/2020	8/30/2021	5	260	
4	Ph 2 - Demolition	Demolition	6/1/2021	6/28/2021	5	20	
5	Ph 2 - Grading	Grading	7/1/2021	9/1/2021	5	45	
6	Ph 1 - Paving	Paving	7/1/2021	9/1/2021	5	45	
7	Ph 1 - Architectural Coating	Architectural Coating	7/1/2021	9/1/2021	5	45	
8	Ph 2 - Building Construction	Building Construction	9/1/2021	8/31/2022	5	261	
9	Ph 3 - Demolition	Demolition	6/1/2022	6/30/2022	5	22	
10	Ph 3 - Grading	Grading	7/1/2022	8/31/2022	5	44	
11	Ph 2 - Paving	Paving	7/1/2022	8/31/2022	5	44	
12	Ph 2 - Architectural Coating	Architectural Coating	7/1/2022	8/31/2022	5	44	
13	Ph 3 - Building Construction	Building Construction	9/1/2022	8/31/2023	5	261	
14	Ph 3 - Paving	Paving	7/1/2023	8/31/2023	5	44	
15	Ph 3 - Architectural Coating	Architectural Coating	7/1/2023	8/31/2023	5	44	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.97

Residential Indoor: 660,466; Residential Outdoor: 220,155; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 13,120 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Ph 1 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73

Ph 1 - Demolition	Excavators	1	5.00	158	0.38
Ph 1 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 1 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading	Excavators	2	5.00	158	0.38
Ph 1 - Grading	Graders	0	8.00	187	0.41
Ph 1 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading	Scrapers	2	5.00	367	0.48
Ph 1 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Building Construction	Cranes	0	7.00	231	0.29
Ph 1 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 1 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 1 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Ph 1 - Building Construction	Welders	0	8.00	46	0.45
Ph 2 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 2 - Demolition	Excavators	1	5.00	158	0.38
Ph 2 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 2 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 2 - Grading	Excavators	2	5.00	158	0.38
Ph 2 - Grading	Graders	0	8.00	187	0.41
Ph 2 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 2 - Grading	Scrapers	2	5.00	367	0.48
Ph 2 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Paving	Pavers	2	8.00	130	0.42
Ph 1 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 1 - Paving	Rollers	2	8.00	80	0.38
Ph 1 - Architectural Coating	Air Compressors	1	6.00	78	0.48
Ph 2 - Building Construction	Cranes	0	7.00	231	0.29

Ph 2 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 2 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 2 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Ph 2 - Building Construction	Welders	0	8.00	46	0.45
Ph 3 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 3 - Demolition	Excavators	1	5.00	158	0.38
Ph 3 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 3 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 3 - Grading	Excavators	2	5.00	158	0.38
Ph 3 - Grading	Graders	0	8.00	187	0.41
Ph 3 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 3 - Grading	Scrapers	2	5.00	367	0.48
Ph 3 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 2 - Paving	Pavers	2	8.00	130	0.42
Ph 2 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 2 - Paving	Rollers	2	8.00	80	0.38
Ph 2 - Architectural Coating	Air Compressors	1	6.00	78	0.48
Ph 3 - Building Construction	Cranes	0	7.00	231	0.29
Ph 3 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 3 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 3 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Ph 3 - Building Construction	Welders	0	8.00	46	0.45
Ph 3 - Paving	Pavers	2	8.00	130	0.42
Ph 3 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 3 - Paving	Rollers	2	8.00	80	0.38
Ph 3 - Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Ph 1 - Demolition	4	0.00	2.00	490.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading	6	0.00	0.00	5,393.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 1 - Building Construction	4	0.00	10.00	0.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 2 - Demolition	4	0.00	2.00	8.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 2 - Grading	6	0.00	0.00	7,436.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 1 - Paving	6	0.00	0.00	0.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 1 - Architectural Coating	1	0.00	0.00	0.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 2 - Building Construction	4	0.00	10.00	0.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 3 - Demolition	4	0.00	2.00	297.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 3 - Grading	6	0.00	0.00	9,171.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 2 - Paving	6	0.00	0.00	0.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 2 - Architectural Coating	1	0.00	0.00	0.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 3 - Building Construction	4	0.00	10.00	0.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 3 - Paving	6	0.00	0.00	0.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT
Ph 3 - Architectural Coating	1	0.00	0.00	0.00	10.80	0.19	0.19	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0542	0.0000	0.0542	8.2100e-003	0.0000	8.2100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0140	0.1459	0.0768	1.4000e-004		7.2900e-003	7.2900e-003		6.7100e-003	6.7100e-003	0.0000	12.2907	12.2907	3.9800e-003	0.0000	12.3901
Total	**0.0140**	**0.1459**	**0.0768**	**1.4000e-004**	**0.0542**	**7.2900e-003**	**0.0615**	**8.2100e-003**	**6.7100e-003**	**0.0149**	**0.0000**	**12.2907**	**12.2907**	**3.9800e-003**	**0.0000**	**12.3901**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.6000e-004	0.0238	3.6500e-003	3.0000e-005	4.0000e-005	2.0000e-005	6.0000e-005	1.0000e-005	2.0000e-005	3.0000e-005	0.0000	2.5765	2.5765	4.7000e-004	0.0000	2.5884
Vendor	3.0000e-005	1.3200e-003	3.4000e-004	0.0000	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.1222	0.1222	2.0000e-005	0.0000	0.1227
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.9000e-004**	**0.0251**	**3.9900e-003**	**3.0000e-005**	**4.0000e-005**	**2.0000e-005**	**7.0000e-005**	**1.0000e-005**	**2.0000e-005**	**3.0000e-005**	**0.0000**	**2.6987**	**2.6987**	**4.9000e-004**	**0.0000**	**2.7111**

3.2 Ph 1 - Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0244	0.0000	0.0244	3.7000e-003	0.0000	3.7000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2500e-003	0.0457	0.0856	1.4000e-004		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	12.2907	12.2907	3.9800e-003	0.0000	12.3900
Total	**2.2500e-003**	**0.0457**	**0.0856**	**1.4000e-004**	**0.0244**	**2.3000e-004**	**0.0246**	**3.7000e-003**	**2.3000e-004**	**3.9300e-003**	**0.0000**	**12.2907**	**12.2907**	**3.9800e-003**	**0.0000**	**12.3900**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.6000e-004	0.0238	3.6500e-003	3.0000e-005	4.0000e-005	2.0000e-005	6.0000e-005	1.0000e-005	2.0000e-005	3.0000e-005	0.0000	2.5765	2.5765	4.7000e-004	0.0000	2.5884
Vendor	3.0000e-005	1.3200e-003	3.4000e-004	0.0000	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.1222	0.1222	2.0000e-005	0.0000	0.1227
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.9000e-004**	**0.0251**	**3.9900e-003**	**3.0000e-005**	**4.0000e-005**	**2.0000e-005**	**7.0000e-005**	**1.0000e-005**	**2.0000e-005**	**3.0000e-005**	**0.0000**	**2.6987**	**2.6987**	**4.9000e-004**	**0.0000**	**2.7111**

3.3 Ph 1 - Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0927	0.0000	0.0927	0.0499	0.0000	0.0499	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0493	0.5496	0.3738	7.0000e-004		0.0239	0.0239		0.0220	0.0220	0.0000	61.7039	61.7039	0.0200	0.0000	62.2028
Total	**0.0493**	**0.5496**	**0.3738**	**7.0000e-004**	**0.0927**	**0.0239**	**0.1166**	**0.0499**	**0.0220**	**0.0719**	**0.0000**	**61.7039**	**61.7039**	**0.0200**	**0.0000**	**62.2028**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0700e-003	0.2618	0.0402	2.9000e-004	4.9000e-004	1.9000e-004	6.8000e-004	1.4000e-004	1.8000e-004	3.2000e-004	0.0000	28.3574	28.3574	5.2300e-003	0.0000	28.4881
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.0700e-003**	**0.2618**	**0.0402**	**2.9000e-004**	**4.9000e-004**	**1.9000e-004**	**6.8000e-004**	**1.4000e-004**	**1.8000e-004**	**3.2000e-004**	**0.0000**	**28.3574**	**28.3574**	**5.2300e-003**	**0.0000**	**28.4881**

3.3 Ph 1 - Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0417	0.0000	0.0417	0.0225	0.0000	0.0225	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.2173	0.4147	7.0000e-004		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003	0.0000	61.7038	61.7038	0.0200	0.0000	62.2027
Total	**0.0111**	**0.2173**	**0.4147**	**7.0000e-004**	**0.0417**	**1.1500e-003**	**0.0429**	**0.0225**	**1.1500e-003**	**0.0236**	**0.0000**	**61.7038**	**61.7038**	**0.0200**	**0.0000**	**62.2027**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0700e-003	0.2618	0.0402	2.9000e-004	4.9000e-004	1.9000e-004	6.8000e-004	1.4000e-004	1.8000e-004	3.2000e-004	0.0000	28.3574	28.3574	5.2300e-003	0.0000	28.4881
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.0700e-003**	**0.2618**	**0.0402**	**2.9000e-004**	**4.9000e-004**	**1.9000e-004**	**6.8000e-004**	**1.4000e-004**	**1.8000e-004**	**3.2000e-004**	**0.0000**	**28.3574**	**28.3574**	**5.2300e-003**	**0.0000**	**28.4881**

3.4 Ph 1 - Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0156	0.1497	0.1522	2.0000e-004		0.0101	0.0101		9.3000e-003	9.3000e-003	0.0000	17.9143	17.9143	5.7900e-003	0.0000	18.0592
Total	**0.0156**	**0.1497**	**0.1522**	**2.0000e-004**		**0.0101**	**0.0101**		**9.3000e-003**	**9.3000e-003**	**0.0000**	**17.9143**	**17.9143**	**5.7900e-003**	**0.0000**	**18.0592**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.9000e-004	0.0276	7.1100e-003	3.0000e-005	9.0000e-005	2.0000e-005	1.1000e-004	3.0000e-005	2.0000e-005	5.0000e-005	0.0000	2.5594	2.5594	4.6000e-004	0.0000	2.5710
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.9000e-004**	**0.0276**	**7.1100e-003**	**3.0000e-005**	**9.0000e-005**	**2.0000e-005**	**1.1000e-004**	**3.0000e-005**	**2.0000e-005**	**5.0000e-005**	**0.0000**	**2.5594**	**2.5594**	**4.6000e-004**	**0.0000**	**2.5710**

3.4 Ph 1 - Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.5800e-003	0.0892	0.1542	2.0000e-004		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	17.9143	17.9143	5.7900e-003	0.0000	18.0592
Total	**4.5800e-003**	**0.0892**	**0.1542**	**2.0000e-004**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**	**0.0000**	**17.9143**	**17.9143**	**5.7900e-003**	**0.0000**	**18.0592**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.9000e-004	0.0276	7.1100e-003	3.0000e-005	9.0000e-005	2.0000e-005	1.1000e-004	3.0000e-005	2.0000e-005	5.0000e-005	0.0000	2.5594	2.5594	4.6000e-004	0.0000	2.5710
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.9000e-004**	**0.0276**	**7.1100e-003**	**3.0000e-005**	**9.0000e-005**	**2.0000e-005**	**1.1000e-004**	**3.0000e-005**	**2.0000e-005**	**5.0000e-005**	**0.0000**	**2.5594**	**2.5594**	**4.6000e-004**	**0.0000**	**2.5710**

3.4 Ph 1 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0272	0.2644	0.2948	4.0000e-004		0.0168	0.0168		0.0155	0.0155	0.0000	35.0246	35.0246	0.0113	0.0000	35.3078
Total	**0.0272**	**0.2644**	**0.2948**	**4.0000e-004**		**0.0168**	**0.0168**		**0.0155**	**0.0155**	**0.0000**	**35.0246**	**35.0246**	**0.0113**	**0.0000**	**35.3078**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2200e-003	0.0519	0.0128	5.0000e-005	1.7000e-004	3.0000e-005	2.0000e-004	5.0000e-005	3.0000e-005	8.0000e-005	0.0000	4.9546	4.9546	8.5000e-004	0.0000	4.9759
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.2200e-003**	**0.0519**	**0.0128**	**5.0000e-005**	**1.7000e-004**	**3.0000e-005**	**2.0000e-004**	**5.0000e-005**	**3.0000e-005**	**8.0000e-005**	**0.0000**	**4.9546**	**4.9546**	**8.5000e-004**	**0.0000**	**4.9759**

3.4 Ph 1 - Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.9600e-003	0.1743	0.3013	4.0000e-004		6.5000e-004	6.5000e-004		6.5000e-004	6.5000e-004	0.0000	35.0246	35.0246	0.0113	0.0000	35.3078
Total	**8.9600e-003**	**0.1743**	**0.3013**	**4.0000e-004**		**6.5000e-004**	**6.5000e-004**		**6.5000e-004**	**6.5000e-004**	**0.0000**	**35.0246**	**35.0246**	**0.0113**	**0.0000**	**35.3078**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2200e-003	0.0519	0.0128	5.0000e-005	1.7000e-004	3.0000e-005	2.0000e-004	5.0000e-005	3.0000e-005	8.0000e-005	0.0000	4.9546	4.9546	8.5000e-004	0.0000	4.9759
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.2200e-003**	**0.0519**	**0.0128**	**5.0000e-005**	**1.7000e-004**	**3.0000e-005**	**2.0000e-004**	**5.0000e-005**	**3.0000e-005**	**8.0000e-005**	**0.0000**	**4.9546**	**4.9546**	**8.5000e-004**	**0.0000**	**4.9759**

3.5 Ph 2 - Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.2000e-004	0.0000	8.2000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0128	0.1327	0.0721	1.3000e-004		6.5400e-003	6.5400e-003		6.0100e-003	6.0100e-003	0.0000	11.7065	11.7065	3.7900e-003	0.0000	11.8012
Total	**0.0128**	**0.1327**	**0.0721**	**1.3000e-004**	**8.2000e-004**	**6.5400e-003**	**7.3600e-003**	**1.2000e-004**	**6.0100e-003**	**6.1300e-003**	**0.0000**	**11.7065**	**11.7065**	**3.7900e-003**	**0.0000**	**11.8012**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	3.8000e-004	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0417	0.0417	1.0000e-005	0.0000	0.0418
Vendor	3.0000e-005	1.2100e-003	3.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1152	0.1152	2.0000e-005	0.0000	0.1157
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.0000e-005**	**1.5900e-003**	**3.6000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.1569**	**0.1569**	**3.0000e-005**	**0.0000**	**0.1576**

3.5 Ph 2 - Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.7000e-004	0.0000	3.7000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1400e-003	0.0435	0.0815	1.3000e-004		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	11.7065	11.7065	3.7900e-003	0.0000	11.8012
Total	**2.1400e-003**	**0.0435**	**0.0815**	**1.3000e-004**	**3.7000e-004**	**2.2000e-004**	**5.9000e-004**	**6.0000e-005**	**2.2000e-004**	**2.8000e-004**	**0.0000**	**11.7065**	**11.7065**	**3.7900e-003**	**0.0000**	**11.8012**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	3.8000e-004	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0417	0.0417	1.0000e-005	0.0000	0.0418
Vendor	3.0000e-005	1.2100e-003	3.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1152	0.1152	2.0000e-005	0.0000	0.1157
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.0000e-005**	**1.5900e-003**	**3.6000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.1569**	**0.1569**	**3.0000e-005**	**0.0000**	**0.1576**

3.6 Ph 2 - Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0927	0.0000	0.0927	0.0499	0.0000	0.0499	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0465	0.5063	0.3599	7.0000e-004		0.0219	0.0219		0.0201	0.0201	0.0000	61.7301	61.7301	0.0200	0.0000	62.2292
Total	**0.0465**	**0.5063**	**0.3599**	**7.0000e-004**	**0.0927**	**0.0219**	**0.1146**	**0.0499**	**0.0201**	**0.0701**	**0.0000**	**61.7301**	**61.7301**	**0.0200**	**0.0000**	**62.2292**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.5200e-003	0.3489	0.0526	3.9000e-004	6.8000e-004	2.2000e-004	9.0000e-004	1.9000e-004	2.1000e-004	4.1000e-004	0.0000	38.7205	38.7205	6.8100e-003	0.0000	38.8907
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.5200e-003**	**0.3489**	**0.0526**	**3.9000e-004**	**6.8000e-004**	**2.2000e-004**	**9.0000e-004**	**1.9000e-004**	**2.1000e-004**	**4.1000e-004**	**0.0000**	**38.7205**	**38.7205**	**6.8100e-003**	**0.0000**	**38.8907**

3.6 Ph 2 - Grading - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0417	0.0000	0.0417	0.0225	0.0000	0.0225	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.2173	0.4147	7.0000e-004		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003	0.0000	61.7300	61.7300	0.0200	0.0000	62.2291
Total	**0.0111**	**0.2173**	**0.4147**	**7.0000e-004**	**0.0417**	**1.1500e-003**	**0.0429**	**0.0225**	**1.1500e-003**	**0.0236**	**0.0000**	**61.7300**	**61.7300**	**0.0200**	**0.0000**	**62.2291**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.5200e-003	0.3489	0.0526	3.9000e-004	6.8000e-004	2.2000e-004	9.0000e-004	1.9000e-004	2.1000e-004	4.1000e-004	0.0000	38.7205	38.7205	6.8100e-003	0.0000	38.8907
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.5200e-003**	**0.3489**	**0.0526**	**3.9000e-004**	**6.8000e-004**	**2.2000e-004**	**9.0000e-004**	**1.9000e-004**	**2.1000e-004**	**4.1000e-004**	**0.0000**	**38.7205**	**38.7205**	**6.8100e-003**	**0.0000**	**38.8907**

3.7 Ph 1 - Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0283	0.2907	0.3297	5.1000e-004		0.0153	0.0153		0.0140	0.0140	0.0000	45.0528	45.0528	0.0146	0.0000	45.4171
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0332**	**0.2907**	**0.3297**	**5.1000e-004**		**0.0153**	**0.0153**		**0.0140**	**0.0140**	**0.0000**	**45.0528**	**45.0528**	**0.0146**	**0.0000**	**45.4171**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Ph 1 - Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0101	0.2333	0.3892	5.1000e-004		5.3500e-003	5.3500e-003		5.3500e-003	5.3500e-003	0.0000	45.0528	45.0528	0.0146	0.0000	45.4171
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0151**	**0.2333**	**0.3892**	**5.1000e-004**		**5.3500e-003**	**5.3500e-003**		**5.3500e-003**	**5.3500e-003**	**0.0000**	**45.0528**	**45.0528**	**0.0146**	**0.0000**	**45.4171**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.8 Ph 1 - Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9300e-003	0.0344	0.0409	7.0000e-005		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	5.7448	5.7448	3.9000e-004	0.0000	5.7547
Total	**1.3109**	**0.0344**	**0.0409**	**7.0000e-005**		**2.1200e-003**	**2.1200e-003**		**2.1200e-003**	**2.1200e-003**	**0.0000**	**5.7448**	**5.7448**	**3.9000e-004**	**0.0000**	**5.7547**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.8 Ph 1 - Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3400e-003	0.0305	0.0412	7.0000e-005		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	5.7448	5.7448	3.9000e-004	0.0000	5.7547
Total	**1.3073**	**0.0305**	**0.0412**	**7.0000e-005**		**2.1400e-003**	**2.1400e-003**		**2.1400e-003**	**2.1400e-003**	**0.0000**	**5.7448**	**5.7448**	**3.9000e-004**	**0.0000**	**5.7547**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.9 Ph 2 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0139	0.1353	0.1508	2.0000e-004		8.6000e-003	8.6000e-003		7.9100e-003	7.9100e-003	0.0000	17.9196	17.9196	5.8000e-003	0.0000	18.0645
Total	**0.0139**	**0.1353**	**0.1508**	**2.0000e-004**		**8.6000e-003**	**8.6000e-003**		**7.9100e-003**	**7.9100e-003**	**0.0000**	**17.9196**	**17.9196**	**5.8000e-003**	**0.0000**	**18.0645**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.2000e-004	0.0265	6.5500e-003	3.0000e-005	9.0000e-005	1.0000e-005	1.0000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	2.5349	2.5349	4.4000e-004	0.0000	2.5458
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.2000e-004**	**0.0265**	**6.5500e-003**	**3.0000e-005**	**9.0000e-005**	**1.0000e-005**	**1.0000e-004**	**3.0000e-005**	**1.0000e-005**	**4.0000e-005**	**0.0000**	**2.5349**	**2.5349**	**4.4000e-004**	**0.0000**	**2.5458**

3.9 Ph 2 - Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.5800e-003	0.0892	0.1542	2.0000e-004		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	17.9196	17.9196	5.8000e-003	0.0000	18.0645
Total	**4.5800e-003**	**0.0892**	**0.1542**	**2.0000e-004**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**	**0.0000**	**17.9196**	**17.9196**	**5.8000e-003**	**0.0000**	**18.0645**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.2000e-004	0.0265	6.5500e-003	3.0000e-005	9.0000e-005	1.0000e-005	1.0000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	2.5349	2.5349	4.4000e-004	0.0000	2.5458
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.2000e-004**	**0.0265**	**6.5500e-003**	**3.0000e-005**	**9.0000e-005**	**1.0000e-005**	**1.0000e-004**	**3.0000e-005**	**1.0000e-005**	**4.0000e-005**	**0.0000**	**2.5349**	**2.5349**	**4.4000e-004**	**0.0000**	**2.5458**

3.9 Ph 2 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0241	0.2362	0.2934	4.0000e-004		0.0138	0.0138		0.0127	0.0127	0.0000	35.2549	35.2549	0.0114	0.0000	35.5399
Total	**0.0241**	**0.2362**	**0.2934**	**4.0000e-004**		**0.0138**	**0.0138**		**0.0127**	**0.0127**	**0.0000**	**35.2549**	**35.2549**	**0.0114**	**0.0000**	**35.5399**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1300e-003	0.0508	0.0119	5.0000e-005	1.7000e-004	3.0000e-005	2.0000e-004	5.0000e-005	2.0000e-005	8.0000e-005	0.0000	4.9406	4.9406	8.0000e-004	0.0000	4.9607
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.1300e-003**	**0.0508**	**0.0119**	**5.0000e-005**	**1.7000e-004**	**3.0000e-005**	**2.0000e-004**	**5.0000e-005**	**2.0000e-005**	**8.0000e-005**	**0.0000**	**4.9406**	**4.9406**	**8.0000e-004**	**0.0000**	**4.9607**

3.9 Ph 2 - Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.0100e-003	0.1753	0.3031	4.0000e-004		6.6000e-004	6.6000e-004		6.6000e-004	6.6000e-004	0.0000	35.2548	35.2548	0.0114	0.0000	35.5399
Total	**9.0100e-003**	**0.1753**	**0.3031**	**4.0000e-004**		**6.6000e-004**	**6.6000e-004**		**6.6000e-004**	**6.6000e-004**	**0.0000**	**35.2548**	**35.2548**	**0.0114**	**0.0000**	**35.5399**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1300e-003	0.0508	0.0119	5.0000e-005	1.7000e-004	3.0000e-005	2.0000e-004	5.0000e-005	2.0000e-005	8.0000e-005	0.0000	4.9406	4.9406	8.0000e-004	0.0000	4.9607
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.1300e-003**	**0.0508**	**0.0119**	**5.0000e-005**	**1.7000e-004**	**3.0000e-005**	**2.0000e-004**	**5.0000e-005**	**2.0000e-005**	**8.0000e-005**	**0.0000**	**4.9406**	**4.9406**	**8.0000e-004**	**0.0000**	**4.9607**

3.10 Ph 3 - Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0329	0.0000	0.0329	4.9800e-003	0.0000	4.9800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0115	0.1182	0.0741	1.5000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	12.8746	12.8746	4.1600e-003	0.0000	12.9787
Total	**0.0115**	**0.1182**	**0.0741**	**1.5000e-004**	**0.0329**	**5.6800e-003**	**0.0386**	**4.9800e-003**	**5.2200e-003**	**0.0102**	**0.0000**	**12.8746**	**12.8746**	**4.1600e-003**	**0.0000**	**12.9787**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.4000e-004	0.0135	2.0200e-003	2.0000e-005	3.0000e-005	1.0000e-005	3.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	1.5323	1.5323	2.6000e-004	0.0000	1.5387
Vendor	3.0000e-005	1.2900e-003	3.0000e-004	0.0000	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.1257	0.1257	2.0000e-005	0.0000	0.1262
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.7000e-004**	**0.0147**	**2.3200e-003**	**2.0000e-005**	**3.0000e-005**	**1.0000e-005**	**4.0000e-005**	**1.0000e-005**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.6580**	**1.6580**	**2.8000e-004**	**0.0000**	**1.6649**

3.10 Ph 3 - Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0148	0.0000	0.0148	2.2400e-003	0.0000	2.2400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3500e-003	0.0478	0.0897	1.5000e-004		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	12.8746	12.8746	4.1600e-003	0.0000	12.9787
Total	**2.3500e-003**	**0.0478**	**0.0897**	**1.5000e-004**	**0.0148**	**2.4000e-004**	**0.0150**	**2.2400e-003**	**2.4000e-004**	**2.4800e-003**	**0.0000**	**12.8746**	**12.8746**	**4.1600e-003**	**0.0000**	**12.9787**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.4000e-004	0.0135	2.0200e-003	2.0000e-005	3.0000e-005	1.0000e-005	3.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	1.5323	1.5323	2.6000e-004	0.0000	1.5387
Vendor	3.0000e-005	1.2900e-003	3.0000e-004	0.0000	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.1257	0.1257	2.0000e-005	0.0000	0.1262
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.7000e-004**	**0.0147**	**2.3200e-003**	**2.0000e-005**	**3.0000e-005**	**1.0000e-005**	**4.0000e-005**	**1.0000e-005**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.6580**	**1.6580**	**2.8000e-004**	**0.0000**	**1.6649**

3.11 Ph 3 - Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0927	0.0000	0.0927	0.0499	0.0000	0.0499	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0391	0.4100	0.3289	6.9000e-004		0.0176	0.0176		0.0161	0.0161	0.0000	60.4135	60.4135	0.0195	0.0000	60.9020
Total	**0.0391**	**0.4100**	**0.3289**	**6.9000e-004**	**0.0927**	**0.0176**	**0.1103**	**0.0499**	**0.0161**	**0.0661**	**0.0000**	**60.4135**	**60.4135**	**0.0195**	**0.0000**	**60.9020**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.5300e-003	0.4155	0.0625	4.8000e-004	8.4000e-004	2.3000e-004	1.0700e-003	2.4000e-004	2.2000e-004	4.6000e-004	0.0000	47.3165	47.3165	7.9000e-003	0.0000	47.5139
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.5300e-003**	**0.4155**	**0.0625**	**4.8000e-004**	**8.4000e-004**	**2.3000e-004**	**1.0700e-003**	**2.4000e-004**	**2.2000e-004**	**4.6000e-004**	**0.0000**	**47.3165**	**47.3165**	**7.9000e-003**	**0.0000**	**47.5139**

3.11 Ph 3 - Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0417	0.0000	0.0417	0.0225	0.0000	0.0225	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0109	0.2125	0.4055	6.9000e-004		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	60.4135	60.4135	0.0195	0.0000	60.9019
Total	**0.0109**	**0.2125**	**0.4055**	**6.9000e-004**	**0.0417**	**1.1300e-003**	**0.0429**	**0.0225**	**1.1300e-003**	**0.0236**	**0.0000**	**60.4135**	**60.4135**	**0.0195**	**0.0000**	**60.9019**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.5300e-003	0.4155	0.0625	4.8000e-004	8.4000e-004	2.3000e-004	1.0700e-003	2.4000e-004	2.2000e-004	4.6000e-004	0.0000	47.3165	47.3165	7.9000e-003	0.0000	47.5139
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.5300e-003**	**0.4155**	**0.0625**	**4.8000e-004**	**8.4000e-004**	**2.3000e-004**	**1.0700e-003**	**2.4000e-004**	**2.2000e-004**	**4.6000e-004**	**0.0000**	**47.3165**	**47.3165**	**7.9000e-003**	**0.0000**	**47.5139**

3.12 Ph 2 - Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0243	0.2448	0.3208	5.0000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	44.0606	44.0606	0.0143	0.0000	44.4169
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0292**	**0.2448**	**0.3208**	**5.0000e-004**		**0.0125**	**0.0125**		**0.0115**	**0.0115**	**0.0000**	**44.0606**	**44.0606**	**0.0143**	**0.0000**	**44.4169**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.12 Ph 2 - Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8900e-003	0.2281	0.3805	5.0000e-004		5.2300e-003	5.2300e-003		5.2300e-003	5.2300e-003	0.0000	44.0606	44.0606	0.0143	0.0000	44.4168
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0148**	**0.2281**	**0.3805**	**5.0000e-004**		**5.2300e-003**	**5.2300e-003**		**5.2300e-003**	**5.2300e-003**	**0.0000**	**44.0606**	**44.0606**	**0.0143**	**0.0000**	**44.4168**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.13 Ph 2 - Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-003	0.0310	0.0399	7.0000e-005		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	5.6172	5.6172	3.7000e-004	0.0000	5.6263
Total	**1.3104**	**0.0310**	**0.0399**	**7.0000e-005**		**1.8000e-003**	**1.8000e-003**		**1.8000e-003**	**1.8000e-003**	**0.0000**	**5.6172**	**5.6172**	**3.7000e-004**	**0.0000**	**5.6263**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.13 Ph 2 - Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	0.0299	0.0403	7.0000e-005		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	5.6172	5.6172	3.7000e-004	0.0000	5.6263
Total	**1.3072**	**0.0299**	**0.0403**	**7.0000e-005**		**2.0900e-003**	**2.0900e-003**		**2.0900e-003**	**2.0900e-003**	**0.0000**	**5.6172**	**5.6172**	**3.7000e-004**	**0.0000**	**5.6263**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.14 Ph 3 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0121	0.1188	0.1475	2.0000e-004		6.9600e-003	6.9600e-003		6.4000e-003	6.4000e-003	0.0000	17.7293	17.7293	5.7300e-003	0.0000	17.8727
Total	**0.0121**	**0.1188**	**0.1475**	**2.0000e-004**		**6.9600e-003**	**6.9600e-003**		**6.4000e-003**	**6.4000e-003**	**0.0000**	**17.7293**	**17.7293**	**5.7300e-003**	**0.0000**	**17.8727**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.7000e-004	0.0255	6.0000e-003	3.0000e-005	9.0000e-005	1.0000e-005	1.0000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	2.4846	2.4846	4.0000e-004	0.0000	2.4947
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.7000e-004**	**0.0255**	**6.0000e-003**	**3.0000e-005**	**9.0000e-005**	**1.0000e-005**	**1.0000e-004**	**3.0000e-005**	**1.0000e-005**	**4.0000e-005**	**0.0000**	**2.4846**	**2.4846**	**4.0000e-004**	**0.0000**	**2.4947**

3.14 Ph 3 - Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.5300e-003	0.0882	0.1524	2.0000e-004		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	17.7293	17.7293	5.7300e-003	0.0000	17.8727
Total	**4.5300e-003**	**0.0882**	**0.1524**	**2.0000e-004**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**	**0.0000**	**17.7293**	**17.7293**	**5.7300e-003**	**0.0000**	**17.8727**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.7000e-004	0.0255	6.0000e-003	3.0000e-005	9.0000e-005	1.0000e-005	1.0000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	2.4846	2.4846	4.0000e-004	0.0000	2.4947
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.7000e-004**	**0.0255**	**6.0000e-003**	**3.0000e-005**	**9.0000e-005**	**1.0000e-005**	**1.0000e-004**	**3.0000e-005**	**1.0000e-005**	**4.0000e-005**	**0.0000**	**2.4846**	**2.4846**	**4.0000e-004**	**0.0000**	**2.4947**

3.14 Ph 3 - Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0221	0.2171	0.2937	4.0000e-004		0.0118	0.0118		0.0108	0.0108	0.0000	35.4853	35.4853	0.0115	0.0000	35.7722
Total	**0.0221**	**0.2171**	**0.2937**	**4.0000e-004**		**0.0118**	**0.0118**		**0.0108**	**0.0108**	**0.0000**	**35.4853**	**35.4853**	**0.0115**	**0.0000**	**35.7722**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-004	0.0451	0.0107	5.0000e-005	1.7000e-004	2.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	7.0000e-005	0.0000	4.8024	4.8024	6.8000e-004	0.0000	4.8193
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.0000e-004**	**0.0451**	**0.0107**	**5.0000e-005**	**1.7000e-004**	**2.0000e-005**	**1.9000e-004**	**5.0000e-005**	**1.0000e-005**	**7.0000e-005**	**0.0000**	**4.8024**	**4.8024**	**6.8000e-004**	**0.0000**	**4.8193**

3.14 Ph 3 - Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.0600e-003	0.1763	0.3048	4.0000e-004		6.6000e-004	6.6000e-004		6.6000e-004	6.6000e-004	0.0000	35.4853	35.4853	0.0115	0.0000	35.7722
Total	**9.0600e-003**	**0.1763**	**0.3048**	**4.0000e-004**		**6.6000e-004**	**6.6000e-004**		**6.6000e-004**	**6.6000e-004**	**0.0000**	**35.4853**	**35.4853**	**0.0115**	**0.0000**	**35.7722**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-004	0.0451	0.0107	5.0000e-005	1.7000e-004	2.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	7.0000e-005	0.0000	4.8024	4.8024	6.8000e-004	0.0000	4.8193
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.0000e-004**	**0.0451**	**0.0107**	**5.0000e-005**	**1.7000e-004**	**2.0000e-005**	**1.9000e-004**	**5.0000e-005**	**1.0000e-005**	**7.0000e-005**	**0.0000**	**4.8024**	**4.8024**	**6.8000e-004**	**0.0000**	**4.8193**

3.15 Ph 3 - Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0227	0.2242	0.3209	5.0000e-004		0.0112	0.0112		0.0103	0.0103	0.0000	44.0591	44.0591	0.0143	0.0000	44.4154
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0277**	**0.2242**	**0.3209**	**5.0000e-004**		**0.0112**	**0.0112**		**0.0103**	**0.0103**	**0.0000**	**44.0591**	**44.0591**	**0.0143**	**0.0000**	**44.4154**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.15 Ph 3 - Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8900e-003	0.2281	0.3805	5.0000e-004		5.2300e-003	5.2300e-003		5.2300e-003	5.2300e-003	0.0000	44.0591	44.0591	0.0143	0.0000	44.4153
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0148**	**0.2281**	**0.3805**	**5.0000e-004**		**5.2300e-003**	**5.2300e-003**		**5.2300e-003**	**5.2300e-003**	**0.0000**	**44.0591**	**44.0591**	**0.0143**	**0.0000**	**44.4153**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.16 Ph 3 - Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2200e-003	0.0287	0.0398	7.0000e-005		1.5600e-003	1.5600e-003		1.5600e-003	1.5600e-003	0.0000	5.6172	5.6172	3.4000e-004	0.0000	5.6256
Total	**1.3102**	**0.0287**	**0.0398**	**7.0000e-005**		**1.5600e-003**	**1.5600e-003**		**1.5600e-003**	**1.5600e-003**	**0.0000**	**5.6172**	**5.6172**	**3.4000e-004**	**0.0000**	**5.6256**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.16 Ph 3 - Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	0.0299	0.0403	7.0000e-005		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	5.6172	5.6172	3.4000e-004	0.0000	5.6256
Total	**1.3072**	**0.0299**	**0.0403**	**7.0000e-005**		**2.0900e-003**	**2.0900e-003**		**2.0900e-003**	**2.0900e-003**	**0.0000**	**5.6172**	**5.6172**	**3.4000e-004**	**0.0000**	**5.6256**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

Integrate Below Market Rate Housing

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6245	2.7086	7.0813	0.0223	1.8380	0.0226	1.8606	0.4922	0.0212	0.5134	0.0000	2,054.9724	2,054.9724	0.1148	0.0000	2,057.8419
Unmitigated	0.6707	3.0095	8.0730	0.0263	2.1880	0.0265	2.2145	0.5860	0.0248	0.6108	0.0000	2,420.6093	2,420.6093	0.1317	0.0000	2,423.9007

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,080.00	1,999.40	1833.00	5,805,403	4,876,674
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	2,080.00	1,999.40	1,833.00	5,805,403	4,876,674

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Non-Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Parking Lot	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Unenclosed Parking Structure	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Solana Highlands - Proposed Project - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	325.4800	325.4800	0.0134	3.0300e-003	326.7179
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	325.4800	325.4800	0.0134	3.0300e-003	326.7179
NaturalGas Mitigated	0.0124	0.1062	0.0452	6.8000e-004		8.5900e-003	8.5900e-003		8.5900e-003	8.5900e-003	0.0000	123.0389	123.0389	2.3600e-003	2.2600e-003	123.7701
NaturalGas Unmitigated	0.0124	0.1062	0.0452	6.8000e-004		8.5900e-003	8.5900e-003		8.5900e-003	8.5900e-003	0.0000	123.0389	123.0389	2.3600e-003	2.2600e-003	123.7701

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.30566e+006	0.0124	0.1062	0.0452	6.8000e-004		8.5900e-003	8.5900e-003		8.5900e-003	8.5900e-003	0.0000	123.0389	123.0389	2.3600e-003	2.2600e-003	123.7701
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0124**	**0.1062**	**0.0452**	**6.8000e-004**		**8.5900e-003**	**8.5900e-003**		**8.5900e-003**	**8.5900e-003**	**0.0000**	**123.0389**	**123.0389**	**2.3600e-003**	**2.2600e-003**	**123.7701**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.30566e+006	0.0124	0.1062	0.0452	6.8000e-004		8.5900e-003	8.5900e-003		8.5900e-003	8.5900e-003	0.0000	123.0389	123.0389	2.3600e-003	2.2600e-003	123.7701
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0124**	**0.1062**	**0.0452**	**6.8000e-004**		**8.5900e-003**	**8.5900e-003**		**8.5900e-003**	**8.5900e-003**	**0.0000**	**123.0389**	**123.0389**	**2.3600e-003**	**2.2600e-003**	**123.7701**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.10901e+006	269.8102	0.0111	2.5200e-003	270.8364
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	95744	23.2934	9.6000e-004	2.2000e-004	23.3820
Unenclosed Parking Structure	133078	32.3764	1.3300e-003	3.0000e-004	32.4995
Total		**325.4800**	**0.0134**	**3.0400e-003**	**326.7179**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.10901e+006	269.8102	0.0111	2.5200e-003	270.8364
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	95744	23.2934	9.6000e-004	2.2000e-004	23.3820
Unenclosed Parking Structure	133078	32.3764	1.3300e-003	3.0000e-004	32.4995
Total		**325.4800**	**0.0134**	**3.0400e-003**	**326.7179**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4778	0.0224	1.9405	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0900e-003	0.0000	3.2376
Unmitigated	1.4778	0.0224	1.9405	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0900e-003	0.0000	3.2376

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2879					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0593	0.0224	1.9405	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0900e-003	0.0000	3.2376
Total	**1.4778**	**0.0224**	**1.9405**	**1.0000e-004**		**0.0107**	**0.0107**		**0.0107**	**0.0107**	**0.0000**	**3.1603**	**3.1603**	**3.0900e-003**	**0.0000**	**3.2376**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2879					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0593	0.0224	1.9405	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0900e-003	0.0000	3.2376
Total	**1.4778**	**0.0224**	**1.9405**	**1.0000e-004**		**0.0107**	**0.0107**		**0.0107**	**0.0107**	**0.0000**	**3.1603**	**3.1603**	**3.0900e-003**	**0.0000**	**3.2376**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	58.1020	0.0217	0.0128	62.4592
Unmitigated	65.5054	0.0220	0.0129	69.8908

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	16.0085 / 3.37743	65.5054	0.0220	0.0129	69.8908
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**65.5054**	**0.0220**	**0.0129**	**69.8908**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	16.0085 / 0.638398	58.1020	0.0217	0.0128	62.4592
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**58.1020**	**0.0217**	**0.0128**	**62.4592**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.0694	0.3587	0.0000	15.0368
Unmitigated	24.2777	1.4348	0.0000	60.1470

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	119.6	24.2777	1.4348	0.0000	60.1470
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**24.2777**	**1.4348**	**0.0000**	**60.1470**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	29.9	6.0694	0.3587	0.0000	15.0368
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**6.0694**	**0.3587**	**0.0000**	**15.0368**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

ATTACHMENT B

AERMOD Input and HARP 2 Output Files

*** MODEL SETUP OPTIONS SUMMARY ***

- -

**Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION. DRYDPLT = F
**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses RURAL Dispersion Only.

**Model Uses Regulatory DEFAULT Options:
1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.

**Other Options Specified:
ADJ_U* - Use ADJ_U* option for SBL in AERMET
CCVR_Sub - Meteorological data includes CCVR substitutions
TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: PM_10

**Model Calculates 1 Short Term Average(s) of: 1-HR
and Calculates PERIOD Averages

**This Run Includes: 35 Source(s); 1 Source Group(s); and 3297 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 35 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 16216

**Output Options Selected:
Model Outputs Tables of PERIOD Averages by Receptor
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 39.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.9 MB of RAM.

**Input Runstream File: aermod.inp
**Output Print File: aermod.out

**Detailed Error/Message File: Solana Highlands.err
**File for Summary of Results: Solana Highlands.sum

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

```
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: ..\met\DMR 2010_2012_v16126.SFC Met Version: 16216
Profile file: ..\met\DMR 2010_2012_v16126.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 3177 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2010 Year: 2010

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
10	01	01	1	01	-13.5	0.169	-9.000	-9.000	-999.	166.	32.2	0.43	0.35	1.00	1.34	57.	10.0	284.2	2.0
10	01	01	1	02	-13.5	0.169	-9.000	-9.000	-999.	166.	32.1	0.43	0.35	1.00	1.34	59.	10.0	283.8	2.0
10	01	01	1	03	-20.9	0.211	-9.000	-9.000	-999.	232.	48.9	0.36	0.35	1.00	1.78	72.	10.0	283.1	2.0
10	01	01	1	04	-5.8	0.110	-9.000	-9.000	-999.	92.	20.4	0.43	0.35	1.00	0.89	52.	10.0	283.1	2.0
10	01	01	1	05	-1.8	0.072	-9.000	-9.000	-999.	47.	19.2	0.36	0.35	1.00	0.44	60.	10.0	283.1	2.0
10	01	01	1	06	-11.6	0.155	-9.000	-9.000	-999.	147.	29.1	0.36	0.35	1.00	1.34	77.	10.0	283.1	2.0
10	01	01	1	07	-21.0	0.211	-9.000	-9.000	-999.	232.	48.9	0.36	0.35	1.00	1.78	80.	10.0	282.0	2.0
10	01	01	1	08	-17.4	0.270	-9.000	-9.000	-999.	336.	101.9	0.36	0.35	0.47	2.23	89.	10.0	283.8	2.0
10	01	01	1	09	18.8	0.051	0.291	0.009	47.	131.	-1.0	0.02	0.35	0.26	0.44	301.	10.0	287.5	2.0
10	01	01	1	10	45.3	0.215	0.492	0.008	94.	239.	-19.7	0.40	0.35	0.19	1.34	356.	10.0	289.2	2.0
10	01	01	1	11	63.8	0.093	0.712	0.009	203.	78.	-1.1	0.02	0.35	0.17	0.89	318.	10.0	292.0	2.0
10	01	01	1	12	72.2	0.125	0.875	0.008	334.	105.	-2.4	0.02	0.35	0.16	1.34	321.	10.0	291.4	2.0
10	01	01	1	13	70.9	0.152	0.943	0.008	425.	143.	-4.5	0.02	0.35	0.16	1.78	320.	10.0	290.9	2.0
10	01	01	1	14	59.7	0.150	0.932	0.008	488.	139.	-5.1	0.02	0.35	0.17	1.78	309.	10.0	289.9	2.0
10	01	01	1	15	39.6	0.145	0.834	0.008	527.	132.	-6.9	0.02	0.35	0.20	1.78	321.	10.0	290.4	2.0
10	01	01	1	16	11.8	0.191	0.561	0.008	537.	200.	-52.9	0.40	0.35	0.29	1.34	341.	10.0	289.9	2.0
10	01	01	1	17	-5.1	0.106	-9.000	-9.000	-999.	85.	21.0	0.40	0.35	0.57	0.89	340.	10.0	288.8	2.0
10	01	01	1	18	-1.8	0.073	-9.000	-9.000	-999.	47.	19.0	0.40	0.35	1.00	0.44	341.	10.0	287.5	2.0
10	01	01	1	19	-13.3	0.168	-9.000	-9.000	-999.	165.	32.2	0.43	0.35	1.00	1.34	18.	10.0	287.0	2.0
10	01	01	1	20	-13.4	0.169	-9.000	-9.000	-999.	166.	32.3	0.43	0.35	1.00	1.34	38.	10.0	287.0	2.0
10	01	01	1	21	-5.0	0.102	-9.000	-9.000	-999.	79.	19.0	0.36	0.35	1.00	0.89	63.	10.0	285.9	2.0
10	01	01	1	22	-5.0	0.102	-9.000	-9.000	-999.	78.	19.0	0.36	0.35	1.00	0.89	65.	10.0	285.4	2.0
10	01	01	1	23	-5.8	0.110	-9.000	-9.000	-999.	87.	20.5	0.43	0.35	1.00	0.89	56.	10.0	285.4	2.0
10	01	01	1	24	-5.8	0.110	-9.000	-9.000	-999.	87.	20.5	0.43	0.35	1.00	0.89	51.	10.0	285.4	2.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
10	01	01	01	10.0	1	57.	1.34	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

*** AERMOD - VERSION 18081 *** *** C:\HARP2\Solana Highlands\Solana Highlands\Solana Highlands.isc ***
06/08/18

*** AERMET - VERSION 16216 *** *** *** 15:06:52

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (26304 HRS) RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	NETWORK OF TYPE GRID-ID
ALL	1ST HIGHEST VALUE IS	162.82904 AT (475646.34, 3649658.93, 19.61, 61.00, 0.00)	DC
	2ND HIGHEST VALUE IS	154.22775 AT (475654.33, 3649594.66, 22.90, 61.00, 0.00)	DC
	3RD HIGHEST VALUE IS	89.53793 AT (475702.03, 3649565.75, 17.12, 61.00, 0.00)	DC
	4TH HIGHEST VALUE IS	78.66901 AT (475682.03, 3649725.75, 21.92, 61.00, 0.00)	DC
	5TH HIGHEST VALUE IS	77.37416 AT (475662.03, 3649745.75, 28.12, 59.00, 0.00)	DC
	6TH HIGHEST VALUE IS	76.40375 AT (475702.03, 3649705.75, 15.83, 61.00, 0.00)	DC
	7TH HIGHEST VALUE IS	73.25746 AT (475722.03, 3649565.75, 12.99, 61.00, 0.00)	DC
	8TH HIGHEST VALUE IS	70.92094 AT (475642.03, 3649765.75, 30.53, 59.00, 0.00)	DC
	9TH HIGHEST VALUE IS	68.05136 AT (475742.03, 3649625.75, 9.22, 68.00, 0.00)	DC
	10TH HIGHEST VALUE IS	67.79048 AT (475682.03, 3649745.75, 22.41, 61.00, 0.00)	DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	NETWORK OF TYPE GRID-ID
ALL	HIGH 1ST HIGH VALUE IS	717.92535	ON 10100307: AT (475642.03, 3649765.75, 30.53, 59.00, 0.00)	DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 38 Warning Message(s)
A Total of 220476000 Informational Message(s)

A Total of 26304 Hours Were Processed

A Total of 598 Calm Hours Identified

A Total of 396 Missing Hours Identified (1.51 Percent)

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********

ME W186	130	MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used	0.50
ME W187	130	MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET	
MX W441	14167	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081407
MX W441	14168	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081408
MX W441	14169	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081409
MX W441	14170	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081410
MX W441	14171	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081411
MX W441	14172	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081412
MX W441	14173	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081413
MX W441	14174	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081414
MX W441	14175	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081415
MX W441	14176	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081416
MX W441	14177	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081417
MX W441	14178	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081418
MX W441	14191	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081507
MX W441	14192	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081508
MX W441	14193	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081509
MX W441	14194	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081510
MX W441	14195	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081511
MX W441	14196	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081512
MX W441	14197	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081513
MX W441	14198	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081514
MX W441	14199	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081515
MX W441	14200	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081516
MX W441	14201	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081517
MX W441	14202	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081518
MX W441	14215	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081607
MX W441	14216	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081608
MX W441	14217	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081609
MX W441	14218	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081610
MX W441	14219	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081611
MX W441	14220	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081612
MX W441	14221	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081613
MX W441	14222	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081614
MX W441	14223	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081615

MX W441	14224	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081616
MX W441	14225	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081617
MX W441	14226	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081618

HARP2 - HRACalc (dated 17023) 6/8/2018 2:38:10 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 2

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\Single Phase - Volume - no variable\SOLANA HIGHLANDS-SINGLE PHASE\hra\Res-tier mix-offsite-18-RCancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\Single Phase - Volume - no variable\SOLANA HIGHLANDS-SINGLE PHASE\hra\Res-tier mix-offsite-18-RCancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\Single Phase - Volume - no variable\SOLANA HIGHLANDS-SINGLE PHASE\hra\Res-tier mix-offsite-18-RNCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\Single Phase - Volume - no variable\SOLANA HIGHLANDS-SINGLE PHASE\hra\Res-tier mix-offsite-18-RNCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\Single Phase - Volume - no variable\SOLANA HIGHLANDS-SINGLE PHASE\hra\Res-tier mix-offsite-18-RNCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\Single Phase - Volume - no variable\SOLANA HIGHLANDS-SINGLE PHASE\hra\Res-tier mix-offsite-18-RNCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 3:41:39 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 2

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\Single Phase - Volume - no variable\SOLANA HIGHLANDS-SINGLE PHASE\hra\Res-tier mix-offsite-19-ACancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\Single Phase - Volume - no variable\SOLANA HIGHLANDS-SINGLE PHASE\hra\Res-tier mix-offsite-19-ACancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\Single Phase - Volume - no variable\SOLANA HIGHLANDS-SINGLE PHASE\hra\Res-tier mix-offsite-19-ANCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\Single Phase - Volume - no variable\SOLANA HIGHLANDS-SINGLE PHASE\hra\Res-tier mix-offsite-19-ANCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\Single Phase - Volume - no variable\SOLANA HIGHLANDS-SINGLE PHASE\hra\Res-tier mix-offsite-19-ANCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\Single Phase - Volume - no variable\SOLANA HIGHLANDS-SINGLE PHASE\hra\Res-tier mix-offsite-19-ANCAcuteRiskSumByRec.csv
HRA ran successfully

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** MODEL SETUP OPTIONS SUMMARY ***

- -

**Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION. DRYDPLT = F
**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses RURAL Dispersion Only.

**Model Uses Regulatory DEFAULT Options:
1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.

**Other Options Specified:
ADJ_U* - Use ADJ_U* option for SBL in AERMET
CCVR_Sub - Meteorological data includes CCVR substitutions
TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: PM_10

**Model Calculates 1 Short Term Average(s) of: 1-HR
and Calculates PERIOD Averages

**This Run Includes: 15 Source(s); 1 Source Group(s); and 3310 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 15 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 16216

```
**Output Options Selected:
        Model Outputs Tables of PERIOD Averages by Receptor
        Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
        Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
        Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =    39.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
              Emission Units = GRAMS/SEC                          ;  Emission Rate Unit Factor =   0.10000E+07
              Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.9 MB of RAM.

**Input Runstream File:          aermod.inp
**Output Print File:             aermod.out

**Detailed Error/Message File:   Solana Highlands.err
**File for Summary of Results:   Solana Highlands.sum
   *** AERMOD - VERSION  18081 ***   *** C:\HARP2\Solana Highlands\Solana Highlands\Solana Highlands.isc
***       06/09/18
*** AERMET - VERSION  16216 ***   ***                                                    ***       14:17:28
                                                                                    PAGE   2
*** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  ADJ_U*

                                *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                          (1=YES; 0=NO)

        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1

            NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS
INCLUDED IN THE DATA FILE.



                        *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
                                          (METERS/SEC)

                                  1.54,   3.09,   5.14,   8.23,  10.80,
   *** AERMOD - VERSION  18081 ***   *** C:\HARP2\Solana Highlands\Solana Highlands\Solana Highlands.isc
***       06/09/18
*** AERMET - VERSION  16216 ***   ***                                                    ***       14:17:28
                                                                                    PAGE   3
*** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  ADJ_U*
```

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: ..\met\DMR 2010_2012_v16126.SFC Met Version: 16216
Profile file: ..\met\DMR 2010_2012_v16126.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 3177 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2010 Year: 2010

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
10	01	01	1	01	-13.5	0.169	-9.000	-9.000	-999.	166.	32.2	0.43	0.35	1.00	1.34	57.	10.0	284.2	2.0
10	01	01	1	02	-13.5	0.169	-9.000	-9.000	-999.	166.	32.1	0.43	0.35	1.00	1.34	59.	10.0	283.8	2.0
10	01	01	1	03	-20.9	0.211	-9.000	-9.000	-999.	232.	48.9	0.36	0.35	1.00	1.78	72.	10.0	283.1	2.0
10	01	01	1	04	-5.8	0.110	-9.000	-9.000	-999.	92.	20.4	0.43	0.35	1.00	0.89	52.	10.0	283.1	2.0
10	01	01	1	05	-1.8	0.072	-9.000	-9.000	-999.	47.	19.2	0.36	0.35	1.00	0.44	60.	10.0	283.1	2.0
10	01	01	1	06	-11.6	0.155	-9.000	-9.000	-999.	147.	29.1	0.36	0.35	1.00	1.34	77.	10.0	283.1	2.0
10	01	01	1	07	-21.0	0.211	-9.000	-9.000	-999.	232.	48.9	0.36	0.35	1.00	1.78	80.	10.0	282.0	2.0
10	01	01	1	08	-17.4	0.270	-9.000	-9.000	-999.	336.	101.9	0.36	0.35	0.47	2.23	89.	10.0	283.8	2.0
10	01	01	1	09	18.8	0.051	0.291	0.009	47.	131.	-1.0	0.02	0.35	0.26	0.44	301.	10.0	287.5	2.0
10	01	01	1	10	45.3	0.215	0.492	0.008	94.	239.	-19.7	0.40	0.35	0.19	1.34	356.	10.0	289.2	2.0
10	01	01	1	11	63.8	0.093	0.712	0.009	203.	78.	-1.1	0.02	0.35	0.17	0.89	318.	10.0	292.0	2.0
10	01	01	1	12	72.2	0.125	0.875	0.008	334.	105.	-2.4	0.02	0.35	0.16	1.34	321.	10.0	291.4	2.0
10	01	01	1	13	70.9	0.152	0.943	0.008	425.	143.	-4.5	0.02	0.35	0.16	1.78	320.	10.0	290.9	2.0
10	01	01	1	14	59.7	0.150	0.932	0.008	488.	139.	-5.1	0.02	0.35	0.17	1.78	309.	10.0	289.9	2.0
10	01	01	1	15	39.6	0.145	0.834	0.008	527.	132.	-6.9	0.02	0.35	0.20	1.78	321.	10.0	290.4	2.0
10	01	01	1	16	11.8	0.191	0.561	0.008	537.	200.	-52.9	0.40	0.35	0.29	1.34	341.	10.0	289.9	2.0
10	01	01	1	17	-5.1	0.106	-9.000	-9.000	-999.	85.	21.0	0.40	0.35	0.57	0.89	340.	10.0	288.8	2.0
10	01	01	1	18	-1.8	0.073	-9.000	-9.000	-999.	47.	19.0	0.40	0.35	1.00	0.44	341.	10.0	287.5	2.0
10	01	01	1	19	-13.3	0.168	-9.000	-9.000	-999.	165.	32.2	0.43	0.35	1.00	1.34	18.	10.0	287.0	2.0
10	01	01	1	20	-13.4	0.169	-9.000	-9.000	-999.	166.	32.3	0.43	0.35	1.00	1.34	38.	10.0	287.0	2.0
10	01	01	1	21	-5.0	0.102	-9.000	-9.000	-999.	79.	19.0	0.36	0.35	1.00	0.89	63.	10.0	285.9	2.0
10	01	01	1	22	-5.0	0.102	-9.000	-9.000	-999.	78.	19.0	0.36	0.35	1.00	0.89	65.	10.0	285.4	2.0
10	01	01	1	23	-5.8	0.110	-9.000	-9.000	-999.	87.	20.5	0.43	0.35	1.00	0.89	56.	10.0	285.4	2.0
10	01	01	1	24	-5.8	0.110	-9.000	-9.000	-999.	87.	20.5	0.43	0.35	1.00	0.89	51.	10.0	285.4	2.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
10	01	01	01	10.0	1	57.	1.34	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

*** AERMOD - VERSION 18081 *** *** C:\HARP2\Solana Highlands\Solana Highlands\Solana Highlands.isc *** 06/09/18
*** AERMET - VERSION 16216 *** *** *** 14:17:28

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (26304 HRS) RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

NETWORK
GROUP ID AVERAGE CONC RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID
- -

ALL 1ST HIGHEST VALUE IS 155.31909 AT (475563.40, 3649653.69, 36.12, 57.00, 0.00) DC
2ND HIGHEST VALUE IS 151.59820 AT (475555.07, 3649612.47, 37.63, 37.63, 0.00) DC
3RD HIGHEST VALUE IS 124.24138 AT (475502.03, 3649745.75, 38.64, 61.00, 0.00) DC
4TH HIGHEST VALUE IS 122.93966 AT (475572.61, 3649593.92, 35.66, 38.00, 0.00) DC
5TH HIGHEST VALUE IS 119.30732 AT (475541.03, 3649549.81, 25.78, 61.00, 0.00) DC
6TH HIGHEST VALUE IS 117.35839 AT (475442.03, 3649685.75, 43.29, 61.00, 0.00) DC
7TH HIGHEST VALUE IS 115.13903 AT (475462.03, 3649705.75, 42.78, 61.00, 0.00) DC
8TH HIGHEST VALUE IS 114.56357 AT (475594.19, 3649671.14, 29.05, 61.00, 0.00) DC
9TH HIGHEST VALUE IS 110.98422 AT (475482.03, 3649725.75, 42.60, 61.00, 0.00) DC
10TH HIGHEST VALUE IS 106.43644 AT (475571.10, 3649565.35, 31.11, 38.00, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

DATE NETWORK
GROUP ID AVERAGE CONC (YYMMDDHH) RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID
- -

ALL HIGH 1ST HIGH VALUE IS 1731.63834 ON 10100307: AT (475602.03, 3649805.75, 35.00, 58.00, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 38 Warning Message(s)
A Total of 85593059 Informational Message(s)

A Total of 26304 Hours Were Processed

A Total of 598 Calm Hours Identified

A Total of 396 Missing Hours Identified (1.51 Percent)

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********

ME W186	90	MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used	0.50
ME W187	90	MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET	
MX W441	14167	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081407
MX W441	14168	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081408
MX W441	14169	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081409
MX W441	14170	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081410
MX W441	14171	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081411
MX W441	14172	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081412
MX W441	14173	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081413
MX W441	14174	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081414
MX W441	14175	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081415
MX W441	14176	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081416
MX W441	14177	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081417
MX W441	14178	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081418
MX W441	14191	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081507
MX W441	14192	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081508
MX W441	14193	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081509
MX W441	14194	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081510
MX W441	14195	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081511
MX W441	14196	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081512
MX W441	14197	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081513
MX W441	14198	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081514
MX W441	14199	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081515
MX W441	14200	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081516
MX W441	14201	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081517
MX W441	14202	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081518
MX W441	14215	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081607
MX W441	14216	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081608
MX W441	14217	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081609
MX W441	14218	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081610
MX W441	14219	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081611
MX W441	14220	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081612
MX W441	14221	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081613
MX W441	14222	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081614
MX W441	14223	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081615

MX W441	14224	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081616
MX W441	14225	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081617
MX W441	14226	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081618

HARP2 - HRACalc (dated 17023) 6/11/2018 12:51:17 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 2.25
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 1
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Default - Offsite - Res - 1CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Default - Offsite - Res - 1CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Default - Offsite - Res - 1NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Default - Offsite - Res - 1NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Default - Offsite - Res - 1NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Default - Offsite - Res - 1NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 12:57:41 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 2.25
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 1
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Default - Onsite - Res - 2CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Default - Onsite - Res - 2CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Default - Onsite - Res - 2NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Default - Onsite - Res - 2NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Default - Onsite - Res - 2NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Default - Onsite - Res - 2NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 12:59:58 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 2.25
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 1
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Mit - Offsite - Res - 3CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Mit - Offsite - Res - 3CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Mit - Offsite - Res - 3NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Mit - Offsite - Res - 3NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Mit - Offsite - Res - 3NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Mit - Offsite - Res - 3NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 1:03:09 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 2.25
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 1
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Mit - Onsite - Res - 4CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Mit - Onsite - Res - 4CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Mit - Onsite - Res - 4NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Mit - Onsite - Res - 4NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Mit - Onsite - Res - 4NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 P2\P1P2\hra\Mit - Onsite - Res - 4NCAcuteRiskSumByRec.csv
HRA ran successfully

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** MODEL SETUP OPTIONS SUMMARY ***

- -

**Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION. DRYDPLT = F
**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses RURAL Dispersion Only.

**Model Uses Regulatory DEFAULT Options:
1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.

**Other Options Specified:
ADJ_U* - Use ADJ_U* option for SBL in AERMET
CCVR_Sub - Meteorological data includes CCVR substitutions
TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: PM_10

**Model Calculates 1 Short Term Average(s) of: 1-HR
and Calculates PERIOD Averages

**This Run Includes: 12 Source(s); 1 Source Group(s); and 3310 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 12 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 16216

```
**Output Options Selected:
        Model Outputs Tables of PERIOD Averages by Receptor
        Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
        Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
        Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =    39.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
              Emission Units = GRAMS/SEC                          ;  Emission Rate Unit Factor =   0.10000E+07
              Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.9 MB of RAM.

**Input Runstream File:          aermod.inp
**Output Print File:             aermod.out

**Detailed Error/Message File:   Solana Highlands.err
**File for Summary of Results:   Solana Highlands.sum
   *** AERMOD - VERSION  18081 ***   *** C:\HARP2\Solana Highlands\Solana Highlands\Solana Highlands.isc
***       06/09/18
*** AERMET - VERSION  16216 ***   ***                                                    ***       11:16:45
                                                                                    PAGE   2
*** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  ADJ_U*

                                *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                          (1=YES; 0=NO)

        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1

            NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS
INCLUDED IN THE DATA FILE.



                        *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
                                          (METERS/SEC)

                                  1.54,   3.09,   5.14,   8.23,  10.80,
   *** AERMOD - VERSION  18081 ***   *** C:\HARP2\Solana Highlands\Solana Highlands\Solana Highlands.isc
***       06/09/18
*** AERMET - VERSION  16216 ***   ***                                                    ***       11:16:45
                                                                                    PAGE   3
*** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  ADJ_U*
```

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: ..\met\DMR 2010_2012_v16126.SFC Met Version: 16216
Profile file: ..\met\DMR 2010_2012_v16126.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 3177 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2010 Year: 2010

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
10	01	01	1	01	-13.5	0.169	-9.000	-9.000	-999.	166.	32.2	0.43	0.35	1.00	1.34	57.	10.0	284.2	2.0
10	01	01	1	02	-13.5	0.169	-9.000	-9.000	-999.	166.	32.1	0.43	0.35	1.00	1.34	59.	10.0	283.8	2.0
10	01	01	1	03	-20.9	0.211	-9.000	-9.000	-999.	232.	48.9	0.36	0.35	1.00	1.78	72.	10.0	283.1	2.0
10	01	01	1	04	-5.8	0.110	-9.000	-9.000	-999.	92.	20.4	0.43	0.35	1.00	0.89	52.	10.0	283.1	2.0
10	01	01	1	05	-1.8	0.072	-9.000	-9.000	-999.	47.	19.2	0.36	0.35	1.00	0.44	60.	10.0	283.1	2.0
10	01	01	1	06	-11.6	0.155	-9.000	-9.000	-999.	147.	29.1	0.36	0.35	1.00	1.34	77.	10.0	283.1	2.0
10	01	01	1	07	-21.0	0.211	-9.000	-9.000	-999.	232.	48.9	0.36	0.35	1.00	1.78	80.	10.0	282.0	2.0
10	01	01	1	08	-17.4	0.270	-9.000	-9.000	-999.	336.	101.9	0.36	0.35	0.47	2.23	89.	10.0	283.8	2.0
10	01	01	1	09	18.8	0.051	0.291	0.009	47.	131.	-1.0	0.02	0.35	0.26	0.44	301.	10.0	287.5	2.0
10	01	01	1	10	45.3	0.215	0.492	0.008	94.	239.	-19.7	0.40	0.35	0.19	1.34	356.	10.0	289.2	2.0
10	01	01	1	11	63.8	0.093	0.712	0.009	203.	78.	-1.1	0.02	0.35	0.17	0.89	318.	10.0	292.0	2.0
10	01	01	1	12	72.2	0.125	0.875	0.008	334.	105.	-2.4	0.02	0.35	0.16	1.34	321.	10.0	291.4	2.0
10	01	01	1	13	70.9	0.152	0.943	0.008	425.	143.	-4.5	0.02	0.35	0.16	1.78	320.	10.0	290.9	2.0
10	01	01	1	14	59.7	0.150	0.932	0.008	488.	139.	-5.1	0.02	0.35	0.17	1.78	309.	10.0	289.9	2.0
10	01	01	1	15	39.6	0.145	0.834	0.008	527.	132.	-6.9	0.02	0.35	0.20	1.78	321.	10.0	290.4	2.0
10	01	01	1	16	11.8	0.191	0.561	0.008	537.	200.	-52.9	0.40	0.35	0.29	1.34	341.	10.0	289.9	2.0
10	01	01	1	17	-5.1	0.106	-9.000	-9.000	-999.	85.	21.0	0.40	0.35	0.57	0.89	340.	10.0	288.8	2.0
10	01	01	1	18	-1.8	0.073	-9.000	-9.000	-999.	47.	19.0	0.40	0.35	1.00	0.44	341.	10.0	287.5	2.0
10	01	01	1	19	-13.3	0.168	-9.000	-9.000	-999.	165.	32.2	0.43	0.35	1.00	1.34	18.	10.0	287.0	2.0
10	01	01	1	20	-13.4	0.169	-9.000	-9.000	-999.	166.	32.3	0.43	0.35	1.00	1.34	38.	10.0	287.0	2.0
10	01	01	1	21	-5.0	0.102	-9.000	-9.000	-999.	79.	19.0	0.36	0.35	1.00	0.89	63.	10.0	285.9	2.0
10	01	01	1	22	-5.0	0.102	-9.000	-9.000	-999.	78.	19.0	0.36	0.35	1.00	0.89	65.	10.0	285.4	2.0
10	01	01	1	23	-5.8	0.110	-9.000	-9.000	-999.	87.	20.5	0.43	0.35	1.00	0.89	56.	10.0	285.4	2.0
10	01	01	1	24	-5.8	0.110	-9.000	-9.000	-999.	87.	20.5	0.43	0.35	1.00	0.89	51.	10.0	285.4	2.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
10	01	01	01	10.0	1	57.	1.34	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

*** AERMOD - VERSION 18081 *** *** C:\HARP2\Solana Highlands\Solana Highlands\Solana Highlands.isc *** 06/09/18

*** AERMET - VERSION 16216 *** *** *** 11:16:45

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (26304 HRS) RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

NETWORK
GROUP ID AVERAGE CONC RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID
- -

ALL 1ST HIGHEST VALUE IS 215.56594 AT (475573.11, 3649565.85, 31.11, 38.00, 0.00) DC
2ND HIGHEST VALUE IS 212.22811 AT (475567.10, 3649589.41, 35.05, 38.00, 0.00) DC
3RD HIGHEST VALUE IS 191.53143 AT (475551.06, 3649613.47, 37.54, 37.54, 0.00) DC
4TH HIGHEST VALUE IS 150.99900 AT (475706.63, 3649566.15, 16.19, 61.00, 0.00) DC
5TH HIGHEST VALUE IS 138.71547 AT (475557.57, 3649552.82, 27.93, 61.00, 0.00) DC
6TH HIGHEST VALUE IS 106.23766 AT (475731.09, 3649564.65, 10.71, 61.00, 0.00) DC
7TH HIGHEST VALUE IS 104.28617 AT (475537.02, 3649552.32, 26.37, 61.00, 0.00) DC
8TH HIGHEST VALUE IS 96.29462 AT (475742.03, 3649625.75, 9.22, 68.00, 0.00) DC
9TH HIGHEST VALUE IS 90.03465 AT (475742.03, 3649645.75, 9.64, 68.00, 0.00) DC
10TH HIGHEST VALUE IS 89.66241 AT (475702.03, 3649705.75, 15.83, 61.00, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

DATE NETWORK
GROUP ID AVERAGE CONC (YYMMDDHH) RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID
- -

ALL HIGH 1ST HIGH VALUE IS 995.74335 ON 12062504: AT (475573.11, 3649565.85, 31.11, 38.00, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 38 Warning Message(s)
A Total of 59923595 Informational Message(s)

A Total of 26304 Hours Were Processed

A Total of 598 Calm Hours Identified

A Total of 396 Missing Hours Identified (1.51 Percent)

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********

ME W186	84	MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used	0.50
ME W187	84	MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET	
MX W441	14167	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081407
MX W441	14168	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081408
MX W441	14169	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081409
MX W441	14170	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081410
MX W441	14171	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081411
MX W441	14172	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081412
MX W441	14173	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081413
MX W441	14174	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081414
MX W441	14175	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081415
MX W441	14176	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081416
MX W441	14177	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081417
MX W441	14178	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081418
MX W441	14191	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081507
MX W441	14192	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081508
MX W441	14193	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081509
MX W441	14194	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081510
MX W441	14195	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081511
MX W441	14196	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081512
MX W441	14197	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081513
MX W441	14198	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081514
MX W441	14199	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081515
MX W441	14200	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081516
MX W441	14201	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081517
MX W441	14202	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081518
MX W441	14215	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081607
MX W441	14216	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081608
MX W441	14217	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081609
MX W441	14218	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081610
MX W441	14219	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081611
MX W441	14220	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081612
MX W441	14221	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081613
MX W441	14222	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081614
MX W441	14223	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081615

MX W441	14224	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081616
MX W441	14225	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081617
MX W441	14226	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081618

HARP2 - HRACalc (dated 17023) 6/11/2018 11:40:19 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 1.25
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 1
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Default - Offsite - Res - 1CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Default - Offsite - Res - 1CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Default - Offsite - Res - 1NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Default - Offsite - Res - 1NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Default - Offsite - Res - 1NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Default - Offsite - Res - 1NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 11:45:11 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 1.25
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 1
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Default - Onsite - Res - 2CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Default - Onsite - Res - 2CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Default - Onsite - Res - 2NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Default - Onsite - Res - 2NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Default - Onsite - Res - 2NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Default - Onsite - Res - 2NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 11:47:55 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 1.25
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 1
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Mit - Offsite - Res - 3CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Mit - Offsite - Res - 3CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Mit - Offsite - Res - 3NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Mit - Offsite - Res - 3NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Mit - Offsite - Res - 3NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Mit - Offsite - Res - 3NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 11:50:11 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 1.25
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 1
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Mit - Onsite - Res - 4CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Mit - Onsite - Res - 4CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Mit - Onsite - Res - 4NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Mit - Onsite - Res - 4NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Mit - Onsite - Res - 4NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 P1\P3 P1\hra\Mit - Onsite - Res - 4NCAcuteRiskSumByRec.csv
HRA ran successfully

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** MODEL SETUP OPTIONS SUMMARY ***

- -

**Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION. DRYDPLT = F
**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses RURAL Dispersion Only.

**Model Uses Regulatory DEFAULT Options:
1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.

**Other Options Specified:
ADJ_U* - Use ADJ_U* option for SBL in AERMET
CCVR_Sub - Meteorological data includes CCVR substitutions
TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: PM_10

**Model Calculates 1 Short Term Average(s) of: 1-HR
and Calculates PERIOD Averages

**This Run Includes: 22 Source(s); 1 Source Group(s); and 3299 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 22 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 16216

```
**Output Options Selected:
        Model Outputs Tables of PERIOD Averages by Receptor
        Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
        Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
        Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =    39.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
              Emission Units = GRAMS/SEC                          ;  Emission Rate Unit Factor =   0.10000E+07
              Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.9 MB of RAM.

**Input Runstream File:          aermod.inp
**Output Print File:             aermod.out

**Detailed Error/Message File:   Solana Highlands.err
**File for Summary of Results:   Solana Highlands.sum
   *** AERMOD - VERSION  18081 ***   *** C:\HARP2\Solana Highlands\Solana Highlands\Solana Highlands.isc
***       06/09/18
*** AERMET - VERSION  16216 ***   ***                                                    ***       12:11:10
                                                                                    PAGE   2
*** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  ADJ_U*

                                *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                          (1=YES; 0=NO)

        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1

            NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS
INCLUDED IN THE DATA FILE.



                        *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
                                          (METERS/SEC)

                                  1.54,   3.09,   5.14,   8.23,  10.80,
   *** AERMOD - VERSION  18081 ***   *** C:\HARP2\Solana Highlands\Solana Highlands\Solana Highlands.isc
***       06/09/18
*** AERMET - VERSION  16216 ***   ***                                                    ***       12:11:10
                                                                                    PAGE   3
*** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  ADJ_U*
```

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: ..\met\DMR 2010_2012_v16126.SFC Met Version: 16216
Profile file: ..\met\DMR 2010_2012_v16126.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 3177 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2010 Year: 2010

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
10	01	01	1	01	-13.5	0.169	-9.000	-9.000	-999.	166.	32.2	0.43	0.35	1.00	1.34	57.	10.0	284.2	2.0
10	01	01	1	02	-13.5	0.169	-9.000	-9.000	-999.	166.	32.1	0.43	0.35	1.00	1.34	59.	10.0	283.8	2.0
10	01	01	1	03	-20.9	0.211	-9.000	-9.000	-999.	232.	48.9	0.36	0.35	1.00	1.78	72.	10.0	283.1	2.0
10	01	01	1	04	-5.8	0.110	-9.000	-9.000	-999.	92.	20.4	0.43	0.35	1.00	0.89	52.	10.0	283.1	2.0
10	01	01	1	05	-1.8	0.072	-9.000	-9.000	-999.	47.	19.2	0.36	0.35	1.00	0.44	60.	10.0	283.1	2.0
10	01	01	1	06	-11.6	0.155	-9.000	-9.000	-999.	147.	29.1	0.36	0.35	1.00	1.34	77.	10.0	283.1	2.0
10	01	01	1	07	-21.0	0.211	-9.000	-9.000	-999.	232.	48.9	0.36	0.35	1.00	1.78	80.	10.0	282.0	2.0
10	01	01	1	08	-17.4	0.270	-9.000	-9.000	-999.	336.	101.9	0.36	0.35	0.47	2.23	89.	10.0	283.8	2.0
10	01	01	1	09	18.8	0.051	0.291	0.009	47.	131.	-1.0	0.02	0.35	0.26	0.44	301.	10.0	287.5	2.0
10	01	01	1	10	45.3	0.215	0.492	0.008	94.	239.	-19.7	0.40	0.35	0.19	1.34	356.	10.0	289.2	2.0
10	01	01	1	11	63.8	0.093	0.712	0.009	203.	78.	-1.1	0.02	0.35	0.17	0.89	318.	10.0	292.0	2.0
10	01	01	1	12	72.2	0.125	0.875	0.008	334.	105.	-2.4	0.02	0.35	0.16	1.34	321.	10.0	291.4	2.0
10	01	01	1	13	70.9	0.152	0.943	0.008	425.	143.	-4.5	0.02	0.35	0.16	1.78	320.	10.0	290.9	2.0
10	01	01	1	14	59.7	0.150	0.932	0.008	488.	139.	-5.1	0.02	0.35	0.17	1.78	309.	10.0	289.9	2.0
10	01	01	1	15	39.6	0.145	0.834	0.008	527.	132.	-6.9	0.02	0.35	0.20	1.78	321.	10.0	290.4	2.0
10	01	01	1	16	11.8	0.191	0.561	0.008	537.	200.	-52.9	0.40	0.35	0.29	1.34	341.	10.0	289.9	2.0
10	01	01	1	17	-5.1	0.106	-9.000	-9.000	-999.	85.	21.0	0.40	0.35	0.57	0.89	340.	10.0	288.8	2.0
10	01	01	1	18	-1.8	0.073	-9.000	-9.000	-999.	47.	19.0	0.40	0.35	1.00	0.44	341.	10.0	287.5	2.0
10	01	01	1	19	-13.3	0.168	-9.000	-9.000	-999.	165.	32.2	0.43	0.35	1.00	1.34	18.	10.0	287.0	2.0
10	01	01	1	20	-13.4	0.169	-9.000	-9.000	-999.	166.	32.3	0.43	0.35	1.00	1.34	38.	10.0	287.0	2.0
10	01	01	1	21	-5.0	0.102	-9.000	-9.000	-999.	79.	19.0	0.36	0.35	1.00	0.89	63.	10.0	285.9	2.0
10	01	01	1	22	-5.0	0.102	-9.000	-9.000	-999.	78.	19.0	0.36	0.35	1.00	0.89	65.	10.0	285.4	2.0
10	01	01	1	23	-5.8	0.110	-9.000	-9.000	-999.	87.	20.5	0.43	0.35	1.00	0.89	56.	10.0	285.4	2.0
10	01	01	1	24	-5.8	0.110	-9.000	-9.000	-999.	87.	20.5	0.43	0.35	1.00	0.89	51.	10.0	285.4	2.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
10	01	01	01	10.0	1	57.	1.34	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

*** AERMOD - VERSION 18081 *** *** C:\HARP2\Solana Highlands\Solana Highlands\Solana Highlands.isc *** 06/09/18

*** AERMET - VERSION 16216 *** *** *** 12:11:10

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (26304 HRS) RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

NETWORK
GROUP ID AVERAGE CONC RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID
- -

ALL 1ST HIGHEST VALUE IS 183.32655 AT (475572.61, 3649593.92, 35.66, 38.00, 0.00) DC
2ND HIGHEST VALUE IS 183.09790 AT (475555.07, 3649612.47, 37.63, 37.63, 0.00) DC
3RD HIGHEST VALUE IS 139.79427 AT (475571.10, 3649565.35, 31.11, 38.00, 0.00) DC
4TH HIGHEST VALUE IS 114.47862 AT (475706.63, 3649566.15, 16.19, 61.00, 0.00) DC
5TH HIGHEST VALUE IS 111.05037 AT (475562.58, 3649550.82, 28.10, 57.00, 0.00) DC
6TH HIGHEST VALUE IS 99.68207 AT (475541.03, 3649549.81, 25.78, 61.00, 0.00) DC
7TH HIGHEST VALUE IS 82.82973 AT (475662.03, 3649745.75, 28.12, 59.00, 0.00) DC
8TH HIGHEST VALUE IS 79.22928 AT (475731.09, 3649564.65, 10.71, 61.00, 0.00) DC
9TH HIGHEST VALUE IS 78.93281 AT (475682.03, 3649725.75, 21.92, 61.00, 0.00) DC
10TH HIGHEST VALUE IS 78.02446 AT (475642.03, 3649765.75, 30.53, 59.00, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

DATE NETWORK
GROUP ID AVERAGE CONC (YYMMDDHH) RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID
- -

ALL HIGH 1ST HIGH VALUE IS 778.30033 ON 11062106: AT (475622.03, 3649785.75, 34.94, 37.00, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 38 Warning Message(s)
A Total of 115753592 Informational Message(s)

A Total of 26304 Hours Were Processed

A Total of 598 Calm Hours Identified

A Total of 396 Missing Hours Identified (1.51 Percent)

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********

ME W186	104	MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used	0.50
ME W187	104	MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET	
MX W441	14167	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081407
MX W441	14168	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081408
MX W441	14169	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081409
MX W441	14170	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081410
MX W441	14171	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081411
MX W441	14172	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081412
MX W441	14173	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081413
MX W441	14174	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081414
MX W441	14175	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081415
MX W441	14176	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081416
MX W441	14177	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081417
MX W441	14178	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081418
MX W441	14191	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081507
MX W441	14192	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081508
MX W441	14193	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081509
MX W441	14194	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081510
MX W441	14195	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081511
MX W441	14196	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081512
MX W441	14197	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081513
MX W441	14198	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081514
MX W441	14199	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081515
MX W441	14200	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081516
MX W441	14201	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081517
MX W441	14202	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081518
MX W441	14215	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081607
MX W441	14216	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081608
MX W441	14217	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081609
MX W441	14218	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081610
MX W441	14219	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081611
MX W441	14220	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081612
MX W441	14221	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081613
MX W441	14222	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081614
MX W441	14223	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081615

MX W441	14224	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081616
MX W441	14225	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081617
MX W441	14226	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081618

HARP2 - HRACalc (dated 17023) 6/11/2018 12:13:58 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 2
Total Exposure Duration: 0.25

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0.25
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Offsite - Res - 1CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Offsite - Res - 1CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Offsite - Res - 1NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Offsite - Res - 1NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Offsite - Res - 1NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Offsite - Res - 1NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 12:30:48 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 2.08
Total Exposure Duration: 0.17

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0.17
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Offsite - Res - 5 - P2CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Offsite - Res - 5 - P2CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Offsite - Res - 5 - P2NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Offsite - Res - 5 - P2NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Offsite - Res - 5 - P2NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Offsite - Res - 5 - P2NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 12:11:54 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 2
Total Exposure Duration: 0.25

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0.25
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Onsite - Res - 2CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Onsite - Res - 2CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Onsite - Res - 2NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Onsite - Res - 2NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Onsite - Res - 2NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Onsite - Res - 2NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 12:32:46 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 2.08
Total Exposure Duration: 0.17

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0.17
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Onsite - Res - 6 - P2CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Onsite - Res - 6 - P2CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Onsite - Res - 6 - P2NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Onsite - Res - 6 - P2NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Onsite - Res - 6 - P2NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Default - Onsite - Res - 6 - P2NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 12:20:50 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 2
Total Exposure Duration: 0.25

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0.25
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Offsite - Res - 3CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Offsite - Res - 3CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Offsite - Res - 3NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Offsite - Res - 3NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Offsite - Res - 3NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Offsite - Res - 3NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 12:34:50 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 2.08
Total Exposure Duration: 0.17

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0.17
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Offsite - Res - 7 - P2CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Offsite - Res - 7 - P2CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Offsite - Res - 7 - P2NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Offsite - Res - 7 - P2NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Offsite - Res - 7 - P2NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Offsite - Res - 7 - P2NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 12:23:28 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 2
Total Exposure Duration: 0.25

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0.25
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Onsite - Res - 4CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Onsite - Res - 4CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Onsite - Res - 4NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Onsite - Res - 4NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Onsite - Res - 4NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Onsite - Res - 4NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 12:37:39 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 2.08
Total Exposure Duration: 0.17

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0.17
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Onsite - Res - 8 - P2CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Onsite - Res - 8 - P2CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Onsite - Res - 8 - P2NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Onsite - Res - 8 - P2NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Onsite - Res - 8 - P2NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P1 New\P1 NEW\hra\Mit - Onsite - Res - 8 - P2NCAcuteRiskSumByRec.csv
HRA ran successfully

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** MODEL SETUP OPTIONS SUMMARY ***

- -

**Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION. DRYDPLT = F
**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses RURAL Dispersion Only.

**Model Uses Regulatory DEFAULT Options:
1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.

**Other Options Specified:
ADJ_U* - Use ADJ_U* option for SBL in AERMET
CCVR_Sub - Meteorological data includes CCVR substitutions
TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: PM_10

**Model Calculates 1 Short Term Average(s) of: 1-HR
and Calculates PERIOD Averages

**This Run Includes: 26 Source(s); 1 Source Group(s); and 3305 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 26 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 16216

```
**Output Options Selected:
        Model Outputs Tables of PERIOD Averages by Receptor
        Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
        Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
        Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =    39.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
              Emission Units = GRAMS/SEC                          ;  Emission Rate Unit Factor =   0.10000E+07
              Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.9 MB of RAM.

**Input Runstream File:          aermod.inp
**Output Print File:             aermod.out

**Detailed Error/Message File:   Solana Highlands.err
**File for Summary of Results:   Solana Highlands.sum
   *** AERMOD - VERSION  18081 ***   *** C:\HARP2\Solana Highlands\Solana Highlands\Solana Highlands.isc
***       06/09/18
*** AERMET - VERSION  16216 ***   ***                                                    ***       06:59:09
                                                                                    PAGE   2
*** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  ADJ_U*

                                *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                          (1=YES; 0=NO)

        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1  1 1 1 1 1

            NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS
INCLUDED IN THE DATA FILE.



                        *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
                                          (METERS/SEC)

                                  1.54,   3.09,   5.14,   8.23,  10.80,
   *** AERMOD - VERSION  18081 ***   *** C:\HARP2\Solana Highlands\Solana Highlands\Solana Highlands.isc
***       06/09/18
*** AERMET - VERSION  16216 ***   ***                                                    ***       06:59:09
                                                                                    PAGE   3
*** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  ADJ_U*
```

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: ..\met\DMR 2010_2012_v16126.SFC Met Version: 16216
Profile file: ..\met\DMR 2010_2012_v16126.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 3177 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2010 Year: 2010

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
10	01	01	1	01	-13.5	0.169	-9.000	-9.000	-999.	166.	32.2	0.43	0.35	1.00	1.34	57.	10.0	284.2	2.0
10	01	01	1	02	-13.5	0.169	-9.000	-9.000	-999.	166.	32.1	0.43	0.35	1.00	1.34	59.	10.0	283.8	2.0
10	01	01	1	03	-20.9	0.211	-9.000	-9.000	-999.	232.	48.9	0.36	0.35	1.00	1.78	72.	10.0	283.1	2.0
10	01	01	1	04	-5.8	0.110	-9.000	-9.000	-999.	92.	20.4	0.43	0.35	1.00	0.89	52.	10.0	283.1	2.0
10	01	01	1	05	-1.8	0.072	-9.000	-9.000	-999.	47.	19.2	0.36	0.35	1.00	0.44	60.	10.0	283.1	2.0
10	01	01	1	06	-11.6	0.155	-9.000	-9.000	-999.	147.	29.1	0.36	0.35	1.00	1.34	77.	10.0	283.1	2.0
10	01	01	1	07	-21.0	0.211	-9.000	-9.000	-999.	232.	48.9	0.36	0.35	1.00	1.78	80.	10.0	282.0	2.0
10	01	01	1	08	-17.4	0.270	-9.000	-9.000	-999.	336.	101.9	0.36	0.35	0.47	2.23	89.	10.0	283.8	2.0
10	01	01	1	09	18.8	0.051	0.291	0.009	47.	131.	-1.0	0.02	0.35	0.26	0.44	301.	10.0	287.5	2.0
10	01	01	1	10	45.3	0.215	0.492	0.008	94.	239.	-19.7	0.40	0.35	0.19	1.34	356.	10.0	289.2	2.0
10	01	01	1	11	63.8	0.093	0.712	0.009	203.	78.	-1.1	0.02	0.35	0.17	0.89	318.	10.0	292.0	2.0
10	01	01	1	12	72.2	0.125	0.875	0.008	334.	105.	-2.4	0.02	0.35	0.16	1.34	321.	10.0	291.4	2.0
10	01	01	1	13	70.9	0.152	0.943	0.008	425.	143.	-4.5	0.02	0.35	0.16	1.78	320.	10.0	290.9	2.0
10	01	01	1	14	59.7	0.150	0.932	0.008	488.	139.	-5.1	0.02	0.35	0.17	1.78	309.	10.0	289.9	2.0
10	01	01	1	15	39.6	0.145	0.834	0.008	527.	132.	-6.9	0.02	0.35	0.20	1.78	321.	10.0	290.4	2.0
10	01	01	1	16	11.8	0.191	0.561	0.008	537.	200.	-52.9	0.40	0.35	0.29	1.34	341.	10.0	289.9	2.0
10	01	01	1	17	-5.1	0.106	-9.000	-9.000	-999.	85.	21.0	0.40	0.35	0.57	0.89	340.	10.0	288.8	2.0
10	01	01	1	18	-1.8	0.073	-9.000	-9.000	-999.	47.	19.0	0.40	0.35	1.00	0.44	341.	10.0	287.5	2.0
10	01	01	1	19	-13.3	0.168	-9.000	-9.000	-999.	165.	32.2	0.43	0.35	1.00	1.34	18.	10.0	287.0	2.0
10	01	01	1	20	-13.4	0.169	-9.000	-9.000	-999.	166.	32.3	0.43	0.35	1.00	1.34	38.	10.0	287.0	2.0
10	01	01	1	21	-5.0	0.102	-9.000	-9.000	-999.	79.	19.0	0.36	0.35	1.00	0.89	63.	10.0	285.9	2.0
10	01	01	1	22	-5.0	0.102	-9.000	-9.000	-999.	78.	19.0	0.36	0.35	1.00	0.89	65.	10.0	285.4	2.0
10	01	01	1	23	-5.8	0.110	-9.000	-9.000	-999.	87.	20.5	0.43	0.35	1.00	0.89	56.	10.0	285.4	2.0
10	01	01	1	24	-5.8	0.110	-9.000	-9.000	-999.	87.	20.5	0.43	0.35	1.00	0.89	51.	10.0	285.4	2.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
10	01	01	01	10.0	1	57.	1.34	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

*** AERMOD - VERSION 18081 *** *** C:\HARP2\Solana Highlands\Solana Highlands\Solana Highlands.isc *** 06/09/18
*** AERMET - VERSION 16216 *** *** *** 06:59:09

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (26304 HRS) RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

NETWORK
GROUP ID AVERAGE CONC RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID
- -

ALL 1ST HIGHEST VALUE IS 123.27073 AT (475493.01, 3649555.83, 31.37, 61.00, 0.00) DC
2ND HIGHEST VALUE IS 107.54521 AT (475706.63, 3649566.15, 16.19, 61.00, 0.00) DC
3RD HIGHEST VALUE IS 95.15652 AT (475471.19, 3649564.19, 32.85, 61.00, 0.00) DC
4TH HIGHEST VALUE IS 93.58329 AT (475682.03, 3649725.75, 21.92, 61.00, 0.00) DC
5TH HIGHEST VALUE IS 88.51482 AT (475588.66, 3649734.12, 28.37, 61.00, 0.00) DC
6TH HIGHEST VALUE IS 88.37359 AT (475702.03, 3649705.75, 15.83, 61.00, 0.00) DC
7TH HIGHEST VALUE IS 82.20543 AT (475662.03, 3649745.75, 28.12, 59.00, 0.00) DC
8TH HIGHEST VALUE IS 80.52050 AT (475459.58, 3649611.55, 37.66, 61.00, 0.00) DC
9TH HIGHEST VALUE IS 79.90022 AT (475731.09, 3649564.65, 10.71, 61.00, 0.00) DC
10TH HIGHEST VALUE IS 79.64345 AT (475742.03, 3649625.75, 9.22, 68.00, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

DATE NETWORK
GROUP ID AVERAGE CONC (YYMMDDHH) RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID
- -

ALL HIGH 1ST HIGH VALUE IS 953.90784 ON 10100307: AT (475662.03, 3649745.75, 28.12, 59.00, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 38 Warning Message(s)
A Total of 131991459 Informational Message(s)

A Total of 26304 Hours Were Processed

A Total of 598 Calm Hours Identified

A Total of 396 Missing Hours Identified (1.51 Percent)

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********

ME W186	112	MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used	0.50
ME W187	112	MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET	
MX W441	14167	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081407
MX W441	14168	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081408
MX W441	14169	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081409
MX W441	14170	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081410
MX W441	14171	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081411
MX W441	14172	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081412
MX W441	14173	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081413
MX W441	14174	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081414
MX W441	14175	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081415
MX W441	14176	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081416
MX W441	14177	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081417
MX W441	14178	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081418
MX W441	14191	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081507
MX W441	14192	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081508
MX W441	14193	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081509
MX W441	14194	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081510
MX W441	14195	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081511
MX W441	14196	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081512
MX W441	14197	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081513
MX W441	14198	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081514
MX W441	14199	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081515
MX W441	14200	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081516
MX W441	14201	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081517
MX W441	14202	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081518
MX W441	14215	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081607
MX W441	14216	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081608
MX W441	14217	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081609
MX W441	14218	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081610
MX W441	14219	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081611
MX W441	14220	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081612
MX W441	14221	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081613
MX W441	14222	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081614
MX W441	14223	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081615

MX W441	14224	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081616
MX W441	14225	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081617
MX W441	14226	METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=	11081618

HARP2 - HRACalc (dated 17023) 6/11/2018 11:08:15 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 1.25

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 1.25
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Offsite - Ph1 - 1CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Offsite - Ph1 - 1CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Offsite - Ph1 - 1NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Offsite - Ph1 - 1NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Offsite - Ph1 - 1NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Offsite - Ph1 - 1NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 11:23:30 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 1
Total Exposure Duration: 0.25

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0.25
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Offsite - Ph2 - 5CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Offsite - Ph2 - 5CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Offsite - Ph2 - 5NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Offsite - Ph2 - 5NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Offsite - Ph2 - 5NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Offsite - Ph2 - 5NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 11:13:19 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 1.25

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 1.25
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Onsite - Ph1 - 2CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Onsite - Ph1 - 2CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Onsite - Ph1 - 2NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Onsite - Ph1 - 2NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Onsite - Ph1 - 2NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Onsite - Ph1 - 2NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 11:25:56 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 1
Total Exposure Duration: 0.25

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0.25
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Onsite - Ph2 - 6CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Onsite - Ph2 - 6CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Onsite - Ph2 - 6NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Onsite - Ph2 - 6NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Onsite - Ph2 - 6NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Default - Onsite - Ph2 - 6NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 11:15:46 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 1.25

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 1.25
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Offsite - Ph1 - 3CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Offsite - Ph1 - 3CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Offsite - Ph1 - 3NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Offsite - Ph1 - 3NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Offsite - Ph1 - 3NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Offsite - Ph1 - 3NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 11:27:50 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 1
Total Exposure Duration: 0.25

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0.25
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Offsite - Ph2 - 7CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Offsite - Ph2 - 7CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Offsite - Ph2 - 7NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Offsite - Ph2 - 7NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Offsite - Ph2 - 7NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Offsite - Ph2 - 7NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 11:18:33 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 1.25

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 1.25
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Onsite - Ph1 - 4CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Onsite - Ph1 - 4CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Onsite - Ph1 - 4NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Onsite - Ph1 - 4NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Onsite - Ph1 - 4NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Onsite - Ph1 - 4NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 17023) 6/11/2018 11:30:06 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 1
Total Exposure Duration: 0.25

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0.25
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Onsite - Ph2 - 8CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Onsite - Ph2 - 8CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Onsite - Ph2 - 8NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Onsite - Ph2 - 8NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Onsite - Ph2 - 8NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\Solana Highlands\P3 Existing\SOLANA HIGHLANDS P3 EXISTING\hra\Mit - Onsite - Ph2 - 8NCAcuteRiskSumByRec.csv
HRA ran successfully

APPENDIX E

Tree Protection Plan

ESTIMATED TOTAL WATER USE (ETWU) WORKSHEET

The project's Estimated Total Water Use is calculated using the following formula:

$$ETWU = (ETo)(0.62)\left(\frac{PF \times HA}{IE} + SLA\right)$$

ETWU = Estimated total water use per year (gallons per year)
ETo = Evapotranspiration rate (inches per year)
PF = Plant Factor from WUCOLS (see Definitions)
HA = Hydrozone Area (square feet): Define hydrozones by water use: very low, low, moderate and high
SLA = Special Landscape Area (square feet): Edible plants, irrigated with recycled water, & turf used for active play
0.62 = Conversion Factor (to gallons per square foot)
IE = Irrigation Efficiency (minimum 0.71)

CITY OF SOLANA BEACH ESTIMATED TOTAL WATER USE (ETWU) WORKSHEET

	Line	Hydrozone Number (1 - 4 Below – use as many tables as necessary to complete all hydrozones)				
		1	2	3	4	SLA
Evapotranspiration Rate (ETo)*	1	Use 41 (west of I-5) / 47 (east of I-5)				
Conversion Factor - .62	2	0.62				
(Line 1 x Line 2)	3	25.42 (west of I-5) / 29.14 (east of I-5)				
Plant Factor (PF)** (0.1 - 0.8)	4	.5	.3	.8	.5	
Hydrozone Area (HA) - in square feet	5	53,583	135,302	561	17,306	
(Line 4 x Line 5)	6	26,792	40,591	449	8,653	
Irrigation Efficiency (IE)***	7	.8	.7	.7	.8	
(Line 6 ÷ Line 7)	8	33,490	57,987	641	10,816	
TOTAL all Line 8s + SLA)	9	102,934				
Line 3 x Line 9 Estimated Total Water Use - **ETWU** (gallons per year) Total shall not exceed MAWA below	10	2,616,582				

*ETo= Evapotranspiration rate = 41 (west of I-5) 47 (east of I-5)
Average calculated from values in State Model Water Efficiency Landscape Ordinance (MWELO) - Appendix A

** PF - Plant Factor (Water Use) - from WUCOLS
Select based on type of plants in hydrozone:
0.1 = VLW - Very Low Water Use Plants
0.3 = LW - Low Water Use Plants
0.5 = MW - Moderate Water Use Plants
0.8 = HW - High Water Use Plants

***IE - Irrigation Efficiency
Spray = .55
Rotor = .70
Bubbler = .75
Drip & Microspray = .80
A different IE may be used if supported by documentation subject to approval by the City Planner

MAXIMUM APPLIED WATER APPLICATION (MAWA) calculation:

25.42 ([.5 x 206,752) + (.3 x 0)] = 2,627,818
25.42 or 29.14 Total Landscape Area Total SLA

2,627,818

SITE AREA BREAK DOWN

DESCRIPTION	SITE AREA
BUILDING FOOTPRINT	143,844 SF.
PAVED AREA	164,965 SF.
VEHICULAR USE AREA	156,628 SF.
IRRIGATED LANDSCAPE AREA	210,535 SF.
NON-IRRIGATED LANDSCAPE AREA	0 SF.
PROPOSED WATER FEATURES	
- POOL	1968 SF.
- SPA	144 SF.
- LEASING OFFICE WATER FEATURE	26 SF.
USEABLE OPEN SPACE (SEE PLAN)	66,70 SF.

I AM FAMILIAR WITH THE REQUIREMENTS FOR LANDSCAPE AND IRRIGATION PLANS CONTAINED IN THE CITY'S WATER EFFICIENT LANDSCAPE REGULATIONS. I UNDERSTAND THAT CONSTRUCTION DRAWINGS ARE TO BE PREPARED IN COMPLIANCE WITH THOSE REGULATIONS AND THE LANDSCAPE MANUAL. I CERTIFY THAT THE PLANS WILL BE PREPARED IMPLEMENTING THOSE REGULATIONS TO PROVIDE EFFICIENT USE OF WATER.

MARC MOODY LA 3827 — 3/12/18 DATE

SCALE: 1" = 40'

PLANTING LEGEND

TREES

SYMBOL	BOTANICAL	COMMON NAME	SIZE	APPROX. QTY.	WUCOLS
	SMALL FOCAL TREE ALOE BAINESI	TREE ALOE	24" BOX	44	LOW
	ENTRY RECREATION AREA TREES/PALMS PHOENIX DACTYLIFERA 'MEDJOOL'	DATE PALM	18' BTH	33	LOW
	ACCENT TREES PETROSIDEROS EXCELSUS	NEW ZEALAND CHRISTMAS TREE	24" BOX	143	MED
	ARBUTUS UNEDO 'MARINA'	MARINA STRAWBERRY TREE	24" BOX		LOW
	OLEA EUROPEA	OLIVE	24" BOX		LOW
	PARKING LOT TREES PODOCARPUS GRACILIOR	FERN PINE	24" BOX	74	MED
	VERTICAL ACCENT TREE LOPHOSTEMON CONFERTUS	BRISBANE BOX	24" BOX	69	MED
	PINUS CANARIENSIS	CANARY ISLAND PINE	24" BOX		LOW
	CUPRESSUS SEMPERVIRENS	ITALIAN CYPRESS	24" BOX		LOW
	LARGE SHADE TREES PINUS HALEPENSIS	ALEPPO PINE	24" BOX	78	LOW
	PLATANUS RACEMOSA	CALIFORNIA SYCAMORE	24" BOX		MED
	QUERCUS AGRIFOLIA	COAST LIVE OAK	24" BOX 84" BOX AS NOTED		LOW
	INTERIOR STREET SHADE TREES MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	24" BOX	69	MED
	CINNAMOMUM CAMPHORA	CAMPHOR TREE	24" BOX		MED
	OUTER STREET TREE PINUS PINEA	STONE PINE	24" BOX.	45	LOW
	EXISTING TREES TO REMAIN PINUS CANARIENSIS	CANARY ISLAND PINE			
	PINUS HALEPENSIS	ALEPPO PINE			
	PINUS RADIATA	MONTEREY PINE			

SHRUBS

BOTANICAL	COMMON NAME	SIZE	APPROX. QTY.	WUCOLS
AGAVE ATTENUATA	FOXTAIL AGAVE	5 GAL.	150	LOW
ALOE ARBORESCENS	TORCH ALOE	5 GAL.	150	LOW
ALOE STRIATA	CORAL ALOE	1 GAL.	50	LOW
ANIGOZANTHOS SPP.	KANGAROO PAW	5 GAL.	1000	LOW
ARCTOSTAPHYLOS SPP.	MANZANITA	1 GAL.	1000	LOW
CISTUS PURPUREUS	PURPLE ROCKROSE	5 GAL.	200	LOW
FEIJOA SELLOWIANA	PINEAPPLE GUAVA	5 GAL.	150	LOW
HESPERALOE PARVIFLORA	RED YUCCA	5 GAL.	100	VL
HETEROMELES ARBUTIFOLIA	TOYON	5 GAL.	100	LOW
LIGUSTRUM TEXANUM	TEXAS PRIVET	5 GAL.	1000	MED
LIRIOPE MUSCARI 'VARIEGATA'	VARIFIED LILY TURF	1 GAL.	500	MED
MUHLENBERGIA CAPILLARIS	PINK MULLY	1 GAL.	100	MED
PITTOSPORUM TOBIRA 'VARIEGATA'	VARIEGATED TOBIRA	5 GAL.	30	MED
PITTOSPORUM T. 'MARJORIE CHANNON'	MARJORIE CHANNON COLUMN	15 GAL.	50	MED
PODOCARPUS 'MAKI' 'COLUMNAR'	FERN PINE (COLUMN)	15 GAL.	50	MED
RHAPHIOLEPIS INDICA 'SPRINGTIME'	INDIAN HAWTHORN	5 GAL.	50	MED
RHUS INTEGRIFOLIA	LEMONADE BERRY	5 GAL.	100	VL
ROSA FLORIBUNDA 'ICEBERG'	ICEBERG ROSE	5 GAL.	100	MED
ROSMARINUS 'TUSCAN BLUE'	TUSCAN BLUE ROSEMARY	5 GAL.	100	LOW
SALVIA GREGGII	AUTUMN SAGE	5 GAL.	150	LOW
SALVIA LEUCANTHA	MEXICAN BUSH SAGE	5 GAL.	200	LOW
STRELITZIA REGINAE	BIRD OF PARADISE	5 GAL.	500	MED
DIANELLA CAERULEA 'CASSA BLUE'	CASSA BLUE DIANELLA	1 GAL.	100	MED

VINES

BOTANICAL	COMMON NAME	SIZE	APPROX. QTY.	WUCOLS
BOUGAINVILLEA 'SAN DIEGO RED'	BOUGAINVILLEA	15 GAL.	30	LOW
DISTICTIS 'RIVERS'	ROYAL TRUMPET VINE	15 GAL.	30	MED

GROUNDCOVER

SYMBOL	BOTANICAL	COMMON NAME	SIZE	WUCOLS
	FLAT LANDSCAPE AREA SENECIO SERPENS	BLUE CHALKSTICKS	FLATS @ 12" O.C.	LOW
	TRACHELOSPERMUM JASMINOIDES	STAR JASMINE	1 GAL. @ 24" O.C.	MED
	WATER QUALITY CAREX 'TEREGOLA	BERKELEY SEDGE	PLUGS @ 18" O.C.	MED
	CAREX PANSA	DUNE SEDGE	PLUGS @ 18" O.C.	MED
	SLOPES BACCHARIS PILULARIS	DWARF COYOTE BRUSH	FLATS @ 12" O.C.	LOW
	SENECIO TALNOIDES	BLUE CHALK STICKS	FLATS @ 12" O.C.	LOW
	SOD PARATRIUM II	TURF GRASS	SOD	HIGH

NOTE: ALL SHRUB AREAS ARE TO BE UNDERPLANTED WITH ABOVE LISTED GROUNDCOVER OR MULCHED (SEE PLAN FOR TYPE AND LOCATION)

NOTES:

- ALL TREES WITHIN 18' OF HARDSCAPE ELEMENTS SHALL RECEIVE ROOT BARRIER PER DETAIL.
- ALL NON-(30) SLOPE PLANTING AREAS TO RECEIVE 3" MIN. - 4" MAX. SHREDDED ORGANIC BARK MULCH.
- CONTRACTOR SHALL PROVIDE PHOTOS OF ALL PLANT MATERIAL 15 GALLON AND LARGER AS SHOWN IN THE PLANTING LEGEND TO THE LANDSCAPE ARCHITECT FOR APPROVAL. PHOTOS SHALL BE INDICATIVE OF THE PLANT MATERIAL THAT WILL BE DELIVERED TO THE SITE. SUB-STANDARD PLANT MATERIAL WILL BE REJECTED ON SITE.
- TRIMMED NATIVE OR ORNAMENTAL TREES SHALL BE LIMBED UP 6' FROM THE GROUND OR UNDERSTORY VEGETATION.
- ALL PARKING SHALL BE SCREENED FROM VIEW FROM THE STREET AND OFF-SITE WITH SHRUBS THAT REACH A HEIGHT OF 36".
- ALL SLOPES SHALL BE PLANTED WITH GROUND COVER FROM FLATS AT A MIN. OF 12" O.C. AND MINIMUM (1) 1 GAL. SHRUBS PER 1000 SF., AND TREES AS SHOWN AT MINIMUM.
- SLOPE GREATER THAN 3:1 SHALL HAVE REINFORCED STRAW MATTING INSTALLED.
- PLATANUS RACEMOSA SHALL REPLACE EXISTING ON SITE AT A MINIMUM RATIO OF 1:1 COMPLYING WITH LUP, POLICIES 339, 332, AND 333

STEPHEN DALTON ARCHITECTS
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H.G. FENTON COMPANY
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LANDSCAPE ARCHITECTURE & PLANNING

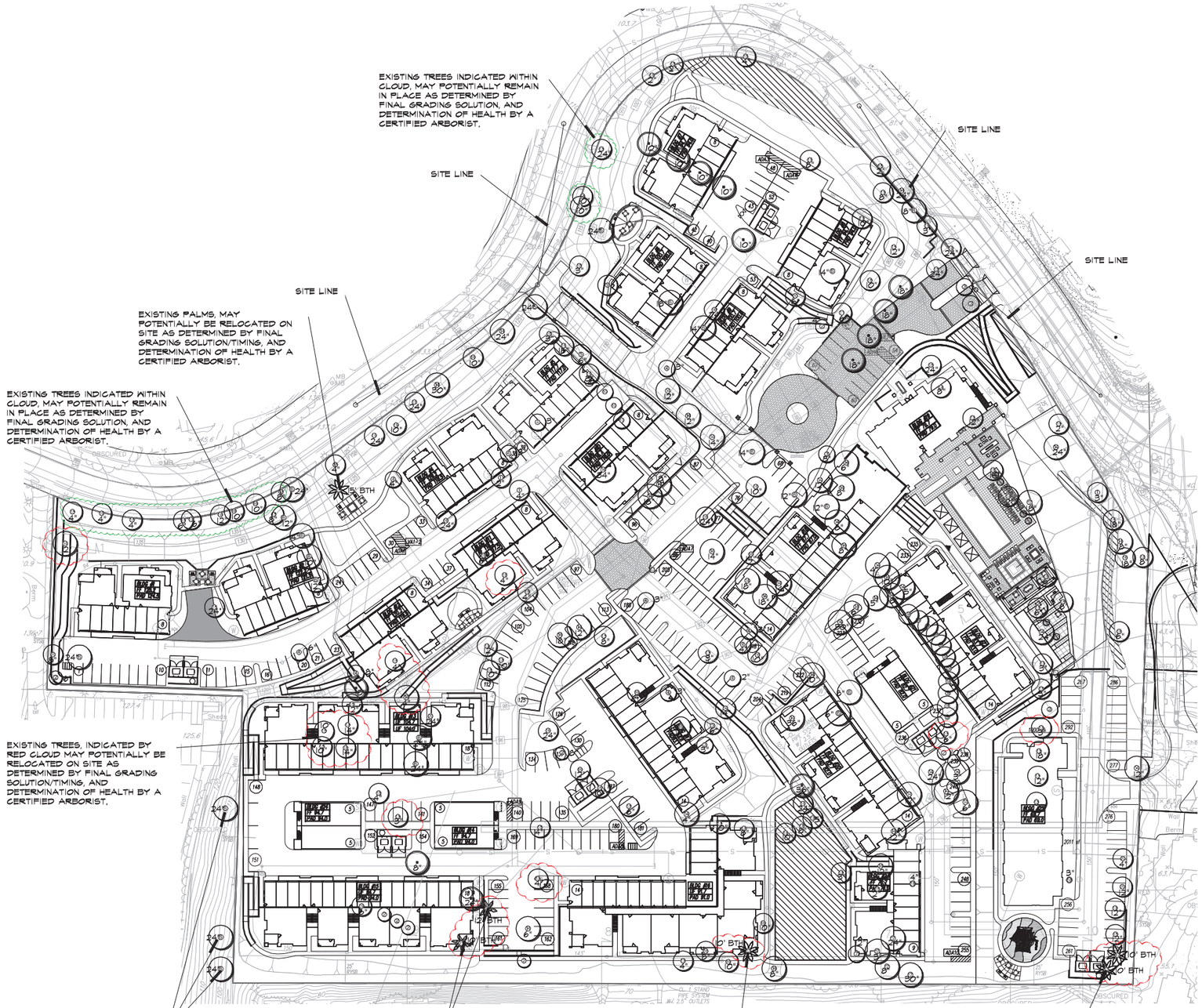
REVITALIZING SOLANA HIGHLANDS

LANDSCAPE PLAN

DEVELOPMENT REVIEW PERMIT

SUBMITTAL REVISED 03/12/18

L-0.1



TREE INVENTORY LEGEND

SYM.	BOTANICAL NAME / COMMON NAME	SIZE
1	ARAUCARIA COLUMNARIS / STAR PINE	
2	ACACIA MELANOXYLON / BLACK ACACIA	
3	ARBUTUS UNEDO / STRAWBERRY TREE	
4	CALLISTEMON RIGIDUS / BOTTLEBRUSH TREE	
6	EUCALYPTUS SPP.	
7	ERIOBOTRYA DEFLEXA / BRONZE LOQUAT	
8	FICUS SP.	
9	LIQUIDAMBAR STYRACIFLUA / LIQUIDAMBAR	
10	MELALEUCA QUINQUENERVIA / PAPERBARK TEA TREE	
11	MYOPORUM LAETUM / MOUSEHOLE TREE	
13	OLEA EUROPEA / OLIVE	
	PHEONIX CANARIENSIS / CANARY ISLAND DATE PALM	
15	PINUS CANARIENSIS / CANARY ISLAND PINE	
16	PINUS HALEPENSIS / ALEPPO PINE	
17	PINUS PINEA / ITALIAN STONE PINE	
18	PINUS RADIATA / MONTEREY PINE	
19	*PLATANUS RACEMOSA / CALIFORNIA SYCAMORE	
18	PODOCAPUS 'MAKI' / YEW PINE	
19	PYRUS CALLERYANA / CALLERY PEAR	
20	SCHINUS TEREBINTHIFOLIUS / BRAZILEAN PEPPER	
	SYGARUS ROMANZOFFIANUM / QUEEN PALM	

* PLATANUS RACEMOSA SHALL BE REPLACED ON SITE AT A MINIMUM RATIO OF 1:1 COMPLYING WITH LUP. POLICIES 351, 352, AND 353

NOTE: ALL EXISTING TREES TO BE REMOVED UNLESS NOTED OTHERWISE.

40 20 0 40 80 120
SCALE: 1" = 40'

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SUBMITTAL REVISED 03/12/18

L-0.3

APPENDIX F

Greenhouse Gas Analysis Report

Greenhouse Gas Analysis for the Solana Highlands Revitalization Project

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SUMMARY OF FINDINGS

The purpose of this technical report is to assess the potential greenhouse gas (GHG) emissions impacts associated with implementation of the proposed Solana Highlands Revitalization Project (proposed project). This assessment utilizes the significance thresholds in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.).

The proposed project involves demolition of the existing development on site (which includes 194 multifamily residential units in 16 buildings and 4 single-family residences) and construction of 260 new multifamily residential units in 24 buildings, covered and open parking, landscaped areas and open space. A Single Phase Construction Alternative (Alternative) was evaluated as well that assumes a compressed schedule compared to the proposed project. Operation of both the proposed project and Alternative are identical and thus are not evaluated separately.

Global climate change is primarily considered a cumulative impact but must also be evaluated on a project-level under CEQA. A project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHG emissions. GHGs are gases that absorb infrared radiation in the atmosphere. Principal GHGs regulated under state and federal law and regulations include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). GHG emissions are measured in metric tons of CO_2 equivalent (MT CO_2e), which account for weighted global warming potential (GWP) factors for CH_4 and N_2O.

Project-Generated Construction and Operational Greenhouse Gas Emissions

Construction of the proposed project would result in GHG emissions primarily associated with the use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. Total proposed project generated GHG emissions during construction were estimated to be 2,230.05 MT CO_2e, or 74.34 MT CO_2e per year when amortized over 30 years. Total Alternative generated GHG emissions during construction were estimated to be 2,474.26 MT CO_2e, or 82.48 MT CO_2e per year when amortized over 30 years.

The proposed project would generate operational GHG emissions from area sources (landscape maintenance), energy sources (electricity consumption), mobile sources (vehicle trips), water supply and wastewater treatment, and solid waste. Estimated annual proposed project generated operational GHG emissions at buildout in 2024 would be approximately 2,515.23 MT CO_2e per year.

Estimated annual proposed project generated operational emissions in 2024, plus amortized construction emissions, would be approximately 2,589.57 MT CO_2e per year. Estimated annual Alternative generated operational emissions in 2024, plus amortized construction

emissions, would be approximately 2,597.71 MT CO_2e per year. As the proposed project is replacing an existing development, a net GHG analysis was performed to determine the net impact of the proposed project. The estimated GHG emissions of the existing site were 2,776.67 MT CO_2e per year. Therefore, the net GHG emissions from the proposed project would be a reduction of 187.10 MT CO_2e per year and the Alternative would result in a net reduction of 178.96 MT CO_2e per year. As such, the net GHG emissions from the proposed project and Alternative would be less than the 900 MT CO_2e significance threshold. Therefore, the impact would be less than significant.

Consistency with Applicable Greenhouse Gas Reduction Plans

The proposed project was shown to be consistent with SANDAG's Regional Plan, City of Solana Beach's Climate Action Plan, Senate Bill (SB) 32, and Executive Order (EO) S-3-05. The proposed project does not conflict with any plans adopted with the purpose of reducing GHG emissions; therefore, the proposed Project's impacts on GHG emissions would be less than significant.

1 INTRODUCTION

1.1 Regional and Local Setting

The project site is located at 661 to 781 South Nardo Avenue in the City of Solana Beach (City) in north coastal San Diego County (County), California (see Figures 1 and 2). The project site encompasses approximately 13.4 acres on three parcels (Assessor's Parcel Numbers 298-260-33, 298-164-22, and 298-281-10 (with listed address as 821 Stephens Avenue)). The Solana Highlands Revitalization Project (proposed project) is located in an urban setting and is surrounded by residential neighborhoods to the north, Solana Pointe Apartments to the northeast, commercial area to the east, single-family homes to the southeast, Turfwood Apartments to the south, and St. James Catholic Church and school campus to the west. Major circulation corridors surrounding the project in less than a mile radius include Interstate 5 (I-5) and Stevens Avenue to the east, Via De La Valle to the south, Lomas Santa Fe Drive to the north, and Highway 101 to the west.

In a regional setting, the proposed project is approximately 0.75 mile east of the Pacific Ocean, approximately 20 miles northwest of downtown San Diego, approximately 4 miles south of the neighboring City of Encinitas, and approximately 4 miles west of the Fairbanks Ranch community. In relation to circulation, Amtrak provides the Surfliner rail service, which stops in the City and downtown San Diego to the south and destinations to the north, including Los Angeles, Santa Barbara, and San Luis Obispo. The North County Transit District (NCTD) Coaster commuter train also has a station in the City. The NCTD Coaster runs north–south through San Diego County, serving eight stations between Oceanside and downtown San Diego.

1.2 Project Description

The proposed project involves demolition of the existing development on site (which includes 194 multifamily residential units in 16 buildings and 4 single-family residences) and construction of 260 new multifamily residential units in 24 buildings (Figures 3 and 4).

Residential buildings would range in height from two stories to three stories and would have a total of 121 one-bedroom units and 139 two-bedroom units. All units would have private outdoor space in the form of balconies (for upper-floor units) or patios (for ground-floor units), laundry facilities and storage space in all homes, and parking garages and surface parking. Project amenities would include a recreation facility/clubhouse building and associated recreation facilities, such as a pool, Jacuzzi, barbecue areas, walking paths, and passive usable open space. The project site would be broken into three neighborhood areas—Bungalow, Valley View, and Lifestyle. The Bungalow neighborhood would be two stories in height and would feature 24 one-bedroom/one-bathroom units and 48 two-bedroom/two-bathroom units. The Bungalow

neighborhood would be located along South Nardo Avenue, with setbacks of a minimum of 25 feet from the property line. The Valley View neighborhood would all be three stories in height and would feature 47 one-bedroom/one-bathroom units and 51 two-bedroom/two-bathroom units. The Valley View neighborhood would be internal to the project site. The Lifestyle neighborhood would be three stories in height and would feature 45 one-bedroom/one-bathroom units and 49 two-bedroom/two-bathroom units. The Lifestyle neighborhood would be located along the southern edge and southeastern slope of the project site toward Stevens Avenue.

1.2.1 Vehicular and Pedestrian Access

The existing four entrances to the project site located off South Nardo Avenue would be reduced to two driveways for the main apartment complex and a dedicated driveway for the senior living building off Stevens Avenue at the location of the existing access driveway for neighboring residences. The entry along the northwest portion South Nardo Avenue would be roughly positioned consistent with the existing driveway in this location. This driveway would be approximately 24 feet wide and would be gated. The second driveway would become the main driveway located closer to Stevens Avenue along the eastern portion of South Nardo Avenue. This driveway would consist of two lanes approximately 16 feet wide each, with a median dividing ingress and egress routes and gated after a turning. This driveway would lead from Nardo Ave. to an initial parking area and small roundabout located on the site, then would transition to a 30-foot-wide gated entrance into the site. Internal vehicular and pedestrian circulation would be guided with way-finding signage for automobiles and pedestrians. Vehicular circulation would be internal to the project site, with project buildings and landscaping screening internal roadways from surrounding developments. Separate pedestrian access would be provided via sidewalks and walkways throughout the project site, connecting residents to parking areas, other buildings, and project recreational and gathering amenities.

The senior designated building would be served by a third driveway off of Stevens Avenue in approximately the same location as the existing driveway that currently serves the off-site units owned by the applicant. This driveway would serve the senior living building and provide existing property owners adjacent to the site with direct access to their properties, and would not be gated.

1.2.2 Traffic-Calming Measures

To reduce vehicle speeds and help improve the walking environment, the proposed project would include the following traffic-calming measures off site along South Nardo Avenue from Solana Circle/Nardito Lane to Stevens Avenue:

- Installation of a 10-foot-wide raised median and striping on South Nardo Avenue just west of Stevens Avenue, which would create a left-turn pocket for vehicles entering the project site.

- Installation of curb extensions on the northwest and northeast corners of the Fresca Street/South Nardo Avenue intersection, which would narrow the street, reduce speeds, and make pedestrians more visible.
- Installation of a 6-foot-wide center median and 5-foot-wide medians on either side of the street on South Nardo Avenue, approximately 230 feet west of Fresca Street and approximately 360 feet east of Nardito Lane, which would narrow the street and reduce speeds along a long stretch of South Nardo Avenue.
- Installation of a ladder-striped crosswalk at the stop-controlled north leg of the South Nardo Avenue/Fresca Street intersection. The ladder-striped crosswalk painted with reflective paint would improve pedestrian visibility compared to the existing condition.
- Installation of a speed table (a long, flat speed bump) on South Nardo Avenue between East Solana Circle and Nardito Lane. The speed table, in conjunction with the other traffic-calming measures, would help to reduce traffic speeds on South Nardo Avenue between Nardito Lane and Fresca Street.
- An existing striped yellow school crosswalk is located on the east leg of the South Nardo Avenue/Nardito Lane intersection serving the adjacent St. James Catholic Church and school. This crosswalk would be repainted with highly reflective paint to improve the visibility of the marked crosswalk.

1.2.3 Landscape Concept Plan

The proposed preliminary Landscape Concept Plan includes the use of indigenous and/or drought-tolerant plant material, where feasible. No invasive or potentially invasive species would be used. Planting is intended to be a connecting device linking the various pieces of the project and design style. The preliminary Landscape Concept Plan uses plant material to help define spaces, create/encourage circulation paths, emphasize entry points, and provide softness and scale to the architecture. Evergreen, deciduous, and flowering material are proposed throughout the project. New landscaping would use significantly less water than the current landscaping and comply with all California landscape water usage standards. The project would also include usable open space and biofiltration areas.

1.2.4 Density Bonus

The following steps outline the density bonus and provide clarification as to how the City arrived at the number of dwelling units being proposed (also see Table 1):

Step 1: The project site is zoned High Residential (HRd), which provides for a maximum allowable density of 13–20 dwelling units per acre.

Step 2: SBMC Section 17.20.030(B)(4) requires an adjustment to the maximum allowable density for multiple dwelling unit projects located in or in proximity to sensitive land, such as steep slopes. A majority of the project site is located on slopes 0%–25%. Table 1 identifies the number of acres on site that are located on a slope and the corresponding density adjustment that applies to those acres. As shown in Table 1, after applying the slope-adjusted density, the proposed project's permitted maximum allowable density would be 206.6 units.

Step 3: The project proposes to enter into a Development Agreement with the City, as permitted by the SBMC Affordable Housing Ordinance, Section 17.70.025(B)(2), and would provide 15.5% of the permitted 206 units as affordable units (32 affordable units).

Step 4: Compliance with the City's Affordable Housing Ordinance allows the project to qualify for a density bonus. State law would entitle the project to a density bonus of 27.5%. Therefore, the project's actual permitted maximum allowable density is 263 units (0.275 x 206 permitted units = 56.65 additional units; 206 + 56.65 = 262.65/263 rounded). The project would be allowed to round up to 263, per the Density Bonus Law Roundup (California Government Code, Section 65915).

Step 5: Although the project would be allowed to build 263 units with the 27.5% density bonus, the project is proposing to construct a total of 260 units, which is actually a density bonus of 26%. While a density bonus of 26% would only require 29 affordable housing units, 32 affordable units would be provided. The 32 affordable units would be subject to a rent regulatory agreement with a term of 55 years and rented to low-income households at affordable rents as required by Section 17.70.025(C).

Table 1
Project Density Overview

Progressive Calculation	Site Density Factor	Dwelling Unit (DU) per Acre				Site DU
Step 1	HRd Zone	13–20 DU per acre				268
Step 2	Slope-Adjusted Density	*Slope*	*Acres*	*Allowable Density*	*DU*	206.6
		0%–25%	9.79	20 du/acre	195.8	
		25%–40%	1.08	10.8 du/acre	10.8	
		40% +	2.54	0.0 du/acre	0.0	
		Total	*13.41*	—	206.6	
Step 3	City Affordable Housing Requirements	Applicant proposes 32 on-site affordable housing units; 15.5% of the total housing units would be affordable units				206.6

Table 1
Project Density Overview

Progressive Calculation	Site Density Factor	Dwelling Unit (DU) per Acre	Site DU
Step 4	SBMC 17.70.025 Density Bonus	Project is eligible for a density bonus	+54
Step 5	Total Number of Units Proposed	Proposed project	260

1.2.5 Sustainable Design Features

The project would be designed and developed using sustainable development practices and design features. These practices include new Title 24 (2016) standards, described in detail in Section 3.2, Regulatory Setting. In addition to the measures that are part of the Title 24 measures, the project would include the following energy-efficiency measures in its design:

- Electric vehicle (EV) charging stations at selected surface parking spaces for residents and guests
- Pre-wire all garages for EV charging stations
- Photovoltaic solar panels
- Low water use appliances, in-home fixtures, and irrigation
- Low VOC (volatile organic compound) paints
- Community recycling program (In addition to meeting the City's recycling requirements property management would actively promote recycling. Recycling bins would be provided on site throughout the property, as well as next to printers and mail stations. At move-in, residents would be supplied with reusable tote bags, as well as reusable water bottles to help reduce trash. At the leasing office, eco-friendly cups made from recycled plant material would be used for water and coffee; and property management staff would be discouraged from using anything but reusable water bottles and coffee cups.)
- Energy Star appliances
- Energy-efficient LED lighting, appliance, and heating, ventilation, and air conditioning (HVAC) design
- Saltwater pool with solar heating
- Building insulation elements installed under the inspection of the Home Energy Rating System (HERS) rating agency

- Drought-tolerant landscaping
- Reclaimed water use for irrigation
- Walking paths and bicycle lockers to promote more sustainable lifestyles for residents, employees, and guests.

1.3 Project Construction and Phasing

Earthwork for the project would result in 176,000 cubic yards of cut and 22,000 cubic yards of fill, with 154,000 cubic yards of export. Exported material would be assessed for suitability for use with the City's Sand Compatibility and Opportunistic Use Program, and any material identified as suitable would be placed on the City's beaches, otherwise, soil export is assumed to be transported to the Otay Landfill as the maximum haul distance/impact for the purposes of this analysis. Grading for the project would be designed to lower the elevation of the project site to create new, flatter pads that would enable the increased density and improve internal circulation for pedestrians and vehicles. Retaining walls necessary to facilitate site grading are shown on Figure 2-4, Site Plan. Visible portions of retaining walls would range in height from 3 to 15 feet for masonry walls and 2 to 7 feet for plantable keystone walls. Landscaping, including bushes and trees, would be placed at the base of retaining walls to screen them from views and blend in with other landscaping elements proposed for the project.

The proposed project would involve a phased construction plan designed to enable partial occupancy of the site for approximately 39 months. The phased construction plan would consist of three phases, broken down as described below. The phases are anticipated to have varying durations with some phases being longer in duration and others shorter.

Phase 1

Phase 1 would occur on the interior and central portions of the site and involve demolition of eight buildings containing 120 existing units and the three standalone structures adjacent to the existing complex containing four multi-family units. Phase 1 would involve construction of a portion of the Valley View neighborhood consisting of three buildings with a total of 36 units. The new administration building and recreational center would start construction as part of Phase 1. On the parcel where the three single-family homes would be demolished, a new driveway would be constructed, extending from the existing access point off of Stevens Avenue to provide direct access from Stevens Avenue to adjacent single-family residences. This new driveway would not provide access from the street to the complex. This phase involves the least amount of dirt export and building construction of the three phases, but the most demo and the initial construction of backbone utilities.

Phase 2

Phase 2 would occur in the southeast portion of the site. Phase 2 would begin within the last month-and-a-half of Phase 1 being completed. Phase 2 would involve demolition of the existing recreation/leasing center structures. Phase 2 construction would include all of the Lifestyle neighborhood and the senior affordable building, for a total of 6 buildings with a total of 111 units. The new driveway providing permanent access to the adjacent single family residents and the senior affordable apartments would be constructed during this phase. The new administration building and recreational center would be completed during this phase.

Phase 3

Phase 3 would occur in the northwest portion of the project site along South Nardo Avenue. Phase 3 would begin within the last month-and-a-half of Phase 2 being completed. Phase 3 would involve demolition of six buildings containing 74 existing units, and would involve construction of the remainder of the Valley View neighborhood and the entirety of the Bungalow neighborhood. Construction of Phase 3 would involve 15 buildings and 113 units: four buildings consisting of 47 units of the Valley View neighborhood and 11 buildings consisting of 66 units of the Bungalow neighborhood. This phase includes more soil export than earlier phases, and the most number of buildings, and is expected to be the longest duration of the three phases.

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2 METHODOLOGY

Construction

Emissions from the construction phase of the project were estimated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2, available online (www.caleemod.com). For the purposes of modeling, it was assumed that construction of the proposed project would commence in mid-2020.

A detailed depiction of the construction schedule—including information regarding subphases, demolition, and equipment used during each subphase—is included in Table 2. This shows the construction schedule of the proposed project and the Alternative. The information contained in Appendix A and B was used as CalEEMod model inputs.

Table 2
Construction Phasing Assumptions

Construction Phase	Construction Start Month/Year	Construction End Month/Year
Proposed Project		
Ph 1 - Demolition	06/2020	06/2020
Ph 1 - Grading	07/2020	09/2020
Ph 1 - Building Construction	09/2020	08/2021
Ph 2 - Demolition	06/2021	06/2021
Ph 2 - Grading	07/2021	09/2021
Ph 1 - Paving	07/2021	09/2021
Ph 1 - Architectural Coating	07/2021	09/2021
Ph 2 - Building Construction	09/2021	08/2022
Ph 3 - Demolition	06/2022	06/2022
Ph 3 - Grading	07/2022	08/2022
Ph 2 - Paving	07/2022	08/2022
Ph 2 - Architectural Coating	07/2022	08/2022
Ph 3 - Building Construction	09/2022	08/2023
Ph 3 - Paving	07/2023	08/2023
Ph 3 - Architectural Coating	07/2023	08/2023
Alternative		
Demolition	06/2020	08/2020
Grading	09/2020	03/2021
Paving	03/2021	05/2021
Building Construction	03/2021	05/2022
Architectural Coating	03/2021	05/2021

Source: H.G. Fenton Company 2018

Construction equipment specifications were provided by the project applicant, and the equipment mix is meant to represent a reasonably conservative estimate of construction activity. For the analysis, it was generally assumed that heavy construction equipment would be operating at the site for 5 days per week (22 days per month), during project construction. Construction traffic, including worker trips and haul-truck trips, were provided by Fehr and Peers (Fehr and Peers 2016). Construction phasing, equipment, worker trips, vendor trips, and haul trips for the proposed project and Alternative are included in Appendix A and B.

Operation

Vehicular Traffic

The proposed project would impact air quality through the vehicular traffic generated by the proposed project. According to the proposed project's traffic report prepared by Fehr and Peers the proposed project would result in a total of 528 trips per day (Fehr and Peers 2016).

CalEEMod[1] was used to estimate daily emissions from proposed vehicular sources. CalEEMod default data, including temperature, trip characteristics, variable start information, emissions factors, and trip distances, were conservatively used for the model inputs.

Project-related traffic was assumed to include a mixture of vehicles in accordance with the model outputs for traffic. For the purposes of a conservative analysis, emission factors representing the vehicle mix and emissions for 2014 were applied to the existing conditions to estimate emissions associated with existing residential uses. Emission factors representing the vehicle mix and emissions for 2024 were used to estimate emissions associated with full buildout of the proposed project.

Energy

In addition to estimating mobile source emissions, CalEEMod was used to estimate emissions from the project's energy use, which includes natural gas combustion. The CalEEMod default land use "Racquet Club" was applied for purposes of estimating energy emissions from the proposed recreational pool area and leasing center. Refer to Appendix A for additional information. Additional details are provided in Section 5.

<u>Natural Gas</u>

CalEEMod was used to estimate emissions from the natural gas combustion. The default energy input ratios for Title 24 and non-Title 24 natural gas consumption as provided in CalEEMod were utilized for the existing structures and proposed project. Due to the age of the existing

[1] CalEEMod Version 2016.3.2 was used to estimate operational emissions.

structures, historical Title 24 default factors were applied to natural gas estimates for the existing buildings. Refer to Appendix A for additional information.

Electricity

The generation of electricity through combustion of fossil fuels typically results in emissions of carbon dioxide (CO_2) and, to a smaller extent, methane (CH_4) and nitrous oxide (N_2O). Annual electricity emissions were estimated using CalEEMod. The default energy input ratios for Title 24 and non-Title 24 electricity consumption as provided in CalEEMod were utilized for the existing structures and proposed project. Due to the age of the existing structures, historical Title 24 default factors were applied to electricity estimates for the existing buildings. Refer to Appendix A for additional information.

The project would meet the 2016 California Building Energy Efficiency Standards (Title 24, Part 6, of the California Code of Regulations). Operational emissions were estimating using CalEEMod Version 2016.3.2, which includes default values consistent with 2016 Title 24 Standards.

Area Sources

CalEEMod was also used to estimate emissions from the project's area sources, which include landscaping, consumer products, and architectural coatings for building maintenance. The CalEEMod default land use "Racquet Club" was applied for purposes of estimating area source emissions from the proposed recreational pool area and leasing center. Refer to Appendix A for additional information. Additional details are provided in Section 5.

Water Supply

Water supplied to, and wastewater generated as a result of, the proposed project requires the use of electricity. Accordingly, the supply, conveyance, treatment, and distribution of water would indirectly result in GHG emissions through use of electricity. Similarly, wastewater generated by the proposed project requires the use of electricity for conveyance and treatment, along with some GHG emissions generated during wastewater treatment. Water consumption estimates for both indoor and outdoor water use were provided by the project applicant for the existing structures and proposed project. The CalEEMod default land use "Racquet Club" was applied for purposes of estimating water use and associated emissions from the proposed recreational pool area and leasing center. Associated electricity consumption from water use and wastewater generation was estimated using CalEEMod. Additional details are provided in Section 5.

As discussed in Section 1.2.5, the proposed project would implement water conservation measures including low-flow fixtures, drought tolerant landscaping, and recycled water for

irrigation. Reductions associated with outdoor recycled water were accounted for in the water-related GHG emission calculations. Due to the lack of specific information regarding other water conservation features and their associated emission reductions, other water conservation features were not accounted for in the emissions estimates to support a conservative analysis.

Solid Waste

The proposed project would generate solid waste and would therefore result in GHG emissions associated with landfill off-gassing. Solid waste generation was derived from the CalEEMod default rates for multifamily residential units. Emission estimates associated with solid waste were estimated using CalEEMod. It is estimated that the proposed project would result in a net increase of approximately 30 tons per year compared to existing on-site building waste generation.

3 EXISTING CONDITIONS

This section describes the existing conditions in the project area and identifies the resources that could be affected by the proposed project.

3.1 Existing Environmental Setting

The Greenhouse Effect and Greenhouse Gases

The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process as follows: Short-wave radiation emitted by the Sun is absorbed by the Earth, the Earth emits a portion of this energy in the form of long-wave radiation, and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth.

The greenhouse effect is a natural process that contributes to regulating the Earth's temperature. Without it, the temperature of the Earth would be about 0°F (−18°C) instead of its present 57°F (14°C). If the atmospheric concentrations of GHGs rise, the average temperature of the lower atmosphere will gradually increase. Global climate change concerns are focused on whether human activities are leading to an enhancement of the greenhouse effect.

GHGs include, but are not limited to, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), O_3, water vapor, hydrofluorocarbons (HFCs), hydrochlorofluorocarbons (HCFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Some GHGs, such as CO_2, CH_4, and N_2O, occur naturally and are emitted to the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Manufactured GHGs, which have a much greater heat-absorption potential than CO_2, include fluorinated gases, such as HFCs, HCFCs, PFCs, and SF_6, which are associated with certain industrial products and processes. A summary of the most common GHGs and their sources is included in the following text.[2]

Carbon Dioxide. CO_2 is a naturally occurring gas and a by-product of human activities and is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of CO_2 include respiration of bacteria, plants, animals, and fungus; evaporation from oceans, volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO_2 are from the combustion of coal, oil, natural gas, and wood.

[2] The descriptions of GHGs are summarized from the Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report (1995), IPCC Fourth Assessment Report (2007), CARB's Glossary of Terms Used in GHG Inventories (2015), and EPA's Glossary of Climate Change Terms (2016d).

Methane. CH_4 is a flammable gas and is the main component of natural gas. Methane is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide. Sources of N_2O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric acid production, nylon production, and fossil-fuel-fired power plants), vehicle emissions, and the use of N_2O as a propellant (such as in rockets, racecars, aerosol sprays).

Fluorinated Gases. Fluorinated gases are synthetic, powerful GHGs that are emitted from a variety of industrial processes. Several prevalent fluorinated gases include the following:

- **Hydrofluorocarbons:** HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals that are used as alternatives to ozone-depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are used in manufacturing.
- **Hydrochlorofluorocarbons:** HCFCs are compounds containing hydrogen, fluorine, chlorine, and carbon atoms. HFCs are synthetic chemicals that are used as alternatives to ozone depleting substances (chlorofluorocarbons (CFCs)).
- **Perfluorocarbons:** PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced as alternatives, along with HFCs, to the ozone depleting substances. The two main sources of PFCs are primarily aluminum production and semiconductor manufacturing. Since PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.
- **Sulfur Hexafluoride:** SF_6 is a colorless gas that is soluble in alcohol and ether and slightly soluble in water. SF_6 is used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.
- **Nitrogen trifluoride:** NF_3 is used in the manufacture of a variety of electronics, including semiconductors and flat panel displays.

Black Carbon. Black carbon is a component of fine particulate matter, which has been identified as a leading environmental risk factor for premature death. It is produced from the incomplete combustion of fossil fuels and biomass burning, particularly from older diesel engines and forest

fires. Black carbon warms the atmosphere by absorbing solar radiation, influences cloud formation, and darkens the surface of snow and ice, which accelerates heat absorption and melting. Black carbon is a short-lived species that varies spatially, which makes it difficult to quantify the global warming potential. Diesel particulate matter emissions are a major source of black carbon and are also TACs that have been regulated and controlled in California for several decades to protect public health. In relation to declining diesel particulate matter from CARB's regulations pertaining to diesel engines, diesel fuels, and burning activities, the CARB estimates that annual black carbon emissions in California have reduced by 70% between 1990 and 2010, with 95% control expected by 2020 (CARB 2014).

Water Vapor. The primary source of water vapor is evaporation from the ocean, with additional vapor generated by sublimation (change from solid to gas) from ice and snow, evaporation from other water bodies, and transpiration from plant leaves. Water vapor is the most important, abundant, and variable GHG in the atmosphere and maintains a climate necessary for life.

Ozone. Tropospheric O_3, which is created by photochemical reactions involving gases from both from natural sources and from human activities, acts as a GHG. Stratospheric O_3, which is created by the interaction between solar ultraviolet radiation and molecular oxygen (O_2), plays a decisive role in the stratospheric radiative balance. Depletion of stratospheric O_3, due to chemical reactions that may be enhanced by climate change, results in an increased ground-level flux of ultraviolet-B radiation.

Aerosols. Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

Chlorofluorocarbons. CFCs are synthetic chemicals that have been used as cleaning solvents, refrigerants, and aerosol propellants. CFCs are chemically unreactive in the lower atmosphere (troposphere) and the production of CFCs was prohibited in 1987 due to the chemical destruction of stratospheric O_3.

Contributions to Greenhouse Gas Emissions

Per the U.S. Environmental Protection Agency's (EPA) *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2015* (2017), total United States GHG emissions were approximately 6,586.7 MMT CO_2e in 2015 (EPA 2017). The primary GHG emitted by human activities in the United States was CO_2, which represented approximately 82.2% of total GHG emissions (5,411.4 MMT CO_2e). The largest source of CO_2, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 93.3% of CO_2 emissions in 2015 (5,049.8 MMT CO_2e). Relative

to 1990, gross United States GHG emissions in 2015 are higher by 3.5%; down from a high of 15.5% above 1990 levels in 2007. GHG emissions decreased from 2014 to 2015 by 2.3% (153.0 MMT CO_2e), and overall, net emissions in 2015 were 11.5% below 2005 levels (EPA 2017).

According to California's 2000–2015 GHG emissions inventory (2017 edition), California emitted 440.36 MMT CO_2e in 2015, including emissions resulting from out-of-state electrical generation (CARB 2017). The sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high GWP substances, and recycling and waste. The California GHG emissions source categories and their relative contributions in 2015 are presented in Table 3.

Table 3
GHG Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total[a]
Transportation	164.63	37%
Industrial [b]	91.71	21%
Electricity generation[c]	83.67	19%
Residential and commercial uses	37.92	9%
Agriculture	34.65	8%
High global-warming potential substances	19.05	4%
Recycling and waste	8.73	2%
Totals	**440.36**	**100%**

Source: CARB 2017.
Notes: Emissions reflect the 2015 California GHG inventory.
MMT CO_2e = million metric tons of carbon dioxide equivalent per year
[a] Percentage of total has been rounded, and total may not sum due to rounding.
[b] The Aliso Canyon natural gas leak event released 1.96 MMT CO_2e of unanticipated emissions in 2015 and 0.52 MMT CO_2e in 2016. These leak emissions will be fully mitigated according to legal settlement and are tracked separately from routine inventory emissions.
[c] Includes emissions associated with imported electricity, which account for 33.74 MMT CO_2e annually.

During 2000 to 2015, per-capita GHG emissions in California have continued to drop from a peak in 2001 of 14.0 MT per person to 11.3 MT per person in 2015, representing a 19% decrease. In addition, total GHG emissions in 2015 were approximately 1.5 MMT CO_2e less than 2014 emissions. The declining trend in GHG emissions, coupled with programs that will continue to provide additional GHG reductions going forward, demonstrates that California is on track to meet the 2020 target of 431 MMT CO_2e (CARB 2017a).

Potential Effects of Human Activity on Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014

Intergovernmental Panel on Climate Change Synthesis Report indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice have, and rising sea levels (IPCC 2014).

In California, climate change impacts have the potential to affect sea level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, and electricity demand and supply (CCCC 2006). The primary effect of global climate change has been a 0.2°C rise in average global tropospheric temperature per decade, determined from meteorological measurements worldwide between 1990 and 2005. Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. A warming of about 0.2°C (0.36°F) per decade is projected, and there are identifiable signs that global warming could be taking place.

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The average temperatures in California have increased, leading to more extreme hot days and fewer cold nights; shifts in the water cycle have been observed, with less winter precipitation falling as snow, and both snowmelt and rainwater running off earlier in the year; sea levels have risen; and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010).

An increase in annual average temperature is a reasonably foreseeable effect of climate change. Observed changes over the last several decades across the western United States reveal clear signals of climate change. Statewide average temperatures increased by about 1.7°F from 1895 to 2011, and warming has been greatest in the Sierra Nevada (CCCC 2012). By 2050, California is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century. By 2100, average temperatures could increase by 4.1 to 8.6°F, depending on emissions levels. Springtime warming—a critical influence on snowmelt—will be particularly pronounced. Summer temperatures will rise more than winter temperatures, and the increases will be greater in inland California, compared to the coast. Heat waves will be more frequent, hotter, and longer. There will be fewer extremely cold nights (CCCC 2012). A decline of Sierra snowpack, which accounts for approximately half of the surface water storage in California and much of the State's water supply, by 30% to as much as 90% is predicted over the next 100 years (CAT 2006).

Model projections for precipitation over California continue to show the Mediterranean pattern of wet winters and dry summers with seasonal, year-to-year, and decade-to-decade variability. For the first time, however, several of the improved climate models shift toward drier conditions by the mid-to-late 21st century in Central and, most notably, Southern California. By late-century, all projections show drying, and half of them suggest 30-year average precipitation will decline by more than 10% below the historical average (CCCC 2012).

Wildfire risk in California will increase as a result of climate change. Earlier snowmelt, higher temperatures and longer dry periods over a longer fire season will directly increase wildfire risk. Indirectly, wildfire risk will also be influenced by potential climate-related changes in vegetation and ignition potential from lightning. However, human activities will continue to be the biggest factor in ignition risk. It is estimated that the long-term increase in fire occurrence associated with a higher emissions scenario is substantial, with increases in the number of large fires statewide ranging from 58% to 128% above historical levels by 2085. Under the same emissions scenario, estimated burned area will increase by 57% to 169%, depending on location (CCCC 2012).

Reduction in the suitability of agricultural lands in the State for traditional crop types may occur. While effects may occur, adaptation could allow farmers and ranchers to minimize potential negative effects on agricultural outcomes through adjusting timing of plantings or harvesting and changing crop types. Because the specific effects of climate change in the Plan Area are uncertain, it would be speculative to predict which crop types and agricultural operations would be substantially affected.

Public health-related effects of increased temperatures and prolonged temperature extremes, including heat stroke, heat exhaustion, and exacerbation of existing medical conditions, could be particular problems for the elderly, infants, and those who lack access to air conditioning or cooled spaces (CNRA 2009).

A summary of current and future climate change impacts to resource areas in California, as discussed in the *Safeguarding California: Reducing Climate Risk* (CNRA 2014), is provided below.

Agriculture. The impacts of climate change on the agricultural sector are far more severe than the typical variability in weather and precipitation patterns that occur year to year. Some of the specific challenges faced by the agricultural sector and farmers include more drastic and unpredictable precipitation and weather patterns; extreme weather events that range from severe flooding to extreme drought, to destructive storm events; significant shifts in water availably and water quality; changes in pollinator lifecycles; temperature fluctuations, including extreme heat stress and decreased chill hours; increased risks from invasive species and weeds, agricultural

pests and plant diseases; and disruptions to the transportation and energy infrastructure supporting agricultural production. These challenges and associated short-term and long-term impacts can have both positive and negative effects on agricultural production. For example, changes in weather patterns can foster longer growing periods for certain crops, but simultaneously increase the likelihood of pests. It is predicted that current crop and livestock production will suffer long-term negative effects resulting in a substantial decrease in the agricultural sector if not managed or mitigated (CNRA 2014).

Biodiversity and Habitat. The state's extensive biodiversity stems from its varied climate and assorted landscapes, which have resulted in numerous habitats where species have evolved and adapted over time. The preservation of California's unique biological heritage is of ever-increasing importance given the forecasted impacts associated with climate change.

Similar to the agricultural sector, there are a number of climate change challenges the biodiversity sector must contend with, on top of the ever-increasing pressures of habitat loss and fragmentation, population growth, pollution, plant and animal diseases, and other human-induced impacts. Specific climate change challenges to biodiversity and habitat include species migration in response to climatic changes, range shift and novel combinations of species; pathogens, parasites and disease; invasive species; extinction risks; changes in the timing of seasonal life-cycle events; food web disruptions; threshold effects (i.e., a change in the ecosystem that results in a "tipping point" beyond which irreversible damage or loss has occurs).

Habitat restoration, conservation, and resource management across California and through collaborative efforts amongst public, private and nonprofit agencies has assisted in the effort to fight climate change impacts on biodiversity and habitat. One of the key measures in these efforts is ensuring species' ability to relocate as temperature and water availability fluctuate as a result of climate change, based on geographic region. As such, it is critical to ensure habitat corridors, linkages and connectivity are established to allow species the mobility to move from place to place as resources change over time. Continued collaborative efforts are required across agencies to ensure the health of existing habitat, wildlife, and the geographic extent of their existence required to support biodiversity (CNRA 2014).

Emergency Management. "Emergency management includes actions to prepare for, mitigate against, respond to and recover from emergencies and disasters that impact our communities, critical infrastructure and resources by lessoning the likelihood, severity and duration of the consequences of the incident" (CNRA 2014). "Hazard mitigation is any action taken to reduce or eliminate the long-term risk to human life and property from natural or man-made hazards" (CNRA 2014). In California, preparing, mitigating, and responding to and/or recovering from a natural disaster usually is done in the context of an earthquake, wildfire or severe flood event.

Energy. The energy sector provides California residents with a supply of reliable and affordable energy through a complex integrated system. Specific climate change challenges for the energy sector include temperature, fluctuating precipitation patterns, increasing extreme weather events and sea level rise. Increasing temperatures and reduced snowpack negatively impact the availability of a steady flow of snowmelt to hydroelectric reservoirs. Higher temperatures also reduce the capacity of thermal power plants since power plant cooling is less efficient at higher ambient temperatures. Natural gas infrastructure in coastal California is threatened by sea level rise and extreme storm events (CNRA 2014).

Forestry. Forests occupy approximately 33% of California's 100 million acres and provide key benefits such as wildlife habitat, absorption of carbon dioxide, renewable energy and building materials. The most significant climate change related risk to forests is accelerated risk of wildfire and more frequent and severe droughts. Droughts have resulted in more large scale mortalities and combined with increasing temperatures have led to an overall increase in wildfire risks. Increased wildfire intensity subsequently increases public safety risks, property damage, fire suppression and emergency response costs, watershed and water quality impacts and vegetation conversions. These factors contribute to decreased forest growth, geographic shifts in tree distribution, loss of fish and wildlife habitat and decreased carbon absorption. These losses can also negatively impact the timber industry as well as recreation opportunities. Climate change may result in increased establishment of non-native species, particularly in rangelands where invasive species are already a problem. Invasive species may be able to exploit temperature or precipitation changes, or quickly occupy areas denuded by fire, insect mortality or other climate change effects on vegetation (CNRA 2014).

Ocean and Coastal Ecosystems and Resources. Sea level rise, changing ocean conditions and other climate change stressors are likely to exacerbate long-standing challenges related to ocean and coastal ecosystems in addition to threatening people and infrastructure located along the California coastline and in coastal communities. Sea level rise in addition to more frequent and severe coastal storms and erosion are threatening vital infrastructure such as roads, bridges, power plants, ports and airports, gasoline pipes, and emergency facilities as well as negatively impacting the coastal recreational assets such as beaches and tidal wetlands. Water quality and ocean acidification threaten the abundance of seafood and other plant and wildlife habitats throughout California and globally (CNRA 2014).

Public Health. Climate change can impact public health through various environmental changes and is the largest threat to human health in the twenty-first Century. Changes in precipitation patterns affect public health primarily through potential for altered water supplies, and extreme events such as heat, floods, droughts, and wildfires. Increased frequency, intensity and duration of extreme heat and heat waves is likely to increase the risk of mortality due to heat related

illness as well as exacerbate existing chronic health conditions. Other extreme weather events are likely to negatively impact air quality and increase or intensify respiratory illness such as asthma and allergies. Additional health impacts that may be impacted by climate change include cardiovascular disease, vector-borne diseases, mental health impacts, and malnutrition injuries. Increased frequency of these ailments is likely to subsequently increase the direct risk of injury and/or mortality (CNRA 2014).

Transportation. Residents of California rely on airports, seaports, public transportation and an extensive roadway network to gain access to destinations, goods and services. While the transportation industry is a source of greenhouse gas emissions it is also vulnerable to climate change risks. Particularly, sea level rise and erosion threaten many coastal California roadways, airports, seaports, transit systems, bridge supports and energy and fueling infrastructure. Increasing temperatures and extended periods of extreme heat threaten the integrity of the roadways and rail lines. High temperatures cause the road surfaces to expand which leads to increased pressure and pavement buckling. High temperatures can also cause rail breakages which could lead to train derailment. Other forms of extreme weather events, such as extreme storm events, can negatively impact infrastructure which can impair movement of peoples and goods, or potentially block evacuation routes and emergency access roads. Increased wildfires, flooding, erosion risks, landslides, mudslides and rockslides can all profoundly impact the transportation system and pose a serious risk to public safety (CNRA 2014).

Water. Water resources in California support residences, plants, wildlife, farmland, landscapes and ecosystems and bring trillions of dollars in economic activity. Climate change could seriously impact the timing, form, amount of precipitation, runoff patterns, and frequency and severity of precipitation events. Higher temperatures reduce the amount of snowpack and lead to earlier snowmelt, which can impact water supply availability, natural ecosystems and winter recreation. Water supply availability during the intense dry summer months is heavily dependent on the snowpack accumulated during the winter time. Increased risk of flooding has a variety of public health concerns including water quality, public safety, property damage, displacement and post-disaster mental health problems. Prolonged and intensified droughts can also negatively groundwater reserves and result in increased overdraft and subsidence. Droughts can also negatively impact agriculture and farmland throughout the state. The higher risk of wildfires can lead to increased erosion, which can negatively impact watersheds and result in poor water quality. Water temperatures are also prone to increase, which can negatively impact wildlife that rely on a specific range of temperatures for suitable habitat (CNRA 2014).

3.2 Regulatory Setting

This section describes the applicable regulatory plans, policies, and ordinances for the proposed project.

Federal Activities

Massachusetts vs. EPA. On April 2, 2007, in *Massachusetts v. EPA*, the Supreme Court directed the EPA Administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA Administrator is required to follow the language of Section 202(a) of the federal Clean Air Act. On December 7, 2009, the Administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- The Administrator found that elevated concentrations of GHGs—CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the "endangerment finding."
- The Administrator further found the combined emissions of GHGs—CO_2, CH_4, N_2O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Energy Independence and Security Act. On December 19, 2007, President George W. Bush signed the Energy Independence and Security Act of 2007. Among other key measures, the Act would do the following, which would aid in the reduction of national GHG emissions:

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
2. Set a target of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by model year 2020 and direct NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
3. Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy

efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

Federal Vehicle Standards. In response to the U.S. Supreme Court ruling discussed above, the Bush Administration issued Executive Order 13432 in 2007 directing the EPA, the Department of Transportation (DOT), and the Department of Energy (DOE) to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the National Highway Traffic Safety Administration (NHTSA) issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011; and, in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, President Obama issued a memorandum directing the DOT, DOE, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams/mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon (mpg) if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6%–23% over the 2010 baselines.

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans and all types of sizes of buses and work trucks. The final standards are expected to lower carbon dioxide emissions by approximately 1.1 billion MT and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

Clean Power Plan and New Source Performance Standards for Electric Generating Units. On October 23, 2015, EPA published a final rule (effective December 22, 2015) establishing the

Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units (80 FR 64510–64660), also known as the Clean Power Plan. These guidelines prescribe how states must develop plans to reduce GHG emissions from existing fossil-fuel-fired electric generating units. The guidelines establish CO_2 emission performance rates representing the best system of emission reduction for two subcategories of existing fossil-fuel-fired electric generating units: (1) fossil-fuel-fired electric utility steam-generating units, and (2) stationary combustion turbines. Concurrently, EPA published a final rule (effective October 23, 2015) establishing Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units (80 FR 64661–65120). The rule prescribes CO_2 emission standards for newly constructed, modified, and reconstructed affected fossil-fuel-fired electric utility generating units. Implementation of the Clean Power Plan has been stayed by the U.S. Supreme Court pending resolution of several lawsuits; additionally, President Trump has called upon the EPA to review the Clean Power Plan.

State of California

State Climate Change Targets

Executive Order (EO) S-3-05. EO S-3-05 (June 2005) established the following goals: GHG emissions should be reduced to 2000 levels by 2010, GHG emissions should be reduced to 1990 levels by 2020, and GHG emissions should be reduced to 80% below 1990 levels by 2050. Under EO S-3-05, the California Environmental Protection Agency is directed to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The Climate Action Team was formed, which subsequently issued the *2006 Climate Action Team Report* to *Governor Schwarzenegger and the Legislature* (CAT 2006).

The *2009 Climate Action Team Biennial Report* (CAT 2010) expands on the policy outlined in the 2006 assessment. The 2009 report identifies the need for additional research in several different aspects that affect climate change to support effective climate change strategies. Subsequently, the *2010 Climate Action Team Report to Governor Schwarzenegger and the California Legislature* (CAT 2010) reviews past climate action milestones including voluntary reporting programs, GHG standards for passenger vehicles, the Low Carbon Fuel Standard, a statewide renewable energy standard, and the cap-and-trade program.

Assembly Bill 32 and CARB's Climate Change Scoping Plan. In furtherance of the goals established in EO S-3-05, the Legislature enacted Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020.

Under AB 32, CARB is responsible for and is recognized as having the expertise to carry out and develop the programs and requirements necessary to achieve the GHG emissions reduction mandate of AB 32. Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions from specified sources. This program is used to monitor and enforce compliance with established standards. CARB also is required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 relatedly authorized CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

In 2007, CARB approved a limit on the statewide GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 MMT CO_2e). CARB's adoption of this limit is in accordance with Health and Safety Code Section 38550.

Further, in 2008, CARB adopted the *Climate Change Scoping Plan: A Framework for Change* (Scoping Plan) in accordance with Health and Safety Code Section 38561. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020. The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction features by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. The key elements of the Scoping Plan include the following (CARB 2008):

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards
2. Achieving a statewide renewable energy mix of 33%
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets
5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard

6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation

In the Scoping Plan, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 28.5% from the otherwise projected 2020 emissions level; i.e., those emissions that would occur in 2020, absent GHG-reducing laws and regulations (referred to as "business-as-usual"). For purposes of calculating this percent reduction, CARB assumed that all new electricity generation would be supplied by natural gas plants, no further regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at 2005 standards.

In the 2011 Final Supplement to the Scoping Plan's Functional Equivalent Document, CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG reduction regulations. Based on the new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7% (down from 28.5%) from the business-as-usual conditions. When the 2020 emissions level projection also was updated to account for newly implemented regulatory measures, including Pavley I (model years 2009–2016) and the Renewables Portfolio Standard (12% to 20%), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16% (down from 28.5%) from the business-as-usual conditions.

In 2014, CARB adopted the *First Update to the Climate Change Scoping Plan: Building on the Framework* (First Update). The stated purpose of the First Update is to "highlight California's success to date in reducing its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80% below 1990 levels by 2050." The First Update found that California is on track to meet the 2020 emissions reduction mandate established by AB 32, and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80% below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.

In conjunction with the First Update, CARB identified "six key focus areas comprising major components of the state's economy to evaluate and describe the larger transformative actions that will be needed to meet the state's more expansive emission reduction needs by 2050." Those six areas are energy, transportation (vehicles/equipment, sustainable communities, housing, fuels, and infrastructure), agriculture, water, waste management, and natural and working lands. The

First Update identifies key recommended actions for each sector that will facilitate achievement of EO S-3-05's 2050 reduction goal.

Based on CARB's research efforts presented in the First Update, it has a "strong sense of the mix of technologies needed to reduce emissions through 2050." Those technologies include energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies.

As part of the First Update, CARB recalculated the state's 1990 emissions level using more recent global warming potentials identified by the IPCC. Using the recalculated 1990 emissions level (431 MMT CO_2e) and the revised 2020 emissions level projection identified in the 2011 Final Supplement, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of approximately 15% (instead of 28.5% or 16%) from the business-as-usual conditions.

On January 20, 2017, CARB released The *2017 Climate Change Scoping Plan Update* (Second Update) for public review and comment (CARB 2017). This update proposes CARB's strategy for achieving the state's 2030 GHG target as established in Senate Bill (SB) 32 (discussed below), including continuing the Cap-and-Trade Program through 2030, and includes a new approach to reduce GHGs from refineries by 20%. The Second Update incorporates approaches to cutting short-lived climate pollutants (SLCPs) under the Short-Lived Climate Pollutant Reduction Strategy (a planning document that was adopted by CARB in March 2017), and acknowledges the need for reducing emissions in agriculture and highlights the work underway to ensure that California's natural and working lands increasingly sequester carbon. During development of the Second Update, CARB held a number of public workshops in the Natural and Working Lands, Agriculture, Energy and Transportation sectors to inform development of the 2030 Scoping Plan Update (CARB 2016). When discussing project-level GHG emissions reduction actions and thresholds, the Second Update states, "achieving no net increase in GHG emissions is the correct overall objective, but it may not be appropriate or feasible for every development project. An inability to mitigate a project's GHG emissions to zero does not necessarily imply a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA." The Second Update has not been considered by CARB's Governing Board at the time this analysis was prepared.

EO B-30-15. EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80% below 1990

levels by 2050 as set forth in S-3-05. To facilitate achievement of this goal, EO B-30-15 calls for an update to CARB's Scoping Plan to express the 2030 target in terms of MMT CO_2E. The EO also calls for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets. Sector-specific agencies in transportation, energy, water, and forestry were required to prepare GHG reduction plans by September 2015, followed by a report on action taken in relation to these plans in June 2016.

SB 32 and AB 197. SB 32 and AB 197 (enacted in 2016) are companion bills that set a new statewide GHG reduction targets; make changes to CARB's membership, and increase legislative oversight of CARB's climate change-based activities; and expand dissemination of GHG and other air quality-related emissions data to enhance transparency and accountability. SB 32 codified the 2030 emissions reduction goal of Executive Order B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and, requires CARB to identify specific information for GHG emissions reduction measures when updating the scoping plan.

SB 605. SB 605 (September 2014) requires CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants in the state no later than January 1, 2016. As defined in the statute, short-lived climate pollutant means "an agent that has a relatively short lifetime in the atmosphere, from a few days to a few decades, and a warming influence on the climate that is more potent than that of carbon dioxide" (SB 605). SB 605, however, does not prescribe specific compounds as short-lived climate pollutants or add to the list of GHGs regulated under AB 32. In developing the strategy, the CARB must complete an inventory of sources and emissions of short-lived climate pollutants in the state based on available data, identify research needs to address any data gaps, identify existing and potential new control measures to reduce emissions, and prioritize the development of new measures for short-lived climate pollutants that offer co-benefits by improving water quality or reducing other criteria air pollutants that impact community health and benefit disadvantaged communities. The *Proposed Short-Lived Climate Pollution Reduction Strategy* released by CARB in April 2016 focuses on methane, black carbon, and fluorinated gases, particularly HFCs, as important short-lived climate pollutants. The strategy recognizes emission reduction efforts implemented under AB 32 (e.g., refrigerant management programs) and other regulatory programs (e.g., in-use diesel engines, solid waste diversion) along with additional measures to be developed.

Building Energy

Title 24, Part 6. Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. The California Energy Commission (CEC) is required by law to adopt standards every 3 years that are cost effective for homeowners over the 30-year lifespan of a building. These standards are updated to consider and incorporate new energy efficient technologies and construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The current Title 24 standards are the 2016 standards, which became effective on January 1, 2017. In general, single-family homes built to the 2016 standards are anticipated to use about 28% less energy for lighting, heating, cooling, ventilation, and water heating than those built to the 2013 standards, and nonresidential buildings built to the 2016 standards will use an estimated 5% less energy than those built to the 2013 standards (CEC 2015). Although the project would comply with 2016 Standards, this analysis conservatively does not quantify the increase energy efficiency associated with the more stringent standards.

Title 24, Part 11. In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CalGreen, and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CalGreen 2016 standards became effective January 1, 2017. The mandatory standards require the following (24 CCR Part 11):

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance
- 65% of construction and demolition waste must be diverted from landfills

- Mandatory inspections of energy systems to ensure optimal working efficiency
- Inclusion of electric vehicle charging stations or designated spaces capable of supporting future charging stations
- Low-pollutant emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards

The CalGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants. CalGreen's Tier 1 standards call for a 15% improvement in energy requirements; stricter water conservation, 65% diversion of construction and demolition waste, 10% recycled content in building materials, 20% permeable paving, 20% cement reduction, and cool/solar-reflective roofs. CalGreen's more rigorous Tier 2 standards call for a 30% improvement in energy requirements, stricter water conservation, 75% diversion of construction and demolition waste, 15% recycled content in building materials, 30% permeable paving, 25% cement reduction, and cool/solar-reflective roofs.

The California Public Utilities Commission, CEC, and CARB also have a shared, established goal of achieving zero net energy (ZNE) for new construction in California. The key policy timelines include: (1) all new residential construction in California will be ZNE starting in 2020, and (2) all new commercial construction in California will be ZNE starting in 2030.[3]

Title 20. Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must be certified through the CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include: refrigerators, refrigerator-freezers and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing for each type of appliance covered under the regulations and appliances must meet the standards for energy performance, energy design, water performance and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

[3] See, e.g., CPUC, California's Zero Net Energy Policies and Initiatives, Sept. 18, 2013, accessed at http://www.cpuc.ca.gov/NR/rdonlyres/C27FC108-A1FD-4D67-AA59- 7EA82011B257/0/3.pdf. It is expected that achievement of the zero net energy goal will occur via revisions to the Title 24 standards.

Mobile Sources

AB 1493. In a response to the transportation sector accounting for more than half of California's CO_2 emissions, AB 1493 (Pavley) was enacted in July 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles that are primarily used for noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards will result in a reduction of about 22% in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term (2013–2016) standards will result in a reduction of about 30%.

EO S-1-07. Issued on January 18, 2007, Executive Order S-1-07 sets a declining Low Carbon Fuel Standard for GHG emissions measured in CO_2E grams per unit of fuel energy sold in California. The target of the Low Carbon Fuel Standard is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources, such as algae, wood, and agricultural waste. In addition, the Low Carbon Fuel Standard would drive the availability of plug-in hybrid, battery electric, and fuel-cell power motor vehicles.

SB 375. SB 375 (Steinberg) (September 2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans, was enacted into law. SB 375 required CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. Regional metropolitan planning organizations (MPOs) are then responsible for preparing a Sustainable Communities Strategy within their Regional Transportation Plan. The goal of the Sustainable Communities Strategy is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If a Sustainable Communities Strategy is unable to achieve the GHG reduction target, an MPO must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to Government Code Section 65080(b)(2)(K), a sustainable communities strategy does not: (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies

responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In 2010, CARB adopted the SB 375 targets for the regional MPOs. The targets for SANDAG are a 7% reduction in emissions per capita by 2020 and a 13% reduction by 2035.

SANDAG completed and adopted its *2050 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) in October 2011. In November 2011, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

After SANDAG's 2050 RTP/SCS was adopted, a lawsuit was filed by the Cleveland National Forest Foundation and others. The case was resolved and decided upon in July 2017 by the California Supreme Court; the court found that SANDAG's EIR did not have to use EO S-3-05's 2050 goal of an 80% reduction in GHG emissions from 1990 levels as a significance threshold because the EIR sufficiently informed the public of the potential impacts.

Although the EIR for SANDAG's 2050 RTP/SCS was pending before the California Supreme Court, in 2015, SANDAG adopted the next iteration of its RTP/SCS in accordance with statutorily mandated timelines and no subsequent litigation challenge was filed. More specifically, in October 2015, SANDAG adopted San Diego Forward: The Regional Plan. Like the 2050 RTP/SCS, this planning document meets CARB's 2020 and 2035 reduction targets for the region (SANDAG 2015). In December 2015, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

Advanced Clean Cars Program. In January 2012, CARB approved the Advanced Clean Cars program, a new emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB 2011). To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75% less smog-forming pollution than the average new car sold today. To reduce GHG emissions, CARB, in conjunction with the EPA and the NHTSA, has adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34% in 2025. The ZEV program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of

ZEVs and plug-in hybrid electric vehicles in the 2018 to 2025 model years. The Clean Fuels Outlet regulation will ensure that fuels such as electricity and hydrogen are available to meet the fueling needs of the new advanced technology vehicles as they come to the market.

EO B-16-12. EO B-16-12 (March 2012) directs state entities under the Governor's direction and control to support and facilitate development and distribution of zero-emission vehicles. This EO also sets a long-term target of reaching 1.5 million zero-emission vehicles on California's roadways by 2025. On a statewide basis, EO B-16-12 also establishes a GHG emissions reduction target from the transportation sector equaling 80% less than 1990 levels by 2050.

Renewable Energy and Energy Procurement

Senate Bill (SB) 1078. SB 1078 (Sher) (September 2002) established the Renewable Portfolio Standard (RPS) program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010 (see SB 107, EOs S-14-08, and S-21-09.)

SB 1368. In September 2006, Governor Schwarzenegger signed SB 1368, which requires the CEC to develop and adopt regulations for GHG emission performance standards for the long-term procurement of electricity by local publicly owned utilities. These standards must be consistent with the standards adopted by the California Public Utilities Commission (CPUC). This effort will help protect energy customers from financial risks associated with investments in carbon-intensive generation by allowing new capital investments in power plants whose GHG emissions are as low as or lower than new combined-cycle natural gas plants by requiring imported electricity to meet GHG performance standards in California and by requiring that the standards be developed and adopted in a public process.

EO S-14-08. EO S-14-08 (November 2008) focuses on the contribution of renewable energy sources to meet the electrical needs of California while reducing the GHG emissions from the electrical sector. This EO requires that all retail suppliers of electricity in California serve 33% of their load with renewable energy by 2020. Furthermore, the EO directs state agencies to take appropriate actions to facilitate reaching this target. The CNRA, through collaboration with the CEC and California Department of Fish and Wildlife (formerly the California Department of Fish and Game), is directed to lead this effort. Pursuant to a Memorandum of Understanding between the CEC and California Department of Fish and Wildlife regarding creating the Renewable Energy Action Team, these agencies will create a "one-stop" process for permitting renewable energy power plants.

EO S-21-09. EO S-21-09 (September 2009) directed CARB to adopt a regulation consistent with the goal of EO S-14-08 by July 31, 2010. CARB is further directed to work with the CPUC and CEC to ensure that the regulation builds upon the RPS program and is applicable to investor-owned utilities, publicly owned utilities, direct access providers, and community choice providers. Under this order, CARB is to give the highest priority to those renewable resources that provide the greatest environmental benefits with the least environmental costs and impacts on public health and can be developed the most quickly in support of reliable, efficient, cost-effective electricity system operations. On September 23, 2010, CARB adopted regulations to implement a Renewable Electricity Standard, which would achieve the goal of the EO with the following intermediate and final goals: 20% for 2012–2014, 24% for 2015–2017, 28% for 2018–2019, and 33% for 2020 and beyond. Under the regulation, wind; solar; geothermal; small hydroelectric; biomass; ocean wave, thermal, and tidal; landfill and digester gas; and biodiesel would be considered sources of renewable energy. The regulation would apply to investor-owned utilities and public (municipal) utilities.

SB X1 2. SB X1 2 (April 2011) expanded the RPS by establishing a goal of 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. In addition to the retail sellers covered by SB 107, SB X1 2 adds local, publicly owned electric utilities to the RPS. By January 1, 2012, the CPUC is required to establish the quantity of electricity products from eligible renewable energy resources to be procured by retail sellers to achieve targets of 20% by December 31, 2013; 25% by December 31, 2016; and 33% by December 31, 2020. The statute also requires that the governing boards for local, publicly owned electric utilities establish the same targets, and the governing boards would be responsible for ensuring compliance with these targets. The CPUC will be responsible for enforcement of the RPS for retail sellers, while the CEC and CARB will enforce the requirements for local publicly owned electric utilities.

SB 350. SB 350 (October 2015) expands the RPS by establishing a goal of 50% of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the CPUC, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal. SB 350 also provides for the

transformation of the California Independent System Operator into a regional organization to promote the development of regional electricity transmission markets in the western states and to improve the access of consumers served by the California Independent System Operator to those markets, pursuant to a specified process.

Water

EO B-29-15. In response to the ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources has modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Solid Waste

AB 939 and AB 341. In 1989, AB 939, known as the Integrated Waste Management Act (Public Resources Code Sections 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by the year 2000.

AB 341 (Chapter 476, Statutes of 2011 (Chesbro)) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle conducted several general stakeholder workshops and several focused workshops and in August 2015 published a discussion document titled AB 341 Report to the Legislature, which identifies five priority strategies that CalRecycle believes would assist the state in reaching the 75% goal by 2020, legislative and regulatory recommendations and an evaluation of program effectiveness.

Increasing the amount of commercial solid waste that is recycled, reused, or composted will reduce GHG emissions primarily by 1) reducing the energy requirements associated with the extraction, harvest, and processing of raw materials and 2) using recyclable materials that require less energy than raw materials to manufacture finished products (CalRecycle 2015). Increased diversion of organic materials (green and food waste) will also reduce GHG emissions (CO_2 and CH_4) resulting from decomposition in landfills by redirecting this material to processes that use the solid waste material to produce vehicle fuels, heat, electricity, or compost.

Other State Regulations and Goals

EO S-13-08. EO Order S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. It directs state agencies to take specified actions to assess and plan for such impacts. It directs the CNRA, in cooperation with the California Department of Water Resources, CEC, California's coastal management agencies, and the Ocean Protection Council, to request that the National Academy of Sciences prepare a Sea Level Rise Assessment Report by December 1, 2010. The Ocean Protection Council, California Department of Water Resources, and CEC, in cooperation with other state agencies, are required to conduct a public workshop to gather information relevant to the Sea Level Rise Assessment Report. The Business, Transportation, and Housing Agency was ordered to assess within 90 days of issuance of the EO the vulnerability of the state's transportation systems to sea-level rise. The Governor's Office of Planning and Research and the CNRA are required to provide land use planning guidance related to sea-level rise and other climate change impacts. The EO also required the other state agencies to develop adaptation strategies by June 9, 2009, to respond to the impacts of global climate change that are predicted to occur over the next 50 to 100 years. A discussion draft adaptation strategies report was released in August 2009, and the final *2009 California Climate Adaptation Strategy* report was issued in December 2009 (CNRA 2009). An update to the 2009 report, *Safeguarding California: Reducing Climate Risk*, was issued in July 2014 (CNRA 2014). To assess the state's vulnerability, the report summarizes key climate change impacts to the state for the following areas: Agriculture, Biodiversity and Habitat, Emergency Management, Energy, Forestry, Ocean and Coastal Ecosystems and Resources, Public Health, Transportation, and Water.

2015 State of the State Address. In January 2015, Governor Brown in his inaugural address and annual report to the Legislature established supplementary goals which would further reduce GHG emissions over the next 15 years. These goals include an increase in California's renewable energy portfolio from 33% to 50%, a reduction in vehicle petroleum use for cars and trucks by up to 50%, measures to double the efficiency of existing buildings, and decreasing emissions associated with heating fuels.

2016 State of the State Address. In his January 2016 address, Governor Brown established a statewide goal to bring per capita GHG emission down to two tons per person, which reflects the goal of the Global Climate Leadership Memorandum of Understanding (Under 2 MOU) to limit global warming to less than two degrees Celsius by 2050. The Under 2 MOU agreement pursues emission reductions of 80 to 95% below 1990 levels by 2050 and/or reach a per capita annual emissions goal of less than two metric tons by 2050. A total of 135 jurisdictions representing 32 countries and six continents, including California, have signed or endorsed the Under 2 MOU (Under 2 2016).

City of Solana Beach General Plan

The City's General Plan (City of Solana Beach 2014) includes smart growth and land use planning principles designed to reduce VMT and result in a reduction in GHG emissions. As discussed in the General Plan, climate change and GHG reduction policies are addressed in plans and programs in multiple elements of the General Plan.

The policies for reduction of GHG emissions in the General Plan are as follows:

- Policy LU-1.6 :Encourage the establishment of mixed-uses that provide for housing and jobs near transit routes, shopping areas, and recreational uses to promote public transit use, walking, and biking.
- Policy LU-2.2 Encourage appropriate smart growth, transit, residential, or mixed-use projects.
- Policy LU-3.1 Concentrate commercial, mixed-use, and medium to high density residential development along transit corridors and near activity centers that can be served efficiently by public transit and alternative transportation modes.
- Policy LU-3.2 Enable residents to reduce their commutes by allowing and encouraging the creation of live/work units for artists, craftspeople, and other professions, promoting home occupations and telecommuting, and supporting other means of achieving a jobs/housing balance.
- Policy LU-3.3 Identify and prioritize infrastructure improvements needed to support increased use of alternatives to private vehicle travel, including transit, bicycle, and pedestrian modes.

City of Solana Beach Climate Action Plan

The City adopted its Climate Action Plan (CAP) on July 12, 2017 (City of Solana Beach 2017). The CAP acts as a roadmap to address challenges of climate change within the City. The CAP

includes a baseline GHG emissions inventory for 2010, GHG emissions forecasts for 2020 and 2035 (as recommended by the 2008 CARB Scoping Plan), local GHG emissions reduction strategies and measures to help the City achieve the 2035 target, climate adaptation measures for the City, and implementation and monitoring mechanisms to ensure the City's measures and targets are achieved. The CAP established GHG emissions reduction goals of 15 percent below 2010 levels by 2020 and 50 percent below 2010 levels by 2035. It should be noted that the 2030 state goal was not available when the CAP process was initiated by the City but the 2030 goal would lie along with the trajectory to meet 2035 goals. The CAP was not prepared in accordance with the requirements within CEQA Guidelines Section 15183.5 and thus is not considered a qualified GHG emission reduction plan and cannot be used to tier from for CEQA.

4 THRESHOLDS OF SIGNIFICANCE

Appendix G of the CEQA Guidelines

No bright-line threshold has been formally adopted by an air district or other lead agencies for use in the San Diego region. CAPCOA recommended an interim 900 MT CO_2E screening level as a theoretical approach to identify projects that require further analysis and potential mitigation (CAPCOA 2008). The 900 MT CO_2E per year screening threshold was developed by CAPCOA based on data collection on various development applications submitted among four diverse cities, including the Cities of Los Angeles, Pleasanton, Dublin, and Livermore. Following the review of numerous pending applications within these four cities, an analysis was conducted to determine the threshold that would capture 90% or more of applications that would be required to conduct a full GHG analysis and implement GHG emission reduction measures as part of final project design. Following CAPCOA's analysis of development applications in various cities, it was determined that the threshold of 900 MT CO2E per year would achieve the objective of 90% capture and ensure that new development projects would keep the State of California on track to meet the goals of AB 32.

This 900 MT CO2E screening level threshold is considered appropriate for small redevelopment projects. Consequently, the interim screening level recommended by the CAPCOA would be appropriate for the proposed project. The stationary bright-line threshold of 10,000 MT CO2E, however, is inappropriate for the project because the project is not an industrial stationary permitted source with a single point of emissions (e.g., single exhaust pipe or release point). The 900 MT CO2E threshold is applied to evaluate whether the project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

The analysis for compliance with regulatory programs only applies to the individual area addressed by the regulatory program. If the proposed project is determined to have GHG emissions less than 900 MT CO2E per year, then the project's cumulative contribution of GHG emissions would be considered less than significant. Conversely, if the proposed project is determined to exceed the 900 MT CO2E per year threshold, then the project's cumulative contribution of GHG emissions would be considered significant and feasible mitigation measures would be required.

Section 15183.5 also specifies that the project's CEQA analysis "must identify those requirements specified in the plan that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project." As discussed in Section 3.2, there is no CAP that applies to this project.

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5 IMPACT ANALYSIS

Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction – Proposed Project

Emissions resulting from the construction phase of the proposed project were estimated using CalEEMod Version 2016.3.2. For the purposes of emissions modeling, it was assumed that construction of the proposed project would commence in mid-2020[4]. A detailed depiction of the construction schedule—including information regarding subphases, demolition, and equipment used during each subphase—is included in Section 1.2, Project Description, and Appendix A of this report. The information contained in Appendix A was used as CalEEMod inputs.

Construction equipment specifications were provided by the project applicant, and the equipment mix is meant to represent a reasonably conservative estimate of construction activity. For the analysis, it was generally assumed that heavy construction equipment would be operating at the site for approximately 8 hours per day, 5 days per week (22 days per month) during project construction. Construction-worker estimates by construction phase were provided by the project applicant, and traffic estimates for construction-worker trips provided by Fehr and Peers were applied to peak building construction periods (Fehr and Peers 2016). CalEEMod defaults, including haul trips, were applied for the demolition of the existing multifamily and three single-family residences. Grading and excavation activities would require approximately 154,000 cubic yards of export. Approximately 10% of exported material (15,600 cubic yards) would be used as beach nourishment at Fletcher Cove Beach approximately 1.5 miles from the project site. To account for these export trips, a 1.5-mile driving distance was applied to the vendor trip length using the heavy-heavy duty on-road truck vehicle class to accurately represent hauling trips. The remaining 90% of exported material (138,400 cubic yards) would be disposed of at a permitted disposal facility. However, for the purposes of a conservative air quality analysis, it was assumed that all soil material to be exported off site would be transported to a disposal facility. The Sycamore Landfill is located approximately 22 miles from the project site. The Otay Landfill is located approximately 33 miles from the project site. To be conservative when estimating emissions from haul trips for export activity, it was assumed all material would be transported to the Otay Landfill. Haul trucks for material export were assumed to have a 16-cubic-yard haul capacity based on the CalEEMod default value.

[4] Although the construction schedule analyzed in this analysis would likely precede on-the-ground development, an earlier construction start date is considered conservative when estimating daily criteria pollutant emissions because construction emissions in future years would decrease as CARB regulations become more stringent and construction equipment fleet turn over occurs to replace older equipment with newer, more efficient equipment technology.

Table 4 shows the estimated annual GHG construction emissions associated with the proposed project as well as the annualized construction emissions over a 30-year "project life."

Table 4
Estimated Annual Construction GHG Emissions – Proposed Project

Year	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
2020	487.90	0.06	0.00	489.44
2021	735.12	0.10	0.00	737.59
2022	843.87	0.11	0.00	846.57
2023	155.73	0.03	0.00	156.45
			Total	**2,230.05**
			Amortized Emissions	**74.34**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
See Appendix A for complete results.

Total construction emissions for the proposed project were 2,230 MT CO_2e. Estimated amortized proposed project generated construction emissions would be approximately 74 MT CO_2e. However, because there is no separate GHG threshold for construction emissions alone, the evaluation of significance is discussed in the operational emissions analysis.

Construction – Alternative

Emissions resulting from the construction phase of the Alternative were estimated using CalEEMod Version 2016.3.2. For the purposes of emissions modeling, it was assumed that construction of the proposed project would commence in mid-2020. Construction would occur over an approximately 24-month period. Under this construction scenario the project would not be constructed in discrete phases and there would be no on-site residents during construction.

A detailed depiction of the construction schedule—including information regarding subphases, demolition, and equipment used during each subphase—is included in Section 1.2, Project Description, and Appendix B of this report. The information contained in Appendix B was used as CalEEMod inputs.

Table 5 shows the estimated maximum daily construction emissions associated with the construction phases of the proposed project. Complete details of the emissions calculations are provided in Appendix B of this document.

Table 5
Estimated Annual Construction GHG Emissions – Alternative

Year	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
2020	1,099.10	0.13	0.00	1,102.35
2021	1,145.18	0.16	0.00	1,149.07
2022	222.19	0.03	0.00	222.84
			Total	**2,474.26**
			Amortized Emissions	**82.48**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
See Appendix A for complete results.

Total construction emissions for the Alternative were 2,474 MT CO_2e. Estimated amortized Alternative generated construction emissions would be approximately 83 MT CO_2e. However, because there is no separate GHG threshold for construction emissions alone, the evaluation of significance is discussed in the operational emissions analysis below.

Operational

Operation of the proposed project would result in GHG emissions from vehicular traffic, area sources (architectural coatings, consumer products, and landscaping), electrical generation, natural gas consumption, water supply (including wastewater generation), and solid waste. Because operation of the existing buildings also generates GHG emissions, the emissions associated with the existing buildings were subtracted from those resulting from the proposed project, and the net change in GHG emissions was compared to the significance threshold.

The estimated operational (year 2024) GHG emissions from the proposed project, existing baseline, and Alternative from area sources, energy usage, motor vehicles, solid waste generation, and water usage and wastewater generation are shown in Table 6.

Table 6
Estimated Annual Operational GHG Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Baseline				
Area	220.22	0.01	0.1	223.46
Energy	288.59	0.01	0.00	289.75
Mobile	2,136.64	0.15	0.00	2,140.48
Solid waste	18.49	1.09	0.00	45.80

Table 6
Estimated Annual Operational GHG Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Water supply and wastewater	73.82	0.02	0.01	77.17
			Total	**2,776.67**
Proposed Project				
Area	3.16	0.00	0.00	3.24
Energy	387.21	0.01	0.00	388.90
Mobile	2,054.97	0.12	0.00	2,057.84
Solid waste	6.07	0.36	0.00	15.04
Water supply and wastewater	46.72	0.02	0.01	50.21
			Total	**2,515.23**
			Amortized Construction Emissions	*74.34*
			Operation + Amortized Construction Total	**2,589.57**
			Net Emissions	**(187.10)**
Alternative				
			Total	**2,515.23**
			Amortized Construction Emissions	*82.48*
			Operation + Amortized Construction Total	**2,597.71**
			Net Emissions	**(178.96)**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
See Appendix A for detailed results.
These emissions reflect California Emissions Estimator Model "mitigated" output and operational year 2024 including increased diversity, increased transit accessibility, and below market-rate housing.
The operational emissions from the Alternative are identical to that of the proposed project.

As shown in Table 6, estimated annual proposed project GHG emissions in 2024 would be approximately 2,515 MT CO_2e per year as a result of proposed project operations. Estimated annual proposed project generated emissions in 2024 from area, energy, mobile, solid waste, and water/wastewater sources and amortized construction emissions would be approximately 2,590 MT CO_2e per year and would result in a net reduction of 187 MT CO_2e per year. The total operational emissions assuming the Alternative construction scenario would be 2,598 MT CO_2e per year and would result in a net reduction of 179 MT CO_2e per year. As shown in Table 6, both the proposed project and Alternative would result in a net reduction in GHG emissions. Therefore, the emissions from both the proposed project and Alternative would be less than the 900 MT CO_2e significance threshold and the impact would be less than significant.

Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The City adopted a CAP in July 2017, with the aim of mitigating City-wide GHG emissions while meeting the goals of AB 32. The CAP will include emission reduction targets of 15% below baseline conditions (2010) by 2020 and 50% below baseline conditions by 2035 (City of Solana Beach 2017). The CAP is not a qualified CAP under CEQA Section 15183.5 and cannot be used for tiering CEQA review. Additionally, the CAP does not direct private actions, instead informs the development of City ordinances that the proposed project is required to adhere to. As described previously, the project would implement a number of sustainability design features, and would not conflict with the goals, policies, and emission reduction targets set forth in the Climate Protection Action Plan, nor would the project impeded the State's ability to achieve these reduction goals. In regards to consistency with EO B-30-15 (goal of reducing GHG emissions to 40% below 1990 levels by 2030) and EO S-3-05 (goal of reducing GHG emissions to 80% below 1990 levels by 2050), there are no established protocols or thresholds of significance for that future year analysis. However, CARB forecasts that compliance with the current Scoping Plan puts the state on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014b). The proposed project would be consistent with the GHG emission reduction measures in the Scoping Plan and would not conflict with the state's trajectory toward future GHG reductions. In addition, since the specific path to compliance for the state in regards to the long-term goals will likely require development of technology or other changes that are not currently known or available, specific additional mitigation measures for the project would be speculative and cannot be identified at this time. As such, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and no mitigation is required. This impact would be less than significant.

At the regional level, SANDAG's regional plan, *San Diego Forward: The Regional Plan* (Regional Plan), has been adopted for the purpose of reducing GHG emissions attributable to passenger vehicles in the San Diego region. While the Regional Plan not regulate land use or supersede the exercise of land use authority by SANDAG's member jurisdictions (i.e., the County and cities therein), the Regional Plan remains a relevant regional reference document for purposes of evaluating the intersection of land use and transportation patterns and the corresponding GHG emissions. The Regional Plan is not directly applicable to the proposed project because the underlying purpose of the Regional Plan is to provide direction and guidance on future regional growth (i.e., the location of new residential and non-residential land uses) and transportation patterns throughout the County, as stipulated under SB 375. The proposed project would maintain the existing residential land use through the removal and improvement of existing on-site facilities including demolishing older, less efficient buildings and constructing newer, more

efficient residential structures. The project is consistent with some of the key goals of the SANDAG Regional Plan which promote compact urban form and infill development (e.g., smart growth) as well as the provision of affordable housing in the region. For reasons outlined previously, the project would support the goals and policies of the Regional Plan. Additionally, the higher-density infill development nature of the project would support the overarching intent of the Regional Plan by improving pedestrian and bicycle access to nearby locations, encouraging non-motorized modes of travel, and thus, reducing vehicle trips and vehicle miles travelled to and from the site with resultant reductions in emissions and improvements in air quality compared to the existing conditions.

Finally, the San Diego Air Pollution Control District has not adopted GHG reduction measures that would apply to the GHG emissions associated with the proposed project. The project applicant would implement a number of sustainability design features to reduce vehicle trips and vehicle miles travelled, energy consumption, water consumption, and solid waste; therefore, these features would reduce GHG emissions associated with proposed project operations. Implementation of sustainability design features, many of which would reduce emissions even further than the increase in emissions shown in Table 4, would further ensure that conflict with plans, policies, and initiatives designed to reduce GHG emissions would not occur. Therefore, this impact would be less than significant.

6 MITIGATION MEASURES

The proposed project would not result in significant impacts; therefore, no mitigation is required.

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7 CUMULATIVE ANALYSIS

GHG emissions are said to result in an increase in the Earth's average surface temperature, commonly referred to as "global climate change." Global climate change, by definition, is cumulative as it is the result of combined worldwide contributions of GHGs to the atmosphere over many years. Impacts associated with the project discussed in Section 5 also serve as the project's cumulative impact analysis.

CalEEMod was used to estimate cumulative GHG emissions from various project components, such as construction, vehicular trips, area sources, electricity, water supply, and solid waste (see Appendix A). The proposed project would result in an estimated net decrease in GHG emissions of 187 MT CO_2e per year and the Alternative would result in a net decrease of 179 MT CO_2e per year. As shown in Table 6, emissions from the project would be below the 900 MT CO_2e significance threshold. Additionally, the project would implement sustainability design features, which would further reduce the minimal emissions generated by the proposed project. Sustainability design features would include measures to reduce vehicle trips and vehicle miles travelled energy consumption, water demand and solid waste generation. Therefore, the project would not result in a cumulative considerable contribution to global GHG emissions and would not conflict with the goals of AB 32. Cumulative impacts would be less than significant.

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8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed project would not result in significant impacts; therefore, impacts would remain less than significant.

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10 LIST OF PREPARERS

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FIGURE 1

Regional Map

Greenhouse Gas Analysis for the Solana Highlands Revitalization Project

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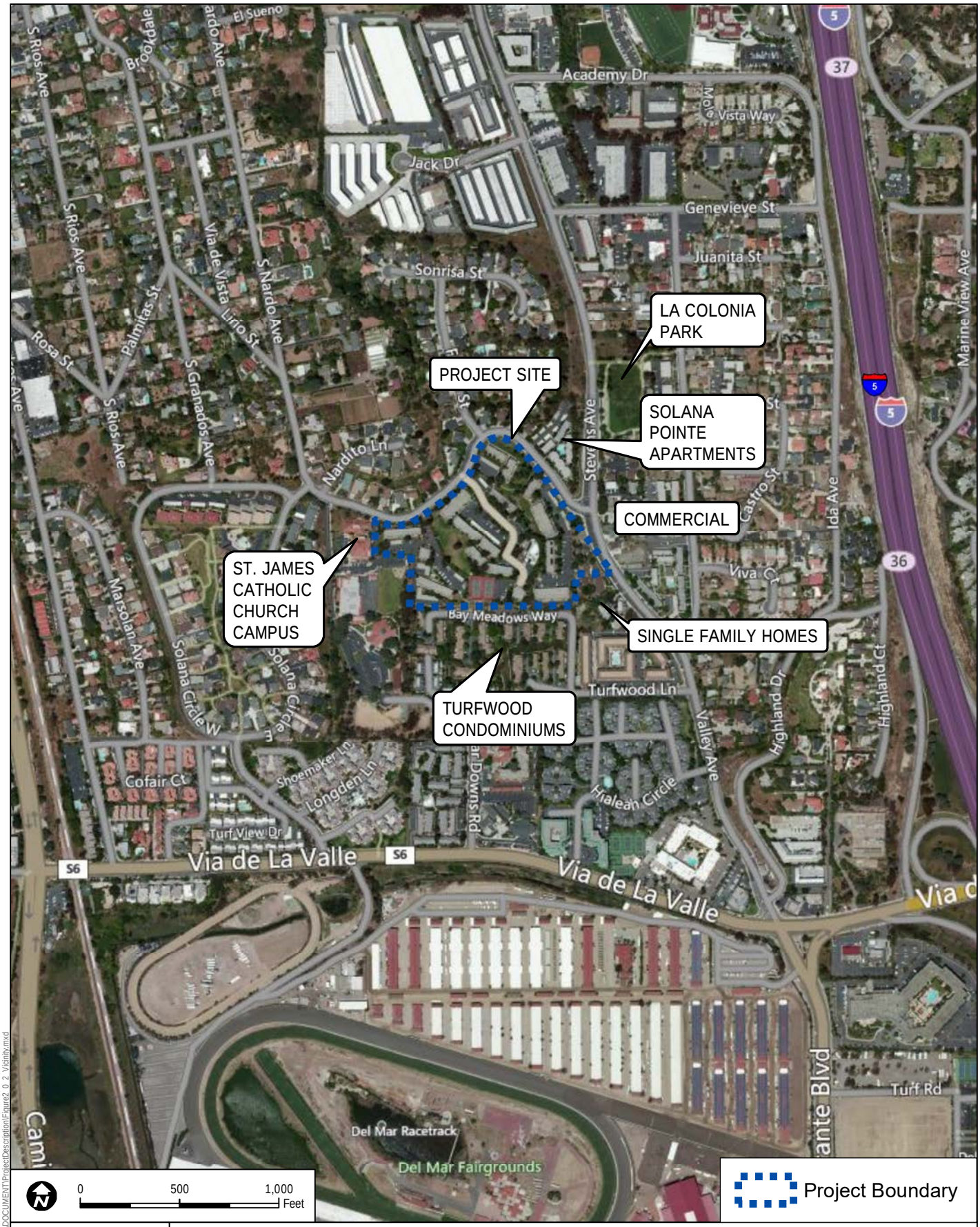

SOURCE: BING Maps 2014; USGS 7.5-Minute Series - Del Mar Quadrangle.

FIGURE 2
Vicinity Map

8607

Greenhouse Gas Analysis for the Solana Highlands Revitalization Project

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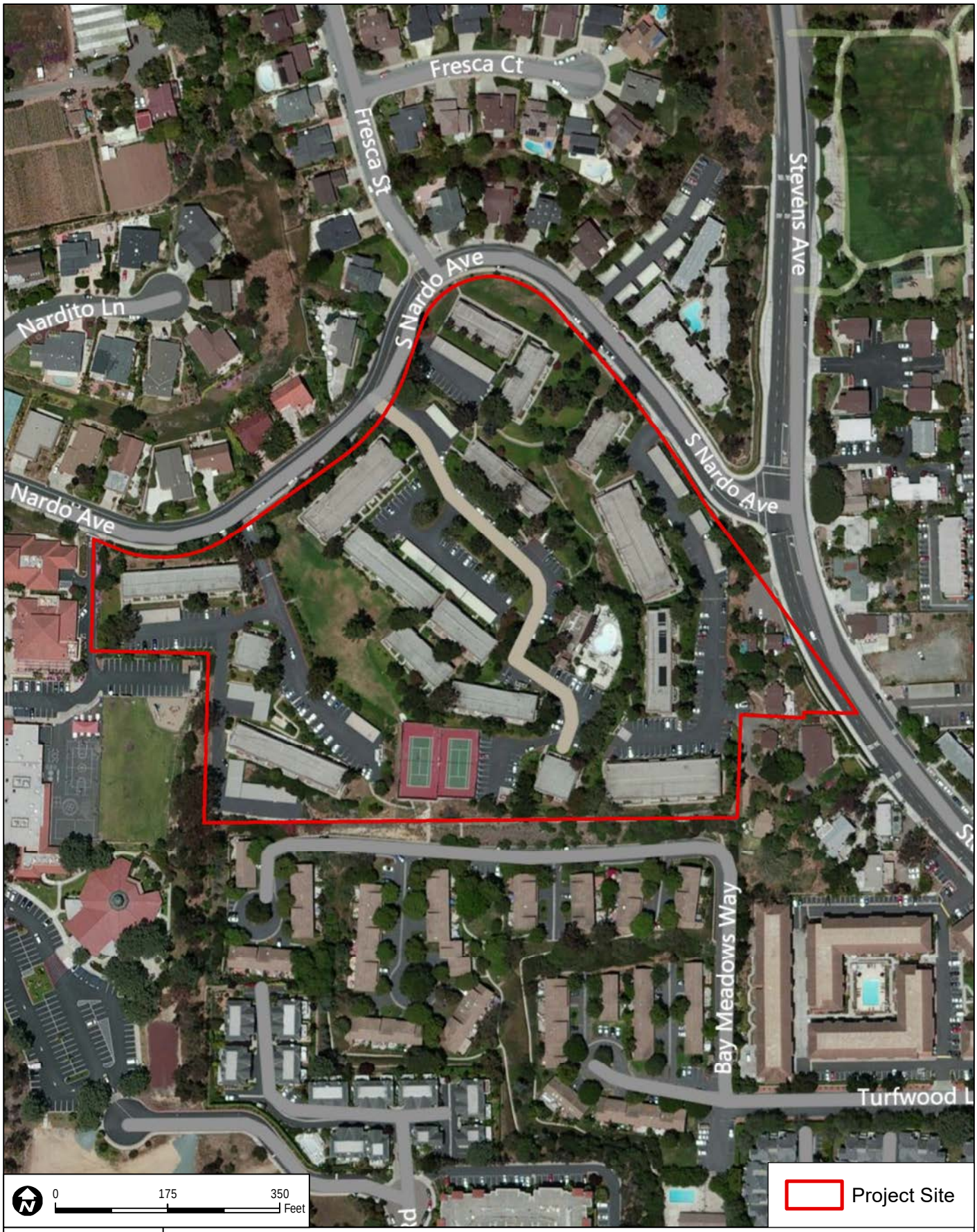

SOURCE: BING Maps, 2014.

FIGURE 3
Existing Site Layout

8607

Greenhouse Gas Analysis for the Solana Highlands Revitalization Project

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1 SITE PLAN
1"=40'-0"

SOURCE: Stephen Dalton Architects 2014

FIGURE 4

Site Plan

8607

Greenhouse Gas Analysis for the Solana Highlands Revitalization Project

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APPENDIX A

CalEEMod Output Files – Proposed Project

Solana Highlands - Existing Uses

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	150.00	1000sqft	3.44	150,000.00	0
Apartments Low Rise	4.00	Dwelling Unit	0.25	4,000.00	11
Apartments Mid Rise	194.00	Dwelling Unit	5.11	142,292.00	555

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2014
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - existing uses

Construction Phase - operational only

Off-road Equipment - operational only

Trips and VMT - operational only

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - trip gen - F&P

Woodstoves - based on PD

Consumer Products - CalEEMod defaults.

Area Coating - SDAPCD Rule 67.0.1

Landscape Equipment - CalEEMod defaults.

Energy Use - Historical data.

Water And Wastewater - water use provided by applicant

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50

tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintParkingValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblFireplaces	NumberGas	2.20	4.00
tblFireplaces	NumberGas	106.70	155.00
tblFireplaces	NumberNoFireplace	0.40	4.00
tblFireplaces	NumberNoFireplace	19.40	155.00
tblFireplaces	NumberWood	1.40	0.00
tblFireplaces	NumberWood	67.90	39.00
tblLandUse	LandUseSquareFeet	194,000.00	142,292.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	ST_TR	7.16	7.68
tblVehicleTrips	ST_TR	6.39	7.68
tblVehicleTrips	SU_TR	6.07	7.04
tblVehicleTrips	SU_TR	5.86	7.04
tblVehicleTrips	WD_TR	6.59	8.00
tblVehicleTrips	WD_TR	6.65	8.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00

tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	260,616.10	37,400.00
tblWater	IndoorWaterUseRate	12,639,880.97	11,944,887.00
tblWater	OutdoorWaterUseRate	164,301.46	0.00
tblWater	OutdoorWaterUseRate	7,968,620.61	5,119,237.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	0.20	0.00
tblWoodstoves	NumberCatalytic	9.70	0.00
tblWoodstoves	NumberNoncatalytic	0.20	0.00
tblWoodstoves	NumberNoncatalytic	9.70	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2013	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2013	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.5756	0.2040	9.1352	0.0128		1.0552	1.0552		1.0552	1.0552	92.5773	127.6405	220.2178	4.9700e-003	0.0105	223.4604
Energy	6.2800e-003	0.0537	0.0228	3.4000e-004		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	288.5939	288.5939	0.0103	3.0300e-003	289.7531
Mobile	0.9272	3.7335	11.3090	0.0234	1.6679	0.0483	1.7162	0.4471	0.0458	0.4929	0.0000	2,136.6374	2,136.6374	0.1536	0.0000	2,140.4780
Waste						0.0000	0.0000		0.0000	0.0000	18.4884	0.0000	18.4884	1.0926	0.0000	45.8043
Water						0.0000	0.0000		0.0000	0.0000	4.2394	69.5763	73.8157	0.0174	9.8000e-003	77.1704
Total	**8.5090**	**3.9912**	**20.4670**	**0.0365**	**1.6679**	**1.1079**	**2.7757**	**0.4471**	**1.1054**	**1.5525**	**115.3050**	**2,622.4482**	**2,737.7532**	**1.2789**	**0.0233**	**2,776.6663**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.5756	0.2040	9.1352	0.0128		1.0552	1.0552		1.0552	1.0552	92.5773	127.6405	220.2178	4.9700e-003	0.0105	223.4604
Energy	6.2800e-003	0.0537	0.0228	3.4000e-004		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	288.5939	288.5939	0.0103	3.0300e-003	289.7531
Mobile	0.9272	3.7335	11.3090	0.0234	1.6679	0.0483	1.7162	0.4471	0.0458	0.4929	0.0000	2,136.6374	2,136.6374	0.1536	0.0000	2,140.4780
Waste						0.0000	0.0000		0.0000	0.0000	18.4884	0.0000	18.4884	1.0926	0.0000	45.8043
Water						0.0000	0.0000		0.0000	0.0000	4.2394	69.5763	73.8157	0.0174	9.8000e-003	77.1704
Total	**8.5090**	**3.9912**	**20.4670**	**0.0365**	**1.6679**	**1.1079**	**2.7757**	**0.4471**	**1.1054**	**1.5525**	**115.3050**	**2,622.4482**	**2,737.7532**	**1.2789**	**0.0233**	**2,776.6663**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/30/2012	1/25/2013	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.44

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.9272	3.7335	11.3090	0.0234	1.6679	0.0483	1.7162	0.4471	0.0458	0.4929	0.0000	2,136.6374	2,136.6374	0.1536	0.0000	2,140.4780
Unmitigated	0.9272	3.7335	11.3090	0.0234	1.6679	0.0483	1.7162	0.4471	0.0458	0.4929	0.0000	2,136.6374	2,136.6374	0.1536	0.0000	2,140.4780

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	32.00	30.72	28.16	89,281	89,281
Apartments Mid Rise	1,552.00	1,489.92	1365.76	4,330,141	4,330,141
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	1,584.00	1,520.64	1,393.92	4,419,422	4,419,422

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.536433	0.053575	0.200220	0.130814	0.024671	0.005832	0.013762	0.020690	0.001840	0.002510	0.007051	0.000678	0.001924
Apartments Mid Rise	0.536433	0.053575	0.200220	0.130814	0.024671	0.005832	0.013762	0.020690	0.001840	0.002510	0.007051	0.000678	0.001924
Other Asphalt Surfaces	0.536433	0.053575	0.200220	0.130814	0.024671	0.005832	0.013762	0.020690	0.001840	0.002510	0.007051	0.000678	0.001924

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	226.4244	226.4244	9.1100e-003	1.8900e-003	227.2141
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	226.4244	226.4244	9.1100e-003	1.8900e-003	227.2141
NaturalGas Mitigated	6.2800e-003	0.0537	0.0228	3.4000e-004		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	62.1696	62.1696	1.1900e-003	1.1400e-003	62.5390
NaturalGas Unmitigated	6.2800e-003	0.0537	0.0228	3.4000e-004		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	62.1696	62.1696	1.1900e-003	1.1400e-003	62.5390

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	45628.1	2.5000e-004	2.1000e-003	8.9000e-004	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.4349	2.4349	5.0000e-005	4.0000e-005	2.4494
Apartments Mid Rise	1.11939e+006	6.0400e-003	0.0516	0.0220	3.3000e-004		4.1700e-003	4.1700e-003		4.1700e-003	4.1700e-003	0.0000	59.7347	59.7347	1.1400e-003	1.1000e-003	60.0897
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**6.2900e-003**	**0.0537**	**0.0228**	**3.4000e-004**		**4.3400e-003**	**4.3400e-003**		**4.3400e-003**	**4.3400e-003**	**0.0000**	**62.1696**	**62.1696**	**1.1900e-003**	**1.1400e-003**	**62.5390**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	45628.1	2.5000e-004	2.1000e-003	8.9000e-004	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.4349	2.4349	5.0000e-005	4.0000e-005	2.4494
Apartments Mid Rise	1.11939e+006	6.0400e-003	0.0516	0.0220	3.3000e-004		4.1700e-003	4.1700e-003		4.1700e-003	4.1700e-003	0.0000	59.7347	59.7347	1.1400e-003	1.1000e-003	60.0897
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**6.2900e-003**	**0.0537**	**0.0228**	**3.4000e-004**		**4.3400e-003**	**4.3400e-003**		**4.3400e-003**	**4.3400e-003**	**0.0000**	**62.1696**	**62.1696**	**1.1900e-003**	**1.1400e-003**	**62.5390**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	14705.4	4.8059	1.9000e-004	4.0000e-005	4.8226
Apartments Mid Rise	678129	221.6185	8.9200e-003	1.8500e-003	222.3915
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**226.4244**	**9.1100e-003**	**1.8900e-003**	**227.2141**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	14705.4	4.8059	1.9000e-004	4.0000e-005	4.8226
Apartments Mid Rise	678129	221.6185	8.9200e-003	1.8500e-003	222.3915
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**226.4244**	**9.1100e-003**	**1.8900e-003**	**227.2141**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	7.5756	0.2040	9.1352	0.0128		1.0552	1.0552		1.0552	1.0552	92.5773	127.6405	220.2178	4.9700e-003	0.0105	223.4604
Unmitigated	7.5756	0.2040	9.1352	0.0128		1.0552	1.0552		1.0552	1.0552	92.5773	127.6405	220.2178	4.9700e-003	0.0105	223.4604

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0593					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5810					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.8860	0.1862	7.6277	0.0127		1.0472	1.0472		1.0472	1.0472	92.5773	125.2363	217.8136	2.4000e-003	0.0105	220.9920
Landscaping	0.0493	0.0179	1.5075	8.0000e-005		8.0000e-003	8.0000e-003		8.0000e-003	8.0000e-003	0.0000	2.4042	2.4042	2.5700e-003	0.0000	2.4684
Total	**7.5756**	**0.2041**	**9.1352**	**0.0128**		**1.0552**	**1.0552**		**1.0552**	**1.0552**	**92.5773**	**127.6405**	**220.2178**	**4.9700e-003**	**0.0105**	**223.4604**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0593					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5810					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.8860	0.1862	7.6277	0.0127		1.0472	1.0472		1.0472	1.0472	92.5773	125.2363	217.8136	2.4000e-003	0.0105	220.9920
Landscaping	0.0493	0.0179	1.5075	8.0000e-005		8.0000e-003	8.0000e-003		8.0000e-003	8.0000e-003	0.0000	2.4042	2.4042	2.5700e-003	0.0000	2.4684
Total	**7.5756**	**0.2041**	**9.1352**	**0.0128**		**1.0552**	**1.0552**		**1.0552**	**1.0552**	**92.5773**	**127.6405**	**220.2178**	**4.9700e-003**	**0.0105**	**223.4604**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	73.8157	0.0174	9.8000e-003	77.1704
Unmitigated	73.8157	0.0174	9.8000e-003	77.1704

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.0374 / 0	0.1724	5.0000e-005	3.0000e-005	0.1827
Apartments Mid Rise	11.9449 / 5.11924	73.6433	0.0173	9.7700e-003	76.9878
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**73.8157**	**0.0174**	**9.8000e-003**	**77.1704**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.0374 / 0	0.1724	5.0000e-005	3.0000e-005	0.1827
Apartments Mid Rise	11.9449 / 5.11924	73.6433	0.0173	9.7700e-003	76.9878
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**73.8157**	**0.0174**	**9.8000e-003**	**77.1704**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	18.4884	1.0926	0.0000	45.8043
Unmitigated	18.4884	1.0926	0.0000	45.8043

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	1.84	0.3735	0.0221	0.0000	0.9253
Apartments Mid Rise	89.24	18.1149	1.0706	0.0000	44.8789
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**18.4884**	**1.0926**	**0.0000**	**45.8043**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	1.84	0.3735	0.0221	0.0000	0.9253
Apartments Mid Rise	89.24	18.1149	1.0706	0.0000	44.8789
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**18.4884**	**1.0926**	**0.0000**	**45.8043**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Solana Highlands - Existing Uses

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	150.00	1000sqft	3.44	150,000.00	0
Apartments Low Rise	4.00	Dwelling Unit	0.25	4,000.00	11
Apartments Mid Rise	194.00	Dwelling Unit	5.11	142,292.00	555

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2014
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - existing uses

Construction Phase - operational only

Off-road Equipment - operational only

Trips and VMT - operational only

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - trip gen - F&P

Woodstoves - based on PD

Consumer Products - CalEEMod defaults.

Area Coating - SDAPCD Rule 67.0.1

Landscape Equipment - CalEEMod defaults.

Energy Use - Historical data.

Water And Wastewater - water use provided by applicant

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50

tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintParkingValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblFireplaces	NumberGas	2.20	4.00
tblFireplaces	NumberGas	106.70	155.00
tblFireplaces	NumberNoFireplace	0.40	4.00
tblFireplaces	NumberNoFireplace	19.40	155.00
tblFireplaces	NumberWood	1.40	0.00
tblFireplaces	NumberWood	67.90	39.00
tblLandUse	LandUseSquareFeet	194,000.00	142,292.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	ST_TR	7.16	7.68
tblVehicleTrips	ST_TR	6.39	7.68
tblVehicleTrips	SU_TR	6.07	7.04
tblVehicleTrips	SU_TR	5.86	7.04
tblVehicleTrips	WD_TR	6.59	8.00
tblVehicleTrips	WD_TR	6.65	8.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00

tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	260,616.10	37,400.00
tblWater	IndoorWaterUseRate	12,639,880.97	11,944,887.00
tblWater	OutdoorWaterUseRate	164,301.46	0.00
tblWater	OutdoorWaterUseRate	7,968,620.61	5,119,237.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	0.20	0.00
tblWoodstoves	NumberCatalytic	9.70	0.00
tblWoodstoves	NumberNoncatalytic	0.20	0.00
tblWoodstoves	NumberNoncatalytic	9.70	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2013	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2013	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	172.0061	4.7394	202.7906	0.3105		25.6314	25.6314		25.6314	25.6314	2,488.9990	3,396.5050	5,885.5040	0.0960	0.2814	5,971.7453
Energy	0.0344	0.2942	0.1252	1.8800e-003		0.0238	0.0238		0.0238	0.0238		375.5081	375.5081	7.2000e-003	6.8800e-003	377.7396
Mobile	5.4208	20.1177	64.8351	0.1375	9.6036	0.2707	9.8743	2.5693	0.2570	2.8262		13,844.5042	13,844.5042	0.9600		13,868.5035
Total	**177.4613**	**25.1513**	**267.7509**	**0.4499**	**9.6036**	**25.9259**	**35.5295**	**2.5693**	**25.9121**	**28.4814**	**2,488.9990**	**17,616.5173**	**20,105.5164**	**1.0632**	**0.2882**	**20,217.9884**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	172.0061	4.7394	202.7906	0.3105		25.6314	25.6314		25.6314	25.6314	2,488.9990	3,396.5050	5,885.5040	0.0960	0.2814	5,971.7453
Energy	0.0344	0.2942	0.1252	1.8800e-003		0.0238	0.0238		0.0238	0.0238		375.5081	375.5081	7.2000e-003	6.8800e-003	377.7396
Mobile	5.4208	20.1177	64.8351	0.1375	9.6036	0.2707	9.8743	2.5693	0.2570	2.8262		13,844.5042	13,844.5042	0.9600		13,868.5035
Total	**177.4613**	**25.1513**	**267.7509**	**0.4499**	**9.6036**	**25.9259**	**35.5295**	**2.5693**	**25.9121**	**28.4814**	**2,488.9990**	**17,616.5173**	**20,105.5164**	**1.0632**	**0.2882**	**20,217.9884**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/30/2012	1/25/2013	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.44

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.4208	20.1177	64.8351	0.1375	9.6036	0.2707	9.8743	2.5693	0.2570	2.8262		13,844.5042	13,844.5042	0.9600		13,868.5035
Unmitigated	5.4208	20.1177	64.8351	0.1375	9.6036	0.2707	9.8743	2.5693	0.2570	2.8262		13,844.5042	13,844.5042	0.9600		13,868.5035

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	32.00	30.72	28.16	89,281	89,281
Apartments Mid Rise	1,552.00	1,489.92	1365.76	4,330,141	4,330,141
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	1,584.00	1,520.64	1,393.92	4,419,422	4,419,422

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.536433	0.053575	0.200220	0.130814	0.024671	0.005832	0.013762	0.020690	0.001840	0.002510	0.007051	0.000678	0.001924
Apartments Mid Rise	0.536433	0.053575	0.200220	0.130814	0.024671	0.005832	0.013762	0.020690	0.001840	0.002510	0.007051	0.000678	0.001924
Other Asphalt Surfaces	0.536433	0.053575	0.200220	0.130814	0.024671	0.005832	0.013762	0.020690	0.001840	0.002510	0.007051	0.000678	0.001924

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0344	0.2942	0.1252	1.8800e-003		0.0238	0.0238		0.0238	0.0238		375.5081	375.5081	7.2000e-003	6.8800e-003	377.7396
NaturalGas Unmitigated	0.0344	0.2942	0.1252	1.8800e-003		0.0238	0.0238		0.0238	0.0238		375.5081	375.5081	7.2000e-003	6.8800e-003	377.7396

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	125.009	1.3500e-003	0.0115	4.9000e-003	7.0000e-005		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004		14.7069	14.7069	2.8000e-004	2.7000e-004	14.7943
Apartments Mid Rise	3066.81	0.0331	0.2826	0.1203	1.8000e-003		0.0229	0.0229		0.0229	0.0229		360.8012	360.8012	6.9200e-003	6.6100e-003	362.9453
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0344**	**0.2942**	**0.1252**	**1.8700e-003**		**0.0238**	**0.0238**		**0.0238**	**0.0238**		**375.5081**	**375.5081**	**7.2000e-003**	**6.8800e-003**	**377.7396**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	0.125009	1.3500e-003	0.0115	4.9000e-003	7.0000e-005		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004		14.7069	14.7069	2.8000e-004	2.7000e-004	14.7943
Apartments Mid Rise	3.06681	0.0331	0.2826	0.1203	1.8000e-003		0.0229	0.0229		0.0229	0.0229		360.8012	360.8012	6.9200e-003	6.6100e-003	362.9453
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0344**	**0.2942**	**0.1252**	**1.8700e-003**		**0.0238**	**0.0238**		**0.0238**	**0.0238**		**375.5081**	**375.5081**	**7.2000e-003**	**6.8800e-003**	**377.7396**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	172.0061	4.7394	202.7906	0.3105		25.6314	25.6314		25.6314	25.6314	2,488.9990	3,396.5050	5,885.5040	0.0960	0.2814	5,971.7453
Unmitigated	172.0061	4.7394	202.7906	0.3105		25.6314	25.6314		25.6314	25.6314	2,488.9990	3,396.5050	5,885.5040	0.0960	0.2814	5,971.7453

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1838					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	167.9501	4.5409	186.0403	0.3097		25.5425	25.5425		25.5425	25.5425	2,488.9990	3,367.0588	5,856.0579	0.0645	0.2814	5,941.5126
Landscaping	0.5473	0.1985	16.7503	8.6000e-004		0.0889	0.0889		0.0889	0.0889		29.4462	29.4462	0.0315		30.2327
Total	**172.0061**	**4.7394**	**202.7906**	**0.3105**		**25.6314**	**25.6314**		**25.6314**	**25.6314**	**2,488.9990**	**3,396.5050**	**5,885.5040**	**0.0960**	**0.2814**	**5,971.7453**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1838					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	167.9501	4.5409	186.0403	0.3097		25.5425	25.5425		25.5425	25.5425	2,488.9990	3,367.0588	5,856.0579	0.0645	0.2814	5,941.5126
Landscaping	0.5473	0.1985	16.7503	8.6000e-004		0.0889	0.0889		0.0889	0.0889		29.4462	29.4462	0.0315		30.2327
Total	**172.0061**	**4.7394**	**202.7906**	**0.3105**		**25.6314**	**25.6314**		**25.6314**	**25.6314**	**2,488.9990**	**3,396.5050**	**5,885.5040**	**0.0960**	**0.2814**	**5,971.7453**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Solana Highlands - Existing Uses

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	150.00	1000sqft	3.44	150,000.00	0
Apartments Low Rise	4.00	Dwelling Unit	0.25	4,000.00	11
Apartments Mid Rise	194.00	Dwelling Unit	5.11	142,292.00	555

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2014
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - existing uses

Construction Phase - operational only

Off-road Equipment - operational only

Trips and VMT - operational only

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - trip gen - F&P

Woodstoves - based on PD

Consumer Products - CalEEMod defaults.

Area Coating - SDAPCD Rule 67.0.1

Landscape Equipment - CalEEMod defaults.

Energy Use - Historical data.

Water And Wastewater - water use provided by applicant

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50

Solana Highlands - Existing Uses - San Diego County, Winter

tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintParkingValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblFireplaces	NumberGas	2.20	4.00
tblFireplaces	NumberGas	106.70	155.00
tblFireplaces	NumberNoFireplace	0.40	4.00
tblFireplaces	NumberNoFireplace	19.40	155.00
tblFireplaces	NumberWood	1.40	0.00
tblFireplaces	NumberWood	67.90	39.00
tblLandUse	LandUseSquareFeet	194,000.00	142,292.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	ST_TR	7.16	7.68
tblVehicleTrips	ST_TR	6.39	7.68
tblVehicleTrips	SU_TR	6.07	7.04
tblVehicleTrips	SU_TR	5.86	7.04
tblVehicleTrips	WD_TR	6.59	8.00
tblVehicleTrips	WD_TR	6.65	8.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00

tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	260,616.10	37,400.00
tblWater	IndoorWaterUseRate	12,639,880.97	11,944,887.00
tblWater	OutdoorWaterUseRate	164,301.46	0.00
tblWater	OutdoorWaterUseRate	7,968,620.61	5,119,237.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	0.20	0.00
tblWoodstoves	NumberCatalytic	9.70	0.00
tblWoodstoves	NumberNoncatalytic	0.20	0.00
tblWoodstoves	NumberNoncatalytic	9.70	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2013	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2013	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	172.0061	4.7394	202.7906	0.3105		25.6314	25.6314		25.6314	25.6314	2,488.9990	3,396.5050	5,885.5040	0.0960	0.2814	5,971.7453
Energy	0.0344	0.2942	0.1252	1.8800e-003		0.0238	0.0238		0.0238	0.0238		375.5081	375.5081	7.2000e-003	6.8800e-003	377.7396
Mobile	5.4047	20.9984	64.5115	0.1304	9.6036	0.2732	9.8768	2.5693	0.2593	2.8286		13,133.3190	13,133.3190	0.9605		13,157.3318
Total	**177.4452**	**26.0319**	**267.4273**	**0.4428**	**9.6036**	**25.9284**	**35.5319**	**2.5693**	**25.9145**	**28.4838**	**2,488.9990**	**16,905.3321**	**19,394.3311**	**1.0637**	**0.2882**	**19,506.8166**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	172.0061	4.7394	202.7906	0.3105		25.6314	25.6314		25.6314	25.6314	2,488.9990	3,396.5050	5,885.5040	0.0960	0.2814	5,971.7453
Energy	0.0344	0.2942	0.1252	1.8800e-003		0.0238	0.0238		0.0238	0.0238		375.5081	375.5081	7.2000e-003	6.8800e-003	377.7396
Mobile	5.4047	20.9984	64.5115	0.1304	9.6036	0.2732	9.8768	2.5693	0.2593	2.8286		13,133.3190	13,133.3190	0.9605		13,157.3318
Total	**177.4452**	**26.0319**	**267.4273**	**0.4428**	**9.6036**	**25.9284**	**35.5319**	**2.5693**	**25.9145**	**28.4838**	**2,488.9990**	**16,905.3321**	**19,394.3311**	**1.0637**	**0.2882**	**19,506.8166**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/30/2012	1/25/2013	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.44

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.4047	20.9984	64.5115	0.1304	9.6036	0.2732	9.8768	2.5693	0.2593	2.8286		13,133.3190	13,133.3190	0.9605		13,157.3318
Unmitigated	5.4047	20.9984	64.5115	0.1304	9.6036	0.2732	9.8768	2.5693	0.2593	2.8286		13,133.3190	13,133.3190	0.9605		13,157.3318

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	32.00	30.72	28.16	89,281	89,281
Apartments Mid Rise	1,552.00	1,489.92	1365.76	4,330,141	4,330,141
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	1,584.00	1,520.64	1,393.92	4,419,422	4,419,422

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.536433	0.053575	0.200220	0.130814	0.024671	0.005832	0.013762	0.020690	0.001840	0.002510	0.007051	0.000678	0.001924
Apartments Mid Rise	0.536433	0.053575	0.200220	0.130814	0.024671	0.005832	0.013762	0.020690	0.001840	0.002510	0.007051	0.000678	0.001924
Other Asphalt Surfaces	0.536433	0.053575	0.200220	0.130814	0.024671	0.005832	0.013762	0.020690	0.001840	0.002510	0.007051	0.000678	0.001924

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0344	0.2942	0.1252	1.8800e-003		0.0238	0.0238		0.0238	0.0238		375.5081	375.5081	7.2000e-003	6.8800e-003	377.7396
NaturalGas Unmitigated	0.0344	0.2942	0.1252	1.8800e-003		0.0238	0.0238		0.0238	0.0238		375.5081	375.5081	7.2000e-003	6.8800e-003	377.7396

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	125.009	1.3500e-003	0.0115	4.9000e-003	7.0000e-005		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004		14.7069	14.7069	2.8000e-004	2.7000e-004	14.7943
Apartments Mid Rise	3066.81	0.0331	0.2826	0.1203	1.8000e-003		0.0229	0.0229		0.0229	0.0229		360.8012	360.8012	6.9200e-003	6.6100e-003	362.9453
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0344**	**0.2942**	**0.1252**	**1.8700e-003**		**0.0238**	**0.0238**		**0.0238**	**0.0238**		**375.5081**	**375.5081**	**7.2000e-003**	**6.8800e-003**	**377.7396**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	0.125009	1.3500e-003	0.0115	4.9000e-003	7.0000e-005		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004		14.7069	14.7069	2.8000e-004	2.7000e-004	14.7943
Apartments Mid Rise	3.06681	0.0331	0.2826	0.1203	1.8000e-003		0.0229	0.0229		0.0229	0.0229		360.8012	360.8012	6.9200e-003	6.6100e-003	362.9453
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0344**	**0.2942**	**0.1252**	**1.8700e-003**		**0.0238**	**0.0238**		**0.0238**	**0.0238**		**375.5081**	**375.5081**	**7.2000e-003**	**6.8800e-003**	**377.7396**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	172.0061	4.7394	202.7906	0.3105		25.6314	25.6314		25.6314	25.6314	2,488.9990	3,396.5050	5,885.5040	0.0960	0.2814	5,971.7453
Unmitigated	172.0061	4.7394	202.7906	0.3105		25.6314	25.6314		25.6314	25.6314	2,488.9990	3,396.5050	5,885.5040	0.0960	0.2814	5,971.7453

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1838					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	167.9501	4.5409	186.0403	0.3097		25.5425	25.5425		25.5425	25.5425	2,488.9990	3,367.0588	5,856.0579	0.0645	0.2814	5,941.5126
Landscaping	0.5473	0.1985	16.7503	8.6000e-004		0.0889	0.0889		0.0889	0.0889		29.4462	29.4462	0.0315		30.2327
Total	**172.0061**	**4.7394**	**202.7906**	**0.3105**		**25.6314**	**25.6314**		**25.6314**	**25.6314**	**2,488.9990**	**3,396.5050**	**5,885.5040**	**0.0960**	**0.2814**	**5,971.7453**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1838					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	167.9501	4.5409	186.0403	0.3097		25.5425	25.5425		25.5425	25.5425	2,488.9990	3,367.0588	5,856.0579	0.0645	0.2814	5,941.5126
Landscaping	0.5473	0.1985	16.7503	8.6000e-004		0.0889	0.0889		0.0889	0.0889		29.4462	29.4462	0.0315		30.2327
Total	**172.0061**	**4.7394**	**202.7906**	**0.3105**		**25.6314**	**25.6314**		**25.6314**	**25.6314**	**2,488.9990**	**3,396.5050**	**5,885.5040**	**0.0960**	**0.2814**	**5,971.7453**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Solana Highlands - Proposed Project

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	57.37	1000sqft	1.32	57,365.00	0
Other Non-Asphalt Surfaces	1.90	1000sqft	0.04	1,900.00	0
Parking Lot	272.00	Space	2.45	108,800.00	0
Unenclosed Parking Structure	50.60	1000sqft	1.16	50,600.00	0
Apartments Mid Rise	260.00	Dwelling Unit	6.84	326,156.00	744

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS

Land Use - project-specific land uses

Construction Phase - construction schedule per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Trips and VMT - Trips per applicant.

Demolition - demo quantities per applicant

Grading - grading quantities per applicant

Architectural Coating - SDAPCD Rule 67.0.1

Vehicle Trips - F&P 2016

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - No fireplaces.

Consumer Products - CalEEMod defaults.

Area Coating - SDAPCD Rule 67.0.1

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - water use per applicant

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - All construction equipment will be Tier 4 Interim except air compressors and pavers which are Tier 3.

Mobile Land Use Mitigation -

Water Mitigation -

Waste Mitigation - AB 341

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tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	13.00	0.00

tblWoodstoves	NumberNoncatalytic	13.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1304	2.1068	1.0102	5.0700e-003	0.2418	0.0461	0.2879	0.0777	0.0425	0.1203	0.0000	487.8971	487.8971	0.0616	0.0000	489.4372
2021	1.5300	2.9083	1.9300	7.7100e-003	0.2756	0.0769	0.3525	0.0931	0.0711	0.1642	0.0000	735.1224	735.1224	0.0986	0.0000	737.5868
2022	1.5177	2.9034	1.9606	8.7800e-003	0.3347	0.0643	0.3990	0.1050	0.0595	0.1645	0.0000	843.8724	843.8724	0.1080	0.0000	846.5724
2023	1.3852	0.5518	0.8361	1.7300e-003	0.0658	0.0250	0.0909	0.0176	0.0232	0.0408	0.0000	155.7263	155.7263	0.0288	0.0000	156.4467
Maximum	**1.5300**	**2.9083**	**1.9606**	**8.7800e-003**	**0.3347**	**0.0769**	**0.3990**	**0.1050**	**0.0711**	**0.1645**	**0.0000**	**843.8724**	**843.8724**	**0.1080**	**0.0000**	**846.5724**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0695	1.6137	1.0618	5.0700e-003	0.1734	6.4400e-003	0.1799	0.0526	6.2200e-003	0.0588	0.0000	487.8970	487.8970	0.0616	0.0000	489.4371
2021	1.4346	2.3325	2.0639	7.7100e-003	0.2366	0.0155	0.2521	0.0725	0.0152	0.0877	0.0000	735.1222	735.1222	0.0986	0.0000	737.5866
2022	1.4401	2.5262	2.1275	8.7800e-003	0.2789	0.0156	0.2945	0.0821	0.0154	0.0975	0.0000	843.8722	843.8722	0.1080	0.0000	846.5722
2023	1.3564	0.5160	0.9073	1.7300e-003	0.0658	8.4700e-003	0.0743	0.0176	8.4300e-003	0.0261	0.0000	155.7262	155.7262	0.0288	0.0000	156.4466
Maximum	**1.4401**	**2.5262**	**2.1275**	**8.7800e-003**	**0.2789**	**0.0156**	**0.2945**	**0.0821**	**0.0154**	**0.0975**	**0.0000**	**843.8722**	**843.8722**	**0.1080**	**0.0000**	**846.5722**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**5.76**	**17.49**	**-7.38**	**0.00**	**17.79**	**78.31**	**29.15**	**23.42**	**76.95**	**44.87**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**6-1-2020**	**8-31-2020**	1.9369	1.4618
2	**9-1-2020**	**11-30-2020**	0.2044	0.1456
3	**12-1-2020**	**2-28-2021**	0.1650	0.1205
4	**3-1-2021**	**5-31-2021**	0.1615	0.1201
5	**6-1-2021**	**8-31-2021**	3.8658	3.3240
6	**9-1-2021**	**11-30-2021**	0.2178	0.1703
7	**12-1-2021**	**2-28-2022**	0.1492	0.1168
8	**3-1-2022**	**5-31-2022**	0.1460	0.1171

9	**6-1-2022**	**8-31-2022**	3.9687	3.5996
10	**9-1-2022**	**11-30-2022**	0.1450	0.1164
11	**12-1-2022**	**2-28-2023**	0.1334	0.1106
12	**3-1-2023**	**5-31-2023**	0.1296	0.1092
13	**6-1-2023**	**8-31-2023**	1.7327	1.7016
		Highest	3.9687	3.5996

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4769	0.0223	1.9332	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0400e-003	0.0000	3.2364
Energy	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	387.2106	387.2106	0.0136	4.5400e-003	388.9038
Mobile	0.6707	3.0095	8.0730	0.0263	2.1880	0.0265	2.2145	0.5860	0.0248	0.6108	0.0000	2,420.6093	2,420.6093	0.1317	0.0000	2,423.9007
Waste						0.0000	0.0000		0.0000	0.0000	24.2777	0.0000	24.2777	1.4348	0.0000	60.1470
Water						0.0000	0.0000		0.0000	0.0000	5.6638	59.8416	65.5054	0.0220	0.0129	69.8908
Total	**2.1580**	**3.1207**	**10.0441**	**0.0270**	**2.1880**	**0.0444**	**2.2324**	**0.5860**	**0.0427**	**0.6287**	**29.9415**	**2,870.8218**	**2,900.7633**	**1.6051**	**0.0174**	**2,946.0788**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4769	0.0223	1.9332	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0400e-003	0.0000	3.2364
Energy	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	387.2106	387.2106	0.0136	4.5400e-003	388.9038
Mobile	0.6245	2.7086	7.0813	0.0223	1.8380	0.0226	1.8606	0.4922	0.0212	0.5134	0.0000	2,054.9724	2,054.9724	0.1148	0.0000	2,057.8419
Waste						0.0000	0.0000		0.0000	0.0000	6.0694	0.0000	6.0694	0.3587	0.0000	15.0368
Water						0.0000	0.0000		0.0000	0.0000	4.5311	42.1904	46.7214	0.0173	0.0103	50.2082
Total	**2.1118**	**2.8199**	**9.0523**	**0.0230**	**1.8380**	**0.0405**	**1.8785**	**0.4922**	**0.0391**	**0.5314**	**10.6005**	**2,487.5337**	**2,498.1342**	**0.5075**	**0.0148**	**2,515.2270**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.14**	**9.64**	**9.87**	**14.73**	**16.00**	**8.68**	**15.85**	**16.00**	**8.47**	**15.49**	**64.60**	**13.35**	**13.88**	**68.38**	**15.05**	**14.62**

3.0 Construction Detail

Construction Phase

Solana Highlands - Proposed Project - San Diego County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Ph 1 - Demolition	Demolition	6/1/2020	6/29/2020	5	21	
2	Ph 1 - Grading	Grading	7/1/2020	9/1/2020	5	45	
3	Ph 1 - Building Construction	Building Construction	9/1/2020	8/30/2021	5	260	
4	Ph 2 - Demolition	Demolition	6/1/2021	6/28/2021	5	20	
5	Ph 2 - Grading	Grading	7/1/2021	9/1/2021	5	45	
6	Ph 1 - Paving	Paving	7/1/2021	9/1/2021	5	45	
7	Ph 1 - Architectural Coating	Architectural Coating	7/1/2021	9/1/2021	5	45	
8	Ph 2 - Building Construction	Building Construction	9/1/2021	8/31/2022	5	261	
9	Ph 3 - Demolition	Demolition	6/1/2022	6/30/2022	5	22	
10	Ph 3 - Grading	Grading	7/1/2022	8/31/2022	5	44	
11	Ph 2 - Paving	Paving	7/1/2022	8/31/2022	5	44	
12	Ph 2 - Architectural Coating	Architectural Coating	7/1/2022	8/31/2022	5	44	
13	Ph 3 - Building Construction	Building Construction	9/1/2022	8/31/2023	5	261	
14	Ph 3 - Paving	Paving	7/1/2023	8/31/2023	5	44	
15	Ph 3 - Architectural Coating	Architectural Coating	7/1/2023	8/31/2023	5	44	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.97

Residential Indoor: 660,466; Residential Outdoor: 220,155; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 13,120 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Ph 1 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73

Ph 1 - Demolition	Excavators	1	5.00	158	0.38
Ph 1 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 1 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading	Excavators	2	5.00	158	0.38
Ph 1 - Grading	Graders	0	8.00	187	0.41
Ph 1 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading	Scrapers	2	5.00	367	0.48
Ph 1 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Building Construction	Cranes	0	7.00	231	0.29
Ph 1 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 1 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 1 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Ph 1 - Building Construction	Welders	0	8.00	46	0.45
Ph 2 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 2 - Demolition	Excavators	1	5.00	158	0.38
Ph 2 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 2 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 2 - Grading	Excavators	2	5.00	158	0.38
Ph 2 - Grading	Graders	0	8.00	187	0.41
Ph 2 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 2 - Grading	Scrapers	2	5.00	367	0.48
Ph 2 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Paving	Pavers	2	8.00	130	0.42
Ph 1 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 1 - Paving	Rollers	2	8.00	80	0.38
Ph 1 - Architectural Coating	Air Compressors	1	6.00	78	0.48
Ph 2 - Building Construction	Cranes	0	7.00	231	0.29

Ph 2 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 2 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 2 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Ph 2 - Building Construction	Welders	0	8.00	46	0.45
Ph 3 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 3 - Demolition	Excavators	1	5.00	158	0.38
Ph 3 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 3 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 3 - Grading	Excavators	2	5.00	158	0.38
Ph 3 - Grading	Graders	0	8.00	187	0.41
Ph 3 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 3 - Grading	Scrapers	2	5.00	367	0.48
Ph 3 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 2 - Paving	Pavers	2	8.00	130	0.42
Ph 2 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 2 - Paving	Rollers	2	8.00	80	0.38
Ph 2 - Architectural Coating	Air Compressors	1	6.00	78	0.48
Ph 3 - Building Construction	Cranes	0	7.00	231	0.29
Ph 3 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 3 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 3 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Ph 3 - Building Construction	Welders	0	8.00	46	0.45
Ph 3 - Paving	Pavers	2	8.00	130	0.42
Ph 3 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 3 - Paving	Rollers	2	8.00	80	0.38
Ph 3 - Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Ph 1 - Demolition	4	12.00	2.00	490.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading	6	12.00	0.00	5,393.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Building Construction	4	80.00	10.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Demolition	4	12.00	2.00	8.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Grading	6	12.00	0.00	7,436.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Paving	6	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Building Construction	4	80.00	10.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Demolition	4	12.00	2.00	297.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Grading	6	12.00	0.00	9,171.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Paving	6	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Building Construction	4	80.00	10.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Paving	6	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0542	0.0000	0.0542	8.2100e-003	0.0000	8.2100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0140	0.1459	0.0768	1.4000e-004		7.2900e-003	7.2900e-003		6.7100e-003	6.7100e-003	0.0000	12.2907	12.2907	3.9800e-003	0.0000	12.3901
Total	**0.0140**	**0.1459**	**0.0768**	**1.4000e-004**	**0.0542**	**7.2900e-003**	**0.0615**	**8.2100e-003**	**6.7100e-003**	**0.0149**	**0.0000**	**12.2907**	**12.2907**	**3.9800e-003**	**0.0000**	**12.3901**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9400e-003	0.0998	0.0240	3.0000e-004	6.9100e-003	3.5000e-004	7.2700e-003	1.9000e-003	3.4000e-004	2.2400e-003	0.0000	29.6047	29.6047	2.5100e-003	0.0000	29.6674
Vendor	8.0000e-005	2.3900e-003	6.4000e-004	1.0000e-005	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.5541	0.5541	4.0000e-005	0.0000	0.5552
Worker	4.6000e-004	3.4000e-004	3.3700e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.9133	0.9133	3.0000e-005	0.0000	0.9140
Total	**3.4800e-003**	**0.1026**	**0.0281**	**3.2000e-004**	**8.0600e-003**	**3.7000e-004**	**8.4400e-003**	**2.2100e-003**	**3.6000e-004**	**2.5700e-003**	**0.0000**	**31.0722**	**31.0722**	**2.5800e-003**	**0.0000**	**31.1366**

3.2 Ph 1 - Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0244	0.0000	0.0244	3.7000e-003	0.0000	3.7000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2500e-003	0.0457	0.0856	1.4000e-004		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	12.2907	12.2907	3.9800e-003	0.0000	12.3900
Total	**2.2500e-003**	**0.0457**	**0.0856**	**1.4000e-004**	**0.0244**	**2.3000e-004**	**0.0246**	**3.7000e-003**	**2.3000e-004**	**3.9300e-003**	**0.0000**	**12.2907**	**12.2907**	**3.9800e-003**	**0.0000**	**12.3900**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9400e-003	0.0998	0.0240	3.0000e-004	6.9100e-003	3.5000e-004	7.2700e-003	1.9000e-003	3.4000e-004	2.2400e-003	0.0000	29.6047	29.6047	2.5100e-003	0.0000	29.6674
Vendor	8.0000e-005	2.3900e-003	6.4000e-004	1.0000e-005	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.5541	0.5541	4.0000e-005	0.0000	0.5552
Worker	4.6000e-004	3.4000e-004	3.3700e-003	1.0000e-005	1.0100e-003	1.0000e-005	1.0200e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.9133	0.9133	3.0000e-005	0.0000	0.9140
Total	**3.4800e-003**	**0.1026**	**0.0281**	**3.2000e-004**	**8.0600e-003**	**3.7000e-004**	**8.4400e-003**	**2.2100e-003**	**3.6000e-004**	**2.5700e-003**	**0.0000**	**31.0722**	**31.0722**	**2.5800e-003**	**0.0000**	**31.1366**

3.3 Ph 1 - Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0701	0.0000	0.0701	0.0375	0.0000	0.0375	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0493	0.5496	0.3738	7.0000e-004		0.0239	0.0239		0.0220	0.0220	0.0000	61.7039	61.7039	0.0200	0.0000	62.2028
Total	**0.0493**	**0.5496**	**0.3738**	**7.0000e-004**	**0.0701**	**0.0239**	**0.0941**	**0.0375**	**0.0220**	**0.0595**	**0.0000**	**61.7039**	**61.7039**	**0.0200**	**0.0000**	**62.2028**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0324	1.0986	0.2646	3.2800e-003	0.0761	3.8900e-003	0.0800	0.0209	3.7200e-003	0.0246	0.0000	325.8334	325.8334	0.0276	0.0000	326.5231
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-003	7.4000e-004	7.2200e-003	2.0000e-005	2.1700e-003	2.0000e-005	2.1800e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.9572	1.9572	6.0000e-005	0.0000	1.9586
Total	**0.0334**	**1.0993**	**0.2718**	**3.3000e-003**	**0.0783**	**3.9100e-003**	**0.0822**	**0.0215**	**3.7300e-003**	**0.0252**	**0.0000**	**327.7905**	**327.7905**	**0.0277**	**0.0000**	**328.4817**

3.3 Ph 1 - Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0316	0.0000	0.0316	0.0169	0.0000	0.0169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.2173	0.4147	7.0000e-004		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003	0.0000	61.7038	61.7038	0.0200	0.0000	62.2027
Total	**0.0111**	**0.2173**	**0.4147**	**7.0000e-004**	**0.0316**	**1.1500e-003**	**0.0327**	**0.0169**	**1.1500e-003**	**0.0180**	**0.0000**	**61.7038**	**61.7038**	**0.0200**	**0.0000**	**62.2027**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0324	1.0986	0.2646	3.2800e-003	0.0761	3.8900e-003	0.0800	0.0209	3.7200e-003	0.0246	0.0000	325.8334	325.8334	0.0276	0.0000	326.5231
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-003	7.4000e-004	7.2200e-003	2.0000e-005	2.1700e-003	2.0000e-005	2.1800e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.9572	1.9572	6.0000e-005	0.0000	1.9586
Total	**0.0334**	**1.0993**	**0.2718**	**3.3000e-003**	**0.0783**	**3.9100e-003**	**0.0822**	**0.0215**	**3.7300e-003**	**0.0252**	**0.0000**	**327.7905**	**327.7905**	**0.0277**	**0.0000**	**328.4817**

3.4 Ph 1 - Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0156	0.1497	0.1522	2.0000e-004		0.0101	0.0101		9.3000e-003	9.3000e-003	0.0000	17.9143	17.9143	5.7900e-003	0.0000	18.0592
Total	**0.0156**	**0.1497**	**0.1522**	**2.0000e-004**		**0.0101**	**0.0101**		**9.3000e-003**	**9.3000e-003**	**0.0000**	**17.9143**	**17.9143**	**5.7900e-003**	**0.0000**	**18.0592**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6800e-003	0.0502	0.0133	1.2000e-004	2.9200e-003	2.4000e-004	3.1700e-003	8.4000e-004	2.3000e-004	1.0800e-003	0.0000	11.6099	11.6099	8.9000e-004	0.0000	11.6322
Worker	0.0130	9.6100e-003	0.0942	2.8000e-004	0.0282	2.0000e-004	0.0284	7.5000e-003	1.9000e-004	7.6900e-003	0.0000	25.5156	25.5156	7.7000e-004	0.0000	25.5348
Total	**0.0147**	**0.0598**	**0.1075**	**4.0000e-004**	**0.0312**	**4.4000e-004**	**0.0316**	**8.3400e-003**	**4.2000e-004**	**8.7700e-003**	**0.0000**	**37.1255**	**37.1255**	**1.6600e-003**	**0.0000**	**37.1669**

3.4 Ph 1 - Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.5800e-003	0.0892	0.1542	2.0000e-004		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	17.9143	17.9143	5.7900e-003	0.0000	18.0592
Total	**4.5800e-003**	**0.0892**	**0.1542**	**2.0000e-004**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**	**0.0000**	**17.9143**	**17.9143**	**5.7900e-003**	**0.0000**	**18.0592**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6800e-003	0.0502	0.0133	1.2000e-004	2.9200e-003	2.4000e-004	3.1700e-003	8.4000e-004	2.3000e-004	1.0800e-003	0.0000	11.6099	11.6099	8.9000e-004	0.0000	11.6322
Worker	0.0130	9.6100e-003	0.0942	2.8000e-004	0.0282	2.0000e-004	0.0284	7.5000e-003	1.9000e-004	7.6900e-003	0.0000	25.5156	25.5156	7.7000e-004	0.0000	25.5348
Total	**0.0147**	**0.0598**	**0.1075**	**4.0000e-004**	**0.0312**	**4.4000e-004**	**0.0316**	**8.3400e-003**	**4.2000e-004**	**8.7700e-003**	**0.0000**	**37.1255**	**37.1255**	**1.6600e-003**	**0.0000**	**37.1669**

3.4 Ph 1 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0272	0.2644	0.2948	4.0000e-004		0.0168	0.0168		0.0155	0.0155	0.0000	35.0246	35.0246	0.0113	0.0000	35.3078
Total	**0.0272**	**0.2644**	**0.2948**	**4.0000e-004**		**0.0168**	**0.0168**		**0.0155**	**0.0155**	**0.0000**	**35.0246**	**35.0246**	**0.0113**	**0.0000**	**35.3078**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6600e-003	0.0884	0.0236	2.3000e-004	5.7100e-003	1.9000e-004	5.9000e-003	1.6500e-003	1.8000e-004	1.8300e-003	0.0000	22.4838	22.4838	1.6700e-003	0.0000	22.5256
Worker	0.0239	0.0171	0.1719	5.3000e-004	0.0552	3.9000e-004	0.0556	0.0147	3.6000e-004	0.0150	0.0000	48.1960	48.1960	1.3800e-003	0.0000	48.2305
Total	**0.0266**	**0.1054**	**0.1955**	**7.6000e-004**	**0.0609**	**5.8000e-004**	**0.0615**	**0.0163**	**5.4000e-004**	**0.0169**	**0.0000**	**70.6798**	**70.6798**	**3.0500e-003**	**0.0000**	**70.7561**

3.4 Ph 1 - Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.9600e-003	0.1743	0.3013	4.0000e-004		6.5000e-004	6.5000e-004		6.5000e-004	6.5000e-004	0.0000	35.0246	35.0246	0.0113	0.0000	35.3078
Total	**8.9600e-003**	**0.1743**	**0.3013**	**4.0000e-004**		**6.5000e-004**	**6.5000e-004**		**6.5000e-004**	**6.5000e-004**	**0.0000**	**35.0246**	**35.0246**	**0.0113**	**0.0000**	**35.3078**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6600e-003	0.0884	0.0236	2.3000e-004	5.7100e-003	1.9000e-004	5.9000e-003	1.6500e-003	1.8000e-004	1.8300e-003	0.0000	22.4838	22.4838	1.6700e-003	0.0000	22.5256
Worker	0.0239	0.0171	0.1719	5.3000e-004	0.0552	3.9000e-004	0.0556	0.0147	3.6000e-004	0.0150	0.0000	48.1960	48.1960	1.3800e-003	0.0000	48.2305
Total	**0.0266**	**0.1054**	**0.1955**	**7.6000e-004**	**0.0609**	**5.8000e-004**	**0.0615**	**0.0163**	**5.4000e-004**	**0.0169**	**0.0000**	**70.6798**	**70.6798**	**3.0500e-003**	**0.0000**	**70.7561**

3.5 Ph 2 - Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.2000e-004	0.0000	8.2000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0128	0.1327	0.0721	1.3000e-004		6.5400e-003	6.5400e-003		6.0100e-003	6.0100e-003	0.0000	11.7065	11.7065	3.7900e-003	0.0000	11.8012
Total	**0.0128**	**0.1327**	**0.0721**	**1.3000e-004**	**8.2000e-004**	**6.5400e-003**	**7.3600e-003**	**1.2000e-004**	**6.0100e-003**	**6.1300e-003**	**0.0000**	**11.7065**	**11.7065**	**3.7900e-003**	**0.0000**	**11.8012**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.4800e-003	3.9000e-004	0.0000	1.1000e-004	1.0000e-005	1.2000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.4772	0.4772	4.0000e-005	0.0000	0.4783
Vendor	6.0000e-005	2.0600e-003	5.5000e-004	1.0000e-005	1.3000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.5229	0.5229	4.0000e-005	0.0000	0.5239
Worker	4.2000e-004	3.0000e-004	3.0000e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8406	0.8406	2.0000e-005	0.0000	0.8412
Total	**5.3000e-004**	**3.8400e-003**	**3.9400e-003**	**2.0000e-005**	**1.2000e-003**	**2.0000e-005**	**1.2300e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.8407**	**1.8407**	**1.0000e-004**	**0.0000**	**1.8433**

3.5 Ph 2 - Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.7000e-004	0.0000	3.7000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1400e-003	0.0435	0.0815	1.3000e-004		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	11.7065	11.7065	3.7900e-003	0.0000	11.8012
Total	**2.1400e-003**	**0.0435**	**0.0815**	**1.3000e-004**	**3.7000e-004**	**2.2000e-004**	**5.9000e-004**	**6.0000e-005**	**2.2000e-004**	**2.8000e-004**	**0.0000**	**11.7065**	**11.7065**	**3.7900e-003**	**0.0000**	**11.8012**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.4800e-003	3.9000e-004	0.0000	1.1000e-004	1.0000e-005	1.2000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.4772	0.4772	4.0000e-005	0.0000	0.4783
Vendor	6.0000e-005	2.0600e-003	5.5000e-004	1.0000e-005	1.3000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.5229	0.5229	4.0000e-005	0.0000	0.5239
Worker	4.2000e-004	3.0000e-004	3.0000e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8406	0.8406	2.0000e-005	0.0000	0.8412
Total	**5.3000e-004**	**3.8400e-003**	**3.9400e-003**	**2.0000e-005**	**1.2000e-003**	**2.0000e-005**	**1.2300e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.8407**	**1.8407**	**1.0000e-004**	**0.0000**	**1.8433**

3.6 Ph 2 - Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0701	0.0000	0.0701	0.0375	0.0000	0.0375	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0465	0.5063	0.3599	7.0000e-004		0.0219	0.0219		0.0201	0.0201	0.0000	61.7301	61.7301	0.0200	0.0000	62.2292
Total	**0.0465**	**0.5063**	**0.3599**	**7.0000e-004**	**0.0701**	**0.0219**	**0.0920**	**0.0375**	**0.0201**	**0.0576**	**0.0000**	**61.7301**	**61.7301**	**0.0200**	**0.0000**	**62.2292**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0420	1.3793	0.3622	4.4600e-003	0.1049	4.7100e-003	0.1096	0.0288	4.5100e-003	0.0333	0.0000	443.5874	443.5874	0.0379	0.0000	444.5339
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	6.7000e-004	6.7500e-003	2.0000e-005	2.1700e-003	2.0000e-005	2.1800e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.8914	1.8914	5.0000e-005	0.0000	1.8928
Total	**0.0429**	**1.3800**	**0.3689**	**4.4800e-003**	**0.1071**	**4.7300e-003**	**0.1118**	**0.0294**	**4.5200e-003**	**0.0339**	**0.0000**	**445.4788**	**445.4788**	**0.0379**	**0.0000**	**446.4267**

3.6 Ph 2 - Grading - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0316	0.0000	0.0316	0.0169	0.0000	0.0169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.2173	0.4147	7.0000e-004		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003	0.0000	61.7300	61.7300	0.0200	0.0000	62.2291
Total	**0.0111**	**0.2173**	**0.4147**	**7.0000e-004**	**0.0316**	**1.1500e-003**	**0.0327**	**0.0169**	**1.1500e-003**	**0.0180**	**0.0000**	**61.7300**	**61.7300**	**0.0200**	**0.0000**	**62.2291**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0420	1.3793	0.3622	4.4600e-003	0.1049	4.7100e-003	0.1096	0.0288	4.5100e-003	0.0333	0.0000	443.5874	443.5874	0.0379	0.0000	444.5339
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	6.7000e-004	6.7500e-003	2.0000e-005	2.1700e-003	2.0000e-005	2.1800e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.8914	1.8914	5.0000e-005	0.0000	1.8928
Total	**0.0429**	**1.3800**	**0.3689**	**4.4800e-003**	**0.1071**	**4.7300e-003**	**0.1118**	**0.0294**	**4.5200e-003**	**0.0339**	**0.0000**	**445.4788**	**445.4788**	**0.0379**	**0.0000**	**446.4267**

3.7 Ph 1 - Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0283	0.2907	0.3297	5.1000e-004		0.0153	0.0153		0.0140	0.0140	0.0000	45.0528	45.0528	0.0146	0.0000	45.4171
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0332**	**0.2907**	**0.3297**	**5.1000e-004**		**0.0153**	**0.0153**		**0.0140**	**0.0140**	**0.0000**	**45.0528**	**45.0528**	**0.0146**	**0.0000**	**45.4171**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	6.7000e-004	6.7500e-003	2.0000e-005	2.1700e-003	2.0000e-005	2.1800e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.8914	1.8914	5.0000e-005	0.0000	1.8928
Total	**9.4000e-004**	**6.7000e-004**	**6.7500e-003**	**2.0000e-005**	**2.1700e-003**	**2.0000e-005**	**2.1800e-003**	**5.8000e-004**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**1.8914**	**1.8914**	**5.0000e-005**	**0.0000**	**1.8928**

3.7 Ph 1 - Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0101	0.2333	0.3892	5.1000e-004		5.3500e-003	5.3500e-003		5.3500e-003	5.3500e-003	0.0000	45.0528	45.0528	0.0146	0.0000	45.4171
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0151**	**0.2333**	**0.3892**	**5.1000e-004**		**5.3500e-003**	**5.3500e-003**		**5.3500e-003**	**5.3500e-003**	**0.0000**	**45.0528**	**45.0528**	**0.0146**	**0.0000**	**45.4171**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	6.7000e-004	6.7500e-003	2.0000e-005	2.1700e-003	2.0000e-005	2.1800e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.8914	1.8914	5.0000e-005	0.0000	1.8928
Total	**9.4000e-004**	**6.7000e-004**	**6.7500e-003**	**2.0000e-005**	**2.1700e-003**	**2.0000e-005**	**2.1800e-003**	**5.8000e-004**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**1.8914**	**1.8914**	**5.0000e-005**	**0.0000**	**1.8928**

3.8 Ph 1 - Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9300e-003	0.0344	0.0409	7.0000e-005		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	5.7448	5.7448	3.9000e-004	0.0000	5.7547
Total	**1.3109**	**0.0344**	**0.0409**	**7.0000e-005**		**2.1200e-003**	**2.1200e-003**		**2.1200e-003**	**2.1200e-003**	**0.0000**	**5.7448**	**5.7448**	**3.9000e-004**	**0.0000**	**5.7547**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	6.7000e-004	6.7500e-003	2.0000e-005	2.1700e-003	2.0000e-005	2.1800e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.8914	1.8914	5.0000e-005	0.0000	1.8928
Total	**9.4000e-004**	**6.7000e-004**	**6.7500e-003**	**2.0000e-005**	**2.1700e-003**	**2.0000e-005**	**2.1800e-003**	**5.8000e-004**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**1.8914**	**1.8914**	**5.0000e-005**	**0.0000**	**1.8928**

3.8 Ph 1 - Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3400e-003	0.0305	0.0412	7.0000e-005		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	5.7448	5.7448	3.9000e-004	0.0000	5.7547
Total	**1.3073**	**0.0305**	**0.0412**	**7.0000e-005**		**2.1400e-003**	**2.1400e-003**		**2.1400e-003**	**2.1400e-003**	**0.0000**	**5.7448**	**5.7448**	**3.9000e-004**	**0.0000**	**5.7547**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	6.7000e-004	6.7500e-003	2.0000e-005	2.1700e-003	2.0000e-005	2.1800e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.8914	1.8914	5.0000e-005	0.0000	1.8928
Total	**9.4000e-004**	**6.7000e-004**	**6.7500e-003**	**2.0000e-005**	**2.1700e-003**	**2.0000e-005**	**2.1800e-003**	**5.8000e-004**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**1.8914**	**1.8914**	**5.0000e-005**	**0.0000**	**1.8928**

3.9 Ph 2 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0139	0.1353	0.1508	2.0000e-004		8.6000e-003	8.6000e-003		7.9100e-003	7.9100e-003	0.0000	17.9196	17.9196	5.8000e-003	0.0000	18.0645
Total	**0.0139**	**0.1353**	**0.1508**	**2.0000e-004**		**8.6000e-003**	**8.6000e-003**		**7.9100e-003**	**7.9100e-003**	**0.0000**	**17.9196**	**17.9196**	**5.8000e-003**	**0.0000**	**18.0645**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3600e-003	0.0452	0.0121	1.2000e-004	2.9200e-003	1.0000e-004	3.0200e-003	8.4000e-004	9.0000e-005	9.3000e-004	0.0000	11.5034	11.5034	8.5000e-004	0.0000	11.5247
Worker	0.0122	8.7300e-003	0.0879	2.7000e-004	0.0282	2.0000e-004	0.0284	7.5000e-003	1.8000e-004	7.6800e-003	0.0000	24.6584	24.6584	7.1000e-004	0.0000	24.6761
Total	**0.0136**	**0.0540**	**0.1000**	**3.9000e-004**	**0.0312**	**3.0000e-004**	**0.0315**	**8.3400e-003**	**2.7000e-004**	**8.6100e-003**	**0.0000**	**36.1618**	**36.1618**	**1.5600e-003**	**0.0000**	**36.2008**

3.9 Ph 2 - Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.5800e-003	0.0892	0.1542	2.0000e-004		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	17.9196	17.9196	5.8000e-003	0.0000	18.0645
Total	**4.5800e-003**	**0.0892**	**0.1542**	**2.0000e-004**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**	**0.0000**	**17.9196**	**17.9196**	**5.8000e-003**	**0.0000**	**18.0645**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3600e-003	0.0452	0.0121	1.2000e-004	2.9200e-003	1.0000e-004	3.0200e-003	8.4000e-004	9.0000e-005	9.3000e-004	0.0000	11.5034	11.5034	8.5000e-004	0.0000	11.5247
Worker	0.0122	8.7300e-003	0.0879	2.7000e-004	0.0282	2.0000e-004	0.0284	7.5000e-003	1.8000e-004	7.6800e-003	0.0000	24.6584	24.6584	7.1000e-004	0.0000	24.6761
Total	**0.0136**	**0.0540**	**0.1000**	**3.9000e-004**	**0.0312**	**3.0000e-004**	**0.0315**	**8.3400e-003**	**2.7000e-004**	**8.6100e-003**	**0.0000**	**36.1618**	**36.1618**	**1.5600e-003**	**0.0000**	**36.2008**

3.9 Ph 2 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0241	0.2362	0.2934	4.0000e-004		0.0138	0.0138		0.0127	0.0127	0.0000	35.2549	35.2549	0.0114	0.0000	35.5399
Total	**0.0241**	**0.2362**	**0.2934**	**4.0000e-004**		**0.0138**	**0.0138**		**0.0127**	**0.0127**	**0.0000**	**35.2549**	**35.2549**	**0.0114**	**0.0000**	**35.5399**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4900e-003	0.0839	0.0224	2.3000e-004	5.7400e-003	1.6000e-004	5.9000e-003	1.6600e-003	1.5000e-004	1.8100e-003	0.0000	22.4004	22.4004	1.6300e-003	0.0000	22.4411
Worker	0.0228	0.0157	0.1605	5.2000e-004	0.0555	3.8000e-004	0.0559	0.0148	3.5000e-004	0.0151	0.0000	46.6991	46.6991	1.2700e-003	0.0000	46.7310
Total	**0.0253**	**0.0996**	**0.1829**	**7.5000e-004**	**0.0612**	**5.4000e-004**	**0.0618**	**0.0164**	**5.0000e-004**	**0.0169**	**0.0000**	**69.0995**	**69.0995**	**2.9000e-003**	**0.0000**	**69.1720**

3.9 Ph 2 - Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.0100e-003	0.1753	0.3031	4.0000e-004		6.6000e-004	6.6000e-004		6.6000e-004	6.6000e-004	0.0000	35.2548	35.2548	0.0114	0.0000	35.5399
Total	**9.0100e-003**	**0.1753**	**0.3031**	**4.0000e-004**		**6.6000e-004**	**6.6000e-004**		**6.6000e-004**	**6.6000e-004**	**0.0000**	**35.2548**	**35.2548**	**0.0114**	**0.0000**	**35.5399**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4900e-003	0.0839	0.0224	2.3000e-004	5.7400e-003	1.6000e-004	5.9000e-003	1.6600e-003	1.5000e-004	1.8100e-003	0.0000	22.4004	22.4004	1.6300e-003	0.0000	22.4411
Worker	0.0228	0.0157	0.1605	5.2000e-004	0.0555	3.8000e-004	0.0559	0.0148	3.5000e-004	0.0151	0.0000	46.6991	46.6991	1.2700e-003	0.0000	46.7310
Total	**0.0253**	**0.0996**	**0.1829**	**7.5000e-004**	**0.0612**	**5.4000e-004**	**0.0618**	**0.0164**	**5.0000e-004**	**0.0169**	**0.0000**	**69.0995**	**69.0995**	**2.9000e-003**	**0.0000**	**69.1720**

3.10 Ph 3 - Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0329	0.0000	0.0329	4.9800e-003	0.0000	4.9800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0115	0.1182	0.0741	1.5000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	12.8746	12.8746	4.1600e-003	0.0000	12.9787
Total	**0.0115**	**0.1182**	**0.0741**	**1.5000e-004**	**0.0329**	**5.6800e-003**	**0.0386**	**4.9800e-003**	**5.2200e-003**	**0.0102**	**0.0000**	**12.8746**	**12.8746**	**4.1600e-003**	**0.0000**	**12.9787**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5700e-003	0.0499	0.0144	1.8000e-004	4.1900e-003	1.6000e-004	4.3500e-003	1.1500e-003	1.5000e-004	1.3000e-003	0.0000	17.4808	17.4808	1.5100e-003	0.0000	17.5185
Vendor	6.0000e-005	2.1400e-003	5.7000e-004	1.0000e-005	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.5697	0.5697	4.0000e-005	0.0000	0.5708
Worker	4.3000e-004	3.0000e-004	3.0600e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0700e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8908	0.8908	2.0000e-005	0.0000	0.8914
Total	**2.0600e-003**	**0.0523**	**0.0180**	**2.0000e-004**	**5.4000e-003**	**1.7000e-004**	**5.5700e-003**	**1.4700e-003**	**1.6000e-004**	**1.6400e-003**	**0.0000**	**18.9414**	**18.9414**	**1.5700e-003**	**0.0000**	**18.9806**

3.10 Ph 3 - Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0148	0.0000	0.0148	2.2400e-003	0.0000	2.2400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3500e-003	0.0478	0.0897	1.5000e-004		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	12.8746	12.8746	4.1600e-003	0.0000	12.9787
Total	**2.3500e-003**	**0.0478**	**0.0897**	**1.5000e-004**	**0.0148**	**2.4000e-004**	**0.0150**	**2.2400e-003**	**2.4000e-004**	**2.4800e-003**	**0.0000**	**12.8746**	**12.8746**	**4.1600e-003**	**0.0000**	**12.9787**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5700e-003	0.0499	0.0144	1.8000e-004	4.1900e-003	1.6000e-004	4.3500e-003	1.1500e-003	1.5000e-004	1.3000e-003	0.0000	17.4808	17.4808	1.5100e-003	0.0000	17.5185
Vendor	6.0000e-005	2.1400e-003	5.7000e-004	1.0000e-005	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.5697	0.5697	4.0000e-005	0.0000	0.5708
Worker	4.3000e-004	3.0000e-004	3.0600e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0700e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8908	0.8908	2.0000e-005	0.0000	0.8914
Total	**2.0600e-003**	**0.0523**	**0.0180**	**2.0000e-004**	**5.4000e-003**	**1.7000e-004**	**5.5700e-003**	**1.4700e-003**	**1.6000e-004**	**1.6400e-003**	**0.0000**	**18.9414**	**18.9414**	**1.5700e-003**	**0.0000**	**18.9806**

3.11 Ph 3 - Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0686	0.0000	0.0686	0.0367	0.0000	0.0367	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0391	0.4100	0.3289	6.9000e-004		0.0176	0.0176		0.0161	0.0161	0.0000	60.4135	60.4135	0.0195	0.0000	60.9020
Total	**0.0391**	**0.4100**	**0.3289**	**6.9000e-004**	**0.0686**	**0.0176**	**0.0862**	**0.0367**	**0.0161**	**0.0528**	**0.0000**	**60.4135**	**60.4135**	**0.0195**	**0.0000**	**60.9020**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0486	1.5408	0.4447	5.4100e-003	0.1294	4.9300e-003	0.1343	0.0355	4.7100e-003	0.0403	0.0000	539.7872	539.7872	0.0465	0.0000	540.9490
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	6.0000e-004	6.1200e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7816	1.7816	5.0000e-005	0.0000	1.7828
Total	**0.0495**	**1.5414**	**0.4508**	**5.4300e-003**	**0.1315**	**4.9400e-003**	**0.1365**	**0.0361**	**4.7200e-003**	**0.0408**	**0.0000**	**541.5688**	**541.5688**	**0.0465**	**0.0000**	**542.7318**

3.11 Ph 3 - Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0309	0.0000	0.0309	0.0165	0.0000	0.0165	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0109	0.2125	0.4055	6.9000e-004		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	60.4135	60.4135	0.0195	0.0000	60.9019
Total	**0.0109**	**0.2125**	**0.4055**	**6.9000e-004**	**0.0309**	**1.1300e-003**	**0.0320**	**0.0165**	**1.1300e-003**	**0.0176**	**0.0000**	**60.4135**	**60.4135**	**0.0195**	**0.0000**	**60.9019**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0486	1.5408	0.4447	5.4100e-003	0.1294	4.9300e-003	0.1343	0.0355	4.7100e-003	0.0403	0.0000	539.7872	539.7872	0.0465	0.0000	540.9490
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	6.0000e-004	6.1200e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7816	1.7816	5.0000e-005	0.0000	1.7828
Total	**0.0495**	**1.5414**	**0.4508**	**5.4300e-003**	**0.1315**	**4.9400e-003**	**0.1365**	**0.0361**	**4.7200e-003**	**0.0408**	**0.0000**	**541.5688**	**541.5688**	**0.0465**	**0.0000**	**542.7318**

3.12 Ph 2 - Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0243	0.2448	0.3208	5.0000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	44.0606	44.0606	0.0143	0.0000	44.4169
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0292**	**0.2448**	**0.3208**	**5.0000e-004**		**0.0125**	**0.0125**		**0.0115**	**0.0115**	**0.0000**	**44.0606**	**44.0606**	**0.0143**	**0.0000**	**44.4169**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	6.0000e-004	6.1200e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7816	1.7816	5.0000e-005	0.0000	1.7828
Total	**8.7000e-004**	**6.0000e-004**	**6.1200e-003**	**2.0000e-005**	**2.1200e-003**	**1.0000e-005**	**2.1300e-003**	**5.6000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7816**	**1.7816**	**5.0000e-005**	**0.0000**	**1.7828**

3.12 Ph 2 - Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8900e-003	0.2281	0.3805	5.0000e-004		5.2300e-003	5.2300e-003		5.2300e-003	5.2300e-003	0.0000	44.0606	44.0606	0.0143	0.0000	44.4168
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0148**	**0.2281**	**0.3805**	**5.0000e-004**		**5.2300e-003**	**5.2300e-003**		**5.2300e-003**	**5.2300e-003**	**0.0000**	**44.0606**	**44.0606**	**0.0143**	**0.0000**	**44.4168**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	6.0000e-004	6.1200e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7816	1.7816	5.0000e-005	0.0000	1.7828
Total	**8.7000e-004**	**6.0000e-004**	**6.1200e-003**	**2.0000e-005**	**2.1200e-003**	**1.0000e-005**	**2.1300e-003**	**5.6000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7816**	**1.7816**	**5.0000e-005**	**0.0000**	**1.7828**

3.13 Ph 2 - Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-003	0.0310	0.0399	7.0000e-005		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	5.6172	5.6172	3.7000e-004	0.0000	5.6263
Total	**1.3104**	**0.0310**	**0.0399**	**7.0000e-005**		**1.8000e-003**	**1.8000e-003**		**1.8000e-003**	**1.8000e-003**	**0.0000**	**5.6172**	**5.6172**	**3.7000e-004**	**0.0000**	**5.6263**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	6.0000e-004	6.1200e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7816	1.7816	5.0000e-005	0.0000	1.7828
Total	**8.7000e-004**	**6.0000e-004**	**6.1200e-003**	**2.0000e-005**	**2.1200e-003**	**1.0000e-005**	**2.1300e-003**	**5.6000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7816**	**1.7816**	**5.0000e-005**	**0.0000**	**1.7828**

3.13 Ph 2 - Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	0.0299	0.0403	7.0000e-005		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	5.6172	5.6172	3.7000e-004	0.0000	5.6263
Total	**1.3072**	**0.0299**	**0.0403**	**7.0000e-005**		**2.0900e-003**	**2.0900e-003**		**2.0900e-003**	**2.0900e-003**	**0.0000**	**5.6172**	**5.6172**	**3.7000e-004**	**0.0000**	**5.6263**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	6.0000e-004	6.1200e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7816	1.7816	5.0000e-005	0.0000	1.7828
Total	**8.7000e-004**	**6.0000e-004**	**6.1200e-003**	**2.0000e-005**	**2.1200e-003**	**1.0000e-005**	**2.1300e-003**	**5.6000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7816**	**1.7816**	**5.0000e-005**	**0.0000**	**1.7828**

3.14 Ph 3 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0121	0.1188	0.1475	2.0000e-004		6.9600e-003	6.9600e-003		6.4000e-003	6.4000e-003	0.0000	17.7293	17.7293	5.7300e-003	0.0000	17.8727
Total	**0.0121**	**0.1188**	**0.1475**	**2.0000e-004**		**6.9600e-003**	**6.9600e-003**		**6.4000e-003**	**6.4000e-003**	**0.0000**	**17.7293**	**17.7293**	**5.7300e-003**	**0.0000**	**17.8727**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2500e-003	0.0422	0.0113	1.2000e-004	2.8900e-003	8.0000e-005	2.9700e-003	8.3000e-004	8.0000e-005	9.1000e-004	0.0000	11.2649	11.2649	8.2000e-004	0.0000	11.2854
Worker	0.0115	7.8700e-003	0.0807	2.6000e-004	0.0279	1.9000e-004	0.0281	7.4200e-003	1.8000e-004	7.5900e-003	0.0000	23.4845	23.4845	6.4000e-004	0.0000	23.5005
Total	**0.0127**	**0.0501**	**0.0920**	**3.8000e-004**	**0.0308**	**2.7000e-004**	**0.0311**	**8.2500e-003**	**2.6000e-004**	**8.5000e-003**	**0.0000**	**34.7495**	**34.7495**	**1.4600e-003**	**0.0000**	**34.7859**

3.14 Ph 3 - Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.5300e-003	0.0882	0.1524	2.0000e-004		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	17.7293	17.7293	5.7300e-003	0.0000	17.8727
Total	**4.5300e-003**	**0.0882**	**0.1524**	**2.0000e-004**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**	**0.0000**	**17.7293**	**17.7293**	**5.7300e-003**	**0.0000**	**17.8727**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2500e-003	0.0422	0.0113	1.2000e-004	2.8900e-003	8.0000e-005	2.9700e-003	8.3000e-004	8.0000e-005	9.1000e-004	0.0000	11.2649	11.2649	8.2000e-004	0.0000	11.2854
Worker	0.0115	7.8700e-003	0.0807	2.6000e-004	0.0279	1.9000e-004	0.0281	7.4200e-003	1.8000e-004	7.5900e-003	0.0000	23.4845	23.4845	6.4000e-004	0.0000	23.5005
Total	**0.0127**	**0.0501**	**0.0920**	**3.8000e-004**	**0.0308**	**2.7000e-004**	**0.0311**	**8.2500e-003**	**2.6000e-004**	**8.5000e-003**	**0.0000**	**34.7495**	**34.7495**	**1.4600e-003**	**0.0000**	**34.7859**

3.14 Ph 3 - Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0221	0.2171	0.2937	4.0000e-004		0.0118	0.0118		0.0108	0.0108	0.0000	35.4853	35.4853	0.0115	0.0000	35.7722
Total	**0.0221**	**0.2171**	**0.2937**	**4.0000e-004**		**0.0118**	**0.0118**		**0.0108**	**0.0108**	**0.0000**	**35.4853**	**35.4853**	**0.0115**	**0.0000**	**35.7722**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9300e-003	0.0663	0.0206	2.2000e-004	5.7700e-003	8.0000e-005	5.8500e-003	1.6700e-003	8.0000e-005	1.7400e-003	0.0000	21.9627	21.9627	1.4900e-003	0.0000	22.0001
Worker	0.0217	0.0144	0.1497	5.0000e-004	0.0558	3.8000e-004	0.0562	0.0148	3.5000e-004	0.0152	0.0000	45.1750	45.1750	1.1700e-003	0.0000	45.2042
Total	**0.0236**	**0.0807**	**0.1703**	**7.2000e-004**	**0.0616**	**4.6000e-004**	**0.0620**	**0.0165**	**4.3000e-004**	**0.0169**	**0.0000**	**67.1377**	**67.1377**	**2.6600e-003**	**0.0000**	**67.2043**

3.14 Ph 3 - Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.0600e-003	0.1763	0.3048	4.0000e-004		6.6000e-004	6.6000e-004		6.6000e-004	6.6000e-004	0.0000	35.4853	35.4853	0.0115	0.0000	35.7722
Total	**9.0600e-003**	**0.1763**	**0.3048**	**4.0000e-004**		**6.6000e-004**	**6.6000e-004**		**6.6000e-004**	**6.6000e-004**	**0.0000**	**35.4853**	**35.4853**	**0.0115**	**0.0000**	**35.7722**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9300e-003	0.0663	0.0206	2.2000e-004	5.7700e-003	8.0000e-005	5.8500e-003	1.6700e-003	8.0000e-005	1.7400e-003	0.0000	21.9627	21.9627	1.4900e-003	0.0000	22.0001
Worker	0.0217	0.0144	0.1497	5.0000e-004	0.0558	3.8000e-004	0.0562	0.0148	3.5000e-004	0.0152	0.0000	45.1750	45.1750	1.1700e-003	0.0000	45.2042
Total	**0.0236**	**0.0807**	**0.1703**	**7.2000e-004**	**0.0616**	**4.6000e-004**	**0.0620**	**0.0165**	**4.3000e-004**	**0.0169**	**0.0000**	**67.1377**	**67.1377**	**2.6600e-003**	**0.0000**	**67.2043**

3.15 Ph 3 - Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0227	0.2242	0.3209	5.0000e-004		0.0112	0.0112		0.0103	0.0103	0.0000	44.0591	44.0591	0.0143	0.0000	44.4154
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0277**	**0.2242**	**0.3209**	**5.0000e-004**		**0.0112**	**0.0112**		**0.0103**	**0.0103**	**0.0000**	**44.0591**	**44.0591**	**0.0143**	**0.0000**	**44.4154**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	5.5000e-004	5.6800e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7135	1.7135	4.0000e-005	0.0000	1.7146
Total	**8.2000e-004**	**5.5000e-004**	**5.6800e-003**	**2.0000e-005**	**2.1200e-003**	**1.0000e-005**	**2.1300e-003**	**5.6000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7135**	**1.7135**	**4.0000e-005**	**0.0000**	**1.7146**

3.15 Ph 3 - Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8900e-003	0.2281	0.3805	5.0000e-004		5.2300e-003	5.2300e-003		5.2300e-003	5.2300e-003	0.0000	44.0591	44.0591	0.0143	0.0000	44.4153
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0148**	**0.2281**	**0.3805**	**5.0000e-004**		**5.2300e-003**	**5.2300e-003**		**5.2300e-003**	**5.2300e-003**	**0.0000**	**44.0591**	**44.0591**	**0.0143**	**0.0000**	**44.4153**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	5.5000e-004	5.6800e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7135	1.7135	4.0000e-005	0.0000	1.7146
Total	**8.2000e-004**	**5.5000e-004**	**5.6800e-003**	**2.0000e-005**	**2.1200e-003**	**1.0000e-005**	**2.1300e-003**	**5.6000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7135**	**1.7135**	**4.0000e-005**	**0.0000**	**1.7146**

3.16 Ph 3 - Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2200e-003	0.0287	0.0398	7.0000e-005		1.5600e-003	1.5600e-003		1.5600e-003	1.5600e-003	0.0000	5.6172	5.6172	3.4000e-004	0.0000	5.6256
Total	**1.3102**	**0.0287**	**0.0398**	**7.0000e-005**		**1.5600e-003**	**1.5600e-003**		**1.5600e-003**	**1.5600e-003**	**0.0000**	**5.6172**	**5.6172**	**3.4000e-004**	**0.0000**	**5.6256**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	5.5000e-004	5.6800e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7135	1.7135	4.0000e-005	0.0000	1.7146
Total	**8.2000e-004**	**5.5000e-004**	**5.6800e-003**	**2.0000e-005**	**2.1200e-003**	**1.0000e-005**	**2.1300e-003**	**5.6000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7135**	**1.7135**	**4.0000e-005**	**0.0000**	**1.7146**

3.16 Ph 3 - Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	0.0299	0.0403	7.0000e-005		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	5.6172	5.6172	3.4000e-004	0.0000	5.6256
Total	**1.3072**	**0.0299**	**0.0403**	**7.0000e-005**		**2.0900e-003**	**2.0900e-003**		**2.0900e-003**	**2.0900e-003**	**0.0000**	**5.6172**	**5.6172**	**3.4000e-004**	**0.0000**	**5.6256**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	5.5000e-004	5.6800e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.8000e-004	0.0000	1.7135	1.7135	4.0000e-005	0.0000	1.7146
Total	**8.2000e-004**	**5.5000e-004**	**5.6800e-003**	**2.0000e-005**	**2.1200e-003**	**1.0000e-005**	**2.1300e-003**	**5.6000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**1.7135**	**1.7135**	**4.0000e-005**	**0.0000**	**1.7146**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

Integrate Below Market Rate Housing

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6245	2.7086	7.0813	0.0223	1.8380	0.0226	1.8606	0.4922	0.0212	0.5134	0.0000	2,054.9724	2,054.9724	0.1148	0.0000	2,057.8419
Unmitigated	0.6707	3.0095	8.0730	0.0263	2.1880	0.0265	2.2145	0.5860	0.0248	0.6108	0.0000	2,420.6093	2,420.6093	0.1317	0.0000	2,423.9007

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,080.00	1,999.40	1833.00	5,805,403	4,876,674
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	2,080.00	1,999.40	1,833.00	5,805,403	4,876,674

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Non-Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Parking Lot	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Unenclosed Parking Structure	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Solana Highlands - Proposed Project - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	284.1399	284.1399	0.0117	2.6500e-003	285.2206
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	284.1399	284.1399	0.0117	2.6500e-003	285.2206
NaturalGas Mitigated	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	103.0707	103.0707	1.9800e-003	1.8900e-003	103.6832
NaturalGas Unmitigated	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	103.0707	103.0707	1.9800e-003	1.8900e-003	103.6832

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.93147e+006	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	103.0707	103.0707	1.9800e-003	1.8900e-003	103.6832
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0104**	**0.0890**	**0.0379**	**5.7000e-004**		**7.2000e-003**	**7.2000e-003**		**7.2000e-003**	**7.2000e-003**	**0.0000**	**103.0707**	**103.0707**	**1.9800e-003**	**1.8900e-003**	**103.6832**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.93147e+006	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	103.0707	103.0707	1.9800e-003	1.8900e-003	103.6832
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0104**	**0.0890**	**0.0379**	**5.7000e-004**		**7.2000e-003**	**7.2000e-003**		**7.2000e-003**	**7.2000e-003**	**0.0000**	**103.0707**	**103.0707**	**1.9800e-003**	**1.8900e-003**	**103.6832**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.04128e+006	253.3322	0.0104	2.3600e-003	254.2957
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	38080	9.2644	3.8000e-004	9.0000e-005	9.2997
Unenclosed Parking Structure	88550	21.5432	8.8000e-004	2.0000e-004	21.6252
Total		**284.1399**	**0.0117**	**2.6500e-003**	**285.2206**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.04128e+006	253.3322	0.0104	2.3600e-003	254.2957
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	38080	9.2644	3.8000e-004	9.0000e-005	9.2997
Unenclosed Parking Structure	88550	21.5432	8.8000e-004	2.0000e-004	21.6252
Total		**284.1399**	**0.0117**	**2.6500e-003**	**285.2206**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4769	0.0223	1.9332	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0400e-003	0.0000	3.2364
Unmitigated	1.4769	0.0223	1.9332	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0400e-003	0.0000	3.2364

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2879					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0584	0.0223	1.9332	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0400e-003	0.0000	3.2364
Total	**1.4769**	**0.0223**	**1.9332**	**1.0000e-004**		**0.0107**	**0.0107**		**0.0107**	**0.0107**	**0.0000**	**3.1603**	**3.1603**	**3.0400e-003**	**0.0000**	**3.2364**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2879					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0584	0.0223	1.9332	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0400e-003	0.0000	3.2364
Total	**1.4769**	**0.0223**	**1.9332**	**1.0000e-004**		**0.0107**	**0.0107**		**0.0107**	**0.0107**	**0.0000**	**3.1603**	**3.1603**	**3.0400e-003**	**0.0000**	**3.2364**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	46.7214	0.0173	0.0103	50.2082
Unmitigated	65.5054	0.0220	0.0129	69.8908

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	16.0085 / 3.37743	65.5054	0.0220	0.0129	69.8908
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**65.5054**	**0.0220**	**0.0129**	**69.8908**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	12.8068 / 0.599455	46.7214	0.0173	0.0103	50.2082
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**46.7214**	**0.0173**	**0.0103**	**50.2082**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.0694	0.3587	0.0000	15.0368
Unmitigated	24.2777	1.4348	0.0000	60.1470

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	119.6	24.2777	1.4348	0.0000	60.1470
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**24.2777**	**1.4348**	**0.0000**	**60.1470**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	29.9	6.0694	0.3587	0.0000	15.0368
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**6.0694**	**0.3587**	**0.0000**	**15.0368**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Solana Highlands - Proposed Project

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	57.37	1000sqft	1.32	57,365.00	0
Other Non-Asphalt Surfaces	1.90	1000sqft	0.04	1,900.00	0
Parking Lot	272.00	Space	2.45	108,800.00	0
Unenclosed Parking Structure	50.60	1000sqft	1.16	50,600.00	0
Apartments Mid Rise	260.00	Dwelling Unit	6.84	326,156.00	744

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS

Land Use - project-specific land uses

Construction Phase - construction schedule per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Trips and VMT - Trips per applicant.

Demolition - demo quantities per applicant

Grading - grading quantities per applicant

Architectural Coating - SDAPCD Rule 67.0.1

Vehicle Trips - F&P 2016

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - No fireplaces.

Consumer Products - CalEEMod defaults.

Area Coating - SDAPCD Rule 67.0.1

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - water use per applicant

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - All construction equipment will be Tier 4 Interim except air compressors and pavers which are Tier 3.

Mobile Land Use Mitigation -

Water Mitigation -

Waste Mitigation - AB 341

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2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.3489	76.8017	34.5357	0.1929	7.3942	1.4756	8.8698	2.8329	1.3641	4.1969	0.0000	20,578.1894	20,578.1894	2.5059	0.0000	20,640.8377
2021	64.3998	101.1297	55.0778	0.2728	8.8997	2.1575	11.0572	3.2437	2.0001	5.2438	0.0000	29,031.4167	29,031.4167	3.7416	0.0000	29,124.9574
2022	65.5494	103.4984	57.7579	0.3206	10.1472	1.8381	11.9852	3.5850	1.7058	5.2908	0.0000	34,337.6816	34,337.6816	4.2093	0.0000	34,442.9146
2023	61.4069	14.9422	22.3793	0.0409	0.9220	0.7227	1.6447	0.2461	0.6706	0.9167	0.0000	4,004.7063	4,004.7063	0.9150	0.0000	4,027.5810
Maximum	**65.5494**	**103.4984**	**57.7579**	**0.3206**	**10.1472**	**2.1575**	**11.9852**	**3.5850**	**2.0001**	**5.2908**	**0.0000**	**34,337.6816**	**34,337.6816**	**4.2093**	**0.0000**	**34,442.9146**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.4023	60.6579	36.3971	0.1929	5.6798	0.2414	5.9212	1.9163	0.2333	2.1496	0.0000	20,578.1894	20,578.1894	2.5059	0.0000	20,640.8377
2021	61.6515	84.5124	60.2474	0.2728	7.1853	0.6086	7.7939	2.3271	0.5989	2.9260	0.0000	29,031.4166	29,031.4166	3.7416	0.0000	29,124.9574
2022	63.2936	93.0065	64.0866	0.3206	8.4312	0.6224	9.0536	2.6682	0.6122	3.2804	0.0000	34,337.6816	34,337.6816	4.2093	0.0000	34,442.9146
2023	60.5418	14.7025	25.2396	0.0409	0.9220	0.3469	1.2690	0.2461	0.3464	0.5925	0.0000	4,004.7063	4,004.7063	0.9150	0.0000	4,027.5810
Maximum	**63.2936**	**93.0065**	**64.0866**	**0.3206**	**8.4312**	**0.6224**	**9.0536**	**2.6682**	**0.6122**	**3.2804**	**0.0000**	**34,337.6816**	**34,337.6816**	**4.2093**	**0.0000**	**34,442.9146**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**3.99**	**14.68**	**-9.56**	**0.00**	**18.80**	**70.63**	**28.37**	**27.76**	**68.80**	**42.81**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.4211	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190	0.0000	38.7072	38.7072	0.0373	0.0000	39.6391
Energy	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Mobile	3.9718	16.3650	46.6332	0.1545	12.5942	0.1484	12.7426	3.3663	0.1393	3.5056		15,672.0407	15,672.0407	0.8219		15,692.5875
Total	**12.4499**	**17.1001**	**68.3209**	**0.1588**	**12.5942**	**0.3068**	**12.9010**	**3.3663**	**0.2977**	**3.6640**	**0.0000**	**16,333.3014**	**16,333.3014**	**0.8711**	**0.0114**	**16,358.4797**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.4211	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190	0.0000	38.7072	38.7072	0.0373	0.0000	39.6391
Energy	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Mobile	3.7074	14.7657	40.5923	0.1311	10.5794	0.1268	10.7062	2.8278	0.1189	2.9467		13,303.7690	13,303.7690	0.7143		13,321.6269
Total	**12.1855**	**15.5008**	**62.2801**	**0.1354**	**10.5794**	**0.2852**	**10.8646**	**2.8278**	**0.2774**	**3.1051**	**0.0000**	**13,965.0298**	**13,965.0298**	**0.7635**	**0.0114**	**13,987.5191**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.12**	**9.35**	**8.84**	**14.72**	**16.00**	**7.06**	**15.79**	**16.00**	**6.84**	**15.25**	**0.00**	**14.50**	**14.50**	**12.35**	**0.00**	**14.49**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Ph 1 - Demolition	Demolition	6/1/2020	6/29/2020	5	21	
2	Ph 1 - Grading	Grading	7/1/2020	9/1/2020	5	45	
3	Ph 1 - Building Construction	Building Construction	9/1/2020	8/30/2021	5	260	
4	Ph 2 - Demolition	Demolition	6/1/2021	6/28/2021	5	20	
5	Ph 2 - Grading	Grading	7/1/2021	9/1/2021	5	45	
6	Ph 1 - Paving	Paving	7/1/2021	9/1/2021	5	45	
7	Ph 1 - Architectural Coating	Architectural Coating	7/1/2021	9/1/2021	5	45	
8	Ph 2 - Building Construction	Building Construction	9/1/2021	8/31/2022	5	261	
9	Ph 3 - Demolition	Demolition	6/1/2022	6/30/2022	5	22	
10	Ph 3 - Grading	Grading	7/1/2022	8/31/2022	5	44	
11	Ph 2 - Paving	Paving	7/1/2022	8/31/2022	5	44	
12	Ph 2 - Architectural Coating	Architectural Coating	7/1/2022	8/31/2022	5	44	
13	Ph 3 - Building Construction	Building Construction	9/1/2022	8/31/2023	5	261	
14	Ph 3 - Paving	Paving	7/1/2023	8/31/2023	5	44	
15	Ph 3 - Architectural Coating	Architectural Coating	7/1/2023	8/31/2023	5	44	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.97

Residential Indoor: 660,466; Residential Outdoor: 220,155; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 13,120 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Ph 1 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 1 - Demolition	Excavators	1	5.00	158	0.38
Ph 1 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 1 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading	Excavators	2	5.00	158	0.38
Ph 1 - Grading	Graders	0	8.00	187	0.41
Ph 1 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading	Scrapers	2	5.00	367	0.48
Ph 1 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Building Construction	Cranes	0	7.00	231	0.29
Ph 1 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 1 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 1 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Ph 1 - Building Construction	Welders	0	8.00	46	0.45
Ph 2 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 2 - Demolition	Excavators	1	5.00	158	0.38
Ph 2 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 2 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 2 - Grading	Excavators	2	5.00	158	0.38
Ph 2 - Grading	Graders	0	8.00	187	0.41
Ph 2 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 2 - Grading	Scrapers	2	5.00	367	0.48

Ph 2 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Paving	Pavers	2	8.00	130	0.42
Ph 1 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 1 - Paving	Rollers	2	8.00	80	0.38
Ph 1 - Architectural Coating	Air Compressors	1	6.00	78	0.48
Ph 2 - Building Construction	Cranes	0	7.00	231	0.29
Ph 2 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 2 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 2 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Ph 2 - Building Construction	Welders	0	8.00	46	0.45
Ph 3 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 3 - Demolition	Excavators	1	5.00	158	0.38
Ph 3 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 3 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 3 - Grading	Excavators	2	5.00	158	0.38
Ph 3 - Grading	Graders	0	8.00	187	0.41
Ph 3 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 3 - Grading	Scrapers	2	5.00	367	0.48
Ph 3 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 2 - Paving	Pavers	2	8.00	130	0.42
Ph 2 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 2 - Paving	Rollers	2	8.00	80	0.38
Ph 2 - Architectural Coating	Air Compressors	1	6.00	78	0.48
Ph 3 - Building Construction	Cranes	0	7.00	231	0.29
Ph 3 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 3 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 3 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37

Ph 3 - Building Construction	Welders	0	8.00	46	0.45
Ph 3 - Paving	Pavers	2	8.00	130	0.42
Ph 3 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 3 - Paving	Rollers	2	8.00	80	0.38
Ph 3 - Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Ph 1 - Demolition	4	12.00	2.00	490.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading	6	12.00	0.00	5,393.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Building Construction	4	80.00	10.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Demolition	4	12.00	2.00	8.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Grading	6	12.00	0.00	7,436.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Paving	6	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Building Construction	4	80.00	10.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Demolition	4	12.00	2.00	297.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Grading	6	12.00	0.00	9,171.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Paving	6	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Building Construction	4	80.00	10.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Paving	6	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.1651	0.0000	5.1651	0.7822	0.0000	0.7822			0.0000			0.0000
Off-Road	1.3374	13.8927	7.3138	0.0133		0.6946	0.6946		0.6390	0.6390		1,290.3008	1,290.3008	0.4173		1,300.7335
Total	**1.3374**	**13.8927**	**7.3138**	**0.0133**	**5.1651**	**0.6946**	**5.8597**	**0.7822**	**0.6390**	**1.4212**		**1,290.3008**	**1,290.3008**	**0.4173**		**1,300.7335**

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2781	9.2714	2.2521	0.0285	0.6724	0.0335	0.7059	0.1843	0.0320	0.2163		3,122.3628	3,122.3628	0.2606		3,128.8767
Vendor	7.4700e-003	0.2255	0.0575	5.5000e-004	0.0135	1.1000e-003	0.0146	3.9000e-003	1.0600e-003	4.9500e-003		58.8080	58.8080	4.3400e-003		58.9165
Worker	0.0440	0.0297	0.3402	1.0100e-003	0.0986	6.9000e-004	0.0993	0.0262	6.4000e-004	0.0268		101.1297	101.1297	3.0200e-003		101.2051
Total	**0.3296**	**9.5265**	**2.6497**	**0.0301**	**0.7845**	**0.0353**	**0.8198**	**0.2143**	**0.0337**	**0.2480**		**3,282.3005**	**3,282.3005**	**0.2679**		**3,288.9983**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3243	0.0000	2.3243	0.3520	0.0000	0.3520			0.0000			0.0000
Off-Road	0.2139	4.3481	8.1504	0.0133		0.0218	0.0218		0.0218	0.0218	0.0000	1,290.3008	1,290.3008	0.4173		1,300.7335
Total	**0.2139**	**4.3481**	**8.1504**	**0.0133**	**2.3243**	**0.0218**	**2.3461**	**0.3520**	**0.0218**	**0.3738**	**0.0000**	**1,290.3008**	**1,290.3008**	**0.4173**		**1,300.7335**

3.2 Ph 1 - Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2781	9.2714	2.2521	0.0285	0.6724	0.0335	0.7059	0.1843	0.0320	0.2163		3,122.3628	3,122.3628	0.2606		3,128.8767
Vendor	7.4700e-003	0.2255	0.0575	5.5000e-004	0.0135	1.1000e-003	0.0146	3.9000e-003	1.0600e-003	4.9500e-003		58.8080	58.8080	4.3400e-003		58.9165
Worker	0.0440	0.0297	0.3402	1.0100e-003	0.0986	6.9000e-004	0.0993	0.0262	6.4000e-004	0.0268		101.1297	101.1297	3.0200e-003		101.2051
Total	**0.3296**	**9.5265**	**2.6497**	**0.0301**	**0.7845**	**0.0353**	**0.8198**	**0.2143**	**0.0337**	**0.2480**		**3,282.3005**	**3,282.3005**	**0.2679**		**3,288.9983**

3.3 Ph 1 - Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1171	0.0000	3.1171	1.6666	0.0000	1.6666			0.0000			0.0000
Off-Road	2.1919	24.4246	16.6137	0.0312		1.0631	1.0631		0.9780	0.9780		3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**2.1919**	**24.4246**	**16.6137**	**0.0312**	**3.1171**	**1.0631**	**4.1802**	**1.6666**	**0.9780**	**2.6446**		**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.3 Ph 1 - Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4286	47.6194	11.5670	0.1466	3.4537	0.1719	3.6255	0.9464	0.1644	1.1108		16,037.0503	16,037.0503	1.3383		16,070.5064
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0440	0.0297	0.3402	1.0100e-003	0.0986	6.9000e-004	0.0993	0.0262	6.4000e-004	0.0268		101.1297	101.1297	3.0200e-003		101.2051
Total	**1.4726**	**47.6491**	**11.9072**	**0.1476**	**3.5522**	**0.1726**	**3.7248**	**0.9725**	**0.1651**	**1.1376**		**16,138.1799**	**16,138.1799**	**1.3413**		**16,171.7116**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4027	0.0000	1.4027	0.7500	0.0000	0.7500			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**1.4027**	**0.0512**	**1.4539**	**0.7500**	**0.0512**	**0.8011**	**0.0000**	**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.3 Ph 1 - Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4286	47.6194	11.5670	0.1466	3.4537	0.1719	3.6255	0.9464	0.1644	1.1108		16,037.0503	16,037.0503	1.3383		16,070.5064
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0440	0.0297	0.3402	1.0100e-003	0.0986	6.9000e-004	0.0993	0.0262	6.4000e-004	0.0268		101.1297	101.1297	3.0200e-003		101.2051
Total	**1.4726**	**47.6491**	**11.9072**	**0.1476**	**3.5522**	**0.1726**	**3.7248**	**0.9725**	**0.1651**	**1.1376**		**16,138.1799**	**16,138.1799**	**1.3413**		**16,171.7116**

3.4 Ph 1 - Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3535	3.4027	3.4600	4.6300e-003		0.2298	0.2298		0.2114	0.2114		448.7993	448.7993	0.1452		452.4281
Total	**0.3535**	**3.4027**	**3.4600**	**4.6300e-003**		**0.2298**	**0.2298**		**0.2114**	**0.2114**		**448.7993**	**448.7993**	**0.1452**		**452.4281**

3.4 Ph 1 - Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0374	1.1276	0.2873	2.7400e-003	0.0677	5.5200e-003	0.0732	0.0195	5.2800e-003	0.0248		294.0401	294.0401	0.0217		294.5824
Worker	0.2936	0.1978	2.2677	6.7700e-003	0.6572	4.6100e-003	0.6618	0.1743	4.2500e-003	0.1786		674.1976	674.1976	0.0201		674.7009
Total	**0.3309**	**1.3254**	**2.5549**	**9.5100e-003**	**0.7249**	**0.0101**	**0.7350**	**0.1938**	**9.5300e-003**	**0.2033**		**968.2377**	**968.2377**	**0.0418**		**969.2833**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6300e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	448.7993	448.7993	0.1452		452.4281
Total	**0.1042**	**2.0264**	**3.5036**	**4.6300e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**448.7993**	**448.7993**	**0.1452**		**452.4281**

3.4 Ph 1 - Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0374	1.1276	0.2873	2.7400e-003	0.0677	5.5200e-003	0.0732	0.0195	5.2800e-003	0.0248		294.0401	294.0401	0.0217		294.5824
Worker	0.2936	0.1978	2.2677	6.7700e-003	0.6572	4.6100e-003	0.6618	0.1743	4.2500e-003	0.1786		674.1976	674.1976	0.0201		674.7009
Total	**0.3309**	**1.3254**	**2.5549**	**9.5100e-003**	**0.7249**	**0.0101**	**0.7350**	**0.1938**	**9.5300e-003**	**0.2033**		**968.2377**	**968.2377**	**0.0418**		**969.2833**

3.4 Ph 1 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3166	3.0749	3.4281	4.6300e-003		0.1955	0.1955		0.1798	0.1798		448.9309	448.9309	0.1452		452.5607
Total	**0.3166**	**3.0749**	**3.4281**	**4.6300e-003**		**0.1955**	**0.1955**		**0.1798**	**0.1798**		**448.9309**	**448.9309**	**0.1452**		**452.5607**

3.4 Ph 1 - Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	1.0183	0.2595	2.7100e-003	0.0677	2.1400e-003	0.0698	0.0195	2.0500e-003	0.0215		291.3520	291.3520	0.0208		291.8724
Worker	0.2767	0.1798	2.1219	6.5400e-003	0.6572	4.5400e-003	0.6617	0.1743	4.1800e-003	0.1785		651.5527	651.5527	0.0186		652.0176
Total	**0.3070**	**1.1981**	**2.3814**	**9.2500e-003**	**0.7249**	**6.6800e-003**	**0.7316**	**0.1938**	**6.2300e-003**	**0.2000**		**942.9047**	**942.9047**	**0.0394**		**943.8900**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6300e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	448.9309	448.9309	0.1452		452.5607
Total	**0.1042**	**2.0264**	**3.5036**	**4.6300e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**448.9309**	**448.9309**	**0.1452**		**452.5607**

3.4 Ph 1 - Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	1.0183	0.2595	2.7100e-003	0.0677	2.1400e-003	0.0698	0.0195	2.0500e-003	0.0215		291.3520	291.3520	0.0208		291.8724
Worker	0.2767	0.1798	2.1219	6.5400e-003	0.6572	4.5400e-003	0.6617	0.1743	4.1800e-003	0.1785		651.5527	651.5527	0.0186		652.0176
Total	**0.3070**	**1.1981**	**2.3814**	**9.2500e-003**	**0.7249**	**6.6800e-003**	**0.7316**	**0.1938**	**6.2300e-003**	**0.2000**		**942.9047**	**942.9047**	**0.0394**		**943.8900**

3.5 Ph 2 - Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0822	0.0000	0.0822	0.0125	0.0000	0.0125			0.0000			0.0000
Off-Road	1.2832	13.2651	7.2128	0.0133		0.6536	0.6536		0.6013	0.6013		1,290.4222	1,290.4222	0.4174		1,300.8559
Total	**1.2832**	**13.2651**	**7.2128**	**0.0133**	**0.0822**	**0.6536**	**0.7358**	**0.0125**	**0.6013**	**0.6138**		**1,290.4222**	**1,290.4222**	**0.4174**		**1,300.8559**

3.5 Ph 2 - Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.4800e-003	0.1448	0.0384	4.8000e-004	0.0115	5.0000e-004	0.0120	3.1600e-003	4.8000e-004	3.6400e-003		52.8513	52.8513	4.4500e-003		52.9625
Vendor	6.0500e-003	0.2037	0.0519	5.4000e-004	0.0135	4.3000e-004	0.0140	3.9000e-003	4.1000e-004	4.3100e-003		58.2704	58.2704	4.1600e-003		58.3745
Worker	0.0415	0.0270	0.3183	9.8000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		97.7329	97.7329	2.7900e-003		97.8026
Total	**0.0520**	**0.3755**	**0.4086**	**2.0000e-003**	**0.1237**	**1.6100e-003**	**0.1253**	**0.0332**	**1.5200e-003**	**0.0347**		**208.8546**	**208.8546**	**0.0114**		**209.1396**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0370	0.0000	0.0370	5.6000e-003	0.0000	5.6000e-003			0.0000			0.0000
Off-Road	0.2139	4.3481	8.1504	0.0133		0.0218	0.0218		0.0218	0.0218	0.0000	1,290.4222	1,290.4222	0.4174		1,300.8559
Total	**0.2139**	**4.3481**	**8.1504**	**0.0133**	**0.0370**	**0.0218**	**0.0588**	**5.6000e-003**	**0.0218**	**0.0274**	**0.0000**	**1,290.4222**	**1,290.4222**	**0.4174**		**1,300.8559**

3.5 Ph 2 - Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.4800e-003	0.1448	0.0384	4.8000e-004	0.0115	5.0000e-004	0.0120	3.1600e-003	4.8000e-004	3.6400e-003		52.8513	52.8513	4.4500e-003		52.9625
Vendor	6.0500e-003	0.2037	0.0519	5.4000e-004	0.0135	4.3000e-004	0.0140	3.9000e-003	4.1000e-004	4.3100e-003		58.2704	58.2704	4.1600e-003		58.3745
Worker	0.0415	0.0270	0.3183	9.8000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		97.7329	97.7329	2.7900e-003		97.8026
Total	**0.0520**	**0.3755**	**0.4086**	**2.0000e-003**	**0.1237**	**1.6100e-003**	**0.1253**	**0.0332**	**1.5200e-003**	**0.0347**		**208.8546**	**208.8546**	**0.0114**		**209.1396**

3.6 Ph 2 - Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1171	0.0000	3.1171	1.6666	0.0000	1.6666			0.0000			0.0000
Off-Road	2.0651	22.5038	15.9946	0.0312		0.9731	0.9731		0.8953	0.8953		3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**2.0651**	**22.5038**	**15.9946**	**0.0312**	**3.1171**	**0.9731**	**4.0902**	**1.6666**	**0.8953**	**2.5619**		**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.6 Ph 2 - Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8513	59.8261	15.8480	0.1990	4.7620	0.2083	4.9703	1.3049	0.1993	1.5042		21,833.4680	21,833.4680	1.8374		21,879.4025
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0415	0.0270	0.3183	9.8000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		97.7329	97.7329	2.7900e-003		97.8026
Total	**1.8928**	**59.8531**	**16.1663**	**0.2000**	**4.8606**	**0.2090**	**5.0696**	**1.3310**	**0.1999**	**1.5309**		**21,931.2009**	**21,931.2009**	**1.8402**		**21,977.2051**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4027	0.0000	1.4027	0.7500	0.0000	0.7500			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**1.4027**	**0.0512**	**1.4539**	**0.7500**	**0.0512**	**0.8011**	**0.0000**	**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.6 Ph 2 - Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8513	59.8261	15.8480	0.1990	4.7620	0.2083	4.9703	1.3049	0.1993	1.5042		21,833.4680	21,833.4680	1.8374		21,879.4025
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0415	0.0270	0.3183	9.8000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		97.7329	97.7329	2.7900e-003		97.8026
Total	**1.8928**	**59.8531**	**16.1663**	**0.2000**	**4.8606**	**0.2090**	**5.0696**	**1.3310**	**0.1999**	**1.5309**		**21,931.2009**	**21,931.2009**	**1.8402**		**21,977.2051**

3.7 Ph 1 - Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.2195					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4751**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**		**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.7 Ph 1 - Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0415	0.0270	0.3183	9.8000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		97.7329	97.7329	2.7900e-003		97.8026
Total	**0.0415**	**0.0270**	**0.3183**	**9.8000e-004**	**0.0986**	**6.8000e-004**	**0.0993**	**0.0262**	**6.3000e-004**	**0.0268**		**97.7329**	**97.7329**	**2.7900e-003**		**97.8026**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4496	10.3669	17.2957	0.0228		0.2377	0.2377		0.2377	0.2377	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.2195					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6691**	**10.3669**	**17.2957**	**0.0228**		**0.2377**	**0.2377**		**0.2377**	**0.2377**	**0.0000**	**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.7 Ph 1 - Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0415	0.0270	0.3183	9.8000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		97.7329	97.7329	2.7900e-003		97.8026
Total	**0.0415**	**0.0270**	**0.3183**	**9.8000e-004**	**0.0986**	**6.8000e-004**	**0.0993**	**0.0262**	**6.3000e-004**	**0.0268**		**97.7329**	**97.7329**	**2.7900e-003**		**97.8026**

3.8 Ph 1 - Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	58.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**58.2602**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.8 Ph 1 - Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0415	0.0270	0.3183	9.8000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		97.7329	97.7329	2.7900e-003		97.8026
Total	**0.0415**	**0.0270**	**0.3183**	**9.8000e-004**	**0.0986**	**6.8000e-004**	**0.0993**	**0.0262**	**6.3000e-004**	**0.0268**		**97.7329**	**97.7329**	**2.7900e-003**		**97.8026**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	58.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**58.1008**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.8 Ph 1 - Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0415	0.0270	0.3183	9.8000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		97.7329	97.7329	2.7900e-003		97.8026
Total	**0.0415**	**0.0270**	**0.3183**	**9.8000e-004**	**0.0986**	**6.8000e-004**	**0.0993**	**0.0262**	**6.3000e-004**	**0.0268**		**97.7329**	**97.7329**	**2.7900e-003**		**97.8026**

3.9 Ph 2 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3166	3.0749	3.4281	4.6300e-003		0.1955	0.1955		0.1798	0.1798		448.9309	448.9309	0.1452		452.5607
Total	**0.3166**	**3.0749**	**3.4281**	**4.6300e-003**		**0.1955**	**0.1955**		**0.1798**	**0.1798**		**448.9309**	**448.9309**	**0.1452**		**452.5607**

3.9 Ph 2 - Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	1.0183	0.2595	2.7100e-003	0.0677	2.1400e-003	0.0698	0.0195	2.0500e-003	0.0215		291.3520	291.3520	0.0208		291.8724
Worker	0.2767	0.1798	2.1219	6.5400e-003	0.6572	4.5400e-003	0.6617	0.1743	4.1800e-003	0.1785		651.5527	651.5527	0.0186		652.0176
Total	**0.3070**	**1.1981**	**2.3814**	**9.2500e-003**	**0.7249**	**6.6800e-003**	**0.7316**	**0.1938**	**6.2300e-003**	**0.2000**		**942.9047**	**942.9047**	**0.0394**		**943.8900**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6300e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	448.9309	448.9309	0.1452		452.5607
Total	**0.1042**	**2.0264**	**3.5036**	**4.6300e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**448.9309**	**448.9309**	**0.1452**		**452.5607**

3.9 Ph 2 - Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	1.0183	0.2595	2.7100e-003	0.0677	2.1400e-003	0.0698	0.0195	2.0500e-003	0.0215		291.3520	291.3520	0.0208		291.8724
Worker	0.2767	0.1798	2.1219	6.5400e-003	0.6572	4.5400e-003	0.6617	0.1743	4.1800e-003	0.1785		651.5527	651.5527	0.0186		652.0176
Total	**0.3070**	**1.1981**	**2.3814**	**9.2500e-003**	**0.7249**	**6.6800e-003**	**0.7316**	**0.1938**	**6.2300e-003**	**0.2000**		**942.9047**	**942.9047**	**0.0394**		**943.8900**

3.9 Ph 2 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2783	2.7305	3.3917	4.6400e-003		0.1600	0.1600		0.1472	0.1472		449.2698	449.2698	0.1453		452.9024
Total	**0.2783**	**2.7305**	**3.3917**	**4.6400e-003**		**0.1600**	**0.1600**		**0.1472**	**0.1472**		**449.2698**	**449.2698**	**0.1453**		**452.9024**

3.9 Ph 2 - Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0281	0.9623	0.2458	2.6800e-003	0.0677	1.8400e-003	0.0695	0.0195	1.7600e-003	0.0213		288.6138	288.6138	0.0202		289.1183
Worker	0.2616	0.1639	1.9731	6.3000e-003	0.6572	4.4400e-003	0.6616	0.1743	4.0900e-003	0.1784		627.6478	627.6478	0.0171		628.0740
Total	**0.2897**	**1.1263**	**2.2189**	**8.9800e-003**	**0.7249**	**6.2800e-003**	**0.7312**	**0.1938**	**5.8500e-003**	**0.1997**		**916.2616**	**916.2616**	**0.0372**		**917.1922**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6400e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	449.2698	449.2698	0.1453		452.9024
Total	**0.1042**	**2.0264**	**3.5036**	**4.6400e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**449.2698**	**449.2698**	**0.1453**		**452.9024**

3.9 Ph 2 - Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0281	0.9623	0.2458	2.6800e-003	0.0677	1.8400e-003	0.0695	0.0195	1.7600e-003	0.0213		288.6138	288.6138	0.0202		289.1183
Worker	0.2616	0.1639	1.9731	6.3000e-003	0.6572	4.4400e-003	0.6616	0.1743	4.0900e-003	0.1784		627.6478	627.6478	0.0171		628.0740
Total	**0.2897**	**1.1263**	**2.2189**	**8.9800e-003**	**0.7249**	**6.2800e-003**	**0.7312**	**0.1938**	**5.8500e-003**	**0.1997**		**916.2616**	**916.2616**	**0.0372**		**917.1922**

3.10 Ph 3 - Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9899	0.0000	2.9899	0.4528	0.0000	0.4528			0.0000			0.0000
Off-Road	1.0460	10.7421	6.7354	0.0133		0.5161	0.5161		0.4748	0.4748		1,290.1644	1,290.1644	0.4173		1,300.5960
Total	**1.0460**	**10.7421**	**6.7354**	**0.0133**	**2.9899**	**0.5161**	**3.5060**	**0.4528**	**0.4748**	**0.9276**		**1,290.1644**	**1,290.1644**	**0.4173**		**1,300.5960**

3.10 Ph 3 - Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1421	4.4302	1.2900	0.0160	0.3890	0.0144	0.4035	0.1066	0.0138	0.1204		1,760.0158	1,760.0158	0.1495		1,763.7526
Vendor	5.6200e-003	0.1925	0.0492	5.4000e-004	0.0135	3.7000e-004	0.0139	3.9000e-003	3.5000e-004	4.2500e-003		57.7228	57.7228	4.0400e-003		57.8237
Worker	0.0392	0.0246	0.2960	9.4000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		94.1472	94.1472	2.5600e-003		94.2111
Total	**0.1869**	**4.6472**	**1.6351**	**0.0175**	**0.5012**	**0.0155**	**0.5166**	**0.1367**	**0.0148**	**0.1514**		**1,911.8857**	**1,911.8857**	**0.1561**		**1,915.7874**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3455	0.0000	1.3455	0.2038	0.0000	0.2038			0.0000			0.0000
Off-Road	0.2139	4.3481	8.1504	0.0133		0.0218	0.0218		0.0218	0.0218	0.0000	1,290.1644	1,290.1644	0.4173		1,300.5960
Total	**0.2139**	**4.3481**	**8.1504**	**0.0133**	**1.3455**	**0.0218**	**1.3672**	**0.2038**	**0.0218**	**0.2255**	**0.0000**	**1,290.1644**	**1,290.1644**	**0.4173**		**1,300.5960**

3.10 Ph 3 - Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1421	4.4302	1.2900	0.0160	0.3890	0.0144	0.4035	0.1066	0.0138	0.1204		1,760.0158	1,760.0158	0.1495		1,763.7526
Vendor	5.6200e-003	0.1925	0.0492	5.4000e-004	0.0135	3.7000e-004	0.0139	3.9000e-003	3.5000e-004	4.2500e-003		57.7228	57.7228	4.0400e-003		57.8237
Worker	0.0392	0.0246	0.2960	9.4000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		94.1472	94.1472	2.5600e-003		94.2111
Total	**0.1869**	**4.6472**	**1.6351**	**0.0175**	**0.5012**	**0.0155**	**0.5166**	**0.1367**	**0.0148**	**0.1514**		**1,911.8857**	**1,911.8857**	**0.1561**		**1,915.7874**

3.11 Ph 3 - Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1200	0.0000	3.1200	1.6669	0.0000	1.6669			0.0000			0.0000
Off-Road	1.7780	18.6352	14.9486	0.0313		0.7975	0.7975		0.7337	0.7337		3,027.0236	3,027.0236	0.9790		3,051.4986
Total	**1.7780**	**18.6352**	**14.9486**	**0.0313**	**3.1200**	**0.7975**	**3.9175**	**1.6669**	**0.7337**	**2.4006**		**3,027.0236**	**3,027.0236**	**0.9790**		**3,051.4986**

3.11 Ph 3 - Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1934	68.3992	19.9167	0.2471	6.0066	0.2226	6.2292	1.6459	0.2130	1.8589		27,173.5768	27,173.5768	2.3078		27,231.2716
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0246	0.2960	9.4000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		94.1472	94.1472	2.5600e-003		94.2111
Total	**2.2326**	**68.4238**	**20.2127**	**0.2480**	**6.1051**	**0.2233**	**6.3284**	**1.6720**	**0.2136**	**1.8856**		**27,267.7240**	**27,267.7240**	**2.3104**		**27,325.4827**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4040	0.0000	1.4040	0.7501	0.0000	0.7501			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0313		0.0512	0.0512		0.0512	0.0512	0.0000	3,027.0236	3,027.0236	0.9790		3,051.4986
Total	**0.4946**	**9.6570**	**18.4314**	**0.0313**	**1.4040**	**0.0512**	**1.4552**	**0.7501**	**0.0512**	**0.8013**	**0.0000**	**3,027.0236**	**3,027.0236**	**0.9790**		**3,051.4986**

3.11 Ph 3 - Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1934	68.3992	19.9167	0.2471	6.0066	0.2226	6.2292	1.6459	0.2130	1.8589		27,173.5768	27,173.5768	2.3078		27,231.2716
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0246	0.2960	9.4000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		94.1472	94.1472	2.5600e-003		94.2111
Total	**2.2326**	**68.4238**	**20.2127**	**0.2480**	**6.1051**	**0.2233**	**6.3284**	**1.6720**	**0.2136**	**1.8856**		**27,267.7240**	**27,267.7240**	**2.3104**		**27,325.4827**

3.12 Ph 2 - Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.2245					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3273**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.12 Ph 2 - Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0246	0.2960	9.4000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		94.1472	94.1472	2.5600e-003		94.2111
Total	**0.0392**	**0.0246**	**0.2960**	**9.4000e-004**	**0.0986**	**6.7000e-004**	**0.0992**	**0.0262**	**6.1000e-004**	**0.0268**		**94.1472**	**94.1472**	**2.5600e-003**		**94.2111**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4496	10.3669	17.2957	0.0228		0.2377	0.2377		0.2377	0.2377	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.2245					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6741**	**10.3669**	**17.2957**	**0.0228**		**0.2377**	**0.2377**		**0.2377**	**0.2377**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.12 Ph 2 - Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0246	0.2960	9.4000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		94.1472	94.1472	2.5600e-003		94.2111
Total	**0.0392**	**0.0246**	**0.2960**	**9.4000e-004**	**0.0986**	**6.7000e-004**	**0.0992**	**0.0262**	**6.1000e-004**	**0.0268**		**94.1472**	**94.1472**	**2.5600e-003**		**94.2111**

3.13 Ph 2 - Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.3605					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**59.5650**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.13 Ph 2 - Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0246	0.2960	9.4000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		94.1472	94.1472	2.5600e-003		94.2111
Total	**0.0392**	**0.0246**	**0.2960**	**9.4000e-004**	**0.0986**	**6.7000e-004**	**0.0992**	**0.0262**	**6.1000e-004**	**0.0268**		**94.1472**	**94.1472**	**2.5600e-003**		**94.2111**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.3605					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**59.4199**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.13 Ph 2 - Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0246	0.2960	9.4000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		94.1472	94.1472	2.5600e-003		94.2111
Total	**0.0392**	**0.0246**	**0.2960**	**9.4000e-004**	**0.0986**	**6.7000e-004**	**0.0992**	**0.0262**	**6.1000e-004**	**0.0268**		**94.1472**	**94.1472**	**2.5600e-003**		**94.2111**

3.14 Ph 3 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2783	2.7305	3.3917	4.6400e-003		0.1600	0.1600		0.1472	0.1472		449.2698	449.2698	0.1453		452.9024
Total	**0.2783**	**2.7305**	**3.3917**	**4.6400e-003**		**0.1600**	**0.1600**		**0.1472**	**0.1472**		**449.2698**	**449.2698**	**0.1453**		**452.9024**

3.14 Ph 3 - Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0281	0.9623	0.2458	2.6800e-003	0.0677	1.8400e-003	0.0695	0.0195	1.7600e-003	0.0213		288.6138	288.6138	0.0202		289.1183
Worker	0.2616	0.1639	1.9731	6.3000e-003	0.6572	4.4400e-003	0.6616	0.1743	4.0900e-003	0.1784		627.6478	627.6478	0.0171		628.0740
Total	**0.2897**	**1.1263**	**2.2189**	**8.9800e-003**	**0.7249**	**6.2800e-003**	**0.7312**	**0.1938**	**5.8500e-003**	**0.1997**		**916.2616**	**916.2616**	**0.0372**		**917.1922**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6400e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	449.2698	449.2698	0.1453		452.9024
Total	**0.1042**	**2.0264**	**3.5036**	**4.6400e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**449.2698**	**449.2698**	**0.1453**		**452.9024**

3.14 Ph 3 - Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0281	0.9623	0.2458	2.6800e-003	0.0677	1.8400e-003	0.0695	0.0195	1.7600e-003	0.0213		288.6138	288.6138	0.0202		289.1183
Worker	0.2616	0.1639	1.9731	6.3000e-003	0.6572	4.4400e-003	0.6616	0.1743	4.0900e-003	0.1784		627.6478	627.6478	0.0171		628.0740
Total	**0.2897**	**1.1263**	**2.2189**	**8.9800e-003**	**0.7249**	**6.2800e-003**	**0.7312**	**0.1938**	**5.8500e-003**	**0.1997**		**916.2616**	**916.2616**	**0.0372**		**917.1922**

3.14 Ph 3 - Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2539	2.4954	3.3761	4.6400e-003		0.1351	0.1351		0.1243	0.1243		449.6073	449.6073	0.1454		453.2426
Total	**0.2539**	**2.4954**	**3.3761**	**4.6400e-003**		**0.1351**	**0.1351**		**0.1243**	**0.1243**		**449.6073**	**449.6073**	**0.1454**		**453.2426**

3.14 Ph 3 - Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0217	0.7576	0.2251	2.6000e-003	0.0677	8.9000e-004	0.0686	0.0195	8.5000e-004	0.0203		281.3170	281.3170	0.0185		281.7789
Worker	0.2477	0.1497	1.8329	6.0500e-003	0.6572	4.3500e-003	0.6615	0.1743	4.0100e-003	0.1783		603.6537	603.6537	0.0156		604.0438
Total	**0.2694**	**0.9073**	**2.0580**	**8.6500e-003**	**0.7249**	**5.2400e-003**	**0.7301**	**0.1938**	**4.8600e-003**	**0.1987**		**884.9707**	**884.9707**	**0.0341**		**885.8227**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6400e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	449.6073	449.6073	0.1454		453.2426
Total	**0.1042**	**2.0264**	**3.5036**	**4.6400e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**449.6073**	**449.6073**	**0.1454**		**453.2426**

3.14 Ph 3 - Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0217	0.7576	0.2251	2.6000e-003	0.0677	8.9000e-004	0.0686	0.0195	8.5000e-004	0.0203		281.3170	281.3170	0.0185		281.7789
Worker	0.2477	0.1497	1.8329	6.0500e-003	0.6572	4.3500e-003	0.6615	0.1743	4.0100e-003	0.1783		603.6537	603.6537	0.0156		604.0438
Total	**0.2694**	**0.9073**	**2.0580**	**8.6500e-003**	**0.7249**	**5.2400e-003**	**0.7301**	**0.1938**	**4.8600e-003**	**0.1987**		**884.9707**	**884.9707**	**0.0341**		**885.8227**

3.15 Ph 3 - Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.2245					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2572**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.15 Ph 3 - Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0225	0.2749	9.1000e-004	0.0986	6.5000e-004	0.0992	0.0262	6.0000e-004	0.0268		90.5481	90.5481	2.3400e-003		90.6066
Total	**0.0372**	**0.0225**	**0.2749**	**9.1000e-004**	**0.0986**	**6.5000e-004**	**0.0992**	**0.0262**	**6.0000e-004**	**0.0268**		**90.5481**	**90.5481**	**2.3400e-003**		**90.6066**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4496	10.3669	17.2957	0.0228		0.2377	0.2377		0.2377	0.2377	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.2245					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6741**	**10.3669**	**17.2957**	**0.0228**		**0.2377**	**0.2377**		**0.2377**	**0.2377**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.15 Ph 3 - Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0225	0.2749	9.1000e-004	0.0986	6.5000e-004	0.0992	0.0262	6.0000e-004	0.0268		90.5481	90.5481	2.3400e-003		90.6066
Total	**0.0372**	**0.0225**	**0.2749**	**9.1000e-004**	**0.0986**	**6.5000e-004**	**0.0992**	**0.0262**	**6.0000e-004**	**0.0268**		**90.5481**	**90.5481**	**2.3400e-003**		**90.6066**

3.16 Ph 3 - Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.3605					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**59.5521**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.16 Ph 3 - Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0225	0.2749	9.1000e-004	0.0986	6.5000e-004	0.0992	0.0262	6.0000e-004	0.0268		90.5481	90.5481	2.3400e-003		90.6066
Total	**0.0372**	**0.0225**	**0.2749**	**9.1000e-004**	**0.0986**	**6.5000e-004**	**0.0992**	**0.0262**	**6.0000e-004**	**0.0268**		**90.5481**	**90.5481**	**2.3400e-003**		**90.6066**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.3605					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**59.4199**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.16 Ph 3 - Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0225	0.2749	9.1000e-004	0.0986	6.5000e-004	0.0992	0.0262	6.0000e-004	0.0268		90.5481	90.5481	2.3400e-003		90.6066
Total	**0.0372**	**0.0225**	**0.2749**	**9.1000e-004**	**0.0986**	**6.5000e-004**	**0.0992**	**0.0262**	**6.0000e-004**	**0.0268**		**90.5481**	**90.5481**	**2.3400e-003**		**90.6066**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

Integrate Below Market Rate Housing

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.7074	14.7657	40.5923	0.1311	10.5794	0.1268	10.7062	2.8278	0.1189	2.9467		13,303.7690	13,303.7690	0.7143		13,321.6269
Unmitigated	3.9718	16.3650	46.6332	0.1545	12.5942	0.1484	12.7426	3.3663	0.1393	3.5056		15,672.0407	15,672.0407	0.8219		15,692.5875

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,080.00	1,999.40	1833.00	5,805,403	4,876,674
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	2,080.00	1,999.40	1,833.00	5,805,403	4,876,674

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Non-Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Parking Lot	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Unenclosed Parking Structure	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
NaturalGas Unmitigated	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5291.71	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0571**	**0.4877**	**0.2075**	**3.1100e-003**		**0.0394**	**0.0394**		**0.0394**	**0.0394**		**622.5536**	**622.5536**	**0.0119**	**0.0114**	**626.2531**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5.29171	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0571**	**0.4877**	**0.2075**	**3.1100e-003**		**0.0394**	**0.0394**		**0.0394**	**0.0394**		**622.5536**	**622.5536**	**0.0119**	**0.0114**	**626.2531**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.4211	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190	0.0000	38.7072	38.7072	0.0373	0.0000	39.6391
Unmitigated	8.4211	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190	0.0000	38.7072	38.7072	0.0373	0.0000	39.6391

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0572					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6483	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190		38.7072	38.7072	0.0373		39.6391
Total	**8.4211**	**0.2474**	**21.4802**	**1.1400e-003**		**0.1190**	**0.1190**		**0.1190**	**0.1190**	**0.0000**	**38.7072**	**38.7072**	**0.0373**	**0.0000**	**39.6391**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0572					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6483	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190		38.7072	38.7072	0.0373		39.6391
Total	**8.4211**	**0.2474**	**21.4802**	**1.1400e-003**		**0.1190**	**0.1190**		**0.1190**	**0.1190**	**0.0000**	**38.7072**	**38.7072**	**0.0373**	**0.0000**	**39.6391**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Solana Highlands - Proposed Project

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	57.37	1000sqft	1.32	57,365.00	0
Other Non-Asphalt Surfaces	1.90	1000sqft	0.04	1,900.00	0
Parking Lot	272.00	Space	2.45	108,800.00	0
Unenclosed Parking Structure	50.60	1000sqft	1.16	50,600.00	0
Apartments Mid Rise	260.00	Dwelling Unit	6.84	326,156.00	744

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS

Land Use - project-specific land uses

Construction Phase - construction schedule per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment -

Trips and VMT - Trips per applicant.

Demolition - demo quantities per applicant

Grading - grading quantities per applicant

Architectural Coating - SDAPCD Rule 67.0.1

Vehicle Trips - F&P 2016

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - No fireplaces.

Consumer Products - CalEEMod defaults.

Area Coating - SDAPCD Rule 67.0.1

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - water use per applicant

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - All construction equipment will be Tier 4 Interim except air compressors and pavers which are Tier 3.

Mobile Land Use Mitigation -

Water Mitigation -

Waste Mitigation - AB 341

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2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.4214	77.6540	34.8846	0.1908	7.3942	1.4779	8.8721	2.8329	1.3663	4.1991	0.0000	20,347.0594	20,347.0594	2.5368	0.0000	20,410.4787
2021	64.4886	102.1467	55.5257	0.2700	8.8997	2.1603	11.0600	3.2437	2.0028	5.2465	0.0000	28,724.5681	28,724.5681	3.7817	0.0000	28,819.1105
2022	65.6429	104.5886	58.3289	0.3172	10.1472	1.8413	11.9884	3.5850	1.7089	5.2939	0.0000	33,970.8628	33,970.8628	4.2572	0.0000	34,077.2937
2023	61.4532	14.9625	22.2487	0.0403	0.9220	0.7227	1.6448	0.2461	0.6706	0.9167	0.0000	3,949.4409	3,949.4409	0.9148	0.0000	3,972.3115
Maximum	**65.6429**	**104.5886**	**58.3289**	**0.3172**	**10.1472**	**2.1603**	**11.9884**	**3.5850**	**2.0028**	**5.2939**	**0.0000**	**33,970.8628**	**33,970.8628**	**4.2572**	**0.0000**	**34,077.2937**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.4748	61.5102	36.7460	0.1908	5.6798	0.2438	5.9236	1.9163	0.2356	2.1518	0.0000	20,347.0594	20,347.0594	2.5368	0.0000	20,410.4787
2021	61.7403	85.5293	60.6953	0.2700	7.1853	0.6114	7.7967	2.3271	0.6016	2.9287	0.0000	28,724.5680	28,724.5680	3.7817	0.0000	28,819.1105
2022	63.3871	94.0968	64.6576	0.3172	8.4312	0.6256	9.0568	2.6682	0.6153	3.2835	0.0000	33,970.8628	33,970.8628	4.2572	0.0000	34,077.2937
2023	60.5881	14.7228	25.1090	0.0403	0.9220	0.3470	1.2690	0.2461	0.3465	0.5926	0.0000	3,949.4409	3,949.4409	0.9148	0.0000	3,972.3115
Maximum	**63.3871**	**94.0968**	**64.6576**	**0.3172**	**8.4312**	**0.6256**	**9.0568**	**2.6682**	**0.6153**	**3.2835**	**0.0000**	**33,970.8628**	**33,970.8628**	**4.2572**	**0.0000**	**34,077.2937**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**3.99**	**14.53**	**-9.49**	**0.00**	**18.80**	**70.53**	**28.36**	**27.76**	**68.71**	**42.79**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.4211	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190	0.0000	38.7072	38.7072	0.0373	0.0000	39.6391
Energy	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Mobile	3.8652	16.8727	45.8971	0.1465	12.5942	0.1494	12.7436	3.3663	0.1402	3.5065		14,860.9429	14,860.9429	0.8240		14,881.5419
Total	**12.3433**	**17.6078**	**67.5849**	**0.1507**	**12.5942**	**0.3078**	**12.9020**	**3.3663**	**0.2986**	**3.6649**	**0.0000**	**15,522.2036**	**15,522.2036**	**0.8732**	**0.0114**	**15,547.4341**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.4211	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190	0.0000	38.7072	38.7072	0.0373	0.0000	39.6391
Energy	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Mobile	3.6057	15.1758	40.3705	0.1243	10.5794	0.1278	10.7072	2.8278	0.1199	2.9476		12,610.8346	12,610.8346	0.7197		12,628.8274
Total	**12.0839**	**15.9108**	**62.0582**	**0.1285**	**10.5794**	**0.2862**	**10.8656**	**2.8278**	**0.2783**	**3.1061**	**0.0000**	**13,272.0953**	**13,272.0953**	**0.7689**	**0.0114**	**13,294.7196**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.10**	**9.64**	**8.18**	**14.72**	**16.00**	**7.04**	**15.78**	**16.00**	**6.81**	**15.25**	**0.00**	**14.50**	**14.50**	**11.94**	**0.00**	**14.49**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Ph 1 - Demolition	Demolition	6/1/2020	6/29/2020	5	21	
2	Ph 1 - Grading	Grading	7/1/2020	9/1/2020	5	45	
3	Ph 1 - Building Construction	Building Construction	9/1/2020	8/30/2021	5	260	
4	Ph 2 - Demolition	Demolition	6/1/2021	6/28/2021	5	20	
5	Ph 2 - Grading	Grading	7/1/2021	9/1/2021	5	45	
6	Ph 1 - Paving	Paving	7/1/2021	9/1/2021	5	45	
7	Ph 1 - Architectural Coating	Architectural Coating	7/1/2021	9/1/2021	5	45	
8	Ph 2 - Building Construction	Building Construction	9/1/2021	8/31/2022	5	261	
9	Ph 3 - Demolition	Demolition	6/1/2022	6/30/2022	5	22	
10	Ph 3 - Grading	Grading	7/1/2022	8/31/2022	5	44	
11	Ph 2 - Paving	Paving	7/1/2022	8/31/2022	5	44	
12	Ph 2 - Architectural Coating	Architectural Coating	7/1/2022	8/31/2022	5	44	
13	Ph 3 - Building Construction	Building Construction	9/1/2022	8/31/2023	5	261	
14	Ph 3 - Paving	Paving	7/1/2023	8/31/2023	5	44	
15	Ph 3 - Architectural Coating	Architectural Coating	7/1/2023	8/31/2023	5	44	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.97

Residential Indoor: 660,466; Residential Outdoor: 220,155; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 13,120 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Ph 1 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 1 - Demolition	Excavators	1	5.00	158	0.38
Ph 1 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 1 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading	Excavators	2	5.00	158	0.38
Ph 1 - Grading	Graders	0	8.00	187	0.41
Ph 1 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading	Scrapers	2	5.00	367	0.48
Ph 1 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Building Construction	Cranes	0	7.00	231	0.29
Ph 1 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 1 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 1 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Ph 1 - Building Construction	Welders	0	8.00	46	0.45
Ph 2 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 2 - Demolition	Excavators	1	5.00	158	0.38
Ph 2 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 2 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 2 - Grading	Excavators	2	5.00	158	0.38
Ph 2 - Grading	Graders	0	8.00	187	0.41
Ph 2 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 2 - Grading	Scrapers	2	5.00	367	0.48

Ph 2 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Paving	Pavers	2	8.00	130	0.42
Ph 1 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 1 - Paving	Rollers	2	8.00	80	0.38
Ph 1 - Architectural Coating	Air Compressors	1	6.00	78	0.48
Ph 2 - Building Construction	Cranes	0	7.00	231	0.29
Ph 2 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 2 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 2 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Ph 2 - Building Construction	Welders	0	8.00	46	0.45
Ph 3 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 3 - Demolition	Excavators	1	5.00	158	0.38
Ph 3 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 3 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 3 - Grading	Excavators	2	5.00	158	0.38
Ph 3 - Grading	Graders	0	8.00	187	0.41
Ph 3 - Grading	Rubber Tired Dozers	1	4.00	247	0.40
Ph 3 - Grading	Scrapers	2	5.00	367	0.48
Ph 3 - Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 2 - Paving	Pavers	2	8.00	130	0.42
Ph 2 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 2 - Paving	Rollers	2	8.00	80	0.38
Ph 2 - Architectural Coating	Air Compressors	1	6.00	78	0.48
Ph 3 - Building Construction	Cranes	0	7.00	231	0.29
Ph 3 - Building Construction	Forklifts	2	4.00	89	0.20
Ph 3 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 3 - Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37

Ph 3 - Building Construction	Welders	0	8.00	46	0.45
Ph 3 - Paving	Pavers	2	8.00	130	0.42
Ph 3 - Paving	Paving Equipment	2	8.00	132	0.36
Ph 3 - Paving	Rollers	2	8.00	80	0.38
Ph 3 - Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Ph 1 - Demolition	4	12.00	2.00	490.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading	6	12.00	0.00	5,393.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Building Construction	4	80.00	10.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Demolition	4	12.00	2.00	8.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Grading	6	12.00	0.00	7,436.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Paving	6	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Building Construction	4	80.00	10.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Demolition	4	12.00	2.00	297.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Grading	6	12.00	0.00	9,171.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Paving	6	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 2 - Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Building Construction	4	80.00	10.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Paving	6	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 3 - Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.1651	0.0000	5.1651	0.7822	0.0000	0.7822			0.0000			0.0000
Off-Road	1.3374	13.8927	7.3138	0.0133		0.6946	0.6946		0.6390	0.6390		1,290.3008	1,290.3008	0.4173		1,300.7335
Total	**1.3374**	**13.8927**	**7.3138**	**0.0133**	**5.1651**	**0.6946**	**5.8597**	**0.7822**	**0.6390**	**1.4212**		**1,290.3008**	**1,290.3008**	**0.4173**		**1,300.7335**

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2832	9.4320	2.3429	0.0282	0.6724	0.0339	0.7063	0.1843	0.0324	0.2167		3,088.0833	3,088.0833	0.2665		3,094.7466
Vendor	7.8300e-003	0.2253	0.0638	5.3000e-004	0.0135	1.1200e-003	0.0147	3.9000e-003	1.0800e-003	4.9700e-003		57.2924	57.2924	4.6100e-003		57.4077
Worker	0.0499	0.0333	0.3207	9.5000e-004	0.0986	6.9000e-004	0.0993	0.0262	6.4000e-004	0.0268		94.9358	94.9358	2.8600e-003		95.0073
Total	**0.3409**	**9.6907**	**2.7273**	**0.0297**	**0.7845**	**0.0357**	**0.8202**	**0.2143**	**0.0342**	**0.2484**		**3,240.3116**	**3,240.3116**	**0.2740**		**3,247.1616**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3243	0.0000	2.3243	0.3520	0.0000	0.3520			0.0000			0.0000
Off-Road	0.2139	4.3481	8.1504	0.0133		0.0218	0.0218		0.0218	0.0218	0.0000	1,290.3008	1,290.3008	0.4173		1,300.7335
Total	**0.2139**	**4.3481**	**8.1504**	**0.0133**	**2.3243**	**0.0218**	**2.3461**	**0.3520**	**0.0218**	**0.3738**	**0.0000**	**1,290.3008**	**1,290.3008**	**0.4173**		**1,300.7335**

3.2 Ph 1 - Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2832	9.4320	2.3429	0.0282	0.6724	0.0339	0.7063	0.1843	0.0324	0.2167		3,088.0833	3,088.0833	0.2665		3,094.7466
Vendor	7.8300e-003	0.2253	0.0638	5.3000e-004	0.0135	1.1200e-003	0.0147	3.9000e-003	1.0800e-003	4.9700e-003		57.2924	57.2924	4.6100e-003		57.4077
Worker	0.0499	0.0333	0.3207	9.5000e-004	0.0986	6.9000e-004	0.0993	0.0262	6.4000e-004	0.0268		94.9358	94.9358	2.8600e-003		95.0073
Total	**0.3409**	**9.6907**	**2.7273**	**0.0297**	**0.7845**	**0.0357**	**0.8202**	**0.2143**	**0.0342**	**0.2484**		**3,240.3116**	**3,240.3116**	**0.2740**		**3,247.1616**

3.3 Ph 1 - Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1171	0.0000	3.1171	1.6666	0.0000	1.6666			0.0000			0.0000
Off-Road	2.1919	24.4246	16.6137	0.0312		1.0631	1.0631		0.9780	0.9780		3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**2.1919**	**24.4246**	**16.6137**	**0.0312**	**3.1171**	**1.0631**	**4.1802**	**1.6666**	**0.9780**	**2.6446**		**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.3 Ph 1 - Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4545	48.4447	12.0335	0.1450	3.4537	0.1741	3.6278	0.9464	0.1666	1.1129		15,860.9840	15,860.9840	1.3690		15,895.2082
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0499	0.0333	0.3207	9.5000e-004	0.0986	6.9000e-004	0.0993	0.0262	6.4000e-004	0.0268		94.9358	94.9358	2.8600e-003		95.0073
Total	**1.5044**	**48.4780**	**12.3542**	**0.1459**	**3.5522**	**0.1748**	**3.7270**	**0.9725**	**0.1672**	**1.1397**		**15,955.9199**	**15,955.9199**	**1.3718**		**15,990.2155**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4027	0.0000	1.4027	0.7500	0.0000	0.7500			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**1.4027**	**0.0512**	**1.4539**	**0.7500**	**0.0512**	**0.8011**	**0.0000**	**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.3 Ph 1 - Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4545	48.4447	12.0335	0.1450	3.4537	0.1741	3.6278	0.9464	0.1666	1.1129		15,860.9840	15,860.9840	1.3690		15,895.2082
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0499	0.0333	0.3207	9.5000e-004	0.0986	6.9000e-004	0.0993	0.0262	6.4000e-004	0.0268		94.9358	94.9358	2.8600e-003		95.0073
Total	**1.5044**	**48.4780**	**12.3542**	**0.1459**	**3.5522**	**0.1748**	**3.7270**	**0.9725**	**0.1672**	**1.1397**		**15,955.9199**	**15,955.9199**	**1.3718**		**15,990.2155**

3.4 Ph 1 - Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3535	3.4027	3.4600	4.6300e-003		0.2298	0.2298		0.2114	0.2114		448.7993	448.7993	0.1452		452.4281
Total	**0.3535**	**3.4027**	**3.4600**	**4.6300e-003**		**0.2298**	**0.2298**		**0.2114**	**0.2114**		**448.7993**	**448.7993**	**0.1452**		**452.4281**

3.4 Ph 1 - Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0391	1.1267	0.3188	2.6700e-003	0.0677	5.6200e-003	0.0733	0.0195	5.3800e-003	0.0249		286.4622	286.4622	0.0231		287.0385
Worker	0.3325	0.2221	2.1380	6.3500e-003	0.6572	4.6100e-003	0.6618	0.1743	4.2500e-003	0.1786		632.9056	632.9056	0.0191		633.3819
Total	**0.3716**	**1.3488**	**2.4568**	**9.0200e-003**	**0.7249**	**0.0102**	**0.7351**	**0.1938**	**9.6300e-003**	**0.2034**		**919.3678**	**919.3678**	**0.0421**		**920.4204**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6300e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	448.7993	448.7993	0.1452		452.4281
Total	**0.1042**	**2.0264**	**3.5036**	**4.6300e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**448.7993**	**448.7993**	**0.1452**		**452.4281**

3.4 Ph 1 - Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0391	1.1267	0.3188	2.6700e-003	0.0677	5.6200e-003	0.0733	0.0195	5.3800e-003	0.0249		286.4622	286.4622	0.0231		287.0385
Worker	0.3325	0.2221	2.1380	6.3500e-003	0.6572	4.6100e-003	0.6618	0.1743	4.2500e-003	0.1786		632.9056	632.9056	0.0191		633.3819
Total	**0.3716**	**1.3488**	**2.4568**	**9.0200e-003**	**0.7249**	**0.0102**	**0.7351**	**0.1938**	**9.6300e-003**	**0.2034**		**919.3678**	**919.3678**	**0.0421**		**920.4204**

3.4 Ph 1 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3166	3.0749	3.4281	4.6300e-003		0.1955	0.1955		0.1798	0.1798		448.9309	448.9309	0.1452		452.5607
Total	**0.3166**	**3.0749**	**3.4281**	**4.6300e-003**		**0.1955**	**0.1955**		**0.1798**	**0.1798**		**448.9309**	**448.9309**	**0.1452**		**452.5607**

3.4 Ph 1 - Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0319	1.0156	0.2890	2.6400e-003	0.0677	2.2300e-003	0.0699	0.0195	2.1300e-003	0.0216		283.8193	283.8193	0.0221		284.3721
Worker	0.3138	0.2018	1.9946	6.1400e-003	0.6572	4.5400e-003	0.6617	0.1743	4.1800e-003	0.1785		611.6381	611.6381	0.0176		612.0774
Total	**0.3457**	**1.2174**	**2.2836**	**8.7800e-003**	**0.7249**	**6.7700e-003**	**0.7316**	**0.1938**	**6.3100e-003**	**0.2001**		**895.4574**	**895.4574**	**0.0397**		**896.4494**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6300e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	448.9309	448.9309	0.1452		452.5607
Total	**0.1042**	**2.0264**	**3.5036**	**4.6300e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**448.9309**	**448.9309**	**0.1452**		**452.5607**

3.4 Ph 1 - Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0319	1.0156	0.2890	2.6400e-003	0.0677	2.2300e-003	0.0699	0.0195	2.1300e-003	0.0216		283.8193	283.8193	0.0221		284.3721
Worker	0.3138	0.2018	1.9946	6.1400e-003	0.6572	4.5400e-003	0.6617	0.1743	4.1800e-003	0.1785		611.6381	611.6381	0.0176		612.0774
Total	**0.3457**	**1.2174**	**2.2836**	**8.7800e-003**	**0.7249**	**6.7700e-003**	**0.7316**	**0.1938**	**6.3100e-003**	**0.2001**		**895.4574**	**895.4574**	**0.0397**		**896.4494**

3.5 Ph 2 - Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0822	0.0000	0.0822	0.0125	0.0000	0.0125			0.0000			0.0000
Off-Road	1.2832	13.2651	7.2128	0.0133		0.6536	0.6536		0.6013	0.6013		1,290.4222	1,290.4222	0.4174		1,300.8559
Total	**1.2832**	**13.2651**	**7.2128**	**0.0133**	**0.0822**	**0.6536**	**0.7358**	**0.0125**	**0.6013**	**0.6138**		**1,290.4222**	**1,290.4222**	**0.4174**		**1,300.8559**

3.5 Ph 2 - Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.5600e-003	0.1472	0.0398	4.8000e-004	0.0115	5.1000e-004	0.0120	3.1600e-003	4.9000e-004	3.6500e-003		52.2669	52.2669	4.5500e-003		52.3805
Vendor	6.3700e-003	0.2031	0.0578	5.3000e-004	0.0135	4.5000e-004	0.0140	3.9000e-003	4.3000e-004	4.3200e-003		56.7639	56.7639	4.4200e-003		56.8744
Worker	0.0471	0.0303	0.2992	9.2000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		91.7457	91.7457	2.6400e-003		91.8116
Total	**0.0580**	**0.3806**	**0.3968**	**1.9300e-003**	**0.1237**	**1.6400e-003**	**0.1253**	**0.0332**	**1.5500e-003**	**0.0347**		**200.7765**	**200.7765**	**0.0116**		**201.0665**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0370	0.0000	0.0370	5.6000e-003	0.0000	5.6000e-003			0.0000			0.0000
Off-Road	0.2139	4.3481	8.1504	0.0133		0.0218	0.0218		0.0218	0.0218	0.0000	1,290.4222	1,290.4222	0.4174		1,300.8559
Total	**0.2139**	**4.3481**	**8.1504**	**0.0133**	**0.0370**	**0.0218**	**0.0588**	**5.6000e-003**	**0.0218**	**0.0274**	**0.0000**	**1,290.4222**	**1,290.4222**	**0.4174**		**1,300.8559**

3.5 Ph 2 - Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.5600e-003	0.1472	0.0398	4.8000e-004	0.0115	5.1000e-004	0.0120	3.1600e-003	4.9000e-004	3.6500e-003		52.2669	52.2669	4.5500e-003		52.3805
Vendor	6.3700e-003	0.2031	0.0578	5.3000e-004	0.0135	4.5000e-004	0.0140	3.9000e-003	4.3000e-004	4.3200e-003		56.7639	56.7639	4.4200e-003		56.8744
Worker	0.0471	0.0303	0.2992	9.2000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		91.7457	91.7457	2.6400e-003		91.8116
Total	**0.0580**	**0.3806**	**0.3968**	**1.9300e-003**	**0.1237**	**1.6400e-003**	**0.1253**	**0.0332**	**1.5500e-003**	**0.0347**		**200.7765**	**200.7765**	**0.0116**		**201.0665**

3.6 Ph 2 - Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1171	0.0000	3.1171	1.6666	0.0000	1.6666			0.0000			0.0000
Off-Road	2.0651	22.5038	15.9946	0.0312		0.9731	0.9731		0.8953	0.8953		3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**2.0651**	**22.5038**	**15.9946**	**0.0312**	**3.1171**	**0.9731**	**4.0902**	**1.6666**	**0.8953**	**2.5619**		**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.6 Ph 2 - Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8848	60.8138	16.4510	0.1968	4.7620	0.2111	4.9731	1.3049	0.2019	1.5068		21,592.0282	21,592.0282	1.8776		21,638.9692
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0471	0.0303	0.2992	9.2000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		91.7457	91.7457	2.6400e-003		91.8116
Total	**1.9319**	**60.8441**	**16.7502**	**0.1977**	**4.8606**	**0.2118**	**5.0723**	**1.3310**	**0.2026**	**1.5336**		**21,683.7740**	**21,683.7740**	**1.8803**		**21,730.7808**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4027	0.0000	1.4027	0.7500	0.0000	0.7500			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**1.4027**	**0.0512**	**1.4539**	**0.7500**	**0.0512**	**0.8011**	**0.0000**	**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.6 Ph 2 - Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8848	60.8138	16.4510	0.1968	4.7620	0.2111	4.9731	1.3049	0.2019	1.5068		21,592.0282	21,592.0282	1.8776		21,638.9692
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0471	0.0303	0.2992	9.2000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		91.7457	91.7457	2.6400e-003		91.8116
Total	**1.9319**	**60.8441**	**16.7502**	**0.1977**	**4.8606**	**0.2118**	**5.0723**	**1.3310**	**0.2026**	**1.5336**		**21,683.7740**	**21,683.7740**	**1.8803**		**21,730.7808**

3.7 Ph 1 - Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.2195					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4751**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**		**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.7 Ph 1 - Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0471	0.0303	0.2992	9.2000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		91.7457	91.7457	2.6400e-003		91.8116
Total	**0.0471**	**0.0303**	**0.2992**	**9.2000e-004**	**0.0986**	**6.8000e-004**	**0.0993**	**0.0262**	**6.3000e-004**	**0.0268**		**91.7457**	**91.7457**	**2.6400e-003**		**91.8116**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4496	10.3669	17.2957	0.0228		0.2377	0.2377		0.2377	0.2377	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.2195					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6691**	**10.3669**	**17.2957**	**0.0228**		**0.2377**	**0.2377**		**0.2377**	**0.2377**	**0.0000**	**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.7 Ph 1 - Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0471	0.0303	0.2992	9.2000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		91.7457	91.7457	2.6400e-003		91.8116
Total	**0.0471**	**0.0303**	**0.2992**	**9.2000e-004**	**0.0986**	**6.8000e-004**	**0.0993**	**0.0262**	**6.3000e-004**	**0.0268**		**91.7457**	**91.7457**	**2.6400e-003**		**91.8116**

3.8 Ph 1 - Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	58.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**58.2602**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.8 Ph 1 - Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0471	0.0303	0.2992	9.2000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		91.7457	91.7457	2.6400e-003		91.8116
Total	**0.0471**	**0.0303**	**0.2992**	**9.2000e-004**	**0.0986**	**6.8000e-004**	**0.0993**	**0.0262**	**6.3000e-004**	**0.0268**		**91.7457**	**91.7457**	**2.6400e-003**		**91.8116**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	58.0413					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**58.1008**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.8 Ph 1 - Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0471	0.0303	0.2992	9.2000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		91.7457	91.7457	2.6400e-003		91.8116
Total	**0.0471**	**0.0303**	**0.2992**	**9.2000e-004**	**0.0986**	**6.8000e-004**	**0.0993**	**0.0262**	**6.3000e-004**	**0.0268**		**91.7457**	**91.7457**	**2.6400e-003**		**91.8116**

3.9 Ph 2 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3166	3.0749	3.4281	4.6300e-003		0.1955	0.1955		0.1798	0.1798		448.9309	448.9309	0.1452		452.5607
Total	**0.3166**	**3.0749**	**3.4281**	**4.6300e-003**		**0.1955**	**0.1955**		**0.1798**	**0.1798**		**448.9309**	**448.9309**	**0.1452**		**452.5607**

3.9 Ph 2 - Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0319	1.0156	0.2890	2.6400e-003	0.0677	2.2300e-003	0.0699	0.0195	2.1300e-003	0.0216		283.8193	283.8193	0.0221		284.3721
Worker	0.3138	0.2018	1.9946	6.1400e-003	0.6572	4.5400e-003	0.6617	0.1743	4.1800e-003	0.1785		611.6381	611.6381	0.0176		612.0774
Total	**0.3457**	**1.2174**	**2.2836**	**8.7800e-003**	**0.7249**	**6.7700e-003**	**0.7316**	**0.1938**	**6.3100e-003**	**0.2001**		**895.4574**	**895.4574**	**0.0397**		**896.4494**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6300e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	448.9309	448.9309	0.1452		452.5607
Total	**0.1042**	**2.0264**	**3.5036**	**4.6300e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**448.9309**	**448.9309**	**0.1452**		**452.5607**

3.9 Ph 2 - Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0319	1.0156	0.2890	2.6400e-003	0.0677	2.2300e-003	0.0699	0.0195	2.1300e-003	0.0216		283.8193	283.8193	0.0221		284.3721
Worker	0.3138	0.2018	1.9946	6.1400e-003	0.6572	4.5400e-003	0.6617	0.1743	4.1800e-003	0.1785		611.6381	611.6381	0.0176		612.0774
Total	**0.3457**	**1.2174**	**2.2836**	**8.7800e-003**	**0.7249**	**6.7700e-003**	**0.7316**	**0.1938**	**6.3100e-003**	**0.2001**		**895.4574**	**895.4574**	**0.0397**		**896.4494**

3.9 Ph 2 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2783	2.7305	3.3917	4.6400e-003		0.1600	0.1600		0.1472	0.1472		449.2698	449.2698	0.1453		452.9024
Total	**0.2783**	**2.7305**	**3.3917**	**4.6400e-003**		**0.1600**	**0.1600**		**0.1472**	**0.1472**		**449.2698**	**449.2698**	**0.1453**		**452.9024**

3.9 Ph 2 - Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0297	0.9591	0.2736	2.6100e-003	0.0677	1.9200e-003	0.0696	0.0195	1.8300e-003	0.0213		281.1026	281.1026	0.0214		281.6377
Worker	0.2974	0.1840	1.8508	5.9100e-003	0.6572	4.4400e-003	0.6616	0.1743	4.0900e-003	0.1784		589.2205	589.2205	0.0161		589.6227
Total	**0.3270**	**1.1430**	**2.1244**	**8.5200e-003**	**0.7249**	**6.3600e-003**	**0.7312**	**0.1938**	**5.9200e-003**	**0.1997**		**870.3231**	**870.3231**	**0.0375**		**871.2604**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6400e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	449.2698	449.2698	0.1453		452.9024
Total	**0.1042**	**2.0264**	**3.5036**	**4.6400e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**449.2698**	**449.2698**	**0.1453**		**452.9024**

3.9 Ph 2 - Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0297	0.9591	0.2736	2.6100e-003	0.0677	1.9200e-003	0.0696	0.0195	1.8300e-003	0.0213		281.1026	281.1026	0.0214		281.6377
Worker	0.2974	0.1840	1.8508	5.9100e-003	0.6572	4.4400e-003	0.6616	0.1743	4.0900e-003	0.1784		589.2205	589.2205	0.0161		589.6227
Total	**0.3270**	**1.1430**	**2.1244**	**8.5200e-003**	**0.7249**	**6.3600e-003**	**0.7312**	**0.1938**	**5.9200e-003**	**0.1997**		**870.3231**	**870.3231**	**0.0375**		**871.2604**

3.10 Ph 3 - Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9899	0.0000	2.9899	0.4528	0.0000	0.4528			0.0000			0.0000
Off-Road	1.0460	10.7421	6.7354	0.0133		0.5161	0.5161		0.4748	0.4748		1,290.1644	1,290.1644	0.4173		1,300.5960
Total	**1.0460**	**10.7421**	**6.7354**	**0.0133**	**2.9899**	**0.5161**	**3.5060**	**0.4528**	**0.4748**	**0.9276**		**1,290.1644**	**1,290.1644**	**0.4173**		**1,300.5960**

3.10 Ph 3 - Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1447	4.4991	1.3367	0.0158	0.3890	0.0146	0.4037	0.1066	0.0140	0.1206		1,740.3526	1,740.3526	0.1526		1,744.1673
Vendor	5.9300e-003	0.1918	0.0547	5.2000e-004	0.0135	3.8000e-004	0.0139	3.9000e-003	3.7000e-004	4.2600e-003		56.2205	56.2205	4.2800e-003		56.3276
Worker	0.0446	0.0276	0.2776	8.9000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		88.3831	88.3831	2.4100e-003		88.4434
Total	**0.1952**	**4.7185**	**1.6690**	**0.0172**	**0.5012**	**0.0157**	**0.5168**	**0.1367**	**0.0150**	**0.1516**		**1,884.9562**	**1,884.9562**	**0.1593**		**1,888.9382**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3455	0.0000	1.3455	0.2038	0.0000	0.2038			0.0000			0.0000
Off-Road	0.2139	4.3481	8.1504	0.0133		0.0218	0.0218		0.0218	0.0218	0.0000	1,290.1644	1,290.1644	0.4173		1,300.5960
Total	**0.2139**	**4.3481**	**8.1504**	**0.0133**	**1.3455**	**0.0218**	**1.3672**	**0.2038**	**0.0218**	**0.2255**	**0.0000**	**1,290.1644**	**1,290.1644**	**0.4173**		**1,300.5960**

3.10 Ph 3 - Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1447	4.4991	1.3367	0.0158	0.3890	0.0146	0.4037	0.1066	0.0140	0.1206		1,740.3526	1,740.3526	0.1526		1,744.1673
Vendor	5.9300e-003	0.1918	0.0547	5.2000e-004	0.0135	3.8000e-004	0.0139	3.9000e-003	3.7000e-004	4.2600e-003		56.2205	56.2205	4.2800e-003		56.3276
Worker	0.0446	0.0276	0.2776	8.9000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		88.3831	88.3831	2.4100e-003		88.4434
Total	**0.1952**	**4.7185**	**1.6690**	**0.0172**	**0.5012**	**0.0157**	**0.5168**	**0.1367**	**0.0150**	**0.1516**		**1,884.9562**	**1,884.9562**	**0.1593**		**1,888.9382**

3.11 Ph 3 - Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1200	0.0000	3.1200	1.6669	0.0000	1.6669			0.0000			0.0000
Off-Road	1.7780	18.6352	14.9486	0.0313		0.7975	0.7975		0.7337	0.7337		3,027.0236	3,027.0236	0.9790		3,051.4986
Total	**1.7780**	**18.6352**	**14.9486**	**0.0313**	**3.1200**	**0.7975**	**3.9175**	**1.6669**	**0.7337**	**2.4006**		**3,027.0236**	**3,027.0236**	**0.9790**		**3,051.4986**

3.11 Ph 3 - Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2335	69.4636	20.6373	0.2443	6.0066	0.2258	6.2323	1.6459	0.2160	1.8619		26,869.9887	26,869.9887	2.3559		26,928.8856
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0276	0.2776	8.9000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		88.3831	88.3831	2.4100e-003		88.4434
Total	**2.2781**	**69.4912**	**20.9149**	**0.2452**	**6.1051**	**0.2264**	**6.3316**	**1.6720**	**0.2166**	**1.8886**		**26,958.3718**	**26,958.3718**	**2.3583**		**27,017.3290**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4040	0.0000	1.4040	0.7501	0.0000	0.7501			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0313		0.0512	0.0512		0.0512	0.0512	0.0000	3,027.0236	3,027.0236	0.9790		3,051.4986
Total	**0.4946**	**9.6570**	**18.4314**	**0.0313**	**1.4040**	**0.0512**	**1.4552**	**0.7501**	**0.0512**	**0.8013**	**0.0000**	**3,027.0236**	**3,027.0236**	**0.9790**		**3,051.4986**

3.11 Ph 3 - Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2335	69.4636	20.6373	0.2443	6.0066	0.2258	6.2323	1.6459	0.2160	1.8619		26,869.9887	26,869.9887	2.3559		26,928.8856
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0276	0.2776	8.9000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		88.3831	88.3831	2.4100e-003		88.4434
Total	**2.2781**	**69.4912**	**20.9149**	**0.2452**	**6.1051**	**0.2264**	**6.3316**	**1.6720**	**0.2166**	**1.8886**		**26,958.3718**	**26,958.3718**	**2.3583**		**27,017.3290**

3.12 Ph 2 - Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.2245					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3273**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.12 Ph 2 - Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0276	0.2776	8.9000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		88.3831	88.3831	2.4100e-003		88.4434
Total	**0.0446**	**0.0276**	**0.2776**	**8.9000e-004**	**0.0986**	**6.7000e-004**	**0.0992**	**0.0262**	**6.1000e-004**	**0.0268**		**88.3831**	**88.3831**	**2.4100e-003**		**88.4434**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4496	10.3669	17.2957	0.0228		0.2377	0.2377		0.2377	0.2377	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.2245					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6741**	**10.3669**	**17.2957**	**0.0228**		**0.2377**	**0.2377**		**0.2377**	**0.2377**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.12 Ph 2 - Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0276	0.2776	8.9000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		88.3831	88.3831	2.4100e-003		88.4434
Total	**0.0446**	**0.0276**	**0.2776**	**8.9000e-004**	**0.0986**	**6.7000e-004**	**0.0992**	**0.0262**	**6.1000e-004**	**0.0268**		**88.3831**	**88.3831**	**2.4100e-003**		**88.4434**

3.13 Ph 2 - Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.3605					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**59.5650**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.13 Ph 2 - Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0276	0.2776	8.9000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		88.3831	88.3831	2.4100e-003		88.4434
Total	**0.0446**	**0.0276**	**0.2776**	**8.9000e-004**	**0.0986**	**6.7000e-004**	**0.0992**	**0.0262**	**6.1000e-004**	**0.0268**		**88.3831**	**88.3831**	**2.4100e-003**		**88.4434**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.3605					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**59.4199**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.13 Ph 2 - Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0276	0.2776	8.9000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268		88.3831	88.3831	2.4100e-003		88.4434
Total	**0.0446**	**0.0276**	**0.2776**	**8.9000e-004**	**0.0986**	**6.7000e-004**	**0.0992**	**0.0262**	**6.1000e-004**	**0.0268**		**88.3831**	**88.3831**	**2.4100e-003**		**88.4434**

3.14 Ph 3 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2783	2.7305	3.3917	4.6400e-003		0.1600	0.1600		0.1472	0.1472		449.2698	449.2698	0.1453		452.9024
Total	**0.2783**	**2.7305**	**3.3917**	**4.6400e-003**		**0.1600**	**0.1600**		**0.1472**	**0.1472**		**449.2698**	**449.2698**	**0.1453**		**452.9024**

3.14 Ph 3 - Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0297	0.9591	0.2736	2.6100e-003	0.0677	1.9200e-003	0.0696	0.0195	1.8300e-003	0.0213		281.1026	281.1026	0.0214		281.6377
Worker	0.2974	0.1840	1.8508	5.9100e-003	0.6572	4.4400e-003	0.6616	0.1743	4.0900e-003	0.1784		589.2205	589.2205	0.0161		589.6227
Total	**0.3270**	**1.1430**	**2.1244**	**8.5200e-003**	**0.7249**	**6.3600e-003**	**0.7312**	**0.1938**	**5.9200e-003**	**0.1997**		**870.3231**	**870.3231**	**0.0375**		**871.2604**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6400e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	449.2698	449.2698	0.1453		452.9024
Total	**0.1042**	**2.0264**	**3.5036**	**4.6400e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**449.2698**	**449.2698**	**0.1453**		**452.9024**

3.14 Ph 3 - Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0297	0.9591	0.2736	2.6100e-003	0.0677	1.9200e-003	0.0696	0.0195	1.8300e-003	0.0213		281.1026	281.1026	0.0214		281.6377
Worker	0.2974	0.1840	1.8508	5.9100e-003	0.6572	4.4400e-003	0.6616	0.1743	4.0900e-003	0.1784		589.2205	589.2205	0.0161		589.6227
Total	**0.3270**	**1.1430**	**2.1244**	**8.5200e-003**	**0.7249**	**6.3600e-003**	**0.7312**	**0.1938**	**5.9200e-003**	**0.1997**		**870.3231**	**870.3231**	**0.0375**		**871.2604**

3.14 Ph 3 - Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2539	2.4954	3.3761	4.6400e-003		0.1351	0.1351		0.1243	0.1243		449.6073	449.6073	0.1454		453.2426
Total	**0.2539**	**2.4954**	**3.3761**	**4.6400e-003**		**0.1351**	**0.1351**		**0.1243**	**0.1243**		**449.6073**	**449.6073**	**0.1454**		**453.2426**

3.14 Ph 3 - Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0229	0.7542	0.2471	2.5400e-003	0.0677	9.4000e-004	0.0686	0.0195	9.0000e-004	0.0204		274.0693	274.0693	0.0195		274.5564
Worker	0.2824	0.1680	1.7155	5.6800e-003	0.6572	4.3500e-003	0.6615	0.1743	4.0100e-003	0.1783		566.7170	566.7170	0.0147		567.0846
Total	**0.3053**	**0.9222**	**1.9626**	**8.2200e-003**	**0.7249**	**5.2900e-003**	**0.7302**	**0.1938**	**4.9100e-003**	**0.1987**		**840.7863**	**840.7863**	**0.0342**		**841.6410**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1042	2.0264	3.5036	4.6400e-003		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003	0.0000	449.6073	449.6073	0.1454		453.2426
Total	**0.1042**	**2.0264**	**3.5036**	**4.6400e-003**		**7.5800e-003**	**7.5800e-003**		**7.5800e-003**	**7.5800e-003**	**0.0000**	**449.6073**	**449.6073**	**0.1454**		**453.2426**

3.14 Ph 3 - Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0229	0.7542	0.2471	2.5400e-003	0.0677	9.4000e-004	0.0686	0.0195	9.0000e-004	0.0204		274.0693	274.0693	0.0195		274.5564
Worker	0.2824	0.1680	1.7155	5.6800e-003	0.6572	4.3500e-003	0.6615	0.1743	4.0100e-003	0.1783		566.7170	566.7170	0.0147		567.0846
Total	**0.3053**	**0.9222**	**1.9626**	**8.2200e-003**	**0.7249**	**5.2900e-003**	**0.7302**	**0.1938**	**4.9100e-003**	**0.1987**		**840.7863**	**840.7863**	**0.0342**		**841.6410**

3.15 Ph 3 - Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.2245					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2572**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.15 Ph 3 - Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0424	0.0252	0.2573	8.5000e-004	0.0986	6.5000e-004	0.0992	0.0262	6.0000e-004	0.0268		85.0075	85.0075	2.2100e-003		85.0627
Total	**0.0424**	**0.0252**	**0.2573**	**8.5000e-004**	**0.0986**	**6.5000e-004**	**0.0992**	**0.0262**	**6.0000e-004**	**0.0268**		**85.0075**	**85.0075**	**2.2100e-003**		**85.0627**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4496	10.3669	17.2957	0.0228		0.2377	0.2377		0.2377	0.2377	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.2245					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6741**	**10.3669**	**17.2957**	**0.0228**		**0.2377**	**0.2377**		**0.2377**	**0.2377**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.15 Ph 3 - Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0424	0.0252	0.2573	8.5000e-004	0.0986	6.5000e-004	0.0992	0.0262	6.0000e-004	0.0268		85.0075	85.0075	2.2100e-003		85.0627
Total	**0.0424**	**0.0252**	**0.2573**	**8.5000e-004**	**0.0986**	**6.5000e-004**	**0.0992**	**0.0262**	**6.0000e-004**	**0.0268**		**85.0075**	**85.0075**	**2.2100e-003**		**85.0627**

3.16 Ph 3 - Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.3605					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**59.5521**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.16 Ph 3 - Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0424	0.0252	0.2573	8.5000e-004	0.0986	6.5000e-004	0.0992	0.0262	6.0000e-004	0.0268		85.0075	85.0075	2.2100e-003		85.0627
Total	**0.0424**	**0.0252**	**0.2573**	**8.5000e-004**	**0.0986**	**6.5000e-004**	**0.0992**	**0.0262**	**6.0000e-004**	**0.0268**		**85.0075**	**85.0075**	**2.2100e-003**		**85.0627**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.3605					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**59.4199**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.16 Ph 3 - Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0424	0.0252	0.2573	8.5000e-004	0.0986	6.5000e-004	0.0992	0.0262	6.0000e-004	0.0268		85.0075	85.0075	2.2100e-003		85.0627
Total	**0.0424**	**0.0252**	**0.2573**	**8.5000e-004**	**0.0986**	**6.5000e-004**	**0.0992**	**0.0262**	**6.0000e-004**	**0.0268**		**85.0075**	**85.0075**	**2.2100e-003**		**85.0627**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

Integrate Below Market Rate Housing

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.6057	15.1758	40.3705	0.1243	10.5794	0.1278	10.7072	2.8278	0.1199	2.9476		12,610.8346	12,610.8346	0.7197		12,628.8274
Unmitigated	3.8652	16.8727	45.8971	0.1465	12.5942	0.1494	12.7436	3.3663	0.1402	3.5065		14,860.9429	14,860.9429	0.8240		14,881.5419

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,080.00	1,999.40	1833.00	5,805,403	4,876,674
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	2,080.00	1,999.40	1,833.00	5,805,403	4,876,674

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Non-Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Parking Lot	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Unenclosed Parking Structure	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
NaturalGas Unmitigated	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5291.71	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0571**	**0.4877**	**0.2075**	**3.1100e-003**		**0.0394**	**0.0394**		**0.0394**	**0.0394**		**622.5536**	**622.5536**	**0.0119**	**0.0114**	**626.2531**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5.29171	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0571**	**0.4877**	**0.2075**	**3.1100e-003**		**0.0394**	**0.0394**		**0.0394**	**0.0394**		**622.5536**	**622.5536**	**0.0119**	**0.0114**	**626.2531**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.4211	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190	0.0000	38.7072	38.7072	0.0373	0.0000	39.6391
Unmitigated	8.4211	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190	0.0000	38.7072	38.7072	0.0373	0.0000	39.6391

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0572					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6483	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190		38.7072	38.7072	0.0373		39.6391
Total	**8.4211**	**0.2474**	**21.4802**	**1.1400e-003**		**0.1190**	**0.1190**		**0.1190**	**0.1190**	**0.0000**	**38.7072**	**38.7072**	**0.0373**	**0.0000**	**39.6391**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0572					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6483	0.2474	21.4802	1.1400e-003		0.1190	0.1190		0.1190	0.1190		38.7072	38.7072	0.0373		39.6391
Total	**8.4211**	**0.2474**	**21.4802**	**1.1400e-003**		**0.1190**	**0.1190**		**0.1190**	**0.1190**	**0.0000**	**38.7072**	**38.7072**	**0.0373**	**0.0000**	**39.6391**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX B

CalEEMod Output Files – Alternative

Solana Highlands - Single Phase Construction Alternative

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	57.37	1000sqft	1.32	57,365.00	0
Other Non-Asphalt Surfaces	1.90	1000sqft	0.04	1,900.00	0
Parking Lot	272.00	Space	2.45	108,800.00	0
Unenclosed Parking Structure	50.60	1000sqft	1.16	50,600.00	0
Apartments Mid Rise	260.00	Dwelling Unit	6.84	326,156.00	744

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS

Land Use - project-specific land uses

Construction Phase - construction schedule per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Trips and VMT - trips per applicant

Demolition - demo quantities per applicant

Grading - grading quantities per applicant

Architectural Coating - SDAPCD Rule 67.0.1

Vehicle Trips - F&P 2016

Woodstoves - no fireplaces

Consumer Products - CalEEMod defaults.

Area Coating - SDAPCD Rule 67.0.1

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - water use per applicant

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - All construction equipment will meet Tier 4 Interim engine standards except air compressors and pavers which will be Tier 3.

Mobile Land Use Mitigation -

Water Mitigation -

Waste Mitigation - AB 341

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstructionPhase	NumDays	30.00	45.00
tblConstructionPhase	NumDays	30.00	44.00
tblConstructionPhase	NumDays	20.00	64.00
tblFireplaces	NumberGas	143.00	0.00
tblFireplaces	NumberNoFireplace	26.00	0.00
tblFireplaces	NumberWood	91.00	0.00
tblGrading	AcresOfGrading	56.25	270.00
tblGrading	AcresOfGrading	56.25	112.50
tblGrading	AcresOfGrading	55.00	110.00
tblGrading	MaterialExported	0.00	19,500.00
tblLandUse	LandUseSquareFeet	57,370.00	57,365.00
tblLandUse	LandUseSquareFeet	260,000.00	326,156.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
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tblOffRoadEquipment	UsageHours	8.00	4.00

tblOffRoadEquipment	UsageHours	8.00	4.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	720.49	536.36
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
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tblTripsAndVMT	HaulingTripLength	20.00	33.00
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tblTripsAndVMT	HaulingTripNumber	803.00	794.00
tblTripsAndVMT	HaulingTripNumber	2,438.00	7,334.00
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tblTripsAndVMT	HaulingTripNumber	0.00	7,332.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	64.00	60.00
tblTripsAndVMT	WorkerTripNumber	10.00	36.00
tblTripsAndVMT	WorkerTripNumber	15.00	36.00
tblTripsAndVMT	WorkerTripNumber	15.00	36.00
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tblTripsAndVMT	WorkerTripNumber	56.00	36.00
tblTripsAndVMT	WorkerTripNumber	279.00	240.00
tblVehicleTrips	ST_TR	6.39	7.69
tblVehicleTrips	SU_TR	5.86	7.05
tblVehicleTrips	WD_TR	6.65	8.00

tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
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tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	16,940,046.66	16,008,460.00
tblWater	OutdoorWaterUseRate	10,679,594.63	3,377,428.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	13.00	0.00
tblWoodstoves	NumberNoncatalytic	13.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.2424	4.6466	1.7951	0.0113	0.6652	0.0809	0.7461	0.1740	0.0748	0.2489	0.0000	1,099.0982	1,099.0982	0.1300	0.0000	1,102.3470
2021	1.7016	4.4236	3.6159	0.0122	0.6445	0.1322	0.7767	0.1727	0.1224	0.2951	0.0000	1,145.1769	1,145.1769	0.1557	0.0000	1,149.0692
2022	0.0879	0.6992	0.8269	2.4100e-003	0.1231	0.0225	0.1456	0.0332	0.0207	0.0539	0.0000	222.1938	222.1938	0.0258	0.0000	222.8383
Maximum	**1.7016**	**4.6466**	**3.6159**	**0.0122**	**0.6652**	**0.1322**	**0.7767**	**0.1740**	**0.1224**	**0.2951**	**0.0000**	**1,145.1769**	**1,145.1769**	**0.1557**	**0.0000**	**1,149.0692**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1307	3.6818	1.9027	0.0113	0.4317	0.0142	0.4458	0.1145	0.0137	0.1282	0.0000	1,099.0980	1,099.0980	0.1300	0.0000	1,102.3468
2021	1.5466	3.6721	3.8623	0.0122	0.5415	0.0324	0.5739	0.1448	0.0320	0.1768	0.0000	1,145.1766	1,145.1766	0.1557	0.0000	1,149.0688
2022	0.0648	0.6059	0.8418	2.4100e-003	0.1231	2.3100e-003	0.1254	0.0332	2.2200e-003	0.0354	0.0000	222.1937	222.1937	0.0258	0.0000	222.8383
Maximum	**1.5466**	**3.6818**	**3.8623**	**0.0122**	**0.5415**	**0.0324**	**0.5739**	**0.1448**	**0.0320**	**0.1768**	**0.0000**	**1,145.1766**	**1,145.1766**	**0.1557**	**0.0000**	**1,149.0688**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**14.26**	**18.52**	**-5.91**	**0.00**	**23.49**	**79.26**	**31.36**	**23.02**	**78.02**	**43.07**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**6-1-2020**	**8-31-2020**	0.6924	0.3419
2	**9-1-2020**	**11-30-2020**	3.0658	2.5307
3	**12-1-2020**	**2-28-2021**	2.9016	2.4155
4	**3-1-2021**	**5-31-2021**	2.9619	2.6065
5	**6-1-2021**	**8-31-2021**	0.5303	0.4267
6	**9-1-2021**	**11-30-2021**	0.5283	0.4258
7	**12-1-2021**	**2-28-2022**	0.4945	0.4133
8	**3-1-2022**	**5-31-2022**	0.4808	0.4095
		Highest	3.0658	2.6065

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4770	0.0223	1.9345	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0500e-003	0.0000	3.2366
Energy	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	387.2106	387.2106	0.0136	4.5400e-003	388.9038
Mobile	0.6707	3.0095	8.0730	0.0263	2.1880	0.0265	2.2145	0.5860	0.0248	0.6108	0.0000	2,420.6093	2,420.6093	0.1317	0.0000	2,423.9007
Waste						0.0000	0.0000		0.0000	0.0000	24.2777	0.0000	24.2777	1.4348	0.0000	60.1470
Water						0.0000	0.0000		0.0000	0.0000	5.6638	59.8416	65.5054	0.0220	0.0129	69.8908
Total	**2.1582**	**3.1208**	**10.0454**	**0.0270**	**2.1880**	**0.0444**	**2.2324**	**0.5860**	**0.0427**	**0.6287**	**29.9415**	**2,870.8218**	**2,900.7633**	**1.6051**	**0.0174**	**2,946.0790**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4770	0.0223	1.9345	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0500e-003	0.0000	3.2366
Energy	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	387.2106	387.2106	0.0136	4.5400e-003	388.9038
Mobile	0.6245	2.7086	7.0813	0.0223	1.8380	0.0226	1.8606	0.4922	0.0212	0.5134	0.0000	2,054.9724	2,054.9724	0.1148	0.0000	2,057.8419
Waste						0.0000	0.0000		0.0000	0.0000	6.0694	0.0000	6.0694	0.3587	0.0000	15.0368
Water						0.0000	0.0000		0.0000	0.0000	4.5311	42.1904	46.7214	0.0173	0.0103	50.2082
Total	**2.1119**	**2.8199**	**9.0536**	**0.0230**	**1.8380**	**0.0405**	**1.8785**	**0.4922**	**0.0391**	**0.5313**	**10.6005**	**2,487.5337**	**2,498.1342**	**0.5075**	**0.0148**	**2,515.2272**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.14**	**9.64**	**9.87**	**14.73**	**16.00**	**8.68**	**15.85**	**16.00**	**8.47**	**15.49**	**64.60**	**13.35**	**13.88**	**68.38**	**15.05**	**14.62**

3.0 Construction Detail

Construction Phase

Solana Highlands - Single Phase Construction Alternative - San Diego County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Ph 1 - Demolition	Demolition	6/1/2020	8/31/2020	5	66	
2	Ph 1 - Grading - 1	Grading	9/1/2020	11/2/2020	5	45	
3	Ph 1 - Grading - 2	Grading	11/3/2020	1/4/2021	5	45	
4	Ph 1 - Grading - 3	Grading	1/5/2021	3/5/2021	5	44	
5	Ph 1 - Paving	Paving	3/1/2021	5/27/2021	5	64	
6	Ph 1 - Architectural Coating	Architectural Coating	3/1/2021	5/27/2021	5	64	
7	Ph 1 - Building Construction	Building Construction	3/6/2021	5/30/2022	5	321	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.97

Residential Indoor: 660,466; Residential Outdoor: 220,155; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 13,120 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Ph 1 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 1 - Demolition	Excavators	1	5.00	158	0.38
Ph 1 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40
Ph 1 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading - 1	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 1	Graders	0	8.00	187	0.41
Ph 1 - Grading - 1	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 1	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 1	Tractors/Loaders/Backhoes	1	4.00	97	0.37

Ph 1 - Grading - 2	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 2	Graders	0	8.00	187	0.41
Ph 1 - Grading - 2	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 2	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 2	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading - 3	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 3	Graders	0	8.00	187	0.41
Ph 1 - Grading - 3	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 3	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 3	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Paving	Pavers	4	8.00	130	0.42
Ph 1 - Paving	Paving Equipment	4	8.00	132	0.36
Ph 1 - Paving	Rollers	4	8.00	80	0.38
Ph 1 - Architectural Coating	Air Compressors	2	6.00	78	0.48
Ph 1 - Building Construction	Cranes	0	7.00	231	0.29
Ph 1 - Building Construction	Forklifts	5	4.00	89	0.20
Ph 1 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 1 - Building Construction	Tractors/Loaders/Backhoes	5	4.00	97	0.37
Ph 1 - Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Ph 1 - Demolition	4	36.00	6.00	794.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 1	6	36.00	0.00	7,334.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 2	6	36.00	0.00	7,334.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 3	6	36.00	0.00	7,332.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Paving	12	36.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Architectural Coating	2	36.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Building Construction	10	240.00	60.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0880	0.0000	0.0880	0.0133	0.0000	0.0133	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0441	0.4585	0.2414	4.4000e-004		0.0229	0.0229		0.0211	0.0211	0.0000	38.6279	38.6279	0.0125	0.0000	38.9402
Total	**0.0441**	**0.4585**	**0.2414**	**4.4000e-004**	**0.0880**	**0.0229**	**0.1109**	**0.0133**	**0.0211**	**0.0344**	**0.0000**	**38.6279**	**38.6279**	**0.0125**	**0.0000**	**38.9402**

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.7700e-003	0.1617	0.0390	4.8000e-004	0.0112	5.7000e-004	0.0118	3.0800e-003	5.5000e-004	3.6200e-003	0.0000	47.9718	47.9718	4.0600e-003	0.0000	48.0733
Vendor	7.5000e-004	0.0226	6.0000e-003	5.0000e-005	1.3100e-003	1.1000e-004	1.4200e-003	3.8000e-004	1.1000e-004	4.8000e-004	0.0000	5.2245	5.2245	4.0000e-004	0.0000	5.2345
Worker	4.3800e-003	3.2400e-003	0.0318	1.0000e-004	9.5300e-003	7.0000e-005	9.6000e-003	2.5300e-003	6.0000e-005	2.5900e-003	0.0000	8.6115	8.6115	2.6000e-004	0.0000	8.6180
Total	**9.9000e-003**	**0.1876**	**0.0768**	**6.3000e-004**	**0.0220**	**7.5000e-004**	**0.0228**	**5.9900e-003**	**7.2000e-004**	**6.6900e-003**	**0.0000**	**61.8077**	**61.8077**	**4.7200e-003**	**0.0000**	**61.9258**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0396	0.0000	0.0396	5.9900e-003	0.0000	5.9900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.0600e-003	0.1435	0.2690	4.4000e-004		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	38.6278	38.6278	0.0125	0.0000	38.9401
Total	**7.0600e-003**	**0.1435**	**0.2690**	**4.4000e-004**	**0.0396**	**7.2000e-004**	**0.0403**	**5.9900e-003**	**7.2000e-004**	**6.7100e-003**	**0.0000**	**38.6278**	**38.6278**	**0.0125**	**0.0000**	**38.9401**

3.2 Ph 1 - Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.7700e-003	0.1617	0.0390	4.8000e-004	0.0112	5.7000e-004	0.0118	3.0800e-003	5.5000e-004	3.6200e-003	0.0000	47.9718	47.9718	4.0600e-003	0.0000	48.0733
Vendor	7.5000e-004	0.0226	6.0000e-003	5.0000e-005	1.3100e-003	1.1000e-004	1.4200e-003	3.8000e-004	1.1000e-004	4.8000e-004	0.0000	5.2245	5.2245	4.0000e-004	0.0000	5.2345
Worker	4.3800e-003	3.2400e-003	0.0318	1.0000e-004	9.5300e-003	7.0000e-005	9.6000e-003	2.5300e-003	6.0000e-005	2.5900e-003	0.0000	8.6115	8.6115	2.6000e-004	0.0000	8.6180
Total	**9.9000e-003**	**0.1876**	**0.0768**	**6.3000e-004**	**0.0220**	**7.5000e-004**	**0.0228**	**5.9900e-003**	**7.2000e-004**	**6.6900e-003**	**0.0000**	**61.8077**	**61.8077**	**4.7200e-003**	**0.0000**	**61.9258**

3.3 Ph 1 - Grading - 1 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2123	0.0000	0.2123	0.0529	0.0000	0.0529	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0493	0.5496	0.3738	7.0000e-004		0.0239	0.0239		0.0220	0.0220	0.0000	61.7039	61.7039	0.0200	0.0000	62.2028
Total	**0.0493**	**0.5496**	**0.3738**	**7.0000e-004**	**0.2123**	**0.0239**	**0.2362**	**0.0529**	**0.0220**	**0.0749**	**0.0000**	**61.7039**	**61.7039**	**0.0200**	**0.0000**	**62.2028**

3.3 Ph 1 - Grading - 1 - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0440	1.4940	0.3598	4.4600e-003	0.1035	5.2900e-003	0.1088	0.0284	5.0600e-003	0.0335	0.0000	443.1044	443.1044	0.0375	0.0000	444.0423
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9900e-003	2.2100e-003	0.0217	6.0000e-005	6.5000e-003	5.0000e-005	6.5400e-003	1.7300e-003	4.0000e-005	1.7700e-003	0.0000	5.8715	5.8715	1.8000e-004	0.0000	5.8759
Total	**0.0470**	**1.4962**	**0.3815**	**4.5200e-003**	**0.1100**	**5.3400e-003**	**0.1153**	**0.0302**	**5.1000e-003**	**0.0353**	**0.0000**	**448.9759**	**448.9759**	**0.0377**	**0.0000**	**449.9182**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0955	0.0000	0.0955	0.0238	0.0000	0.0238	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.2173	0.4147	7.0000e-004		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003	0.0000	61.7038	61.7038	0.0200	0.0000	62.2027
Total	**0.0111**	**0.2173**	**0.4147**	**7.0000e-004**	**0.0955**	**1.1500e-003**	**0.0967**	**0.0238**	**1.1500e-003**	**0.0250**	**0.0000**	**61.7038**	**61.7038**	**0.0200**	**0.0000**	**62.2027**

3.3 Ph 1 - Grading - 1 - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0440	1.4940	0.3598	4.4600e-003	0.1035	5.2900e-003	0.1088	0.0284	5.0600e-003	0.0335	0.0000	443.1044	443.1044	0.0375	0.0000	444.0423
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9900e-003	2.2100e-003	0.0217	6.0000e-005	6.5000e-003	5.0000e-005	6.5400e-003	1.7300e-003	4.0000e-005	1.7700e-003	0.0000	5.8715	5.8715	1.8000e-004	0.0000	5.8759
Total	**0.0470**	**1.4962**	**0.3815**	**4.5200e-003**	**0.1100**	**5.3400e-003**	**0.1153**	**0.0302**	**5.1000e-003**	**0.0353**	**0.0000**	**448.9759**	**448.9759**	**0.0377**	**0.0000**	**449.9182**

3.4 Ph 1 - Grading - 2 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1244	0.0000	0.1244	0.0420	0.0000	0.0420	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0471	0.5251	0.3572	6.7000e-004		0.0229	0.0229		0.0210	0.0210	0.0000	58.9615	58.9615	0.0191	0.0000	59.4382
Total	**0.0471**	**0.5251**	**0.3572**	**6.7000e-004**	**0.1244**	**0.0229**	**0.1473**	**0.0420**	**0.0210**	**0.0631**	**0.0000**	**58.9615**	**58.9615**	**0.0191**	**0.0000**	**59.4382**

3.4 Ph 1 - Grading - 2 - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0421	1.4276	0.3438	4.2700e-003	0.1023	5.0500e-003	0.1074	0.0280	4.8300e-003	0.0328	0.0000	423.4109	423.4109	0.0359	0.0000	424.3071
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8500e-003	2.1100e-003	0.0207	6.0000e-005	6.2100e-003	4.0000e-005	6.2500e-003	1.6500e-003	4.0000e-005	1.6900e-003	0.0000	5.6105	5.6105	1.7000e-004	0.0000	5.6148
Total	**0.0449**	**1.4297**	**0.3645**	**4.3300e-003**	**0.1086**	**5.0900e-003**	**0.1136**	**0.0297**	**4.8700e-003**	**0.0345**	**0.0000**	**429.0214**	**429.0214**	**0.0360**	**0.0000**	**429.9219**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0560	0.0000	0.0560	0.0189	0.0000	0.0189	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0106	0.2076	0.3963	6.7000e-004		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003	0.0000	58.9614	58.9614	0.0191	0.0000	59.4381
Total	**0.0106**	**0.2076**	**0.3963**	**6.7000e-004**	**0.0560**	**1.1000e-003**	**0.0571**	**0.0189**	**1.1000e-003**	**0.0200**	**0.0000**	**58.9614**	**58.9614**	**0.0191**	**0.0000**	**59.4381**

3.4 Ph 1 - Grading - 2 - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0421	1.4276	0.3438	4.2700e-003	0.1023	5.0500e-003	0.1074	0.0280	4.8300e-003	0.0328	0.0000	423.4109	423.4109	0.0359	0.0000	424.3071
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8500e-003	2.1100e-003	0.0207	6.0000e-005	6.2100e-003	4.0000e-005	6.2500e-003	1.6500e-003	4.0000e-005	1.6900e-003	0.0000	5.6105	5.6105	1.7000e-004	0.0000	5.6148
Total	**0.0449**	**1.4297**	**0.3645**	**4.3300e-003**	**0.1086**	**5.0900e-003**	**0.1136**	**0.0297**	**4.8700e-003**	**0.0345**	**0.0000**	**429.0214**	**429.0214**	**0.0360**	**0.0000**	**429.9219**

3.4 Ph 1 - Grading - 2 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0627	0.0000	0.0627	8.1000e-003	0.0000	8.1000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0700e-003	0.0225	0.0160	3.0000e-005		9.7000e-004	9.7000e-004		9.0000e-004	9.0000e-004	0.0000	2.7436	2.7436	8.9000e-004	0.0000	2.7657
Total	**2.0700e-003**	**0.0225**	**0.0160**	**3.0000e-005**	**0.0627**	**9.7000e-004**	**0.0636**	**8.1000e-003**	**9.0000e-004**	**9.0000e-003**	**0.0000**	**2.7436**	**2.7436**	**8.9000e-004**	**0.0000**	**2.7657**

3.4 Ph 1 - Grading - 2 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.8400e-003	0.0605	0.0159	2.0000e-004	0.0789	2.1000e-004	0.0792	0.0195	2.0000e-004	0.0197	0.0000	19.4446	19.4446	1.6600e-003	0.0000	19.4861
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	9.0000e-005	9.0000e-004	0.0000	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2522	0.2522	1.0000e-005	0.0000	0.2524
Total	**1.9700e-003**	**0.0606**	**0.0168**	**2.0000e-004**	**0.0792**	**2.1000e-004**	**0.0794**	**0.0196**	**2.0000e-004**	**0.0198**	**0.0000**	**19.6968**	**19.6968**	**1.6700e-003**	**0.0000**	**19.7384**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0282	0.0000	0.0282	3.6400e-003	0.0000	3.6400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9000e-004	9.6600e-003	0.0184	3.0000e-005		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	2.7436	2.7436	8.9000e-004	0.0000	2.7657
Total	**4.9000e-004**	**9.6600e-003**	**0.0184**	**3.0000e-005**	**0.0282**	**5.0000e-005**	**0.0283**	**3.6400e-003**	**5.0000e-005**	**3.6900e-003**	**0.0000**	**2.7436**	**2.7436**	**8.9000e-004**	**0.0000**	**2.7657**

3.4 Ph 1 - Grading - 2 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.8400e-003	0.0605	0.0159	2.0000e-004	0.0789	2.1000e-004	0.0792	0.0195	2.0000e-004	0.0197	0.0000	19.4446	19.4446	1.6600e-003	0.0000	19.4861
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	9.0000e-005	9.0000e-004	0.0000	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2522	0.2522	1.0000e-005	0.0000	0.2524
Total	**1.9700e-003**	**0.0606**	**0.0168**	**2.0000e-004**	**0.0792**	**2.1000e-004**	**0.0794**	**0.0196**	**2.0000e-004**	**0.0198**	**0.0000**	**19.6968**	**19.6968**	**1.6700e-003**	**0.0000**	**19.7384**

3.5 Ph 1 - Grading - 3 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1246	0.0000	0.1246	0.0427	0.0000	0.0427	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0454	0.4951	0.3519	6.9000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	60.3583	60.3583	0.0195	0.0000	60.8463
Total	**0.0454**	**0.4951**	**0.3519**	**6.9000e-004**	**0.1246**	**0.0214**	**0.1460**	**0.0427**	**0.0197**	**0.0624**	**0.0000**	**60.3583**	**60.3583**	**0.0195**	**0.0000**	**60.8463**

3.5 Ph 1 - Grading - 3 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0414	1.3600	0.3571	4.4000e-003	0.1035	4.6500e-003	0.1081	0.0284	4.4500e-003	0.0329	0.0000	437.3834	437.3834	0.0373	0.0000	438.3166
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7500e-003	1.9600e-003	0.0198	6.0000e-005	6.3500e-003	4.0000e-005	6.4000e-003	1.6900e-003	4.0000e-005	1.7300e-003	0.0000	5.5481	5.5481	1.6000e-004	0.0000	5.5521
Total	**0.0441**	**1.3620**	**0.3769**	**4.4600e-003**	**0.1098**	**4.6900e-003**	**0.1145**	**0.0301**	**4.4900e-003**	**0.0346**	**0.0000**	**442.9315**	**442.9315**	**0.0375**	**0.0000**	**443.8688**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0561	0.0000	0.0561	0.0192	0.0000	0.0192	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0109	0.2125	0.4055	6.9000e-004		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	60.3582	60.3582	0.0195	0.0000	60.8462
Total	**0.0109**	**0.2125**	**0.4055**	**6.9000e-004**	**0.0561**	**1.1300e-003**	**0.0572**	**0.0192**	**1.1300e-003**	**0.0204**	**0.0000**	**60.3582**	**60.3582**	**0.0195**	**0.0000**	**60.8462**

3.5 Ph 1 - Grading - 3 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0414	1.3600	0.3571	4.4000e-003	0.1035	4.6500e-003	0.1081	0.0284	4.4500e-003	0.0329	0.0000	437.3834	437.3834	0.0373	0.0000	438.3166
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7500e-003	1.9600e-003	0.0198	6.0000e-005	6.3500e-003	4.0000e-005	6.4000e-003	1.6900e-003	4.0000e-005	1.7300e-003	0.0000	5.5481	5.5481	1.6000e-004	0.0000	5.5521
Total	**0.0441**	**1.3620**	**0.3769**	**4.4600e-003**	**0.1098**	**4.6900e-003**	**0.1145**	**0.0301**	**4.4900e-003**	**0.0346**	**0.0000**	**442.9315**	**442.9315**	**0.0375**	**0.0000**	**443.8688**

3.6 Ph 1 - Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0804	0.8268	0.9378	1.4600e-003		0.0434	0.0434		0.0399	0.0399	0.0000	128.1503	128.1503	0.0415	0.0000	129.1864
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0853**	**0.8268**	**0.9378**	**1.4600e-003**		**0.0434**	**0.0434**		**0.0399**	**0.0399**	**0.0000**	**128.1503**	**128.1503**	**0.0415**	**0.0000**	**129.1864**

3.6 Ph 1 - Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-003	2.8600e-003	0.0288	9.0000e-005	9.2400e-003	7.0000e-005	9.3000e-003	2.4500e-003	6.0000e-005	2.5200e-003	0.0000	8.0700	8.0700	2.3000e-004	0.0000	8.0758
Total	**4.0000e-003**	**2.8600e-003**	**0.0288**	**9.0000e-005**	**9.2400e-003**	**7.0000e-005**	**9.3000e-003**	**2.4500e-003**	**6.0000e-005**	**2.5200e-003**	**0.0000**	**8.0700**	**8.0700**	**2.3000e-004**	**0.0000**	**8.0758**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0288	0.6635	1.1069	1.4600e-003		0.0152	0.0152		0.0152	0.0152	0.0000	128.1501	128.1501	0.0415	0.0000	129.1863
Paving	4.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0337**	**0.6635**	**1.1069**	**1.4600e-003**		**0.0152**	**0.0152**		**0.0152**	**0.0152**	**0.0000**	**128.1501**	**128.1501**	**0.0415**	**0.0000**	**129.1863**

3.6 Ph 1 - Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-003	2.8600e-003	0.0288	9.0000e-005	9.2400e-003	7.0000e-005	9.3000e-003	2.4500e-003	6.0000e-005	2.5200e-003	0.0000	8.0700	8.0700	2.3000e-004	0.0000	8.0758
Total	**4.0000e-003**	**2.8600e-003**	**0.0288**	**9.0000e-005**	**9.2400e-003**	**7.0000e-005**	**9.3000e-003**	**2.4500e-003**	**6.0000e-005**	**2.5200e-003**	**0.0000**	**8.0700**	**8.0700**	**2.3000e-004**	**0.0000**	**8.0758**

3.7 Ph 1 - Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0140	0.0977	0.1163	1.9000e-004		6.0200e-003	6.0200e-003		6.0200e-003	6.0200e-003	0.0000	16.3408	16.3408	1.1200e-003	0.0000	16.3689
Total	**1.3199**	**0.0977**	**0.1163**	**1.9000e-004**		**6.0200e-003**	**6.0200e-003**		**6.0200e-003**	**6.0200e-003**	**0.0000**	**16.3408**	**16.3408**	**1.1200e-003**	**0.0000**	**16.3689**

3.7 Ph 1 - Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-003	2.8600e-003	0.0288	9.0000e-005	9.2400e-003	7.0000e-005	9.3000e-003	2.4500e-003	6.0000e-005	2.5200e-003	0.0000	8.0700	8.0700	2.3000e-004	0.0000	8.0758
Total	**4.0000e-003**	**2.8600e-003**	**0.0288**	**9.0000e-005**	**9.2400e-003**	**7.0000e-005**	**9.3000e-003**	**2.4500e-003**	**6.0000e-005**	**2.5200e-003**	**0.0000**	**8.0700**	**8.0700**	**2.3000e-004**	**0.0000**	**8.0758**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8000e-003	0.0869	0.1173	1.9000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	16.3408	16.3408	1.1200e-003	0.0000	16.3688
Total	**1.3097**	**0.0869**	**0.1173**	**1.9000e-004**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**16.3408**	**16.3408**	**1.1200e-003**	**0.0000**	**16.3688**

3.7 Ph 1 - Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-003	2.8600e-003	0.0288	9.0000e-005	9.2400e-003	7.0000e-005	9.3000e-003	2.4500e-003	6.0000e-005	2.5200e-003	0.0000	8.0700	8.0700	2.3000e-004	0.0000	8.0758
Total	**4.0000e-003**	**2.8600e-003**	**0.0288**	**9.0000e-005**	**9.2400e-003**	**7.0000e-005**	**9.3000e-003**	**2.4500e-003**	**6.0000e-005**	**2.5200e-003**	**0.0000**	**8.0700**	**8.0700**	**2.3000e-004**	**0.0000**	**8.0758**

3.8 Ph 1 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0851	0.8264	0.9213	1.2500e-003		0.0525	0.0525		0.0483	0.0483	0.0000	109.4520	109.4520	0.0354	0.0000	110.3370
Total	**0.0851**	**0.8264**	**0.9213**	**1.2500e-003**		**0.0525**	**0.0525**		**0.0483**	**0.0483**	**0.0000**	**109.4520**	**109.4520**	**0.0354**	**0.0000**	**110.3370**

3.8 Ph 1 - Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0199	0.6628	0.1768	1.7300e-003	0.0428	1.4000e-003	0.0442	0.0124	1.3400e-003	0.0137	0.0000	168.6288	168.6288	0.0125	0.0000	168.9417
Worker	0.0897	0.0640	0.6446	2.0000e-003	0.2069	1.4600e-003	0.2084	0.0550	1.3500e-003	0.0563	0.0000	180.7348	180.7348	5.1800e-003	0.0000	180.8643
Total	**0.1096**	**0.7268**	**0.8213**	**3.7300e-003**	**0.2497**	**2.8600e-003**	**0.2526**	**0.0673**	**2.6900e-003**	**0.0700**	**0.0000**	**349.3637**	**349.3637**	**0.0177**	**0.0000**	**349.8061**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0280	0.5446	0.9416	1.2500e-003		2.0400e-003	2.0400e-003		2.0400e-003	2.0400e-003	0.0000	109.4519	109.4519	0.0354	0.0000	110.3369
Total	**0.0280**	**0.5446**	**0.9416**	**1.2500e-003**		**2.0400e-003**	**2.0400e-003**		**2.0400e-003**	**2.0400e-003**	**0.0000**	**109.4519**	**109.4519**	**0.0354**	**0.0000**	**110.3369**

3.8 Ph 1 - Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0199	0.6628	0.1768	1.7300e-003	0.0428	1.4000e-003	0.0442	0.0124	1.3400e-003	0.0137	0.0000	168.6288	168.6288	0.0125	0.0000	168.9417
Worker	0.0897	0.0640	0.6446	2.0000e-003	0.2069	1.4600e-003	0.2084	0.0550	1.3500e-003	0.0563	0.0000	180.7348	180.7348	5.1800e-003	0.0000	180.8643
Total	**0.1096**	**0.7268**	**0.8213**	**3.7300e-003**	**0.2497**	**2.8600e-003**	**0.2526**	**0.0673**	**2.6900e-003**	**0.0700**	**0.0000**	**349.3637**	**349.3637**	**0.0177**	**0.0000**	**349.8061**

3.8 Ph 1 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0369	0.3618	0.4494	6.1000e-004		0.0212	0.0212		0.0195	0.0195	0.0000	54.0031	54.0031	0.0175	0.0000	54.4398
Total	**0.0369**	**0.3618**	**0.4494**	**6.1000e-004**		**0.0212**	**0.0212**		**0.0195**	**0.0195**	**0.0000**	**54.0031**	**54.0031**	**0.0175**	**0.0000**	**54.4398**

3.8 Ph 1 - Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.1500e-003	0.3086	0.0825	8.4000e-004	0.0211	6.0000e-004	0.0217	6.0900e-003	5.7000e-004	6.6600e-003	0.0000	82.3506	82.3506	5.9800e-003	0.0000	82.5001
Worker	0.0418	0.0288	0.2950	9.5000e-004	0.1020	7.1000e-004	0.1027	0.0271	6.5000e-004	0.0278	0.0000	85.8400	85.8400	2.3400e-003	0.0000	85.8985
Total	**0.0510**	**0.3374**	**0.3775**	**1.7900e-003**	**0.1231**	**1.3100e-003**	**0.1244**	**0.0332**	**1.2200e-003**	**0.0344**	**0.0000**	**168.1906**	**168.1906**	**8.3200e-003**	**0.0000**	**168.3986**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0138	0.2685	0.4642	6.1000e-004		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	54.0031	54.0031	0.0175	0.0000	54.4397
Total	**0.0138**	**0.2685**	**0.4642**	**6.1000e-004**		**1.0000e-003**	**1.0000e-003**		**1.0000e-003**	**1.0000e-003**	**0.0000**	**54.0031**	**54.0031**	**0.0175**	**0.0000**	**54.4397**

3.8 Ph 1 - Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.1500e-003	0.3086	0.0825	8.4000e-004	0.0211	6.0000e-004	0.0217	6.0900e-003	5.7000e-004	6.6600e-003	0.0000	82.3506	82.3506	5.9800e-003	0.0000	82.5001
Worker	0.0418	0.0288	0.2950	9.5000e-004	0.1020	7.1000e-004	0.1027	0.0271	6.5000e-004	0.0278	0.0000	85.8400	85.8400	2.3400e-003	0.0000	85.8985
Total	**0.0510**	**0.3374**	**0.3775**	**1.7900e-003**	**0.1231**	**1.3100e-003**	**0.1244**	**0.0332**	**1.2200e-003**	**0.0344**	**0.0000**	**168.1906**	**168.1906**	**8.3200e-003**	**0.0000**	**168.3986**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

Integrate Below Market Rate Housing

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6245	2.7086	7.0813	0.0223	1.8380	0.0226	1.8606	0.4922	0.0212	0.5134	0.0000	2,054.9724	2,054.9724	0.1148	0.0000	2,057.8419
Unmitigated	0.6707	3.0095	8.0730	0.0263	2.1880	0.0265	2.2145	0.5860	0.0248	0.6108	0.0000	2,420.6093	2,420.6093	0.1317	0.0000	2,423.9007

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,080.00	1,999.40	1833.00	5,805,403	4,876,674
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	2,080.00	1,999.40	1,833.00	5,805,403	4,876,674

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Non-Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Parking Lot	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Unenclosed Parking Structure	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	284.1399	284.1399	0.0117	2.6500e-003	285.2206
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	284.1399	284.1399	0.0117	2.6500e-003	285.2206
NaturalGas Mitigated	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	103.0707	103.0707	1.9800e-003	1.8900e-003	103.6832
NaturalGas Unmitigated	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	103.0707	103.0707	1.9800e-003	1.8900e-003	103.6832

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.93147e+006	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	103.0707	103.0707	1.9800e-003	1.8900e-003	103.6832
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0104**	**0.0890**	**0.0379**	**5.7000e-004**		**7.2000e-003**	**7.2000e-003**		**7.2000e-003**	**7.2000e-003**	**0.0000**	**103.0707**	**103.0707**	**1.9800e-003**	**1.8900e-003**	**103.6832**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.93147e+006	0.0104	0.0890	0.0379	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003	0.0000	103.0707	103.0707	1.9800e-003	1.8900e-003	103.6832
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0104**	**0.0890**	**0.0379**	**5.7000e-004**		**7.2000e-003**	**7.2000e-003**		**7.2000e-003**	**7.2000e-003**	**0.0000**	**103.0707**	**103.0707**	**1.9800e-003**	**1.8900e-003**	**103.6832**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.04128e+006	253.3322	0.0104	2.3600e-003	254.2957
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	38080	9.2644	3.8000e-004	9.0000e-005	9.2997
Unenclosed Parking Structure	88550	21.5432	8.8000e-004	2.0000e-004	21.6252
Total		**284.1399**	**0.0117**	**2.6500e-003**	**285.2206**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.04128e+006	253.3322	0.0104	2.3600e-003	254.2957
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	38080	9.2644	3.8000e-004	9.0000e-005	9.2997
Unenclosed Parking Structure	88550	21.5432	8.8000e-004	2.0000e-004	21.6252
Total		**284.1399**	**0.0117**	**2.6500e-003**	**285.2206**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4770	0.0223	1.9345	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0500e-003	0.0000	3.2366
Unmitigated	1.4770	0.0223	1.9345	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0500e-003	0.0000	3.2366

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2879					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0585	0.0223	1.9345	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0500e-003	0.0000	3.2366
Total	**1.4770**	**0.0223**	**1.9345**	**1.0000e-004**		**0.0107**	**0.0107**		**0.0107**	**0.0107**	**0.0000**	**3.1603**	**3.1603**	**3.0500e-003**	**0.0000**	**3.2366**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2879					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0585	0.0223	1.9345	1.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	3.1603	3.1603	3.0500e-003	0.0000	3.2366
Total	**1.4770**	**0.0223**	**1.9345**	**1.0000e-004**		**0.0107**	**0.0107**		**0.0107**	**0.0107**	**0.0000**	**3.1603**	**3.1603**	**3.0500e-003**	**0.0000**	**3.2366**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	46.7214	0.0173	0.0103	50.2082
Unmitigated	65.5054	0.0220	0.0129	69.8908

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	16.0085 / 3.37743	65.5054	0.0220	0.0129	69.8908
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**65.5054**	**0.0220**	**0.0129**	**69.8908**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	12.8068 / 0.599455	46.7214	0.0173	0.0103	50.2082
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**46.7214**	**0.0173**	**0.0103**	**50.2082**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.0694	0.3587	0.0000	15.0368
Unmitigated	24.2777	1.4348	0.0000	60.1470

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	119.6	24.2777	1.4348	0.0000	60.1470
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**24.2777**	**1.4348**	**0.0000**	**60.1470**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	29.9	6.0694	0.3587	0.0000	15.0368
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**6.0694**	**0.3587**	**0.0000**	**15.0368**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Solana Highlands - Single Phase Construction Alternative

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	57.37	1000sqft	1.32	57,365.00	0
Other Non-Asphalt Surfaces	1.90	1000sqft	0.04	1,900.00	0
Parking Lot	272.00	Space	2.45	108,800.00	0
Unenclosed Parking Structure	50.60	1000sqft	1.16	50,600.00	0
Apartments Mid Rise	260.00	Dwelling Unit	6.84	326,156.00	744

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS

Land Use - project-specific land uses

Construction Phase - construction schedule per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Trips and VMT - trips per applicant

Demolition - demo quantities per applicant

Grading - grading quantities per applicant

Architectural Coating - SDAPCD Rule 67.0.1

Vehicle Trips - F&P 2016

Woodstoves - no fireplaces

Consumer Products - CalEEMod defaults.

Area Coating - SDAPCD Rule 67.0.1

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - water use per applicant

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - All construction equipment will meet Tier 4 Interim engine standards except air compressors and pavers which will be Tier 3.

Mobile Land Use Mitigation -

Water Mitigation -

Waste Mitigation - AB 341

Solana Highlands - Single Phase Construction Alternative - San Diego County, Summer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	64.00
tblConstructionPhase	NumDays	300.00	321.00
tblConstructionPhase	NumDays	20.00	66.00
tblConstructionPhase	NumDays	30.00	45.00
tblConstructionPhase	NumDays	30.00	45.00
tblConstructionPhase	NumDays	30.00	44.00
tblConstructionPhase	NumDays	20.00	64.00
tblFireplaces	NumberGas	143.00	0.00
tblFireplaces	NumberNoFireplace	26.00	0.00
tblFireplaces	NumberWood	91.00	0.00
tblGrading	AcresOfGrading	56.25	270.00
tblGrading	AcresOfGrading	56.25	112.50
tblGrading	AcresOfGrading	55.00	110.00
tblGrading	MaterialExported	0.00	19,500.00
tblLandUse	LandUseSquareFeet	57,370.00	57,365.00
tblLandUse	LandUseSquareFeet	260,000.00	326,156.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00

tblOffRoadEquipment	UsageHours	8.00	4.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	720.49	536.36
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripNumber	803.00	794.00
tblTripsAndVMT	HaulingTripNumber	2,438.00	7,334.00
tblTripsAndVMT	HaulingTripNumber	0.00	7,334.00
tblTripsAndVMT	HaulingTripNumber	0.00	7,332.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	64.00	60.00
tblTripsAndVMT	WorkerTripNumber	10.00	36.00
tblTripsAndVMT	WorkerTripNumber	15.00	36.00
tblTripsAndVMT	WorkerTripNumber	15.00	36.00
tblTripsAndVMT	WorkerTripNumber	15.00	36.00
tblTripsAndVMT	WorkerTripNumber	30.00	36.00
tblTripsAndVMT	WorkerTripNumber	56.00	36.00
tblTripsAndVMT	WorkerTripNumber	279.00	240.00
tblVehicleTrips	ST_TR	6.39	7.69
tblVehicleTrips	SU_TR	5.86	7.05
tblVehicleTrips	WD_TR	6.65	8.00

tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	16,940,046.66	16,008,460.00
tblWater	OutdoorWaterUseRate	10,679,594.63	3,377,428.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	13.00	0.00
tblWoodstoves	NumberNoncatalytic	13.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.2667	89.2718	33.3643	0.2336	14.4273	1.2989	15.7263	3.7168	1.2036	4.9204	0.0000	25,135.3224	25,135.3224	2.8067	0.0000	25,205.4885
2021	48.2191	111.9684	67.7823	0.2923	87.0944	2.7330	88.2750	22.0693	2.5371	23.1630	0.0000	30,898.5494	30,898.5494	4.3224	0.0000	31,006.6096
2022	1.6493	13.0921	15.8732	0.0466	2.3777	0.4244	2.8021	0.6399	0.3908	1.0307	0.0000	4,737.8005	4,737.8005	0.5355	0.0000	4,751.1874
Maximum	**48.2191**	**111.9684**	**67.7823**	**0.2923**	**87.0944**	**2.7330**	**88.2750**	**22.0693**	**2.5371**	**23.1630**	**0.0000**	**30,898.5494**	**30,898.5494**	**4.3224**	**0.0000**	**31,006.6096**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.5695	74.5042	35.1820	0.2336	9.2381	0.2870	9.5251	2.4235	0.2767	2.7002	0.0000	25,135.3224	25,135.3224	2.8067	0.0000	25,205.4885
2021	44.7179	93.6774	75.5336	0.2923	83.9801	0.9329	84.2388	21.0015	0.9234	21.2511	0.0000	30,898.5494	30,898.5494	4.3224	0.0000	31,006.6096
2022	1.2139	11.3318	16.1531	0.0466	2.3777	0.0433	2.4210	0.6399	0.0418	0.6816	0.0000	4,737.8005	4,737.8005	0.5355	0.0000	4,751.1874
Maximum	**44.7179**	**93.6774**	**75.5336**	**0.2923**	**83.9801**	**0.9329**	**84.2388**	**21.0015**	**0.9234**	**21.2511**	**0.0000**	**30,898.5494**	**30,898.5494**	**4.3224**	**0.0000**	**31,006.6096**

Solana Highlands - Single Phase Construction Alternative - San Diego County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**10.41**	**16.25**	**-8.42**	**0.00**	**7.99**	**71.65**	**9.94**	**8.93**	**69.94**	**15.39**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.4228	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189	0.0000	38.7072	38.7072	0.0374	0.0000	39.6412
Energy	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Mobile	3.9718	16.3650	46.6332	0.1545	12.5942	0.1484	12.7426	3.3663	0.1393	3.5056		15,672.0407	15,672.0407	0.8219		15,692.5875
Total	**12.4516**	**17.1004**	**68.3348**	**0.1588**	**12.5942**	**0.3068**	**12.9009**	**3.3663**	**0.2976**	**3.6639**	**0.0000**	**16,333.3014**	**16,333.3014**	**0.8712**	**0.0114**	**16,358.4818**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.4228	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189	0.0000	38.7072	38.7072	0.0374	0.0000	39.6412
Energy	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Mobile	3.7074	14.7657	40.5923	0.1311	10.5794	0.1268	10.7062	2.8278	0.1189	2.9467		13,303.7690	13,303.7690	0.7143		13,321.6269
Total	**12.1872**	**15.5010**	**62.2940**	**0.1354**	**10.5794**	**0.2851**	**10.8645**	**2.8278**	**0.2773**	**3.1050**	**0.0000**	**13,965.0298**	**13,965.0298**	**0.7636**	**0.0114**	**13,987.5212**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.12**	**9.35**	**8.84**	**14.72**	**16.00**	**7.06**	**15.79**	**16.00**	**6.84**	**15.25**	**0.00**	**14.50**	**14.50**	**12.35**	**0.00**	**14.49**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Ph 1 - Demolition	Demolition	6/1/2020	8/31/2020	5	66	
2	Ph 1 - Grading - 1	Grading	9/1/2020	11/2/2020	5	45	
3	Ph 1 - Grading - 2	Grading	11/3/2020	1/4/2021	5	45	
4	Ph 1 - Grading - 3	Grading	1/5/2021	3/5/2021	5	44	
5	Ph 1 - Paving	Paving	3/1/2021	5/27/2021	5	64	
6	Ph 1 - Architectural Coating	Architectural Coating	3/1/2021	5/27/2021	5	64	
7	Ph 1 - Building Construction	Building Construction	3/6/2021	5/30/2022	5	321	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.97

Residential Indoor: 660,466; Residential Outdoor: 220,155; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 13,120 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Ph 1 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 1 - Demolition	Excavators	1	5.00	158	0.38
Ph 1 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40

Ph 1 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading - 1	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 1	Graders	0	8.00	187	0.41
Ph 1 - Grading - 1	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 1	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 1	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading - 2	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 2	Graders	0	8.00	187	0.41
Ph 1 - Grading - 2	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 2	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 2	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading - 3	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 3	Graders	0	8.00	187	0.41
Ph 1 - Grading - 3	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 3	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 3	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Paving	Pavers	4	8.00	130	0.42
Ph 1 - Paving	Paving Equipment	4	8.00	132	0.36
Ph 1 - Paving	Rollers	4	8.00	80	0.38
Ph 1 - Architectural Coating	Air Compressors	2	6.00	78	0.48
Ph 1 - Building Construction	Cranes	0	7.00	231	0.29
Ph 1 - Building Construction	Forklifts	5	4.00	89	0.20
Ph 1 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 1 - Building Construction	Tractors/Loaders/Backhoes	5	4.00	97	0.37
Ph 1 - Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Ph 1 - Demolition	4	36.00	6.00	794.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 1	6	36.00	0.00	7,334.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 2	6	36.00	0.00	7,334.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 3	6	36.00	0.00	7,332.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Paving	12	36.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Architectural Coating	2	36.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Building Construction	10	240.00	60.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6650	0.0000	2.6650	0.4036	0.0000	0.4036			0.0000			0.0000
Off-Road	1.3374	13.8927	7.3138	0.0133		0.6946	0.6946		0.6390	0.6390		1,290.3008	1,290.3008	0.4173		1,300.7335
Total	**1.3374**	**13.8927**	**7.3138**	**0.0133**	**2.6650**	**0.6946**	**3.3596**	**0.4036**	**0.6390**	**1.0426**		**1,290.3008**	**1,290.3008**	**0.4173**		**1,300.7335**

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1434	4.7802	1.1611	0.0147	0.3467	0.0173	0.3639	0.0950	0.0165	0.1115		1,609.8416	1,609.8416	0.1343		1,613.2000
Vendor	0.0224	0.6766	0.1724	1.6400e-003	0.0406	3.3100e-003	0.0439	0.0117	3.1700e-003	0.0149		176.4241	176.4241	0.0130		176.7494
Worker	0.1321	0.0890	1.0205	3.0400e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		303.3889	303.3889	9.0600e-003		303.6154
Total	**0.2979**	**5.5457**	**2.3539**	**0.0194**	**0.6830**	**0.0226**	**0.7057**	**0.1851**	**0.0216**	**0.2067**		**2,089.6546**	**2,089.6546**	**0.1564**		**2,093.5649**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1993	0.0000	1.1993	0.1816	0.0000	0.1816			0.0000			0.0000
Off-Road	0.2139	4.3481	8.1504	0.0133		0.0218	0.0218		0.0218	0.0218	0.0000	1,290.3008	1,290.3008	0.4173		1,300.7335
Total	**0.2139**	**4.3481**	**8.1504**	**0.0133**	**1.1993**	**0.0218**	**1.2210**	**0.1816**	**0.0218**	**0.2034**	**0.0000**	**1,290.3008**	**1,290.3008**	**0.4173**		**1,300.7335**

3.2 Ph 1 - Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1434	4.7802	1.1611	0.0147	0.3467	0.0173	0.3639	0.0950	0.0165	0.1115		1,609.8416	1,609.8416	0.1343		1,613.2000
Vendor	0.0224	0.6766	0.1724	1.6400e-003	0.0406	3.3100e-003	0.0439	0.0117	3.1700e-003	0.0149		176.4241	176.4241	0.0130		176.7494
Worker	0.1321	0.0890	1.0205	3.0400e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		303.3889	303.3889	9.0600e-003		303.6154
Total	**0.2979**	**5.5457**	**2.3539**	**0.0194**	**0.6830**	**0.0226**	**0.7057**	**0.1851**	**0.0216**	**0.2067**		**2,089.6546**	**2,089.6546**	**0.1564**		**2,093.5649**

3.3 Ph 1 - Grading - 1 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.4349	0.0000	9.4349	2.3514	0.0000	2.3514			0.0000			0.0000
Off-Road	2.1919	24.4246	16.6137	0.0312		1.0631	1.0631		0.9780	0.9780		3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**2.1919**	**24.4246**	**16.6137**	**0.0312**	**9.4349**	**1.0631**	**10.4980**	**2.3514**	**0.9780**	**3.3294**		**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.3 Ph 1 - Grading - 1 - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9427	64.7582	15.7302	0.1993	4.6967	0.2337	4.9304	1.2870	0.2236	1.5106		21,808.9610	21,808.9610	1.8199		21,854.4584
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1321	0.0890	1.0205	3.0400e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		303.3889	303.3889	9.0600e-003		303.6154
Total	**2.0748**	**64.8472**	**16.7506**	**0.2024**	**4.9924**	**0.2358**	**5.2282**	**1.3654**	**0.2255**	**1.5909**		**22,112.3500**	**22,112.3500**	**1.8290**		**22,158.0738**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.2457	0.0000	4.2457	1.0581	0.0000	1.0581			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**4.2457**	**0.0512**	**4.2969**	**1.0581**	**0.0512**	**1.1093**	**0.0000**	**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.3 Ph 1 - Grading - 1 - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9427	64.7582	15.7302	0.1993	4.6967	0.2337	4.9304	1.2870	0.2236	1.5106		21,808.9610	21,808.9610	1.8199		21,854.4584
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1321	0.0890	1.0205	3.0400e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		303.3889	303.3889	9.0600e-003		303.6154
Total	**2.0748**	**64.8472**	**16.7506**	**0.2024**	**4.9924**	**0.2358**	**5.2282**	**1.3654**	**0.2255**	**1.5909**		**22,112.3500**	**22,112.3500**	**1.8290**		**22,158.0738**

3.4 Ph 1 - Grading - 2 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.6623	0.0000	5.6623	1.9414	0.0000	1.9414			0.0000			0.0000
Off-Road	2.1919	24.4246	16.6137	0.0312		1.0631	1.0631		0.9780	0.9780		3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**2.1919**	**24.4246**	**16.6137**	**0.0312**	**5.6623**	**1.0631**	**6.7254**	**1.9414**	**0.9780**	**2.9194**		**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.4 Ph 1 - Grading - 2 - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9427	64.7582	15.7302	0.1993	4.8620	0.2337	5.0958	1.3275	0.2236	1.5512		21,808.9610	21,808.9610	1.8199		21,854.4584
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1321	0.0890	1.0205	3.0400e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		303.3889	303.3889	9.0600e-003		303.6154
Total	**2.0748**	**64.8472**	**16.7506**	**0.2024**	**5.1578**	**0.2358**	**5.3936**	**1.4060**	**0.2255**	**1.6315**		**22,112.3500**	**22,112.3500**	**1.8290**		**22,158.0738**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5480	0.0000	2.5480	0.8736	0.0000	0.8736			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**2.5480**	**0.0512**	**2.5992**	**0.8736**	**0.0512**	**0.9248**	**0.0000**	**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.4 Ph 1 - Grading - 2 - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9427	64.7582	15.7302	0.1993	4.8620	0.2337	5.0958	1.3275	0.2236	1.5512		21,808.9610	21,808.9610	1.8199		21,854.4584
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1321	0.0890	1.0205	3.0400e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		303.3889	303.3889	9.0600e-003		303.6154
Total	**2.0748**	**64.8472**	**16.7506**	**0.2024**	**5.1578**	**0.2358**	**5.3936**	**1.4060**	**0.2255**	**1.6315**		**22,112.3500**	**22,112.3500**	**1.8290**		**22,158.0738**

3.4 Ph 1 - Grading - 2 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.6623	0.0000	5.6623	1.9414	0.0000	1.9414			0.0000			0.0000
Off-Road	2.0651	22.5038	15.9946	0.0312		0.9731	0.9731		0.8953	0.8953		3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**2.0651**	**22.5038**	**15.9946**	**0.0312**	**5.6623**	**0.9731**	**6.6354**	**1.9414**	**0.8953**	**2.8367**		**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.4 Ph 1 - Grading - 2 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8259	59.0054	15.6306	0.1963	81.1364	0.2055	81.3418	20.0494	0.1966	20.2460		21,533.9771	21,533.9771	1.8122		21,579.2816
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1245	0.0809	0.9549	2.9400e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		293.1987	293.1987	8.3700e-003		293.4079
Total	**1.9504**	**59.0863**	**16.5855**	**0.1992**	**81.4321**	**0.2075**	**81.6396**	**20.1279**	**0.1985**	**20.3263**		**21,827.1759**	**21,827.1759**	**1.8206**		**21,872.6895**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5480	0.0000	2.5480	0.8736	0.0000	0.8736			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**2.5480**	**0.0512**	**2.5992**	**0.8736**	**0.0512**	**0.9248**	**0.0000**	**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.4 Ph 1 - Grading - 2 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8259	59.0054	15.6306	0.1963	81.1364	0.2055	81.3418	20.0494	0.1966	20.2460		21,533.9771	21,533.9771	1.8122		21,579.2816
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1245	0.0809	0.9549	2.9400e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		293.1987	293.1987	8.3700e-003		293.4079
Total	**1.9504**	**59.0863**	**16.5855**	**0.1992**	**81.4321**	**0.2075**	**81.6396**	**20.1279**	**0.1985**	**20.3263**		**21,827.1759**	**21,827.1759**	**1.8206**		**21,872.6895**

3.5 Ph 1 - Grading - 3 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.6623	0.0000	5.6623	1.9414	0.0000	1.9414			0.0000			0.0000
Off-Road	2.0651	22.5038	15.9946	0.0312		0.9731	0.9731		0.8953	0.8953		3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**2.0651**	**22.5038**	**15.9946**	**0.0312**	**5.6623**	**0.9731**	**6.6354**	**1.9414**	**0.8953**	**2.8367**		**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.5 Ph 1 - Grading - 3 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8669	60.3300	15.9815	0.2007	4.8021	0.2101	5.0122	1.3158	0.2010	1.5168		22,017.3799	22,017.3799	1.8529		22,063.7013
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1245	0.0809	0.9549	2.9400e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		293.1987	293.1987	8.3700e-003		293.4079
Total	**1.9914**	**60.4109**	**16.9364**	**0.2037**	**5.0978**	**0.2121**	**5.3100**	**1.3943**	**0.2029**	**1.5971**		**22,310.5786**	**22,310.5786**	**1.8612**		**22,357.1092**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5480	0.0000	2.5480	0.8736	0.0000	0.8736			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**2.5480**	**0.0512**	**2.5992**	**0.8736**	**0.0512**	**0.9248**	**0.0000**	**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.5 Ph 1 - Grading - 3 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8669	60.3300	15.9815	0.2007	4.8021	0.2101	5.0122	1.3158	0.2010	1.5168		22,017.3799	22,017.3799	1.8529		22,063.7013
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1245	0.0809	0.9549	2.9400e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		293.1987	293.1987	8.3700e-003		293.4079
Total	**1.9914**	**60.4109**	**16.9364**	**0.2037**	**5.0978**	**0.2121**	**5.3100**	**1.3943**	**0.2029**	**1.5971**		**22,310.5786**	**22,310.5786**	**1.8612**		**22,357.1092**

3.6 Ph 1 - Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5111	25.8382	29.3065	0.0456		1.3555	1.3555		1.2470	1.2470		4,414.4217	4,414.4217	1.4277		4,450.1146
Paving	0.1543					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.6654**	**25.8382**	**29.3065**	**0.0456**		**1.3555**	**1.3555**		**1.2470**	**1.2470**		**4,414.4217**	**4,414.4217**	**1.4277**		**4,450.1146**

3.6 Ph 1 - Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1245	0.0809	0.9549	2.9400e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		293.1987	293.1987	8.3700e-003		293.4079
Total	**0.1245**	**0.0809**	**0.9549**	**2.9400e-003**	**0.2957**	**2.0400e-003**	**0.2978**	**0.0784**	**1.8800e-003**	**0.0803**		**293.1987**	**293.1987**	**8.3700e-003**		**293.4079**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8993	20.7338	34.5913	0.0456		0.4754	0.4754		0.4754	0.4754	0.0000	4,414.4217	4,414.4217	1.4277		4,450.1146
Paving	0.1543					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0536**	**20.7338**	**34.5913**	**0.0456**		**0.4754**	**0.4754**		**0.4754**	**0.4754**	**0.0000**	**4,414.4217**	**4,414.4217**	**1.4277**		**4,450.1146**

3.6 Ph 1 - Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1245	0.0809	0.9549	2.9400e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		293.1987	293.1987	8.3700e-003		293.4079
Total	**0.1245**	**0.0809**	**0.9549**	**2.9400e-003**	**0.2957**	**2.0400e-003**	**0.2978**	**0.0784**	**1.8800e-003**	**0.0803**		**293.1987**	**293.1987**	**8.3700e-003**		**293.4079**

3.7 Ph 1 - Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	40.8103					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4378	3.0537	3.6351	5.9400e-003		0.1882	0.1882		0.1882	0.1882		562.8961	562.8961	0.0386		563.8618
Total	**41.2481**	**3.0537**	**3.6351**	**5.9400e-003**		**0.1882**	**0.1882**		**0.1882**	**0.1882**		**562.8961**	**562.8961**	**0.0386**		**563.8618**

3.7 Ph 1 - Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1245	0.0809	0.9549	2.9400e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		293.1987	293.1987	8.3700e-003		293.4079
Total	**0.1245**	**0.0809**	**0.9549**	**2.9400e-003**	**0.2957**	**2.0400e-003**	**0.2978**	**0.0784**	**1.8800e-003**	**0.0803**		**293.1987**	**293.1987**	**8.3700e-003**		**293.4079**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	40.8103					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0386		563.8618
Total	**40.9292**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0386**		**563.8618**

3.7 Ph 1 - Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1245	0.0809	0.9549	2.9400e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		293.1987	293.1987	8.3700e-003		293.4079
Total	**0.1245**	**0.0809**	**0.9549**	**2.9400e-003**	**0.2957**	**2.0400e-003**	**0.2978**	**0.0784**	**1.8800e-003**	**0.0803**		**293.1987**	**293.1987**	**8.3700e-003**		**293.4079**

3.8 Ph 1 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7915	7.6873	8.5702	0.0116		0.4887	0.4887		0.4496	0.4496		1,122.3273	1,122.3273	0.3630		1,131.4019
Total	**0.7915**	**7.6873**	**8.5702**	**0.0116**		**0.4887**	**0.4887**		**0.4496**	**0.4496**		**1,122.3273**	**1,122.3273**	**0.3630**		**1,131.4019**

3.8 Ph 1 - Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1814	6.1098	1.5570	0.0163	0.4062	0.0128	0.4190	0.1169	0.0123	0.1292		1,748.1117	1,748.1117	0.1249		1,751.2344
Worker	0.8301	0.5393	6.3657	0.0196	1.9715	0.0136	1.9852	0.5230	0.0126	0.5355		1,954.6581	1,954.6581	0.0558		1,956.0527
Total	**1.0116**	**6.6491**	**7.9227**	**0.0359**	**2.3777**	**0.0265**	**2.4042**	**0.6399**	**0.0248**	**0.6647**		**3,702.7698**	**3,702.7698**	**0.1807**		**3,707.2871**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2604	5.0661	8.7591	0.0116		0.0189	0.0189		0.0189	0.0189	0.0000	1,122.3273	1,122.3273	0.3630		1,131.4018
Total	**0.2604**	**5.0661**	**8.7591**	**0.0116**		**0.0189**	**0.0189**		**0.0189**	**0.0189**	**0.0000**	**1,122.3273**	**1,122.3273**	**0.3630**		**1,131.4018**

3.8 Ph 1 - Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1814	6.1098	1.5570	0.0163	0.4062	0.0128	0.4190	0.1169	0.0123	0.1292		1,748.1117	1,748.1117	0.1249		1,751.2344
Worker	0.8301	0.5393	6.3657	0.0196	1.9715	0.0136	1.9852	0.5230	0.0126	0.5355		1,954.6581	1,954.6581	0.0558		1,956.0527
Total	**1.0116**	**6.6491**	**7.9227**	**0.0359**	**2.3777**	**0.0265**	**2.4042**	**0.6399**	**0.0248**	**0.6647**		**3,702.7698**	**3,702.7698**	**0.1807**		**3,707.2871**

3.8 Ph 1 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6958	6.8263	8.4792	0.0116		0.4000	0.4000		0.3680	0.3680		1,123.1744	1,123.1744	0.3633		1,132.2559
Total	**0.6958**	**6.8263**	**8.4792**	**0.0116**		**0.4000**	**0.4000**		**0.3680**	**0.3680**		**1,123.1744**	**1,123.1744**	**0.3633**		**1,132.2559**

3.8 Ph 1 - Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1687	5.7740	1.4746	0.0161	0.4062	0.0110	0.4172	0.1169	0.0106	0.1275		1,731.6827	1,731.6827	0.1211		1,734.7097
Worker	0.7848	0.4918	5.9193	0.0189	1.9715	0.0133	1.9849	0.5230	0.0123	0.5352		1,882.9434	1,882.9434	0.0511		1,884.2218
Total	**0.9535**	**6.2658**	**7.3940**	**0.0350**	**2.3777**	**0.0244**	**2.4021**	**0.6399**	**0.0228**	**0.6627**		**3,614.6261**	**3,614.6261**	**0.1722**		**3,618.9316**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2604	5.0661	8.7591	0.0116		0.0189	0.0189		0.0189	0.0189	0.0000	1,123.1744	1,123.1744	0.3633		1,132.2559
Total	**0.2604**	**5.0661**	**8.7591**	**0.0116**		**0.0189**	**0.0189**		**0.0189**	**0.0189**	**0.0000**	**1,123.1744**	**1,123.1744**	**0.3633**		**1,132.2559**

3.8 Ph 1 - Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1687	5.7740	1.4746	0.0161	0.4062	0.0110	0.4172	0.1169	0.0106	0.1275		1,731.6827	1,731.6827	0.1211		1,734.7097
Worker	0.7848	0.4918	5.9193	0.0189	1.9715	0.0133	1.9849	0.5230	0.0123	0.5352		1,882.9434	1,882.9434	0.0511		1,884.2218
Total	**0.9535**	**6.2658**	**7.3940**	**0.0350**	**2.3777**	**0.0244**	**2.4021**	**0.6399**	**0.0228**	**0.6627**		**3,614.6261**	**3,614.6261**	**0.1722**		**3,618.9316**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

Integrate Below Market Rate Housing

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.7074	14.7657	40.5923	0.1311	10.5794	0.1268	10.7062	2.8278	0.1189	2.9467		13,303.7690	13,303.7690	0.7143		13,321.6269
Unmitigated	3.9718	16.3650	46.6332	0.1545	12.5942	0.1484	12.7426	3.3663	0.1393	3.5056		15,672.0407	15,672.0407	0.8219		15,692.5875

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,080.00	1,999.40	1833.00	5,805,403	4,876,674
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	2,080.00	1,999.40	1,833.00	5,805,403	4,876,674

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Non-Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Parking Lot	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Unenclosed Parking Structure	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
NaturalGas Unmitigated	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5291.71	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0571**	**0.4877**	**0.2075**	**3.1100e-003**		**0.0394**	**0.0394**		**0.0394**	**0.0394**		**622.5536**	**622.5536**	**0.0119**	**0.0114**	**626.2531**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5.29171	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0571**	**0.4877**	**0.2075**	**3.1100e-003**		**0.0394**	**0.0394**		**0.0394**	**0.0394**		**622.5536**	**622.5536**	**0.0119**	**0.0114**	**626.2531**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.4228	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189	0.0000	38.7072	38.7072	0.0374	0.0000	39.6412
Unmitigated	8.4228	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189	0.0000	38.7072	38.7072	0.0374	0.0000	39.6412

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0572					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6500	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189		38.7072	38.7072	0.0374		39.6412
Total	**8.4228**	**0.2477**	**21.4941**	**1.1400e-003**		**0.1189**	**0.1189**		**0.1189**	**0.1189**	**0.0000**	**38.7072**	**38.7072**	**0.0374**	**0.0000**	**39.6412**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0572					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6500	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189		38.7072	38.7072	0.0374		39.6412
Total	**8.4228**	**0.2477**	**21.4941**	**1.1400e-003**		**0.1189**	**0.1189**		**0.1189**	**0.1189**	**0.0000**	**38.7072**	**38.7072**	**0.0374**	**0.0000**	**39.6412**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Solana Highlands - Single Phase Construction Alternative

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	57.37	1000sqft	1.32	57,365.00	0
Other Non-Asphalt Surfaces	1.90	1000sqft	0.04	1,900.00	0
Parking Lot	272.00	Space	2.45	108,800.00	0
Unenclosed Parking Structure	50.60	1000sqft	1.16	50,600.00	0
Apartments Mid Rise	260.00	Dwelling Unit	6.84	326,156.00	744

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	536.36	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS

Land Use - project-specific land uses

Construction Phase - construction schedule per applicant

Off-road Equipment - equipment per applicant

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Off-road Equipment - Based on applicant provided data.

Trips and VMT - trips per applicant

Demolition - demo quantities per applicant

Grading - grading quantities per applicant

Architectural Coating - SDAPCD Rule 67.0.1

Vehicle Trips - F&P 2016

Woodstoves - no fireplaces

Consumer Products - CalEEMod defaults.

Area Coating - SDAPCD Rule 67.0.1

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - water use per applicant

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - All construction equipment will meet Tier 4 Interim engine standards except air compressors and pavers which will be Tier 3.

Mobile Land Use Mitigation -

Water Mitigation -

Waste Mitigation - AB 341

Solana Highlands - Single Phase Construction Alternative - San Diego County, Winter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 3

Solana Highlands - Single Phase Construction Alternative - San Diego County, Winter

tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	64.00
tblConstructionPhase	NumDays	300.00	321.00
tblConstructionPhase	NumDays	20.00	66.00
tblConstructionPhase	NumDays	30.00	45.00
tblConstructionPhase	NumDays	30.00	45.00
tblConstructionPhase	NumDays	30.00	44.00
tblConstructionPhase	NumDays	20.00	64.00
tblFireplaces	NumberGas	143.00	0.00
tblFireplaces	NumberNoFireplace	26.00	0.00
tblFireplaces	NumberWood	91.00	0.00
tblGrading	AcresOfGrading	56.25	270.00
tblGrading	AcresOfGrading	56.25	112.50
tblGrading	AcresOfGrading	55.00	110.00
tblGrading	MaterialExported	0.00	19,500.00
tblLandUse	LandUseSquareFeet	57,370.00	57,365.00
tblLandUse	LandUseSquareFeet	260,000.00	326,156.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00

tblOffRoadEquipment	UsageHours	8.00	4.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	720.49	536.36
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripLength	20.00	33.00
tblTripsAndVMT	HaulingTripNumber	803.00	794.00
tblTripsAndVMT	HaulingTripNumber	2,438.00	7,334.00
tblTripsAndVMT	HaulingTripNumber	0.00	7,334.00
tblTripsAndVMT	HaulingTripNumber	0.00	7,332.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	64.00	60.00
tblTripsAndVMT	WorkerTripNumber	10.00	36.00
tblTripsAndVMT	WorkerTripNumber	15.00	36.00
tblTripsAndVMT	WorkerTripNumber	15.00	36.00
tblTripsAndVMT	WorkerTripNumber	15.00	36.00
tblTripsAndVMT	WorkerTripNumber	30.00	36.00
tblTripsAndVMT	WorkerTripNumber	56.00	36.00
tblTripsAndVMT	WorkerTripNumber	279.00	240.00
tblVehicleTrips	ST_TR	6.39	7.69
tblVehicleTrips	SU_TR	5.86	7.05
tblVehicleTrips	WD_TR	6.65	8.00

tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	16,940,046.66	16,008,460.00
tblWater	OutdoorWaterUseRate	10,679,594.63	3,377,428.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	13.00	0.00
tblWoodstoves	NumberNoncatalytic	13.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.3195	90.4050	33.9402	0.2312	14.4273	1.3019	15.7293	3.7168	1.2065	4.9232	0.0000	24,877.3065	24,877.3065	2.8479	0.0000	24,948.5050
2021	48.3030	112.9942	68.2185	0.2895	87.0944	2.7358	88.2777	22.0693	2.5398	23.1656	0.0000	30,601.1911	30,601.1911	4.3616	0.0000	30,710.2317
2022	1.7658	13.1327	15.6731	0.0450	2.3777	0.4248	2.8026	0.6399	0.3913	1.0312	0.0000	4,577.4516	4,577.4516	0.5400	0.0000	4,590.9502
Maximum	**48.3030**	**112.9942**	**68.2185**	**0.2895**	**87.0944**	**2.7358**	**88.2777**	**22.0693**	**2.5398**	**23.1656**	**0.0000**	**30,601.1911**	**30,601.1911**	**4.3616**	**0.0000**	**30,710.2317**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.6222	75.6374	35.7579	0.2312	9.2381	0.2900	9.5281	2.4235	0.2796	2.7031	0.0000	24,877.3065	24,877.3065	2.8479	0.0000	24,948.5050
2021	44.8017	94.7032	75.9699	0.2895	83.9801	0.9357	84.2415	21.0015	0.9260	21.2537	0.0000	30,601.1911	30,601.1911	4.3616	0.0000	30,710.2317
2022	1.3304	11.3724	15.9530	0.0450	2.3777	0.0438	2.4215	0.6399	0.0422	0.6821	0.0000	4,577.4516	4,577.4516	0.5400	0.0000	4,590.9502
Maximum	**44.8017**	**94.7032**	**75.9699**	**0.2895**	**83.9801**	**0.9357**	**84.2415**	**21.0015**	**0.9260**	**21.2537**	**0.0000**	**30,601.1911**	**30,601.1911**	**4.3616**	**0.0000**	**30,710.2317**

Solana Highlands - Single Phase Construction Alternative - San Diego County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**10.36**	**16.08**	**-8.36**	**0.00**	**7.99**	**71.55**	**9.94**	**8.93**	**69.84**	**15.39**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.4228	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189	0.0000	38.7072	38.7072	0.0374	0.0000	39.6412
Energy	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Mobile	3.8652	16.8727	45.8971	0.1465	12.5942	0.1494	12.7436	3.3663	0.1402	3.5065		14,860.9429	14,860.9429	0.8240		14,881.5419
Total	**12.3450**	**17.6081**	**67.5987**	**0.1507**	**12.5942**	**0.3077**	**12.9019**	**3.3663**	**0.2986**	**3.6649**	**0.0000**	**15,522.2036**	**15,522.2036**	**0.8733**	**0.0114**	**15,547.4362**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.4228	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189	0.0000	38.7072	38.7072	0.0374	0.0000	39.6412
Energy	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Mobile	3.6057	15.1758	40.3705	0.1243	10.5794	0.1278	10.7072	2.8278	0.1199	2.9476		12,610.8346	12,610.8346	0.7197		12,628.8274
Total	**12.0856**	**15.9111**	**62.0721**	**0.1285**	**10.5794**	**0.2861**	**10.8655**	**2.8278**	**0.2782**	**3.1060**	**0.0000**	**13,272.0953**	**13,272.0953**	**0.7690**	**0.0114**	**13,294.7216**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.10**	**9.64**	**8.18**	**14.72**	**16.00**	**7.04**	**15.78**	**16.00**	**6.82**	**15.25**	**0.00**	**14.50**	**14.50**	**11.94**	**0.00**	**14.49**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Ph 1 - Demolition	Demolition	6/1/2020	8/31/2020	5	66	
2	Ph 1 - Grading - 1	Grading	9/1/2020	11/2/2020	5	45	
3	Ph 1 - Grading - 2	Grading	11/3/2020	1/4/2021	5	45	
4	Ph 1 - Grading - 3	Grading	1/5/2021	3/5/2021	5	44	
5	Ph 1 - Paving	Paving	3/1/2021	5/27/2021	5	64	
6	Ph 1 - Architectural Coating	Architectural Coating	3/1/2021	5/27/2021	5	64	
7	Ph 1 - Building Construction	Building Construction	3/6/2021	5/30/2022	5	321	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.97

Residential Indoor: 660,466; Residential Outdoor: 220,155; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 13,120 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Ph 1 - Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Ph 1 - Demolition	Excavators	1	5.00	158	0.38
Ph 1 - Demolition	Rubber Tired Dozers	2	4.00	247	0.40

Ph 1 - Demolition	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading - 1	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 1	Graders	0	8.00	187	0.41
Ph 1 - Grading - 1	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 1	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 1	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading - 2	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 2	Graders	0	8.00	187	0.41
Ph 1 - Grading - 2	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 2	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 2	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Grading - 3	Excavators	2	5.00	158	0.38
Ph 1 - Grading - 3	Graders	0	8.00	187	0.41
Ph 1 - Grading - 3	Rubber Tired Dozers	1	4.00	247	0.40
Ph 1 - Grading - 3	Scrapers	2	5.00	367	0.48
Ph 1 - Grading - 3	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Ph 1 - Paving	Pavers	4	8.00	130	0.42
Ph 1 - Paving	Paving Equipment	4	8.00	132	0.36
Ph 1 - Paving	Rollers	4	8.00	80	0.38
Ph 1 - Architectural Coating	Air Compressors	2	6.00	78	0.48
Ph 1 - Building Construction	Cranes	0	7.00	231	0.29
Ph 1 - Building Construction	Forklifts	5	4.00	89	0.20
Ph 1 - Building Construction	Generator Sets	0	8.00	84	0.74
Ph 1 - Building Construction	Tractors/Loaders/Backhoes	5	4.00	97	0.37
Ph 1 - Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Solana Highlands - Single Phase Construction Alternative - San Diego County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Ph 1 - Demolition	4	36.00	6.00	794.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 1	6	36.00	0.00	7,334.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 2	6	36.00	0.00	7,334.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Grading - 3	6	36.00	0.00	7,332.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Paving	12	36.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Architectural Coating	2	36.00	0.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT
Ph 1 - Building Construction	10	240.00	60.00	0.00	10.80	7.30	33.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6650	0.0000	2.6650	0.4036	0.0000	0.4036			0.0000			0.0000
Off-Road	1.3374	13.8927	7.3138	0.0133		0.6946	0.6946		0.6390	0.6390		1,290.3008	1,290.3008	0.4173		1,300.7335
Total	**1.3374**	**13.8927**	**7.3138**	**0.0133**	**2.6650**	**0.6946**	**3.3596**	**0.4036**	**0.6390**	**1.0426**		**1,290.3008**	**1,290.3008**	**0.4173**		**1,300.7335**

3.2 Ph 1 - Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1460	4.8630	1.2080	0.0146	0.3467	0.0175	0.3642	0.0950	0.0167	0.1117		1,592.1676	1,592.1676	0.1374		1,595.6031
Vendor	0.0235	0.6760	0.1913	1.6000e-003	0.0406	3.3700e-003	0.0440	0.0117	3.2300e-003	0.0149		171.8773	171.8773	0.0138		172.2231
Worker	0.1496	0.0999	0.9621	2.8600e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		284.8075	284.8075	8.5700e-003		285.0219
Total	**0.3191**	**5.6390**	**2.3613**	**0.0190**	**0.6830**	**0.0229**	**0.7060**	**0.1851**	**0.0219**	**0.2070**		**2,048.8525**	**2,048.8525**	**0.1598**		**2,052.8481**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1993	0.0000	1.1993	0.1816	0.0000	0.1816			0.0000			0.0000
Off-Road	0.2139	4.3481	8.1504	0.0133		0.0218	0.0218		0.0218	0.0218	0.0000	1,290.3008	1,290.3008	0.4173		1,300.7335
Total	**0.2139**	**4.3481**	**8.1504**	**0.0133**	**1.1993**	**0.0218**	**1.2210**	**0.1816**	**0.0218**	**0.2034**	**0.0000**	**1,290.3008**	**1,290.3008**	**0.4173**		**1,300.7335**

3.2 Ph 1 - Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1460	4.8630	1.2080	0.0146	0.3467	0.0175	0.3642	0.0950	0.0167	0.1117		1,592.1676	1,592.1676	0.1374		1,595.6031
Vendor	0.0235	0.6760	0.1913	1.6000e-003	0.0406	3.3700e-003	0.0440	0.0117	3.2300e-003	0.0149		171.8773	171.8773	0.0138		172.2231
Worker	0.1496	0.0999	0.9621	2.8600e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		284.8075	284.8075	8.5700e-003		285.0219
Total	**0.3191**	**5.6390**	**2.3613**	**0.0190**	**0.6830**	**0.0229**	**0.7060**	**0.1851**	**0.0219**	**0.2070**		**2,048.8525**	**2,048.8525**	**0.1598**		**2,052.8481**

3.3 Ph 1 - Grading - 1 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.4349	0.0000	9.4349	2.3514	0.0000	2.3514			0.0000			0.0000
Off-Road	2.1919	24.4246	16.6137	0.0312		1.0631	1.0631		0.9780	0.9780		3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**2.1919**	**24.4246**	**16.6137**	**0.0312**	**9.4349**	**1.0631**	**10.4980**	**2.3514**	**0.9780**	**3.3294**		**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.3 Ph 1 - Grading - 1 - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9780	65.8805	16.3644	0.1971	4.6967	0.2368	4.9334	1.2870	0.2265	1.5135		21,569.5266	21,569.5266	1.8617		21,616.0684
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1496	0.0999	0.9621	2.8600e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		284.8075	284.8075	8.5700e-003		285.0219
Total	**2.1276**	**65.9804**	**17.3265**	**0.2000**	**4.9924**	**0.2388**	**5.2312**	**1.3654**	**0.2284**	**1.5938**		**21,854.3341**	**21,854.3341**	**1.8702**		**21,901.0903**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.2457	0.0000	4.2457	1.0581	0.0000	1.0581			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**4.2457**	**0.0512**	**4.2969**	**1.0581**	**0.0512**	**1.1093**	**0.0000**	**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.3 Ph 1 - Grading - 1 - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9780	65.8805	16.3644	0.1971	4.6967	0.2368	4.9334	1.2870	0.2265	1.5135		21,569.5266	21,569.5266	1.8617		21,616.0684
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1496	0.0999	0.9621	2.8600e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		284.8075	284.8075	8.5700e-003		285.0219
Total	**2.1276**	**65.9804**	**17.3265**	**0.2000**	**4.9924**	**0.2388**	**5.2312**	**1.3654**	**0.2284**	**1.5938**		**21,854.3341**	**21,854.3341**	**1.8702**		**21,901.0903**

3.4 Ph 1 - Grading - 2 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.6623	0.0000	5.6623	1.9414	0.0000	1.9414			0.0000			0.0000
Off-Road	2.1919	24.4246	16.6137	0.0312		1.0631	1.0631		0.9780	0.9780		3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**2.1919**	**24.4246**	**16.6137**	**0.0312**	**5.6623**	**1.0631**	**6.7254**	**1.9414**	**0.9780**	**2.9194**		**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.4 Ph 1 - Grading - 2 - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9780	65.8805	16.3644	0.1971	4.8620	0.2368	5.0988	1.3275	0.2265	1.5541		21,569.5266	21,569.5266	1.8617		21,616.0684
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1496	0.0999	0.9621	2.8600e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		284.8075	284.8075	8.5700e-003		285.0219
Total	**2.1276**	**65.9804**	**17.3265**	**0.2000**	**5.1578**	**0.2388**	**5.3966**	**1.4060**	**0.2284**	**1.6344**		**21,854.3341**	**21,854.3341**	**1.8702**		**21,901.0903**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5480	0.0000	2.5480	0.8736	0.0000	0.8736			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,022.9724	3,022.9724	0.9777		3,047.4147
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**2.5480**	**0.0512**	**2.5992**	**0.8736**	**0.0512**	**0.9248**	**0.0000**	**3,022.9724**	**3,022.9724**	**0.9777**		**3,047.4147**

3.4 Ph 1 - Grading - 2 - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9780	65.8805	16.3644	0.1971	4.8620	0.2368	5.0988	1.3275	0.2265	1.5541		21,569.5266	21,569.5266	1.8617		21,616.0684
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1496	0.0999	0.9621	2.8600e-003	0.2957	2.0800e-003	0.2978	0.0784	1.9100e-003	0.0804		284.8075	284.8075	8.5700e-003		285.0219
Total	**2.1276**	**65.9804**	**17.3265**	**0.2000**	**5.1578**	**0.2388**	**5.3966**	**1.4060**	**0.2284**	**1.6344**		**21,854.3341**	**21,854.3341**	**1.8702**		**21,901.0903**

3.4 Ph 1 - Grading - 2 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.6623	0.0000	5.6623	1.9414	0.0000	1.9414			0.0000			0.0000
Off-Road	2.0651	22.5038	15.9946	0.0312		0.9731	0.9731		0.8953	0.8953		3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**2.0651**	**22.5038**	**15.9946**	**0.0312**	**5.6623**	**0.9731**	**6.6354**	**1.9414**	**0.8953**	**2.8367**		**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.4 Ph 1 - Grading - 2 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8589	59.9797	16.2254	0.1941	81.1364	0.2082	81.3445	20.0494	0.1992	20.2486		21,295.8493	21,295.8493	1.8519		21,342.1463
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1412	0.0908	0.8976	2.7600e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		275.2371	275.2371	7.9100e-003		275.4348
Total	**2.0001**	**60.0705**	**17.1229**	**0.1969**	**81.4321**	**0.2102**	**81.6423**	**20.1279**	**0.2010**	**20.3289**		**21,571.0864**	**21,571.0864**	**1.8598**		**21,617.5811**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5480	0.0000	2.5480	0.8736	0.0000	0.8736			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**2.5480**	**0.0512**	**2.5992**	**0.8736**	**0.0512**	**0.9248**	**0.0000**	**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.4 Ph 1 - Grading - 2 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8589	59.9797	16.2254	0.1941	81.1364	0.2082	81.3445	20.0494	0.1992	20.2486		21,295.8493	21,295.8493	1.8519		21,342.1463
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1412	0.0908	0.8976	2.7600e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		275.2371	275.2371	7.9100e-003		275.4348
Total	**2.0001**	**60.0705**	**17.1229**	**0.1969**	**81.4321**	**0.2102**	**81.6423**	**20.1279**	**0.2010**	**20.3289**		**21,571.0864**	**21,571.0864**	**1.8598**		**21,617.5811**

3.5 Ph 1 - Grading - 3 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.6623	0.0000	5.6623	1.9414	0.0000	1.9414			0.0000			0.0000
Off-Road	2.0651	22.5038	15.9946	0.0312		0.9731	0.9731		0.8953	0.8953		3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**2.0651**	**22.5038**	**15.9946**	**0.0312**	**5.6623**	**0.9731**	**6.6354**	**1.9414**	**0.8953**	**2.8367**		**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.5 Ph 1 - Grading - 3 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9007	61.3261	16.5896	0.1985	4.8021	0.2128	5.0150	1.3158	0.2036	1.5195		21,773.9064	21,773.9064	1.8935		21,821.2428
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1412	0.0908	0.8976	2.7600e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		275.2371	275.2371	7.9100e-003		275.4348
Total	**2.0419**	**61.4169**	**17.4872**	**0.2012**	**5.0978**	**0.2149**	**5.3127**	**1.3943**	**0.2055**	**1.5998**		**22,049.1435**	**22,049.1435**	**1.9014**		**22,096.6776**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5480	0.0000	2.5480	0.8736	0.0000	0.8736			0.0000			0.0000
Off-Road	0.4946	9.6570	18.4314	0.0312		0.0512	0.0512		0.0512	0.0512	0.0000	3,024.2555	3,024.2555	0.9781		3,048.7081
Total	**0.4946**	**9.6570**	**18.4314**	**0.0312**	**2.5480**	**0.0512**	**2.5992**	**0.8736**	**0.0512**	**0.9248**	**0.0000**	**3,024.2555**	**3,024.2555**	**0.9781**		**3,048.7081**

3.5 Ph 1 - Grading - 3 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9007	61.3261	16.5896	0.1985	4.8021	0.2128	5.0150	1.3158	0.2036	1.5195		21,773.9064	21,773.9064	1.8935		21,821.2428
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1412	0.0908	0.8976	2.7600e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		275.2371	275.2371	7.9100e-003		275.4348
Total	**2.0419**	**61.4169**	**17.4872**	**0.2012**	**5.0978**	**0.2149**	**5.3127**	**1.3943**	**0.2055**	**1.5998**		**22,049.1435**	**22,049.1435**	**1.9014**		**22,096.6776**

3.6 Ph 1 - Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5111	25.8382	29.3065	0.0456		1.3555	1.3555		1.2470	1.2470		4,414.4217	4,414.4217	1.4277		4,450.1146
Paving	0.1543					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.6654**	**25.8382**	**29.3065**	**0.0456**		**1.3555**	**1.3555**		**1.2470**	**1.2470**		**4,414.4217**	**4,414.4217**	**1.4277**		**4,450.1146**

3.6 Ph 1 - Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1412	0.0908	0.8976	2.7600e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		275.2371	275.2371	7.9100e-003		275.4348
Total	**0.1412**	**0.0908**	**0.8976**	**2.7600e-003**	**0.2957**	**2.0400e-003**	**0.2978**	**0.0784**	**1.8800e-003**	**0.0803**		**275.2371**	**275.2371**	**7.9100e-003**		**275.4348**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8993	20.7338	34.5913	0.0456		0.4754	0.4754		0.4754	0.4754	0.0000	4,414.4217	4,414.4217	1.4277		4,450.1146
Paving	0.1543					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0536**	**20.7338**	**34.5913**	**0.0456**		**0.4754**	**0.4754**		**0.4754**	**0.4754**	**0.0000**	**4,414.4217**	**4,414.4217**	**1.4277**		**4,450.1146**

3.6 Ph 1 - Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1412	0.0908	0.8976	2.7600e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		275.2371	275.2371	7.9100e-003		275.4348
Total	**0.1412**	**0.0908**	**0.8976**	**2.7600e-003**	**0.2957**	**2.0400e-003**	**0.2978**	**0.0784**	**1.8800e-003**	**0.0803**		**275.2371**	**275.2371**	**7.9100e-003**		**275.4348**

3.7 Ph 1 - Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	40.8103					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4378	3.0537	3.6351	5.9400e-003		0.1882	0.1882		0.1882	0.1882		562.8961	562.8961	0.0386		563.8618
Total	**41.2481**	**3.0537**	**3.6351**	**5.9400e-003**		**0.1882**	**0.1882**		**0.1882**	**0.1882**		**562.8961**	**562.8961**	**0.0386**		**563.8618**

3.7 Ph 1 - Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1412	0.0908	0.8976	2.7600e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		275.2371	275.2371	7.9100e-003		275.4348
Total	**0.1412**	**0.0908**	**0.8976**	**2.7600e-003**	**0.2957**	**2.0400e-003**	**0.2978**	**0.0784**	**1.8800e-003**	**0.0803**		**275.2371**	**275.2371**	**7.9100e-003**		**275.4348**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	40.8103					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0386		563.8618
Total	**40.9292**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0386**		**563.8618**

3.7 Ph 1 - Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1412	0.0908	0.8976	2.7600e-003	0.2957	2.0400e-003	0.2978	0.0784	1.8800e-003	0.0803		275.2371	275.2371	7.9100e-003		275.4348
Total	**0.1412**	**0.0908**	**0.8976**	**2.7600e-003**	**0.2957**	**2.0400e-003**	**0.2978**	**0.0784**	**1.8800e-003**	**0.0803**		**275.2371**	**275.2371**	**7.9100e-003**		**275.4348**

3.8 Ph 1 - Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7915	7.6873	8.5702	0.0116		0.4887	0.4887		0.4496	0.4496		1,122.3273	1,122.3273	0.3630		1,131.4019
Total	**0.7915**	**7.6873**	**8.5702**	**0.0116**		**0.4887**	**0.4887**		**0.4496**	**0.4496**		**1,122.3273**	**1,122.3273**	**0.3630**		**1,131.4019**

3.8 Ph 1 - Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1913	6.0935	1.7337	0.0158	0.4062	0.0134	0.4195	0.1169	0.0128	0.1297		1,702.9158	1,702.9158	0.1327		1,706.2324
Worker	0.9414	0.6054	5.9838	0.0184	1.9715	0.0136	1.9852	0.5230	0.0126	0.5355		1,834.9142	1,834.9142	0.0527		1,836.2321
Total	**1.1326**	**6.6989**	**7.7175**	**0.0343**	**2.3777**	**0.0270**	**2.4047**	**0.6399**	**0.0253**	**0.6652**		**3,537.8300**	**3,537.8300**	**0.1854**		**3,542.4645**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2604	5.0661	8.7591	0.0116		0.0189	0.0189		0.0189	0.0189	0.0000	1,122.3273	1,122.3273	0.3630		1,131.4018
Total	**0.2604**	**5.0661**	**8.7591**	**0.0116**		**0.0189**	**0.0189**		**0.0189**	**0.0189**	**0.0000**	**1,122.3273**	**1,122.3273**	**0.3630**		**1,131.4018**

3.8 Ph 1 - Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1913	6.0935	1.7337	0.0158	0.4062	0.0134	0.4195	0.1169	0.0128	0.1297		1,702.9158	1,702.9158	0.1327		1,706.2324
Worker	0.9414	0.6054	5.9838	0.0184	1.9715	0.0136	1.9852	0.5230	0.0126	0.5355		1,834.9142	1,834.9142	0.0527		1,836.2321
Total	**1.1326**	**6.6989**	**7.7175**	**0.0343**	**2.3777**	**0.0270**	**2.4047**	**0.6399**	**0.0253**	**0.6652**		**3,537.8300**	**3,537.8300**	**0.1854**		**3,542.4645**

3.8 Ph 1 - Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6958	6.8263	8.4792	0.0116		0.4000	0.4000		0.3680	0.3680		1,123.1744	1,123.1744	0.3633		1,132.2559
Total	**0.6958**	**6.8263**	**8.4792**	**0.0116**		**0.4000**	**0.4000**		**0.3680**	**0.3680**		**1,123.1744**	**1,123.1744**	**0.3633**		**1,132.2559**

3.8 Ph 1 - Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1779	5.7544	1.6415	0.0157	0.4062	0.0115	0.4177	0.1169	0.0110	0.1279		1,686.6157	1,686.6157	0.1284		1,689.8264
Worker	0.8921	0.5519	5.5524	0.0177	1.9715	0.0133	1.9849	0.5230	0.0123	0.5352		1,767.6614	1,767.6614	0.0483		1,768.8680
Total	**1.0700**	**6.3063**	**7.1939**	**0.0334**	**2.3777**	**0.0248**	**2.4026**	**0.6399**	**0.0233**	**0.6632**		**3,454.2771**	**3,454.2771**	**0.1767**		**3,458.6944**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2604	5.0661	8.7591	0.0116		0.0189	0.0189		0.0189	0.0189	0.0000	1,123.1744	1,123.1744	0.3633		1,132.2559
Total	**0.2604**	**5.0661**	**8.7591**	**0.0116**		**0.0189**	**0.0189**		**0.0189**	**0.0189**	**0.0000**	**1,123.1744**	**1,123.1744**	**0.3633**		**1,132.2559**

3.8 Ph 1 - Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1779	5.7544	1.6415	0.0157	0.4062	0.0115	0.4177	0.1169	0.0110	0.1279		1,686.6157	1,686.6157	0.1284		1,689.8264
Worker	0.8921	0.5519	5.5524	0.0177	1.9715	0.0133	1.9849	0.5230	0.0123	0.5352		1,767.6614	1,767.6614	0.0483		1,768.8680
Total	**1.0700**	**6.3063**	**7.1939**	**0.0334**	**2.3777**	**0.0248**	**2.4026**	**0.6399**	**0.0233**	**0.6632**		**3,454.2771**	**3,454.2771**	**0.1767**		**3,458.6944**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

Integrate Below Market Rate Housing

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.6057	15.1758	40.3705	0.1243	10.5794	0.1278	10.7072	2.8278	0.1199	2.9476		12,610.8346	12,610.8346	0.7197		12,628.8274
Unmitigated	3.8652	16.8727	45.8971	0.1465	12.5942	0.1494	12.7436	3.3663	0.1402	3.5065		14,860.9429	14,860.9429	0.8240		14,881.5419

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,080.00	1,999.40	1833.00	5,805,403	4,876,674
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	2,080.00	1,999.40	1,833.00	5,805,403	4,876,674

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Other Non-Asphalt Surfaces	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Parking Lot	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Unenclosed Parking Structure	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
NaturalGas Unmitigated	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5291.71	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0571**	**0.4877**	**0.2075**	**3.1100e-003**		**0.0394**	**0.0394**		**0.0394**	**0.0394**		**622.5536**	**622.5536**	**0.0119**	**0.0114**	**626.2531**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5.29171	0.0571	0.4877	0.2075	3.1100e-003		0.0394	0.0394		0.0394	0.0394		622.5536	622.5536	0.0119	0.0114	626.2531
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0571**	**0.4877**	**0.2075**	**3.1100e-003**		**0.0394**	**0.0394**		**0.0394**	**0.0394**		**622.5536**	**622.5536**	**0.0119**	**0.0114**	**626.2531**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.4228	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189	0.0000	38.7072	38.7072	0.0374	0.0000	39.6412
Unmitigated	8.4228	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189	0.0000	38.7072	38.7072	0.0374	0.0000	39.6412

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0572					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6500	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189		38.7072	38.7072	0.0374		39.6412
Total	**8.4228**	**0.2477**	**21.4941**	**1.1400e-003**		**0.1189**	**0.1189**		**0.1189**	**0.1189**	**0.0000**	**38.7072**	**38.7072**	**0.0374**	**0.0000**	**39.6412**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0572					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6500	0.2477	21.4941	1.1400e-003		0.1189	0.1189		0.1189	0.1189		38.7072	38.7072	0.0374		39.6412
Total	**8.4228**	**0.2477**	**21.4941**	**1.1400e-003**		**0.1189**	**0.1189**		**0.1189**	**0.1189**	**0.0000**	**38.7072**	**38.7072**	**0.0374**	**0.0000**	**39.6412**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX G

Cultural Resources Study

ASM affiliates
archaeology
history
ethnography
architectural history

September 16, 2014

John La Raia
HG Fenton Company
7577 Mission Valley Road, Suite 200
San Diego, CA 92108

Re: Negative Cultural Resources Study for the Revitalizing Solana Highlands EIR, Solana Beach, California

Dear Mr. La Raia,

This report presents the results of a cultural resources study conducted by ASM Affiliates, Inc., (ASM) for the EIR on the proposed redevelopment of the 13.41-acre Solana Highlands property. The project is located within the city of Solana Beach, San Diego County, California (Figure 1). The project area is shown on the 7.5 USGS Del Mar quadrangle in Section 2 of Township 14 South and Range 4 West (Figure 2).

This study was performed in accordance with the California Environmental Quality Act (CEQA) to determine the presence or absence of potentially significant prehistoric and historic resources within the project's Area of Potential Effects (APE). It consisted of a review of all relevant site records and reports on file with the South Coastal Information Center (SCIC) of the California Historical Resources Information System (CHRIS) at San Diego State University within a 0.25-mi. search radius, a pedestrian survey of the APE, and a review of the Sacred Lands File held by the Native American Heritage Commission (NAHC).

The entirety of the property has been previously developed, and no historical or archaeological resources were identified within the APE during ASM's study through either the records searches or the pedestrian survey.

This report includes the results of the study, as well as a brief historic background sketch for the area and archaeological recommendations.

Project Description

H. G. Fenton is proposing to redevelop a 13.41-acre site that is currently developed with 194 garden-style apartments and associated surface parking. The site will be redeveloped with 260 new apartments, parking, a separate leasing facility/club house building, recreational amenities, a system of internal and interconnected paths and landscaping throughout. The project is located on parcels 298-260-33-00, 298-164-22-00, and 298-281-10-00.

Corporate: 2034 Corte Del Nogal, Carlsbad, CA 92011 • (760) 804-5757 • Fax: (760) 804-5755
Office Locations: Pasadena & Tehachapi, CA • Boise, ID • Reno & Las Vegas, NV • Salt Lake City, UT
Stanwood & Spokane, WA • Cheyenne, WY • Hilo, HI
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City of Solana Beach

Cultural Setting

Prehistory

Archaeological fieldwork along the southern California coast has documented a diverse range of human occupation extending from the early Holocene into the Ethnohistoric period (Erlandson and Colten 1991; Jones 1992; Moratto 1984). A variety of different regional chronologies, often with overlapping terminology, have been used in coastal southern California, and they vary from region to region (Moratto 1984). Today, the prehistory of San Diego County is generally divided into three major temporal periods: Paleo-Indian, Archaic, and Late Prehistoric. These time periods are characterized by patterns in material culture that are thought to represent distinct regional trends in the economic and social organization of prehistoric groups. In addition, particular scholars referring to specific areas utilize a number of cultural terms synonymously with these temporal labels: San Dieguito for Paleo-Indian, La Jolla for Archaic, and Yuman or Cuyamaca for Late Prehistoric (Meighan 1959; Moriarty 1966; Rogers 1939, 1945; True 1966, 1970; Wallace 1978; Warren 1964).

Paleo-Indian Period

The antiquity of human occupation in the New World has been the subject of considerable debate over the last few decades. The most widely accepted model currently is that humans first entered the western hemisphere between 12,000 and 15,000 years ago. While there is no firm evidence of human occupation in coastal southern California prior to 12,000 B.P., dates as early as 23,000 B.P. and even 48,000 B.P. have been reported (Bada et al. 1974; Carter 1980; Rogers 1974). The amino acid racemization technique used to date these sites has been largely discredited, however, by more recent accelerator radiocarbon dating of early human remains along the California coast (Taylor et al. 1985). Despite intense interest and a long history of research, no widely accepted evidence of human occupation of North America dating prior to 15,000 B.P. has emerged.

As in most of North America, the earliest recognized period of California prehistory is termed Paleo-Indian. In southern California, this period is usually considered to date from at least as early as 10,000 B.P. until 8500 to 7200 B.P. (Moratto 1984; Warren et al. 2008), and is represented by what is known as the San Dieguito complex (Rogers 1966). Within the local classificatory system, San Dieguito assemblages are composed almost entirely of flaked stone tools, including scrapers, choppers, and large projectile points (Warren 1987; Warren et al. 2008).

Archaic Period

The Archaic period (also referred to as the Early Milling period) extends back at least 7,200 years, possibly to as early as 9000 B.P. (Moratto 1984; Rogers 1966; Warren et al. 2008). Archaic subsistence is generally considered to have differed from Paleo-Indian subsistence in two major ways. First, gathering activities were emphasized over hunting, with shellfish and seed collecting having a high importance. Second, milling technology, frequently employing portable ground stone slabs, was developed. The shift from a mostly interior-based subsistence focus to a littoral focus is traditionally held to mark the transition from the Paleo-Indian period to the Archaic period. In reality, the implications of this transition are poorly understood from both an economic and a cultural standpoint (see Warren et al. 2008 for an excellent review).

Early Archaic occupations in San Diego County are most apparent along the coast and the major drainage systems that extend inland from the coastal plains (Moratto 1984). Coastal Archaic sites are characterized by cobble tools, basin metates, manos, discoidals, a small number of "Pinto" and "Elko" series dart points, and flexed burials. Together, these elements typify what is termed the La Jolla complex in San Diego County, which appears as the early coastal manifestation of a more diversified way of life.

Late Prehistoric Period

In his overview of later San Diego prehistory, Malcolm Rogers (1945) hypothesized that around 2000 B.P., Yuman-speaking people from the Colorado River region began migrating into western portions of southern California. This hypothesis was based primarily on patterns of material culture in archaeological contexts and his reading of historical linguistics. This "Yuman invasion" is still commonly cited in the literature, but some later linguistic studies suggest that the movement may have actually been northward from Baja California (Griset 1996).

Assemblages derived from Late Prehistoric sites in San Diego County differ in many ways from those in the Archaic tradition. The occurrence of small, pressure-flaked projectile points, the replacement of flexed inhumations with cremations, the introduction of ceramics, and an emphasis on inland plant food collection, processing, and storage (especially acorns) are some of the cultural patterns that were well established by the second millennium A.D. The centralized and seasonally permanent residential patterns that had begun to emerge during the Archaic period became well established in most areas. Inland semisedentary villages appeared along major watercourses in the foothills and in montane valleys where seasonal exploitation of acorns and piñon nuts was common, resulting in permanent milling stations on bedrock outcrops. Mortars for acorn processing increased in frequency relative to seed-grinding basins.

Ethnohistoric Period

In ethnohistoric times, two main cultural groups occupied San Diego County: the Uto-Aztecan-speaking Luiseño in the north and the Kumeyaay, Ipai/Tipai or Diegueño in the south. Traditionally, Luiseño territory encompassed an area from roughly Agua Hedionda on the coast, east to Lake Henshaw, north into Riverside County, and west through San Juan Capistrano to the coast (Bean and Shipek 1978; Kroeber 1925; Rivers 1993). The region inhabited by various groups of the Kumeyaay was much larger and probably extended from Agua Hedionda Lagoon eastward into the Imperial Valley and southward through much of northern Baja California (Almstedt 1982; Gifford 1931; Hedges 1975; Luomala 1978; Shipek 1982; Spier 1923).

The Kumeyaay inhabited a diverse environment including marine, foothill, mountain, and desert resource zones. The Kumeyaay speak a Yuman language (including the dialects of Ipai and Tipai) related to the large Hokan superfamily.

There seems to have been considerable variability in the social organization and settlement patterns among the Kumeyaay. The Kumeyaay were organized bands containing members of non-localized patrilineal, patrilocal groups that claimed prescribed territories, but did not individually own the resources except for some minor plants and eagle aeries (Luomala 1978; Spier 1923). Some of the bands occupied procurement ranges that required considerable residential mobility, such as those in the deserts (Hicks 1963). In the mountains, some of the larger bands occupied a few large

residential bases that would be inhabited for half of the year, such as those occupied in Cuyamaca in the summer and fall, and in Guatay or Descanso during the rest of the year (Almstedt 1982; Rensch 1975). According to Spier (1923), many desert and mountain Kumeyaay spent spring through autumn in larger residential bases in the upland procurement ranges, and wintered in mixed groups in residential bases along the eastern foothills on the edge of the desert (i.e., Jacumba and Mountain Springs). This variability in settlement mobility and organization reflects the great range of environments within Kumeyaay territory. Most of Kumeyaay mythology was quite similar to the Quechan and Mojave of the Colorado River, as well as other Yuman groups in the Southwest (Gifford 1931; Hicks 1963; Luomala 1978; Spier 1923; Waterman 1910).

Acorns were the most important single food source utilized by the Kumeyaay whose villages were usually located near water, necessary for leaching acorn meal. Other storable resources such as mesquite or agave were equally valuable to bands inhabiting desert areas, at least during certain seasons (Hicks 1963; Shackley 1984). Seeds from grasses, manzanita, sage, sunflower, lemonade berry, chia, and other plants were also used along with various wild greens and fruits.

Deer, small game, and birds were hunted, and fish and marine foods were eaten. Houses were arranged in the village without apparent spatial patterning. Houses in primary villages were conical tule bundle-covered structures with excavated floors and central hearths, while houses constructed at mountain bases generally lacked any excavation, probably due to the summer occupation. Other structures included sweathouses, ceremonial enclosures, ramadas, and acorn granaries. The material culture included ceramic cooking vessels, basketry, flaked stone tools, milling implements, arrow shaft straighteners, and bone, shell, and stone ornaments.

Hunting implements consisted of the bow and arrow, curved throwing sticks, nets, and snares. Bone and shell hooks, as well as nets, were used for fishing. Lithic resources of quartz and metavolcanics were commonly available throughout much of the Kumeyaay territory. Other raw materials such as obsidian, chert, chalcedony, and steatite occur in more localized areas. These raw materials were acquired through either direct procurement or exchange. Projectile point types included Cottonwood and Desert Side-notched, both commonly produced. Higher frequencies of ceramics and Desert Side-notched points in artifact assemblages at Kumeyaay sites as compared with Luiseño sites have been documented (Gross et al. 1989; True 1966, 1970), and this may be one way to differentiate between the two groups' territories (True 1966).

Historic Period

The Hispanic era in California's history includes the Spanish Colonial (1769-1821) and Mexican Republic (1821-1846) periods. This era witnessed the transition from a society dominated by religious and military institutions consisting of missions and presidios to a civilian population residing on large ranchos or in pueblos (Chapman 1925).

The effects of missionization, along with the introduction of European diseases, greatly reduced the Native American population of southern California. At the time of contact, Kumeyaay population levels may have been as high as 10,000 individuals. Many of the local Kumeyaay were incorporated into the Spanish sphere of control at a very early date. Most villagers, however, continued to maintain many of their aboriginal customs and simply adopted the agricultural and animal husbandry practices learned from Spaniards.

Mexico won independence from Spain in 1821, and with it the process of dismantling of the mission system began to unfold. The 1833 Secularization Act passed by the Mexican Congress ordered half of all mission lands to be transferred to the Indians, and the other half to remain in trust and managed by an appointed administrator. These orders were never implemented due to several factors that conspired to prevent the Indians from regaining their patrimony. By 1835, the missions, including Mission San Diego and Mission Luis Rey, were secularized.

The subsequent American period (1846 to present) witnessed the development of San Diego County in various ways. This time period includes the rather rapid dominance over Californio culture by Anglo-Victorian (Yankee) culture and the rise of urban centers and rural communities. A Frontier period from 1850 to 1870 saw the region's transformation from a feudal-like society to an aggressive capitalistic economy in which American entrepreneurs gained control of most large ranchos and transformed San Diego into a merchant-dominated market town. Between 1870 and 1930, urban development established the cities of San Diego, National City, and Chula Vista, while a rural society based on family-owned farms organized by rural school district communities also developed, especially in the northern region of the county. The Army and Navy took an increased interest in the San Diego harbor between 1900 and 1940. The Army established coastal defense fortifications at Fort Rosecrans on Point Loma, and the Navy developed major facilities in the bay (Fredericks 1979; Van Wormer and Roth 1985). The 1920s brought a land boom (Robinson 1942) that stimulated development throughout the city and county, particularly in the Point Loma, Pacific Beach, and Mission Beach areas. Development stalled during the depression years of the 1930s, but World War II ushered in a period of growth based on expanding defense industries. The city of Solana Beach was incorporated in 1986.

Study Methods and Field Conditions

Methods used to assess the presence or absence of cultural resources within the property included a search of existing records and an intensive field survey. On September 3, 2014, ASM requested a records search from the SCIC (Appendix A). The search included the project area and a radius of 0.25 mi. around it. A records search of the Sacred Lands File held by the NAHC was requested on September 3, 2014 (Appendix B).

The field survey was conducted on September 3, 2014, by ASM Senior Archaeologist James Daniels. Field methods consisted of a pedestrian survey of the APE. The APE was photographed, and all areas of visible soil were examined for cultural resources. The majority of the APE has already been developed. Photographs taken of the APE were geotagged, and their location and the direction of their view are included in Appendix C.

Study Results

SCIC Records Search Results

Twelve reports have addressed cultural resource studies within a 0.25-mi. radius of the APE. Two of the reports have addressed the APE. Both of the latter reports are overviews of large areas (Byrd and O'Neill 2002; Gallegos et al. 1988). Descriptions of the cultural resource studies within the records search radius are provided in Table 1.

Table 1. Previous Cultural Resources Reports Addressing the APE and .25-Mile Records Search Radius

NADB No.	Authors	Date	Title	Relation to the APE
1120093	Advance Planning & Research Associates	1977	*Archaeological Survey and Air Quality Analysis Mola Vista Subdivision (TM 3608, Log #77-13-11) Solana Beach, California.*	Outside
1120672	Gallegos, Dennis, Roxana Phillips, and Andrew Pigniolo	1988	*A Cultural Resource Overview for the San Dieguito River Valley San Diego, California.*	Outside
1121441	Smith, Brian F.	1986	*A Report of an Archaeological Sampling Program at Site W-36 (SDi-10238), La Vida Del Mar Project, Solana Beach, California P-85-55 EAD Log #85-13-17.*	Outside
1121667	Wade, Sue A.	1988	*Archaeological Test Excavations at SDM-W-36 City of Solana Beach, California*	Outside
1124968	RECON	1982	*Draft EIR for the Mickellar Joseph Development*	Outside
1126258	Lewis, Jeffrey	2002	*Negative Historic Property Survey Report-I-5/Lomas Sante Fe Dr. Interchange*	Outside
1128275	CALTRANS: Martin Rosen	2002	*Section 106 Compliance and Filing of Negative HPSRS*	Outside
1129361	Byrd, Brian F., and Collin O'Neill	2002	*Archaeological Survey Report for the Phase I Archaeological Survey along Interstate 5 San Diego County, CA.*	Outside
1129362	Laylander, Don, and Mark Becker	2004	*Archaeological Testing at Twelve Prehistoric Sites (SDI-603, -628, -4553, -6831, -6882, 10965, -12670, 13484, 15678, 15679, 15680) on the Central San Diego Coast, San Diego County, CA.*	Outside
1129372	Rosen, Martin D.	2005	*Completion of Section 106 Requirements, Filing of 2nd Supplemental Historic Property Survey Report*	Outside
1129516	Caterino, David	2005	*The Cemeteries and Gravestones of San Diego County: An Archaeological Study*	Outside
1130415	Fulton, Phil	2006	*Cultural Resources Assessment Del Mar Fairgrounds Project Cities of Del Mar and San Diego, San Diego County, California*	Outside

The records search indicated that no previously recorded cultural resources are located within the APE. Just two cultural resources are located within the 0.25-mi. search radius. Both sites are prehistoric sites. The closest site, SDI-10238, was recorded approximately 100 m south of the current APE. Descriptions of the previously recorded resources within the search radius are provided below and in Table 2.

SDI-10238
This prehistoric site was first investigated by Brian Smith (Smith 1986) and RECON (Wade 1988). The site has two loci, with Locus A in the north and Locus B to the south. Locus B was evaluated by Cooley and Barrie of Mooney and Associates in 2002 (Cooley et al. 2003). This report was not listed in the records search report database, but it is reported on an updated site record. The site record reports that the evaluation the site yielded intact shell midden, debitage, cores, flaked tools, percussion tools, milling implements, possible shell beads, modified bone, a steatite artifact, faunal remains including 45 different taxa, and four pieces of bone identified as possibly human. At least one hearth feature was also identified. Radiocarbon dates from the investigations by Smith and by Wade yielded ages ranging between 7,040 ±100 B.P. and 5,790 ±110 B.P. The two radiocarbon dates on marine shell samples obtained by Cooley et al. (2003) were reported as 8,360 B.P. and 7,680 B.P.

SDI-13484
This site was first recorded by Karen Crafts and Martin Rosen of Caltrans District 11 as a light scatter of marine shell (Crafts 1994). The site was evaluated by Laylander of ASM in 2003 and cultural deposits at the site were found to extend from 20 to 80 cm below the ground surface, most of the deposits of marine shell (at least 14 genera, predominantly *Chione, Argopecten,* and *Ostrea*) and trace amounts of animal bone and lithic debitage (Laylander and Becker 2004). Two samples of *Chione* shell were radiocarbon dated, yielding dates of 3,950 ±60 B.P. and 3760 ±80 B.P.

Table 2. Previously Recorded Cultural Resources within the 0.25-mi. Records Search Radius

Designation		Site Type	Recorder, Date	Relation to the APE
Primary Number	Trinomial			
P-37-	CA-SDI-			
010238	10238	AP2. Lithic scatter; AP9. Burial; AP11. Hearths/Pits; AP15. Habitation debris	Smith 1986; Wade 1988; Cooley et al. 2003	100 m south
013484	13484	AP2. Lithic scatter; AP16. Shell scatter	Crafts and Rosen 1993; Laylander 2003	430 m east

A search of the historic addresses on file at the SCIC identified two previously recorded historic addresses within the 0.25-mi. search radius. None of the historic addresses are located within the APE. The historic addresses are described in Table 3.

Table 3. Previously Recorded Historic Addresses within the 0.25-mi. Records Search Radius

Address	City, Zip Code	Common / Historic Name	Relation to the APE
850 Vera Street	Solana Beach, 92075	-	Outside
880 Stevens Ave	Solana Beach, 92075	-	Outside

NAHC Records Search Results

The NAHC responded on September 9, 2014 that the records search of the Sacred Lands File failed to indicate the presence Native American traditional cultural places within the project area. The NAHC provided a list of 18 Native American contacts who might have additional information (see Appendix B). As per the scope of work, the City may use this list in conducting direct consultation with Native Americans.

Survey Field Conditions and Results

The APE is a completely developed area in the city of Solana Beach. No cultural resources were identified within the APE as a result of the field survey. Ground surface visibility within the APE was less than 5 percent due to the developed nature of the area (see Appendix C). The natural landscape of the APE has been modified by the development of apartment complexes and paved parking lots.

Recommendations

No cultural resources were identified within the APE in the records search or during the pedestrian field survey. One cultural resource, SDI-10238, has been previously recorded near the APE. The site is a prehistoric habitation site situated on a small terrace and was reported as containing human remains. No evidence of the site was identified within the current APE.

Given the poor ground surface visibility during the pedestrian survey and the close proximity of SDI-10238, archaeological monitoring is recommended during any ground disturbance in order to protect any previously unknown subsurface cultural deposits, including during any pre-construction soil testing and the initial grading of the APE. In the event that any previously undetected cultural resources are encountered, all work should cease in the vicinity of the discovery in order to evaluate such discoveries and determine if additional archaeological work is needed.

Should you have any questions regarding this study, please do not hesitate to call me.

Respectfully submitted,

James T. Daniels, Jr., M.A., RPA
Senior Archaeologist

Attachments:

Figure 1	Project Vicinity.
Figure 2	Project Location.
Appendix A	SCIC Records Search Confirmation
Appendix B	NAHC Correspondence
Appendix C	Geotagged Photographs of APE

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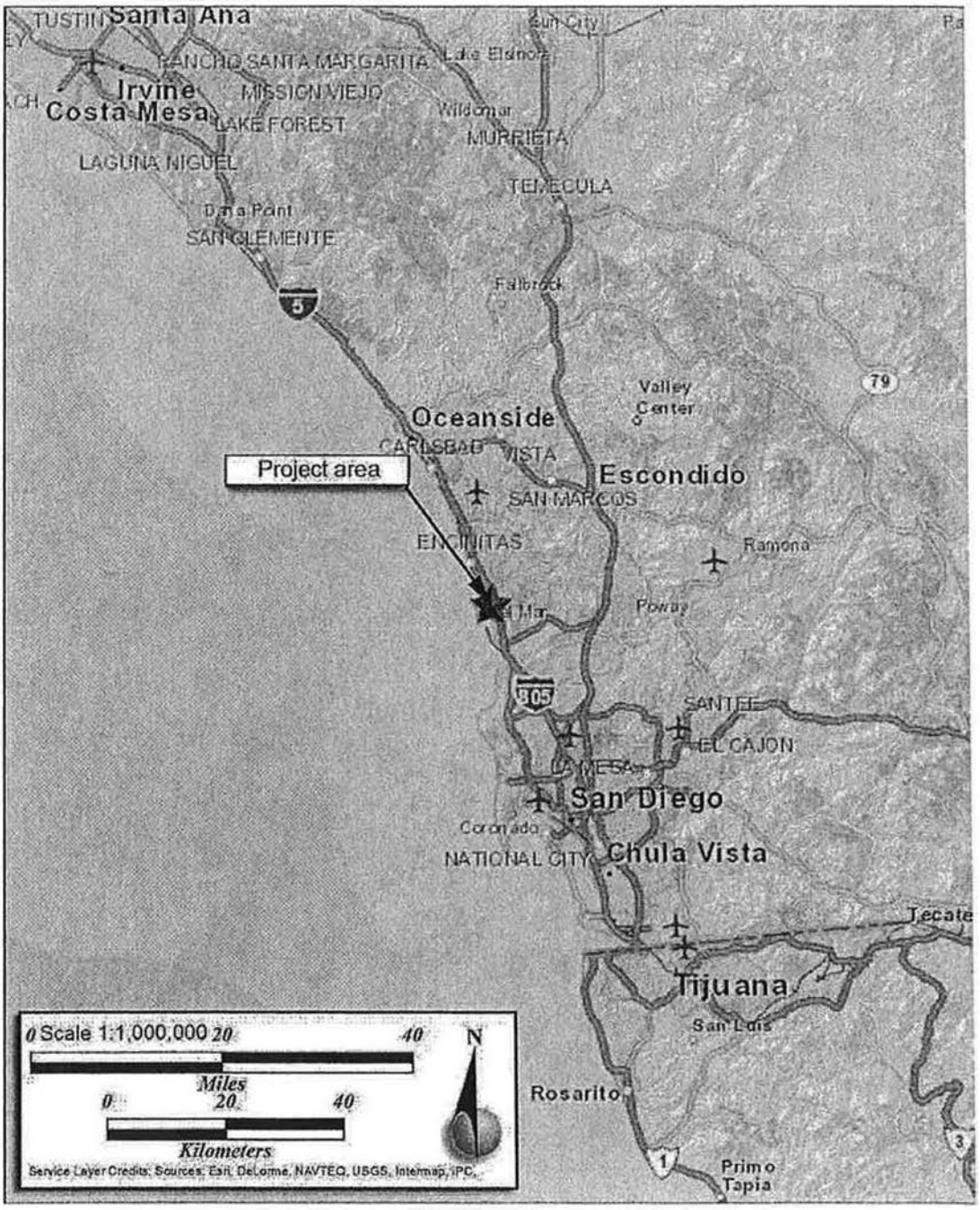


Figure 1. Vicinity map of Solana Highlands project area.

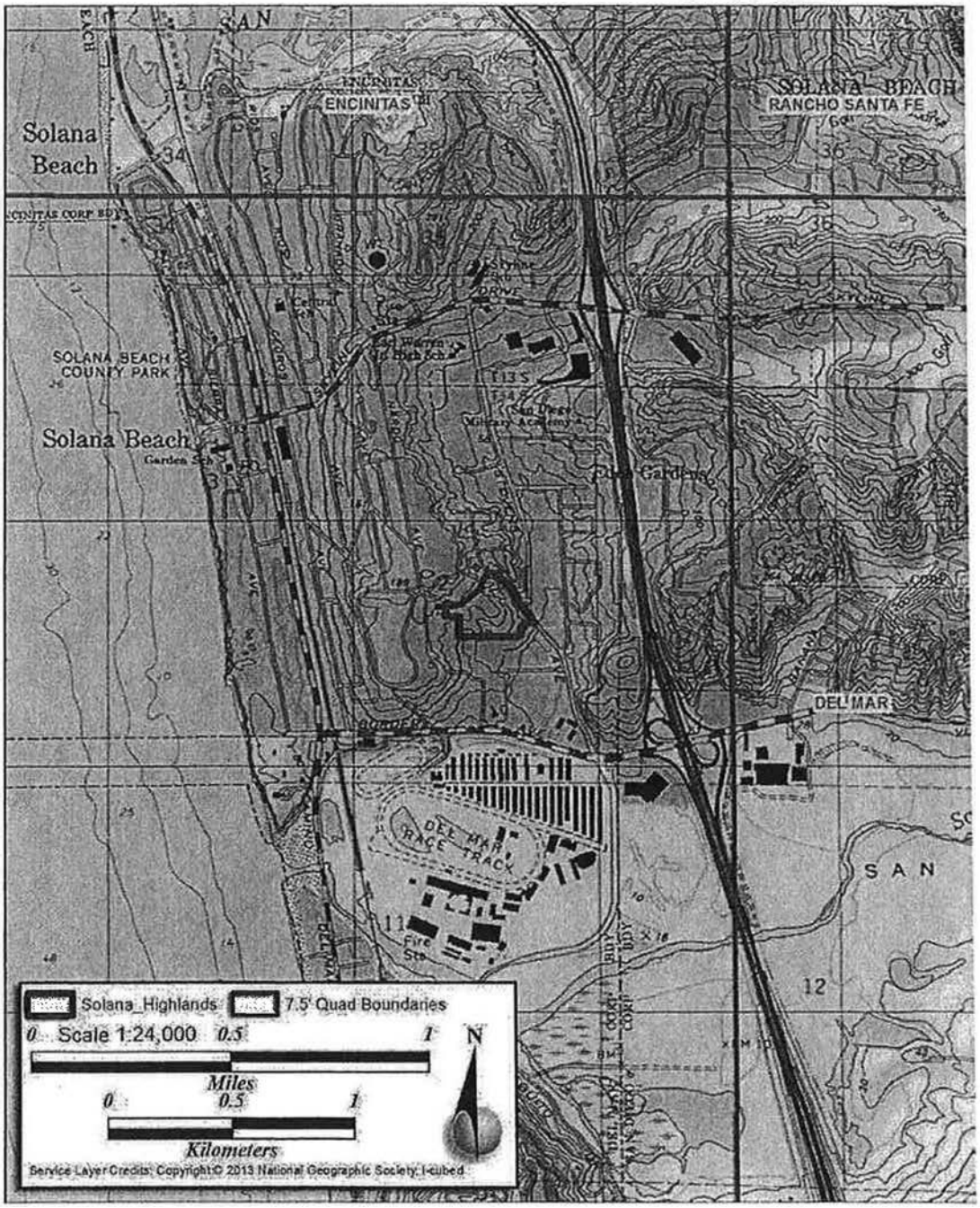


Figure 2. Location map of Solana Highlands project area.

APPENDIX A

Records Search Request and Confirmation Page

ASM affiliates
archaeology
history
ethnography
architectural history

September 3, 2014

Nick Doose
South Coastal Information Center
4283 El Cajon Blvd. St. 250
San Diego, CA 92105

Re: Site Records Search Update Request for the Solona Highlands Development Project, Solona Beach, San Diego County, California

Dear Mr. Doose,

ASM Affiliates, Inc. (ASM) would like to request a record search of maps and files from the SCIC in order to identify and locate previously documented archaeological sites and cultural resource studies within the Solona Highlands Project area. The compiled information would also provide a means to assess potential adverse affects the project may have on cultural resources in the area. The search should include the project area and a 1/4 mile radius surrounding it.

The project area is located on the 7.5 USGS Del Mar quadrangle in Section 2 of Township 14 South and Range 4 West. Attached to this request is a map of the project area. Additionally, I have included the shapefiles for the project area and the 1/4 mile radius surrounding it via the SCIC website. This project does not yet have a billing number, so please reference your invoice to the Solona Highlands Project. Thank you for your assistance on this project.

Sincerely,

James T. Daniels, Jr., M.A., RPA

Senior Archaeologist
ASM Affiliates Inc.,
2034 Corte del Nogal
Carlsbad, CA 92011
(760) 804-5757
jdaniels@asmaffiliates.com

Attachment:
Figure 1. Location map of the project area.

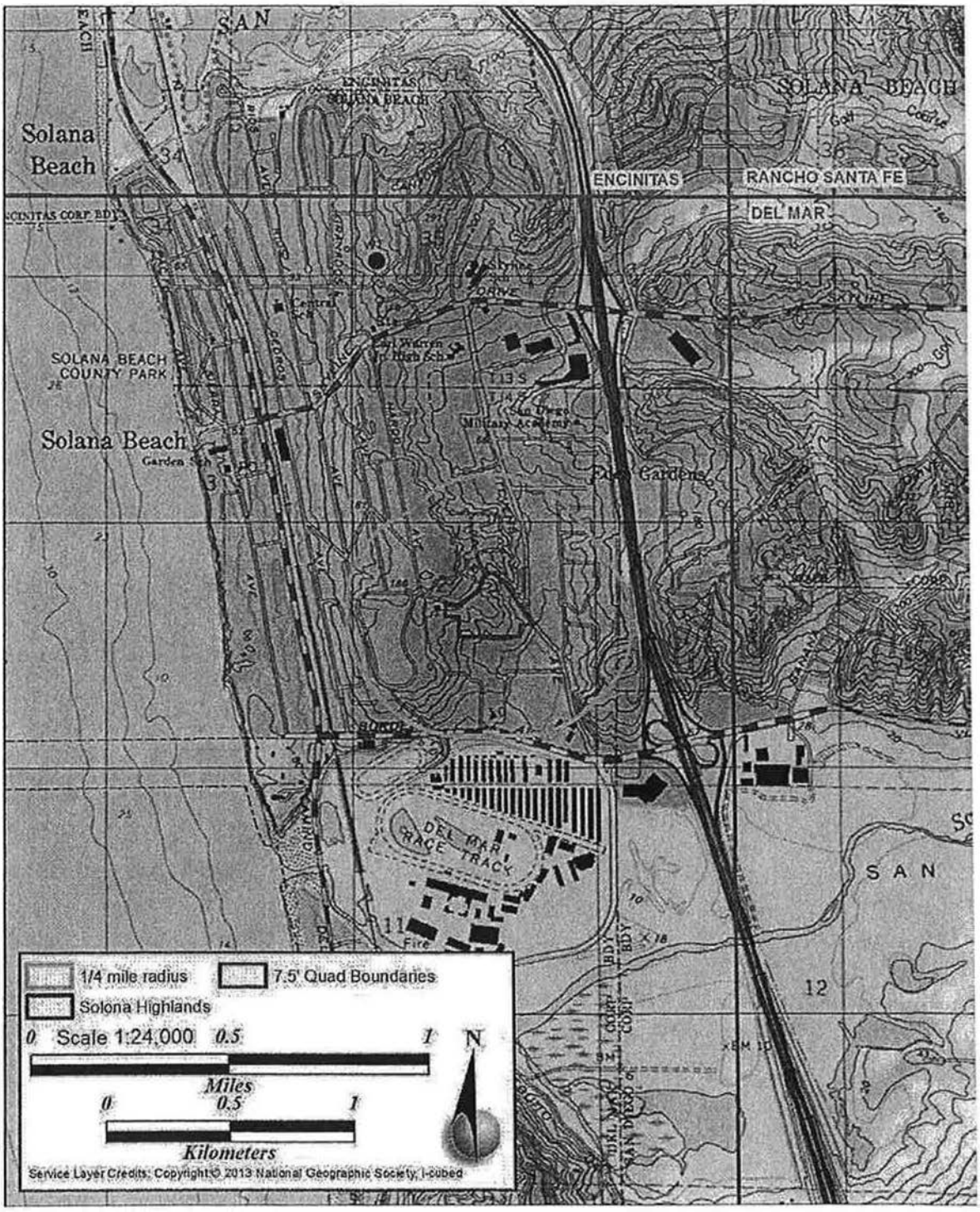


Figure 1. Location map of the project area.

South Coastal Information Center
San Diego State University
5500 Campanile Drive
San Diego, CA 92182-5320
Office: (619) 594-5682
www.scic.org
nick@scic.org

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM RECORDS SEARCH

Company: ASM Affiliates, Inc.

Company Representative: James Daniels

Date Processed: 9/15/2014

Project Identification: Solona Highlands

Search Radius: 1/4 mile

Historical Resources: YES

Trinomial and Primary site maps have been reviewed. All sites within the project boundaries and the specified radius of the project area have been plotted. Copies of the site record forms have been included for all recorded sites.

Previous Survey Report Boundaries: YES

Project boundary maps have been reviewed. National Archaeological Database (NADB) citations for reports within the project boundaries and within the specified radius of the project area have been included.

Historic Addresses: YES

A map and database of historic properties (formerly Geofinder) has been included.

Historic Maps: YES

The historic maps on file at the South Coastal Information Center have been reviewed, and copies have been included.

Summary of SHRC Approved CHRIS IC Records Search Elements	
RSID:	894
RUSH:	no
Hours:	1
Spatial Features:	14
Address-Mapped Shapes:	yes
Digital Database Records:	3
Quads:	1
Aerial Photos:	0
PDFs:	Yes
PDF Pages:	23

This is not an invoice. Please pay from the monthly billing statement

APPENDIX B

NAHC Correspondence

ASM affiliates
archaeology
history
ethnography
architectural history

September 3, 2014

Ms. Cynthia Gomez
California Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691

Re: Solana Highlands Revitalization Project, City of Solana Beach, San Diego County, California

Dear Ms. Gomez,

ASM Affiliates, Inc. (ASM) is conducting an archaeological study of the proposed Solana Highlands Revitalization Project in the city of San Diego, California. ASM is currently conducting a records search with the South Coastal Information Center in San Diego County. I am writing to inquire if you have registered any cultural resources, traditional cultural properties, or areas of heritage sensitivity within this proposed project area.

Our investigation will include direct contact with local tribal entities in a manner that ensures complete confidentiality. We request that you send along a listing of the appropriate individuals to make contact with related to this project. Please submit your response to me at our Carlsbad office, listed below. Feel free to call, write, or e-mail if you have any questions.

Sincerely,

James T. Daniels, Jr.
Senior Archaeologist
jdaniels@asmaffiliates.com

Attachment: Figure 1. Map of the project area

Your Requested Information:

County – San Diego
USGS Quads – Del Mar
Township 14 South
Range 4 West
Section 2

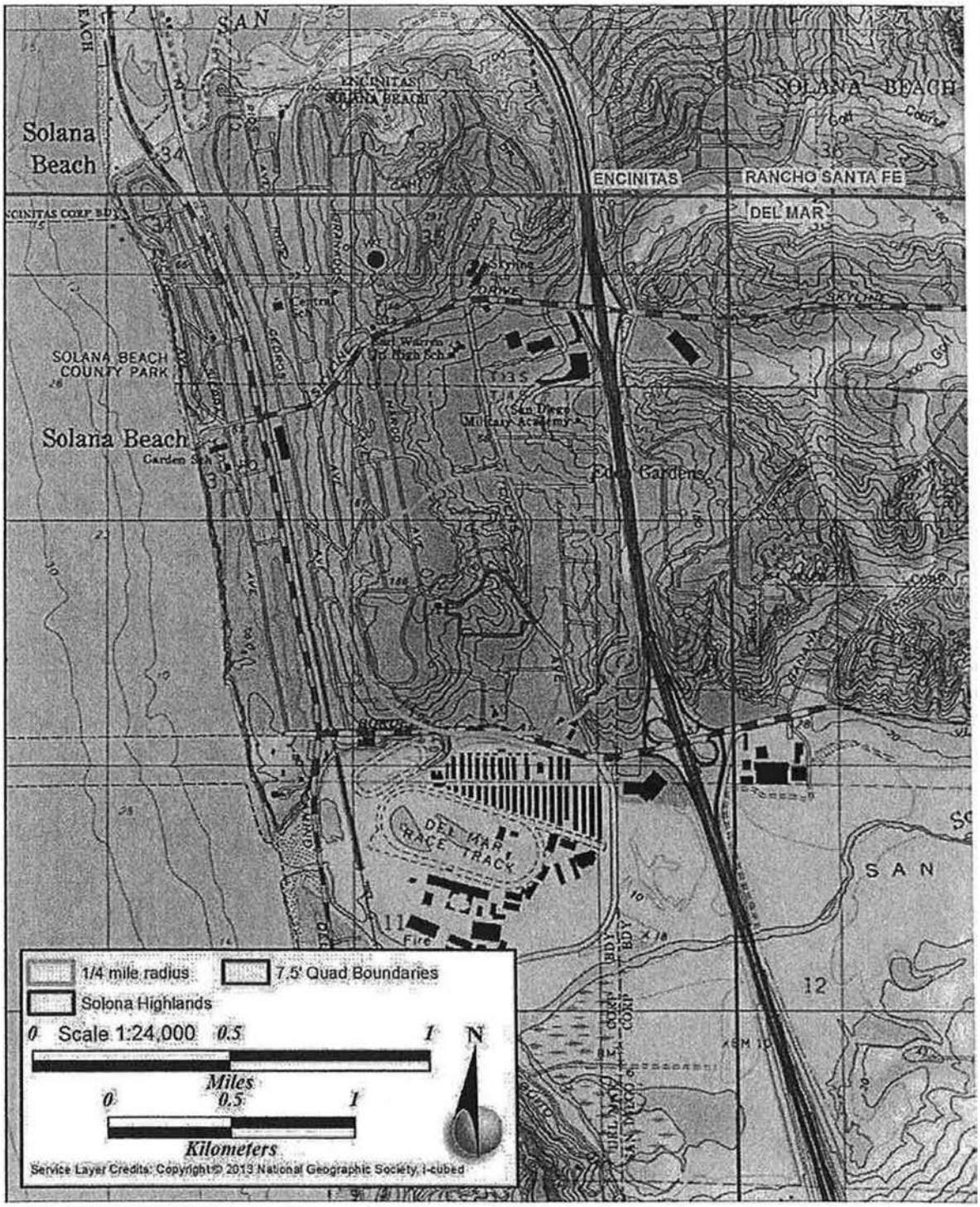


Figure 1. Location Map for the Proposed Solana Highlands Project.

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471

September 9, 2014

James T. Daniels, Jr.
ASM Affiliates Inc.
2034 Corte del Nogal
Carlsbad, CA 92011

Sent by Fax: (760) 804-5755
Number of Pages: 3

Re: Solana Highlands Revitalization Project, City of Solana Beach, San Diego County.

Dear Mr. Daniels,

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 373-3712.

Sincerely,

Katy Sanchez

Katy Sanchez
Associate Government Program Analyst

Native American Contact List
San Diego County
September 9, 2014

Ewiiaapaayp Tribal Office
Robert Pinto Sr., Chairperson
4054 Willows Road
Alpine , CA 91901
wmicklin@leaningrock.net
(619) 445-6315
(619) 445-9126 Fax
Diegueno/Kumeyaay

Kumeyaay Cultural Historic Committee
Ron Christman
56 Viejas Grade Road
Alpine , CA 92001
(619) 445-0385
Diegueno/Kumeyaay

La Posta Band of Mission Indians
Gwendolyn Parada, Chairperson
8 Crestwood Road
Boulevard , CA 91905
gparada@lapostacasino.
(619) 478-2113
(619) 478-2125
Diegueno/Kumeyaay

Campo Band of Mission Indians
Ralph Goff, Chairperson
36190 Church Road, Suite 1
Campo , CA 91906
chairgoff@aol.com
(619) 478-9046
(619) 478-5818 Fax
Diegueno/Kumeyaay

Manzanita Band of Kumeyaay Nation
Leroy J. Elliott, Chairperson
P.O. Box 1302
Boulevard , CA 91905
ljbirdsinger@aol.com
(619) 766-4930
(619) 766-4957 Fax
Diegueno/Kumeyaay

Jamul Indian Village
Raymond Hunter, Chairperson
P.O. Box 612
Jamul , CA 91935
jamulrez@sctdv.net
(619) 669-4785
Diegueno/Kumeyaay

Sycuan Band of the Kumeyaay Nation
Daniel Tucker, Chairperson
5459 Sycuan Road
El Cajon , CA 92019
ssilva@sycuan-nsn.gov
(619) 445-2613
(619) 445-1927 Fax
Diegueno/Kumeyaay

Kumeyaay Cultural Repatriation Committee
Steve Banegas, Spokesperson
1095 Barona Road
Lakeside , CA 92040
sbenegas50@gmail.com
(619) 742-5587
(619) 443-0681 Fax
Diegueno/Kumeyaay

Viejas Band of Kumeyaay Indians
Anthony R. Pico, Chairperson
P.O. Box 908
Alpine , CA 91903
jhagen@viejas-nsn.gov
(619) 445-3810
(619) 445-5337 Fax
Diegueno/Kumeyaay

Viejas Band of Kumeyaay Indians
ATTN: Julie Hagen, Cultural Resources
P.O. Box 908
Alpine , CA 91903
jhagen@viejas-nsn.gov
(619) 445-3810
(619) 445-5337
Diegueno/Kumeyaay

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.
This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Solana Highlands Revitalization Project, City of Solana Beach, San Diego County.

Native American Contact List
San Diego County
September 9, 2014

Ewilaapaayp Tribal Office
Will Micklin, Executive Director
4054 Willows Road Diegueno/Kumeyaay
Alpine , CA 91901
wmicklin@leaningrock.net
(619) 445-6315
(619) 445-9126 Fax

Kumeyaay Diegueno Land Conservancy
Mr. Kim Bactad, Executive Director
2 Kwaaypaay Court Diegueno/Kumeyaay
El Cajon , CA 91919
kimbactad@gmail.com
(619) 659-1008 Office
(619) 445-0238 Fax

Manzanita Band of Mission Indians
ATTN: Keith Adkins, EPA Director
P.O. Box 1302 Kumeyaay
Boulevard , CA 91905
(619) 766-4930
(619) 766-4957 Fax

Inter-Tribal Cultural Resource Protection Council
Frank Brown, Coordinator
240 Brown Road Diegueno/Kumeyaay
Alpine , CA 91901
frbrown@viejas-nsn.gov
(619) 884-6437

Iipay Nation of Santa Ysabel
Clint Linton, Director of Cultural Resources
P.O. Box 507 Diegueno/Kumeyaay
Santa Ysabel , CA 92070
cjlinton73@aol.com
(760) 803-5694

Kumeyaay Cultural Repatriation Committee
Bernice Paipa, Vice Spokesperson
P.O. 937 Diegueno/Kumeyaay
Boulevard , CA 91905
bernicepaipa@gmail.com

Sycuan Band of the Kumeyaay Nation
Sydney Morris, Environmental Coordinator
5459 Sycuan Road Diegueno/Kumeyaay
El Cajon , CA 92019
smorris@sycuan-nsn.gov
(619) 445-2613
(619) 445-1927 Fax

Iipay Nation of Santa Ysabel
Virgil Perez, Chairperson
P.O. Box 130 Diegueno/Kumeyaay
Santa Ysabel , CA 92070
(760) 765-0845
(760) 765-0320

Manzanita Band of the Kumeyaay Nation
Nick Elliott, Cultural Resources Coordinator
P.O. Box 1302 Kumeyaay
Boulevard , CA 91905
nickmepa@yahoo.com
(619) 766-4930
(619) 925-0952 Cell
(919) 766-4957 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.
This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Solana Highlands Revitalization Project, City of Solana Beach, San Diego County.

APPENDIX C

Geotagged Survey Photographs

Solana Highlands
Archaeological Survey

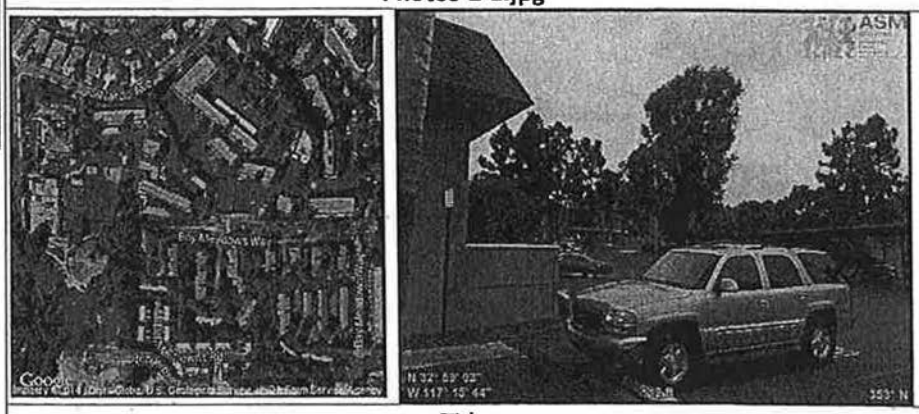
Overview Map

Solana Highlands

Archaeological Survey

Attributes	
Latitude	N 32° 59' 03"
Longitude	W 117° 15' 44"
Elevation	112 ft
Photo Direction	353° N

Photos-1-1.jpg



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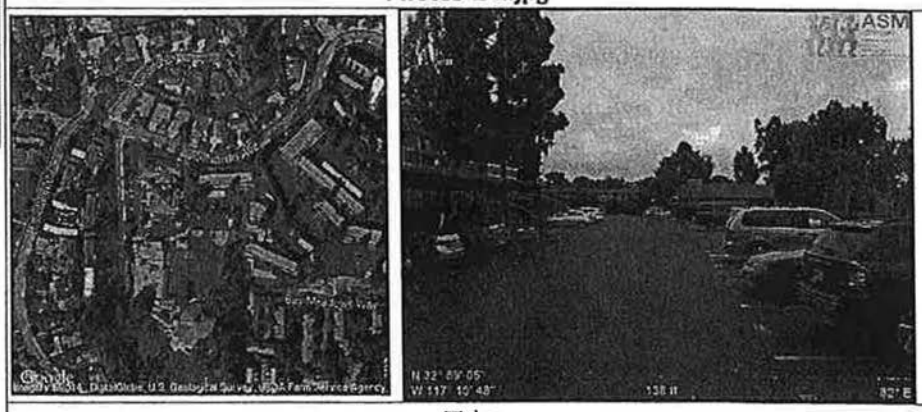

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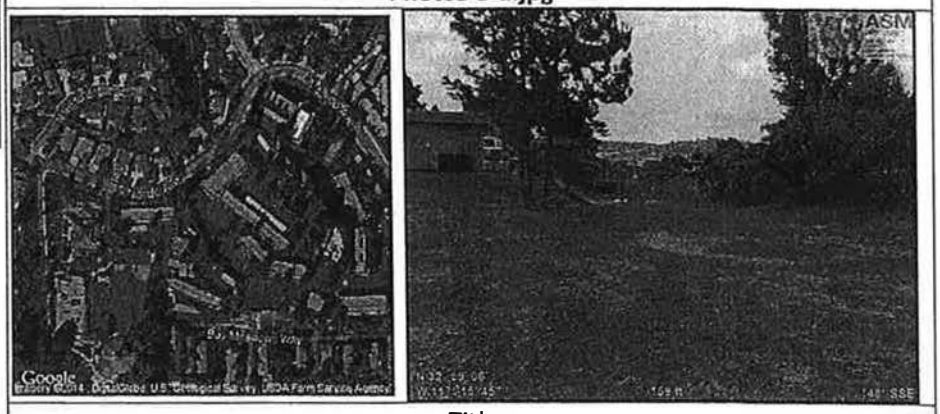

Title:

Solana Highlands

Archaeological Survey

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Elevation	132 ft
Photo Direction	117° ESE

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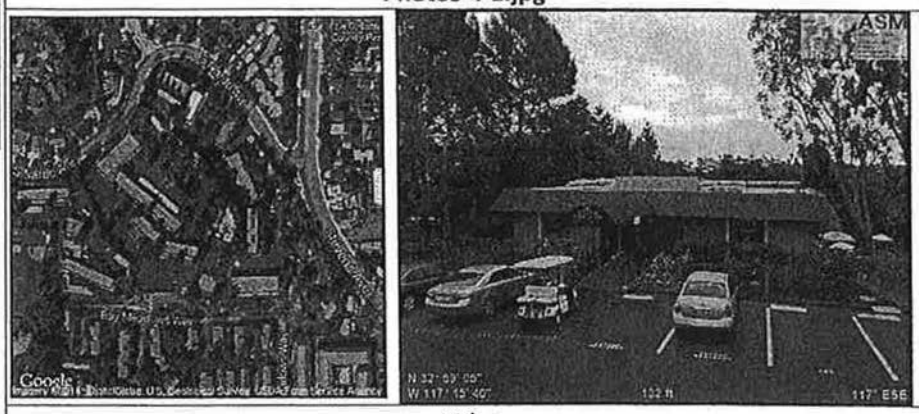

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Photo Direction	116° ESE

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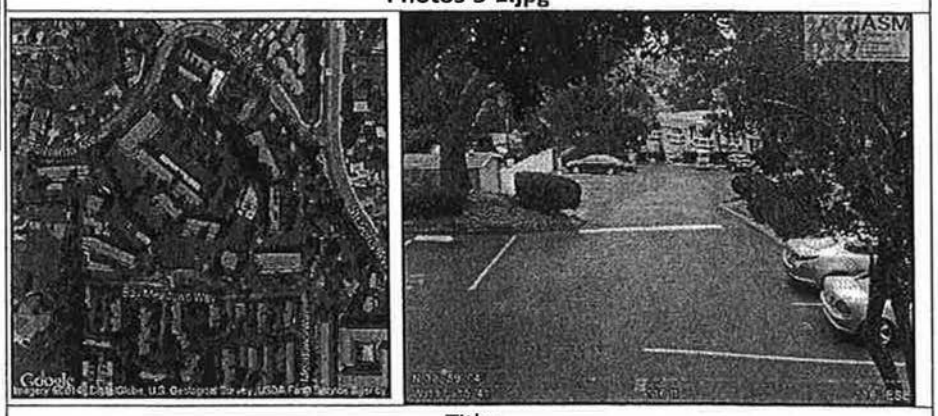

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Elevation	139 ft
Photo Direction	265° W

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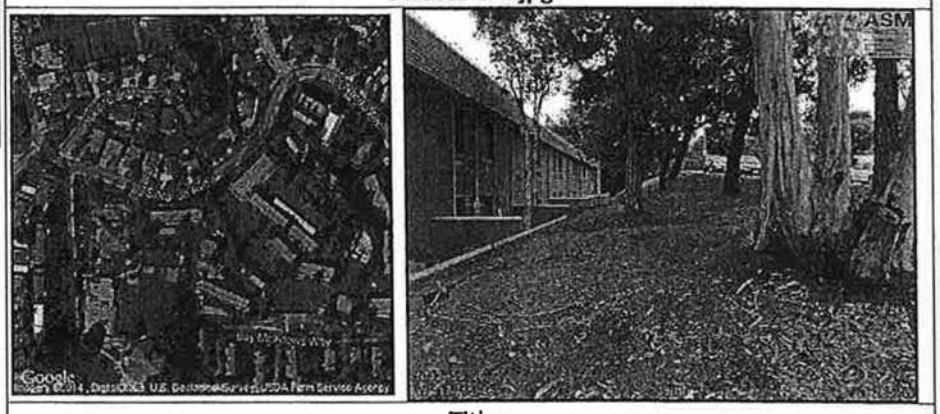

Title:

Solana Highlands

Archaeological Survey

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Photos-7-1.jpg

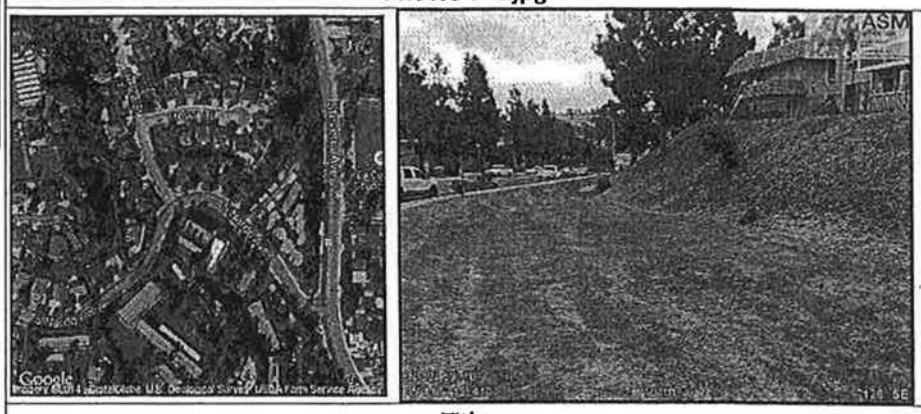

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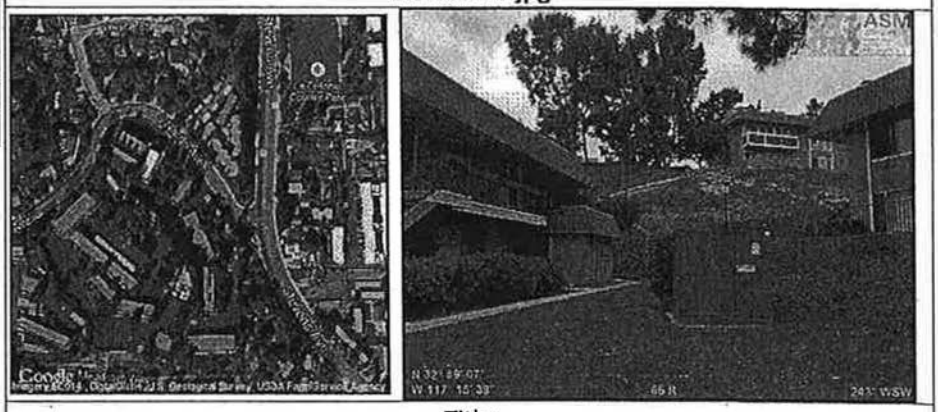
Photo Direction	243° WSW

Photos-8-1.jpg



Title:

Attributes	
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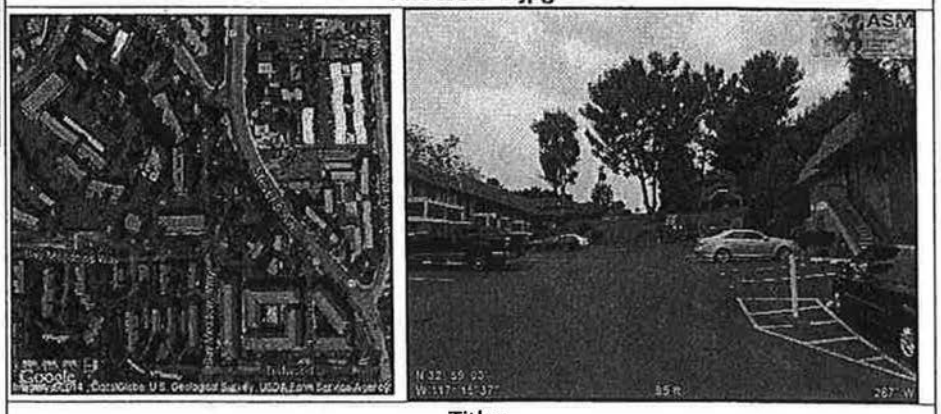
Elevation	85 ft
Photo Direction	267° W

Photos-9-1.jpg



Title:

Solana Highlands

Archaeological Survey

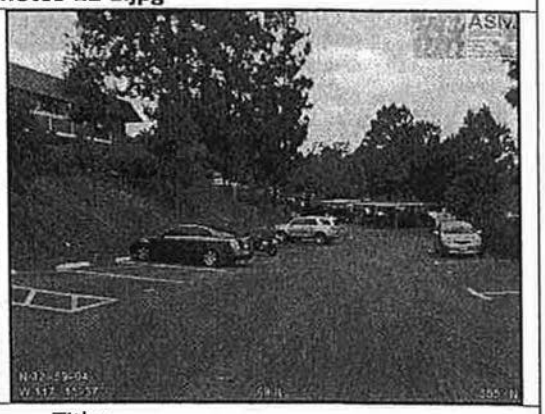
Attributes	
Latitude	N 32° 59' 04"
Longitude	W 117° 15' 37"
Elevation	69 ft
Photo Direction	86° E

Photos-10-1.jpg

Title:

Attributes	
Latitude	N 32° 59' 04"
Longitude	W 117° 15' 37"
Elevation	69 ft
Photo Direction	355° N

Photos-11-1.jpg



Title:

Attributes	
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Longitude	W 117° 15' 36"
Elevation	48 ft
Photo Direction	193° SSW

Photos-12-1.jpg

Title:

APPENDIX H

Geotechnical Report

GEOCON
INCORPORATED

GEOTECHNICAL
ENVIRONMENTAL
MATERIALS

GEOTECHNICAL INVESTIGATION

SOLANA HIGHLANDS
SOLANA BEACH, CALIFORNIA

PREPARED FOR

H. G. FENTON COMPANY
% MKG CONSULTING, INC.
SAN DIEGO, CALIFORNIA

AUGUST 28, 2014
PROJECT NO. G1198-42-04

GEOCON
INCORPORATED
GEOTECHNICAL ■ ENVIRONMENTAL ■ MATERIALS

Project No. G1198-42-04
August 28, 2014

H. G. Fenton Company
% MKG Consulting, Inc.
20857 Parkridge
Lake Forest, California 92630

Attention: Mr. Michael Gaddie

Subject: GEOTECHNICAL INVESTIGATION
SOLANA HIGHLANDS
SOLANA BEACH, CALIFORNIA

Dear Mr. Gaddie:

In accordance with your request and authorization of our proposal (LG-14243), dated July 24, 2014, we have prepared this geotechnical investigation for the proposed Solana Highlands project located south of Nardo Avenue and west of Stevens Avenue, in Solana Beach, California. The accompanying report presents the results of our study along with conclusions and recommendations pertaining to the geotechnical aspects of the planned redevelopment of the Solana Highlands apartment complex.

It is our opinion that the proposed redevelopment of the Solana Highlands apartment complex can be constructed as currently proposed provided the recommendations of this report are incorporated and implemented in the design and construction of the project.

Should you have questions regarding this report, or if we may be of further service, please contact the undersigned at your convenience.

Very truly yours,

GEOCON INCORPORATED

Rodney C. Mikesell
GE 2533

Noel Borja
Senior Staff Engineer

Garry W. Cannon
RCE 56468
CEG 2201

RCM:NGB:GWC:dmc

(3/del) Addressee

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GEOTECHNICAL INVESTIGATION

1. PURPOSE AND SCOPE

This report has been prepared to provide geotechnical recommendations for the proposed redevelopment of the Solana Highlands apartment complex located in Solana Beach, California (see Vicinity Map, Figure 1). The purpose of this investigation was to identify potential geologic and geotechnical constraints, and to provide recommendations pertaining to geotechnical aspects of site development.

We performed the following scope of services for this investigation:

- Reviewed readily available published and unpublished geologic literature to evaluate the potential for geologic hazards to exist on the property.
- Performed a field investigation to enable characterization of the site soil conditions and general site geology.
- Performed laboratory testing of representative soil samples to evaluate pertinent physical characteristics for engineering analysis.
- Prepared report providing recommendations regarding the geotechnical aspects of developing the property as proposed, including site grading, foundation design criteria, preliminary pavement design, and remedial grading measures.

To aid in the preparation of this report, we reviewed the following plans and geotechnical reports:

1. *Preliminary Grading Plan, Revitalizing Solana Highlands, Development Review Submittal 1, Sheet G2.1, Solana Beach, California,* prepared by Pasco Laret Suitar & Associates, dated March 31, 2014.
2. *Report of Testing and Observation Services for Slope Repair, Solana Highlands, San Diego, California,* prepared by Geocon Incorporated, dated November 2, 2010 (Project No. G1198-42-01).
3. *Geotechnical Due Diligence Study, 821 Stevens Avenue, Solana Beach, California,* prepared by Geocon Incorporated, dated September 28, 2010 (Project No. G1198-42-03).
4. *Consultation: Repair of Erosion, Solana Highlands, Solana Beach, California,* prepared by Geocon Incorporated, dated May 5, 2010 (Project No. G1198-42-01).

We performed the field investigation on August 12 and 13, 2014. Our field investigation consisted of a site reconnaissance and drilling 16, small-diameter borings to depths ranging from 6 feet to 51 feet. We collected representative soil samples from the exploratory borings for laboratory testing. The exploratory boring logs are presented in Appendix A. The Geologic Map, Figure 2, presents the

The project civil engineer provided an AutoCAD file of the preliminary grading plan (Reference No. 1) which was used to generate the Geologic Map, Figure 2. The general site geology along with the locations of geologic cross-sections and exploratory borings are shown on Figure 2.

We performed laboratory tests on selected soil samples obtained during the field investigation to evaluate pertinent physical properties for engineering analyses and to assist in providing recommendations for site grading and preliminary foundation design criteria. Details of the laboratory testing and a summary of the test results are presented in Appendix B.

2. SITE DESCRIPTION AND PROPOSED PROJECT DEVELOPMENT

The Solana Highlands apartment complex is located on approximately 13.5 acres of land at 701 South Nardo Avenue in Solana Beach, California. The site is bound by: Nardo Avenue on the north; St. James Academy on the west; Nardo Avenue/Stevens Avenue on the east; and Bay Meadows Way on the south. The existing apartment complex consists of 12 apartment buildings, the leasing building/pool recreation center, 2-tennis courts, and several covered and open parking stalls linked by main drive aisles. Topography of the site varies from gently to steeply sloping with an elevations ranging from approximately 40 feet MSL to 150 feet MSL with site drainage trending in an easterly direction.

Based on our discussions with you and our review of the referenced preliminary grading plan, we understand that redevelopment of the Solana Highlands apartment complex will consist of demolishing the entire complex and regrading the site to accommodate the construction of 25 new apartment buildings. The new apartment buildings will be 2- to 4-story structures comprising 260 units with attached garages. Grading for the site will consist of cuts and fills on the order of 30 feet, and will include the construction of 2:1 (horizontal:vertical) slopes. In addition, planned improvements will also include on-grade parking lots, driveways, utilities, and landscaping. Retaining walls with maximum heights of up to 16 feet are planned across the site.

The descriptions contained herein are based on our site reconnaissance, review of the referenced reports and conceptual site plan, and discussions with you. If project details vary significantly from those outlined herein, Geocon should be notified for review and possible revisions to this report prior to final design submittal.

3. SOIL AND GEOLOGIC CONDITIONS

Previously placed fill and old terrace deposits underlie the site. A description for each of these units is discussed below. The approximate lateral and vertical extent of each of the soil and geologic units is depicted on the Geologic Map, Figure 2 (Map Pocket) and the Geologic Cross-Sections, Figure 3 (Map Pocket). Logs of borings and a discussion of the results are presented in Appendix A.

depicted on the Geologic Map, Figure 2 (Map Pocket) and the Geologic Cross-Sections, Figure 3 (Map Pocket). Logs of borings and a discussion of the results are presented in Appendix A.

3.1 Previously Placed Fill (Qf)

We encountered previously placed fill at different locations across the site. The fill ranged from less than 2 feet to as deep as 8 feet. The fills are likely associated with original grading on the property; however, grading reports documenting the fill were not available. The fills were found to be loose to medium dense and composed of silty to clayey sand with some gravel. Laboratory test results indicate the undocumented fill soil possesses a *very low* to *low* expansion potential and has low compressibility characteristics. To provide uniform bearing conditions, we recommend the fill be removed and replaced as documented properly compacted fill.

3.2 Old Terrace Deposits (Qop)

We observed old terrace deposits (formerly Bay Point Formation) exposed near grade and underlying the previously placed fill. The old terrace deposits consist of medium dense to very dense, fine to medium sand to silty to clayey sand with gravel. Based on laboratory test results, this unit possesses low expansion and low compressibility characteristics and is suitable for support of additional fill and structural loading.

4. GROUNDWATER

We did not observe groundwater during our field investigation. We did encounter zones of wet soils within the old terrace deposits that could be the result of minor seepage from irrigation sources. We do not expect groundwater to adversely impact proposed project development; however, it is not uncommon for groundwater or seepage conditions to develop where none previously existed. Groundwater elevations are dependent on seasonal precipitation, irrigation; land use, among other factors, and vary as a result. Proper surface drainage will be important to future performance of the project.

5. GEOLOGIC HAZARDS

5.1 Faulting and Seismicity

Based on our review of geologic literature and experience with the soil and geologic conditions in the general vicinity, it is our opinion that known active, potentially active, or inactive faults are not located at the site. The site is not mapped within a State of California Earthquake Fault Zone.

Although the site is located just north of San Diego city limits, the *City of San Diego Seismic Safety Study, Geologic Hazards and Faults (April* 2008), *Edition, Grid Tile 42,* shows an unnamed fault

located approximately 800 feet southeast of the site on the east side of Valley Avenue. The San Diego Seismic Safety Study classifies the fault as *potentially active, inactive, presumed inactive, or activity unknown*.

According to the computer program *EZ-FRISK* (Version 7.62), 8 known active faults are located within a search radius of 50 miles from the property. The nearest known active fault is the Newport-Inglewood/Rose Canyon Fault Zone, located approximately 3 miles west of the site. The Newport-Inglewood/Rose Canyon Fault Zone is the dominant source of potential ground motion. Earthquakes that might occur on the Newport-Inglewood/Rose Canyon Fault Zone or other faults within the southern California and northern Baja California area are potential generators of significant ground motion at the site. The estimated deterministic maximum earthquake magnitude and peak ground acceleration for the Newport-Inglewood Fault are 7.5 and 0.47 g, respectively. Table 5.1.1 lists the estimated maximum earthquake magnitude and peak ground acceleration for the most dominant faults in relationship to the site location. We calculated peak ground acceleration (PGA) using Boore-Atkinson (2008), Campbell-Bozorgnia (2008), and Chiou-Youngs (2008) acceleration-attenuation relationships.

TABLE 5.1.1
DETERMINISTIC SPECTRA SITE PARAMETERS

Fault Name	Distance from Site (miles)	Maximum Earthquake Magnitude (Mw)	Peak Ground Acceleration		
			Boore-Atkinson 2008 (g)	Campbell-Bozorgnia 2008 (g)	Chiou-Youngs 2008 (g)
Newport-Inglewood/Rose Canyon Fault Zone	3	7.5	0.39	0.36	0.47
Rose Canyon	3	6.9	0.35	0.36	0.42
Coronado Bank	17	7.4	0.20	0.15	0.18
Palos Verdes/Coronado Bank	17	7.7	0.22	0.16	0.21
Elsinore	29	7.85	0.18	0.12	0.15
Earthquake Valley	41	6.8	0.9	0.06	0.05
Palos Verdes	43	7.3	0.11	0.07	0.07
San Joaquin Hills	47	7.1	0.09	0.08	0.07

We used the computer program *EZ-FRISK* to perform a probablilistic seismic hazard analysis. The computer program *EZ-FRISK* operates under the assumption that the occurrence rate of earthquakes on each mapped Quaternary fault is proportional to the fault slip rate. The program accounts for earthquake magnitude as a function of fault rupture length. Site acceleration estimates are made using the earthquake magnitude and distance from the site to the rupture zone. The program also accounts for

uncertainty in each of following: (1) earthquake magnitude, (2) rupture length for a given magnitude, (3) location of the rupture zone, (4) maximum possible magnitude of a given earthquake, and (5) acceleration at the site from a given earthquake along each fault. By calculating the expected accelerations from considered earthquake sources, the program calculates the total average annual expected number of occurrences of site acceleration greater than a specified value. We utilized acceleration-attenuation relationships suggested by Boore-Atkinson (2008), Campbell-Bozorgnia (2008), and Chiou-Youngs (2008) in the analysis. Table 5.1.2 presents the site-specific probabilistic seismic hazard parameters including acceleration-attenuation relationships and the probability of exceedence.

TABLE 5.1.2
PROBABILISTIC SEISMIC HAZARD PARAMETERS

Probability of Exceedence	Peak Ground Acceleration		
	Boore-Atkinson, 2008 (g)	Campbell-Bozorgnia, 2008 (g)	Chiou-Youngs, 2008 (g)
2% in a 50 Year Period	0.53	0.47	0.56
5% in a 50 Year Period	0.38	0.33	0.38
10% in a 50 Year Period	0.28	0.24	0.27

The California Geologic Survey (CGS) has a program that calculates the ground motion for a 10 percent of probability of exceedence in 50 years based on an average of several attenuation relationships. Table 5.1.3 presents the calculated results from the Probabilistic Seismic Hazards Mapping Ground Motion Page from the CGS website.

TABLE 5.1.3
PROBABILISTIC SITE PARAMETERS FOR SELECTED FAULTS
CALIFORNIA GEOLOGIC SURVEY

Calculated Acceleration (g) Firm Rock	Calculated Acceleration (g) Soft Rock	Calculated Acceleration (g) Alluvium
0.27	0.29	0.33

While listing peak accelerations is useful for comparison of potential effects of fault activity in a region, other considerations are important in seismic design, including frequency and duration of motion and soil conditions underlying the site. Seismic design of the structures should be evaluated in accordance with the 2013 California Building Code (CBC) guidelines.

5.2 Ground Rupture

The risk associated with ground rupture hazard is very low due to the absence of active faults at the subject site.

5.3 Seiches and Tsunamis

The site is located less than ⅔-mile from the ocean; however, the site is situated at elevations ranging from approximately 40 to 150 MSL. Therefore, the risk associated with inundation hazard due to a seiche or tsunami is very low.

5.4 Liquefaction and Seismically Induced Settlement

The risk associated with soil liquefaction hazard at the site is very low due to the dense nature of the formational soil and lack of permanent, shallow groundwater.

5.5 Landslides

Based on our review of published geologic maps for the site vicinity, it is our opinion landslides are not present at the property or at a location that could impact the site.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 General

6.1.1 No soil or geologic conditions were encountered during our study that would preclude the development of the property as presently planned, provided the recommendations of this report are followed.

6.1.2 Previously placed fill and old terrace deposits underlie the site. To provide uniform support of the planned new buildings, we recommend the fill be removed and replaced as properly compacted fill. The old terrace deposits are suitable for support of additional structural fill and settlement-sensitive structures.

6.1.3 We did not encounter groundwater in any of the exploratory borings. We did encounter some zones of wet soil conditions in the old terrace deposits that could be the result of seepage. We do not expect groundwater to affect construction as currently proposed.

6.1.4 No significant geologic hazards were observed or are known to exist on the site that would adversely affect the site. No special seismic design considerations, other than those recommended herein, are required.

6.1.5 The proposed buildings can be supported on conventional shallow foundations bearing on properly compacted fill or old terrace deposits.

6.1.6 Portions of the on-site soils are sufficiently sandy such that caving may occur in open excavations. Measures to provide trench sidewall stability may be needed.

6.1.7 Subsurface conditions observed may be extrapolated between borings to reflect the general soil/geologic conditions; however, some variations in subsurface conditions during grading should be expected.

6.2 Excavation and Soil Characteristics

6.2.1 Excavation of the fill and old terrace deposits should be possible with light to heavy effort using conventional, heavy-duty equipment during grading and trenching operations.

6.2.2 The soil encountered in the field investigation is considered to be “non-expansive” (expansion index [EI] of 20 or less) as defined by 2013 California Building Code (CBC) Section 1803.5.3. Table 6.2.1 presents soil classifications based on the expansion index. We

expect a majority of the soil encountered possess a "very low" to "low" expansion potential (expansion index of 50 or less).

TABLE 6.2.1
EXPANSION CLASSIFICATION BASED ON EXPANSION INDEX

Expansion Index (EI)	Expansion Classification	2013 CBC Expansion Classification
0 – 20	Very Low	Non-Expansive
21 – 50	Low	Expansive
51 – 90	Medium	
91 – 130	High	
Greater Than 130	Very High	

6.2.3 We performed laboratory tests on samples of the site soils to evaluate the percentage of water-soluble sulfate content. Results from the laboratory water-soluble sulfate content tests are presented in Appendix B and indicate that the on-site materials at the locations tested possess "Not Applicable" and "S0" sulfate exposure to concrete structures as defined by 2013 CBC Section 1904 and ACI 318-11 Sections 4.2 and 4.3. Table 6.2.2 presents a summary of concrete requirements set forth by 2013 CBC Section 1904 and ACI 318. The presence of water-soluble sulfates is not a visually discernible characteristic; therefore, other soil samples from the site could yield different concentrations. Additionally, over time landscaping activities (i.e., addition of fertilizers and other soil nutrients) may affect the concentration.

TABLE 6.2.2
REQUIREMENTS FOR CONCRETE EXPOSED TO SULFATE-CONTAINING SOLUTIONS

Sulfate Severity	Exposure Class	Water-Soluble Sulfate (SO_4) Percent by Weight	Cement Type (ASTM C 150)	Maximum Water to Cement Ratio by Weight	Minimum Compressive Strength (psi)
Not Applicable	S0	$SO_4<0.10$	--	--	2,500
Moderate	S1	$0.10\leq SO_4<0.20$	II	0.50	4,000
Severe	S2	$0.20\leq SO_4\leq 2.00$	V	0.45	4,500
Very Severe	S3	$SO_4>2.00$	V+Pozzolan or Slag	0.45	4,500

6.2.4 We performed laboratory tests on selected soil samples to check corrosion potential. A site is considered corrosive if the chloride concentration is 500 part per million (ppm) or greater,

sulfate concentration is 2,000 ppm (0.2%) or greater, or the pH is 5.5 or less according to Caltrans *Corrosion Guidelines,* dated September 2003. The laboratory test results are presented in Appendix B.

6.2.5 Geocon Incorporated does not practice in the field of corrosion engineering; therefore, further evaluation by a corrosion engineer may be needed to incorporate the necessary precautions to avoid premature corrosion of underground pipes and buried metal in direct contact with soil.

6.3 Temporary Slope Excavations

6.3.1 Temporary slopes should be made in conformance with OSHA requirements. The on-site soils can be considered Type B soil in accordance with OSHA requirements. Where seepage is encountered the soil should be classified as Type C. In general, special shoring requirements will not be necessary if temporary excavations will be less than 3 feet high. Temporary excavation depths greater than 3 feet, however, should be laid back at an appropriate inclination. These excavations should not become saturated or allowed to dry. Surcharge loads should not be permitted within a distance equal to the depth of the excavation from the top of the excavation. The top of the excavation should be a minimum of 15 feet from the edge of existing improvements. Excavations steeper than those recommended or closer than 15 feet from an existing surface improvement should be shored in accordance with applicable OSHA codes and regulations.

6.4 Grading

6.4.1 Grading should be performed in accordance with the *Recommended Grading Specifications* in Appendix C. Where the recommendations of this report conflict with Appendix C, the recommendations of this section take precedence.

6.4.2 Earthwork should be observed, and compacted fill tested by representatives of Geocon Incorporated.

6.4.3 Grading should commence with the removal of vegetation and existing improvements from areas to be graded. Deleterious debris such as wood, asphalt, brick, plastic, and concrete should be exported from the site and not be mixed with fill soils. Existing building foundations and underground improvements should be removed and the resulting depressions properly backfilled in accordance with the procedures described herein.

6.4.4 We recommend previously placed fill be removed to expose the underlying old terrace deposits prior to placing additional fill or structural loads.

6.4.5 Grading should be performed such that building pads are underlain entirely by either old terrace deposits or properly compacted fill. Where cut to fill transitions occur on building pads, we recommend the building pad be undercut at least 3 feet below pad subgrade or 1-foot below bottom of the building footings, whichever is greater, and replaced with compacted fill. The undercut should extend into the fill side of the transition until the required undercut depth is achieved throughout the building pad. The undercuts should be sloped a minimum of 1 percent towards the planned street or deeper fill and should extend at least 5 feet beyond the edge of the building pad.

6.4.6 Prior to placing fill, the base of excavations should be scarified; moisture conditioned as necessary and compacted. Fill soils may then be placed and compacted in layers to the design finish grade elevations. In general, on-site soils are suitable for re-use as fill if free from vegetation, debris and other deleterious material. Layers of fill should be no thicker than will allow for adequate bonding and compaction. All fill, including scarified ground surfaces and backfill, should be compacted to at least 90 of laboratory maximum dry density as determined by ASTM Test Procedure D-1557 at or slightly above optimum moisture content. Overly wet materials will require drying and/or mixing with drier soils to facilitate proper compaction.

6.4.7 Imported material, if required, should consist of granular *low* expansive (Expansion Index less than 50) soils. Prior to importing, samples from proposed borrow sites should be evaluated by a Geocon representative and subjected to laboratory expansion testing to determine if the material conforms to the recommended expansion criteria.

6.5 Slopes

6.5.1 Cut and fill slopes with maximum heights of approximately 25 feet and 60 feet, respectively are proposed at the site with inclinations of 2:1 (horizontal:vertical) or flatter. The slopes are considered grossly stable with factors of safety in excess of 1.5 with respect to both deep seated and surficial instability. Slope stability analyses are shown on Figures 4 through 5.

6.5.2 It is recommended that all slope excavations be observed during grading by an engineering geologist to verify that soil and geologic conditions do not differ significantly from those anticipated.

6.5.3 The outer 15 feet (or a distance equal to the height of the slope, whichever is less) of fill slopes should be composed of properly compacted granular *soil* fill to reduce the potential for surficial sloughing. All slopes should be compacted by backrolling with a loaded sheepsfoot roller at vertical intervals not to exceed 4 feet and then track walked with a D-8

bulldozer, or equivalent, upon completion such that the fill soils are uniformly compacted to at least 90 percent relative compaction to the face of the finish slope.

6.5.4 All slopes should be landscaped with drought-tolerant vegetation, having variable root depths and requiring minimal landscape irrigation. In addition, all slopes should be drained and properly maintained to reduce erosion.

6.6 Seismic Design Criteria

6.6.1 We used the computer program *U.S. Seismic Design Maps*, provided by the USGS. Table 6.6.1 summarizes site-specific design criteria obtained from the 2013 California Building Code (CBC; Based on the 2012 International Building Code [IBC] and ASCE 7-10), Chapter 16 Structural Design, Section 1613 Earthquake Loads. The short spectral response uses a period of 0.2 second. The building structure and improvements should be designed using a Site Class D. We evaluated the site class based on the discussion in Section 1613.3.2 of the 2013 CBC and Table 20.3-1 of ASCE 7-10. The values presented in Table 6.6.1 are for the risk-targeted maximum considered earthquake (MCE_R).

TABLE 6.6.1
2013 CBC SEISMIC DESIGN PARAMETERS

Parameter	Value	2013 CBC Reference
Site Class	D	Section 1613.3.2
MCE_R Ground Motion Spectral Response Acceleration – Class B (short), S_S	1.160g	Figure 1613.3.1(1)
MCE_R Ground Motion Spectral Response Acceleration – Class B (1 sec), S_1	0.448g	Figure 1613.3.1(2)
Site Coefficient, F_A	1.036	Table 1613.3.3(1)
Site Coefficient, F_V	1.552	Table 1613.3.3(2)
Site Class Modified MCE_R Spectral Response Acceleration (short), S_{MS}	1.201g	Section 1613.3.3 (Eqn 16-37)
Site Class Modified MCE_R Spectral Response Acceleration (1 sec), S_{M1}	0.696g	Section 1613.3.3 (Eqn 16-38)
5% Damped Design Spectral Response Acceleration (short), S_{DS}	0.801g	Section 1613.3.4 (Eqn 16-39)
5% Damped Design Spectral Response Acceleration (1 sec), S_{D1}	0.464g	Section 1613.3.4 (Eqn 16-40)

6.6.2 Table 6.6.2 presents additional seismic design parameters for projects located in Seismic Design Categories of D through F in accordance with ASCE 7-10 for the mapped maximum considered geometric mean (MCE_G).

TABLE 6.6.2
2013 CBC SITE ACCELERATION DESIGN PARAMETERS

Parameter	Value	ASCE 7-10 Reference
Mapped MCE_G Peak Ground Acceleration, PGA	0.487g	Figure 22-7
Site Coefficient, F_{PGA}	1.013	Table 11.8-1
Site Class Modified MCE_G Peak Ground Acceleration, PGA_M	0.493g	Section 11.8.3 (Eqn 11.8-1)

6.6.3 Conformance to the criteria in Tables 6.6.1 and 6.6.2 for seismic design does not constitute any kind of guarantee or assurance that significant structural damage or ground failure will not occur if a large earthquake occurs. The primary goal of seismic design is to protect life, not to avoid all damage, since such design may be economically prohibitive.

6.7 Foundation and Concrete Slabs-On-Grade Recommendations

6.7.1 The foundation recommendations herein are for one- to four-story structures. The foundation recommendations have been separated into three categories dependent on the thickness and geometry of the underlying fill soils as well as the expansion index of the prevailing subgrade soils of a particular building pad. The foundation category criteria are presented in Table 6.7.1. Final foundation categories for each building will be provided after completion of grading (finish pad grades have been achieved) and laboratory expansion testing of the finish grade soils is complete.

TABLE 6.7.1
FOUNDATION CATEGORY CRITERIA

Foundation Category	Maximum Fill Thickness, T (feet)	Differential Fill Thickness, D (feet)	Expansion Index (EI)
I	$T<20$	--	$EI\leq50$
II	$20\leq T<50$	$10\leq D<20$	$50<EI\leq90$
III	$T\geq50$	$D\geq20$	$90<EI\leq130$

6.7.2 Table 6.7.2 presents minimum foundation and interior concrete slab design criteria for conventional foundation systems.

TABLE 6.7.2
CONVENTIONAL FOUNDATION RECOMMENDATIONS BY CATEGORY

Foundation Category	Minimum Footing Embedment Depth (inches)	Continuous Footing Reinforcement	Interior Slab Reinforcement
I	12	Two No. 4 bars, one top and one bottom	6 x 6 - 10/10 welded wire mesh at slab mid-point
II	18	Four No. 4 bars, two top and two bottom	No. 3 bars at 24 inches on center, both directions
III	24	Four No. 5 bars, two top and two bottom	No. 3 bars at 18 inches on center, both directions

6.7.3 The embedment depths presented in Table 6.7.2 should be measured from the lowest adjacent pad grade for both interior and exterior footings. The conventional foundations should have a minimum width of 12 inches and 24 inches for continuous and isolated footings, respectively. A typical footing dimension detail is provided on Figure 7.

6.7.4 The concrete slab-on-grade should be a minimum of 4 inches thick for Foundation Categories I and II and 5 inches thick for Foundation Category III.

6.7.5 A vapor retarder should underlie slabs that may receive moisture-sensitive floor coverings or to be used to store moisture-sensitive materials. The vapor retarder design should be consistent with the guidelines presented in the American Concrete Institute's (ACI) *Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials* (ACI 302.2R-06). In addition, the membrane should be installed in a manner that prevents puncture in accordance with manufacturer's recommendations and ASTM requirements. The project architect or developer should specify the type of vapor retarder used based on the type of floor covering that will be installed and if the structure will possess a humidity-controlled environment.

6.7.6 The project foundation engineer, architect, and/or developer should determine the thickness of bedding sand below the slab. In general, 3 to 4 inches of sand bedding is typically used. Geocon should be contacted to provide recommendations if the bedding sand is thicker than 6 inches.

6.7.7 The foundation design engineer should provide appropriate concrete mix design criteria and curing measures to assure proper curing of the slab by reducing the potential for rapid moisture loss and subsequent cracking and/or slab curl. We suggest that the foundation design engineer present the concrete mix design and proper curing methods on the

foundation plan. It is critical that the foundation contractor understands and follows the specifications presented on the foundation plan.

6.7.8 As an alternative to the conventional foundation recommendations, consideration should be given to the use of post-tensioned concrete slab and foundation systems for the support of the proposed structures. The post-tensioned systems should be designed by a structural engineer experienced in post-tensioned slab design and design criteria of the Post-Tensioning Institute (PTI), Third Edition, as required by the 2013 California Building Code (CBC Section 1808.6). Although this procedure was developed for expansive soil conditions, it can also be used to reduce the potential for foundation distress due to differential fill settlement. The post-tensioned design should incorporate the geotechnical parameters presented on Table 6.7.3 for the particular Foundation Category designated. The parameters presented in Table 6.7.3 are based on the guidelines presented in the PTI, Third Edition design manual.

TABLE 6.7.3
POST-TENSIONED FOUNDATION SYSTEM DESIGN PARAMETERS

Post-Tensioning Institute (PTI), Third Edition Design Parameters	Foundation Category		
	I	II	III
Thornthwaite Index	-20	-20	-20
Equilibrium Suction	3.9	3.9	3.9
Edge Lift Moisture Variation Distance, e_M (feet)	5.3	5.1	4.9
Edge Lift, y_M (inches)	0.61	1.10	1.58
Center Lift Moisture Variation Distance, e_M (feet)	9.0	9.0	9.0
Center Lift, y_M (inches)	0.30	0.47	0.66

6.7.9 The foundations for the post-tensioned slabs should be embedded in accordance with the recommendations of the structural engineer. If a post-tensioned mat foundation system is planned, the slab should possess a thickened edge with a minimum width of 12 inches and extend at least 6 inches below the clean sand or crushed rock layer.

6.7.10 If the structural engineer proposes a post-tensioned foundation design method other than PTI, Third Edition:

- The deflection criteria presented in Table 6.7.3 are still applicable.
- Interior stiffener beams should be used for Foundation Categories II and III.
- The width of the perimeter foundations should be at least 12 inches.

- The perimeter footing embedment depths should be at least 12 inches, 18 inches and 24 inches for foundation categories I, II, and III, respectively. The embedment depths should be measured from the lowest adjacent pad grade.

6.7.11 Our experience indicates post-tensioned slabs are susceptible to excessive edge lift, regardless of the underlying soil conditions. Placing reinforcing steel at the bottom of the perimeter footings and the interior stiffener beams may mitigate this potential. The placement of the reinforcing tendons in the top of the slab and the resulting eccentricity after tensioning could reduce the ability of the system to mitigate edge lift. The structural engineer should design the foundation system to reduce the potential of edge lift occurring for the proposed structures.

6.7.12 During the construction of the post-tension foundation system, the concrete should be placed monolithically. Under no circumstances should cold joints form between the footings/grade beams and the slab during the construction of the post-tension foundation system.

6.7.13 Category I, II, or III foundations may be designed for an allowable soil bearing pressure of 2,500 pounds per square foot (psf) (dead plus live load). The soil bearing pressure may be increased by 300 psf and 500 psf for each additional foot of foundation width and depth, respectively, up to a maximum allowable soil bearing pressure of 4,000 psf. This bearing pressure may be increased by one-third for transient loads due to wind or seismic forces. The estimated maximum total and differential settlement for the planned structures due to foundation loads is 1 inch and ½ inch, respectively. Differential settlement is estimated to occur over a span of 40 feet.

6.7.14 Isolated footings outside of the slab area, if present, should have the minimum embedment depth and width recommended for conventional foundations for a particular foundation category. The use of isolated footings, which are located beyond the perimeter of the building and support structural elements connected to the building, are not recommended for Category III. Where this condition cannot be avoided, the isolated footings should be connected to the building foundation system with grade beams.

6.7.15 For Foundation Category III, consideration should be given to using interior stiffening beams and connecting isolated footings and/or increasing the slab thickness. In addition, consideration should be given to connecting patio slabs, which exceed 5 feet in width, to the building foundation to reduce the potential for future separation to occur.

6.7.16 Special subgrade presaturation is not deemed necessary prior to placing concrete; however, the exposed foundation and slab subgrade soil should be moisture conditioned, as necessary, to maintain a moist condition as would be expected in any such concrete placement.

6.7.17 The exterior flatwork recommendations provided herein assumes that grading is performed as recommended above and that the near surface soils are very low to low expansive (EI $\leq$ 50). Exterior slabs not subjected to vehicular traffic should be a minimum of four inches thick and reinforced with 6 x 6-6/6 welded wire mesh. The mesh should be placed in the middle of the slab. Proper mesh positioning is critical to future performance of the slabs. The contractor should take extra measures to provide proper mesh placement. Prior to construction of slabs, the upper 12 inches of subgrade soils should be moisture conditioned one to three percent above optimum moisture content and compacted to at least 90 percent of the laboratory maximum dry density per ASTM 1557.

6.7.18 To control the location and spread of concrete shrinkage and/or expansion cracks, it is recommended that crack-control joints be included in the design of concrete slabs. Crack-control joint spacing should not exceed, in feet, twice the recommended slab thickness in inches (e.g., 10 feet by 10 feet for a 5-inch-thick slab). Crack-control joints should be created while the concrete is still fresh using a grooving tool or shortly thereafter using saw cuts. The structural engineer should take criteria of the American Concrete Institute into consideration when establishing crack-control spacing patterns.

6.7.19 Where buildings or other improvements are planned near the top of a slope steeper than 3:1 (horizontal:vertical), special foundations and/or design considerations are recommended due to the tendency for lateral soil movement to occur.

- For fill slopes less than 20 feet high or cut slopes regardless of height, building footings should be deepened such that the bottom outside edge of the footing is at least 7 feet horizontally from the face of the slope.

- When located next to a descending 3:1 (horizontal:vertical) fill slope or steeper, the foundations should be extended to a depth where the minimum horizontal distance is equal to H/3 (where H equals the vertical distance from the top of the fill slope to the base of the fill soil) with a minimum of 7 feet but need not exceed 40 feet. The horizontal distance is measured from the outer, deepest edge of the footing to the face of the slope. A post-tensioned slab and foundation system or mat foundation system can be used to help reduce the potential for distress in the structures associates with slope creep and lateral fill extension. Specific design parameters or recommendations for either of these alternatives can be provided once the building location and fill slope geometry have been determined.

- If swimming pools are planned, Geocon Incorporated should be contacted for a review of specific site conditions.

- Swimming pools located within 7 feet of the top of cut or fill slopes are not recommended. Where such a condition cannot be avoided, the portion of the swimming pool wall within 7 feet of the slope face be designed assuming that the adjacent soil provides no lateral support. This recommendation applies to fill

slopes up to 30 feet in height, and cut slopes regardless of height. For swimming pools located near the top of fill slopes greater than 30 feet in height, additional recommendations may be required and Geocon Incorporated should be contacted for a review of specific site conditions.

- Although other improvements, which are relatively rigid or brittle, such as concrete flatwork or masonry walls, may experience some distress if located near the top of a slope, it is generally not economical to mitigate this potential. It may be possible, however, to incorporate design measures, which would permit some lateral soil movement without causing extensive distress. Geocon Incorporated should be consulted for specific recommendations.

6.7.20 Special subgrade presaturation is not deemed necessary prior to placing concrete; however, the exposed foundation and slab subgrade soil should be moisture conditioned, as necessary, to maintain a moist condition as would be expected in any such concrete placement.

6.7.21 The recommendations of this report are intended to reduce the potential for cracking of slabs due to expansive soil (if present), differential settlement of existing soil or soil with varying thicknesses. However, even with the incorporation of the recommendations presented herein, foundations, stucco walls, and slabs-on-grade placed on such conditions may still exhibit some cracking due to soil movement and/or shrinkage. The occurrence of concrete shrinkage cracks is independent of the supporting soil characteristics. Their occurrence may be reduced and/or controlled by: limiting the slump of the concrete; proper concrete placement and curing; and by the placement of crack control joints at periodic intervals, in particular, where re-entrant slab corners occur.

6.7.22 Geocon Incorporated should be consulted to provide additional design parameters as required by the structural engineer.

6.8 Retaining Walls and Lateral Loads

6.8.1 Retaining walls that are allowed to rotate more than 0.001H (where H equals the height of the retaining portion of the wall) at the top of the wall and having a level backfill surface should be designed for an active soil pressure equivalent to the pressure exerted by a fluid density of 35 pcf. Where the backfill will be inclined at 2:1 (horizontal:vertical), an active soil pressure of 50 pcf is recommended. Expansive soil should not be used as backfill material behind retaining walls. Soil placed for retaining wall backfill should have an Expansion Index less than 50.

6.8.2 Soil contemplated for use as retaining wall backfill, including import materials, should be identified in the field prior to backfill. At that time Geocon Incorporated should obtain samples for laboratory testing to evaluate its suitability. Modified lateral earth pressures may

be necessary if the backfill soil does not meet the required expansion index or shear strength. City or regional standard wall designs, if used, are based on a specific active lateral earth pressure and/or soil friction angle. In this regard, on-site soil to be used as backfill may or may not meet the values for standard wall designs. Geocon Incorporated should be consulted to assess the suitability of the on-site soil for use as wall backfill if standard wall designs will be used.

6.8.3 Unrestrained walls will move laterally when backfilled and loading is applied. The amount of lateral deflection is dependent on the wall height, the type of soil used for backfill, and loads acting on the wall. The wall designer should provide appropriate lateral deflection quantities for planned retaining walls structures, if applicable. These lateral values should be considered when planning types of improvements above retaining wall structures.

6.8.4 Where walls are restrained from movement at the top, an additional uniform pressure of 8H psf should be added to the active soil pressure where the wall possesses a height of 8 feet or less and 12H where the wall is greater than 8 feet. For retaining walls subject to vehicular loads within a horizontal distance equal to two-thirds the wall height, a surcharge equivalent to 2 feet of fill soil should be added.

6.8.5 The structural engineer should determine the seismic design category for the project in accordance with Section 1613 of the CBC. If the project possesses a seismic design category of D, E, or F, retaining walls that support more than 6 feet of backfill should be designed with seismic lateral pressure in accordance with Section 18.3.5.12 of the 2013 CBC. The seismic load is dependent on the retained height where H is the height of the wall, in feet, and the calculated loads result in pounds per square foot (psf) exerted at the base of the wall and zero at the top of the wall. A seismic load of 22H should be used for design. We used the peak ground acceleration adjusted for Site Class effects, PGA_M, of 0.493g calculated from ASCE 7-10 Section 11.8.3 and applied a pseudo-static coefficient of 0.33.

6.8.6 Retaining walls should be provided with a drainage system adequate to prevent the buildup of hydrostatic forces and should be waterproofed as required by the project architect. The use of drainage openings through the base of the wall (weep holes) is not recommended where the seepage could be a nuisance or otherwise adversely affect the property adjacent to the base of the wall. The above recommendations assume a properly compacted granular (EI of less than 50) free-draining backfill material with no hydrostatic forces or imposed surcharge load. Figure 8 presents a typical retaining wall drainage detail. If conditions different than those described are expected, or if specific drainage details are desired, Geocon Incorporated should be contacted for additional recommendations.

6.8.7 In general, wall foundations having a minimum depth and width of one foot may be designed for an allowable soil bearing pressure of 2,500 psf, provided the soil within 3 feet below the base of the wall consists of compacted fill with an Expansion Index of less than 50. The soil bearing pressure may be increased by 300 psf and 500 psf for each additional foot of foundation width and depth, respectively, up to a maximum allowable soil bearing pressure of 4,000 psf. This bearing pressure may be increased by one-third for transient loads due to wind or seismic forces. The proximity of the foundation to the top of a slope steeper than 3:1 could impact the allowable soil bearing pressure. Therefore, Geocon Incorporated should be consulted where such a condition is anticipated.

6.8.8 Resistance to lateral loads can be provided by friction along the base of the wall foundation or by passive earth pressure against the side of the footing. Allowable coefficients of friction of 0.4 are recommended for footings in compacted fill. Passive earth pressure may be taken as 150 pcf for walls founded on a 2:1 slope, and 350 pcf for horizontal ground in front of the wall. The allowable passive pressure assumes a horizontal surface extending at least 5 feet, or three times the surface generating the passive pressure, whichever is greater. The upper 12 inches of material in areas not protected by floor slabs or pavement should not be included in design for passive resistance.

6.8.9 The recommendations presented above are generally applicable to the design of rigid concrete or masonry retaining walls having a maximum height of 8 feet. In the event that walls higher than 8 feet are planned, Geocon Incorporated should be consulted for additional recommendations.

6.9 Preliminary Pavement Recommendations

6.9.1 The following pavement sections are based on an assumed R-Value of 20. Final pavement sections should be calculated once subgrade elevations have been attained and R-Value testing on actual subgrade samples is performed. We calculated the preliminary pavement sections using procedures outlined in the *California Highway Design Manual* (Caltrans). Table 6.9.1 presents the preliminary flexible pavement recommendations for varying traffic indices. The civil engineer should determine the appropriate traffic index for the anticipated traffic volume and pavement area.

TABLE 6.9.1
PRELIMINARY FLEXIBLE PAVEMENT SECTIONS

Traffic Index	Asphalt Concrete Thickness (inches)	Class 2 Aggregate Base Thickness (inches)
4.5	3	6
5.0	3	7
5.5	3	9
6.0	3.5	9.5
6.5	4	10
7.0	4	12

6.9.2 Asphalt concrete should conform to Section 203-6 of the *Standard Specifications for Public Works Construction* (Green Book). Class 2 aggregate base materials should conform to Section 26-1.02B of the *Standard Specifications of the State of California, Department of Transportation* (Caltrans). Crushed aggregate base, as specified in the Green Book, can be used in lieu of Class 2 Aggregate Base.

6.9.3 Prior to placing base material, the subgrade should be scarified, moisture conditioned and recompacted to a minimum of 95 percent relative compaction. The depth of compaction should be at least 12 inches. The base material should be compacted to at least 95 percent relative compaction. Asphalt concrete should be compacted to at least 95 percent Hveem density.

6.9.4 A rigid Portland Cement concrete (PCC) pavement section should be placed in driveway entrance aprons and trash bin loading/storage areas. We calculated the rigid pavement section in general conformance with the procedure recommended by the American Concrete Institute report *ACI 330R-08 Guide for Design and Construction of Concrete Parking Lots* using the parameters presented in Table 6.9.2.

TABLE 6.9.2
PRELIMINARY RIGID PAVEMENT DESIGN PARAMETERS

Design Parameter	Design Value
Modulus of subgrade reaction, k	100 pci
Modulus of rupture for concrete, M_R	500 psi
Compressive Strength	3,000 psi
Traffic Category, TC	A and C
Average daily truck traffic, ADTT	10 (A) and 100 (C)

6.9.5 Based on the criteria presented herein, the PCC pavement sections should have a minimum thickness as presented in Table 6.9.3.

TABLE 6.9.3
PRELIMINARY RIGID PAVEMENT RECOMMENDATIONS

Location	Portland Cement Concrete (inches)
Automobile Areas (TC=A-10)	5.5
Entrance aprons and Heavy Truck/Fire Lane Areas (TC=C-100)	7

6.9.6 The PCC pavement should be placed over subgrade soil that is compacted to a dry density of at least 95 percent of the laboratory maximum dry density near to slightly above optimum moisture content.

6.9.7 Loading aprons such as trash bin enclosures should utilize Portland Cement concrete as recommended in Table 6.9.3 for heavy trucks. The pavement should be reinforced with No. 3 steel reinforcing bars spaced 24 inches on center in both directions placed at the slab midpoint. The concrete should extend out from the trash bin such that both the front and rear wheels of the trash truck will be located on reinforced concrete pavement when loading. Reinforcing steel, outside of trash bin loading areas, is not be necessary within the concrete for geotechnical purposes with the possible exception of dowels at construction joints as discussed herein.

6.9.8 A thickened edge or integral curb should be constructed on the outside of concrete slabs subjected to heavy truck traffic wheel loads. The thickened edge should be 1.2 times the slab thickness or a minimum thickness of 2 inches, whichever results in a thicker edge, and taper back to the recommended slab thickness 4 feet behind the face of the slab (e.g., a 7-inch-thick slab would have a 9-inch-thick edge).

6.9.9 To control the location and spread of concrete shrinkage cracks, it is recommended that crack control joints be included in the design of the concrete pavement slabs. Crack control joint spacing should not exceed 12 feet. The crack control joints should be created while the concrete is still fresh using a grooving tool or shortly thereafter using saw cuts. The depth of the crack-control joints should be determined following recommendations in the referenced ACI guide. The cracks should be sealed with an appropriate sealant to prevent the migration of water through the control joint to the subgrade materials. Appropriate fillers or sealers are discussed in the referenced ACI guide.

6.9.10 Construction joints should be provided at the interface between areas of concrete placed at different times during construction. Doweling is recommended between the joints in pavements designed to accommodate heavy truck traffic. Dowels should meet the recommendations in the referenced ACI guide.

6.9.11 The performance of pavements is highly dependent upon providing positive surface drainage away from the edge of pavements. Allowing water to pond on or adjacent to the pavement will likely result in saturation of the subgrade materials and subsequent pavement distress. Where landscape or planter islands are planned adjacent to pavement surfaces, the perimeter curb should extend at least 6 inches below the bottom of the Class 2 aggregate base and into the underlying subgrade. Drainage from landscaped areas should be directed to controlled drainage structures.

6.10 Bio-Retention Basin and Bio-Swale Recommendations

6.10.1 The project civil engineer should design any bio-retention basins, bioswales, and bio-remediation areas. The design should be reviewed by Geocon Incorporated. Typically, bioswales consist of a surface layer of vegetation underlain by clean sand. A subdrain should be provided beneath the sand layer. Prior to discharging into the storm drain pipe, a seepage cutoff wall should be constructed at the interface between the subdrain and storm drain pipe. The concrete cut-off wall should extend at least 6-inches beyond the perimeter of the gravel-packed subdrain system.

6.10.2 Distress may be caused to planned improvements and properties located hydrologically downstream or adjacent to these devices. The distress depends on the amount of water to be detained, its residence time, soil permeability, and other factors. We have not performed a hydrogeology study at the site. Downstream and adjacent properties may be subjected to seeps, springs, slope instability, raised groundwater, movement of foundations and slabs, or other impacts as a result of water infiltration. Infiltration into compacted fills is not recommended. Considering the presence of fill and the proximity of bio-retention bmp areas to slopes and structural improvements, bio-retention areas should be lined with an impermeable barrier, such as a thick visqueen, to prevent water infiltration in to the underlying compacted fill, below structural improvements, and to the face of adjacent slopes.

6.10.3 The landscape architect should be consulted to provide the appropriate plant recommendations. If drought resistant plants are not used, irrigation may be required.

6.11 Site Drainage and Moisture Protection

6.11.1 Adequate site drainage is critical to reduce the potential for differential soil movement, erosion and subsurface seepage. Under no circumstances should water be allowed to pond adjacent to footings. The site should be graded and maintained such that surface drainage is directed away from structures in accordance with 2013 CBC 1803.3 or other applicable standards. In addition, surface drainage should be directed away from the top of slopes into swales or other controlled drainage devices. Roof and pavement drainage should be directed into conduits that carry runoff away from the proposed structure.

6.11.2 In the case of basement walls or building walls retaining landscaping areas, a water-proofing system should be used on the wall and joints, and a Miradrain drainage panel (or similar) should be placed over the waterproofing. The project architect or civil engineer should provide detailed specifications on the plans for all waterproofing and drainage.

6.11.3 Underground utilities should be leak free. Utility and irrigation lines should be checked periodically for leaks, and detected leaks should be repaired promptly. Detrimental soil movement could occur if water is allowed to infiltrate the soil for prolonged periods of time.

6.12 Grading and Foundation Plan Review

6.12.1 Geocon Incorporated should review the grading plans and foundation plans for the project prior to final design submittal to evaluate whether additional analyses and/or recommendations are required.

LIMITATIONS AND UNIFORMITY OF CONDITIONS

1. The firm that performed the geotechnical investigation for the project should be retained to provide testing and observation services during construction to provide continuity of geotechnical interpretation and to check that the recommendations presented for geotechnical aspects of site development are incorporated during site grading, construction of improvements, and excavation of foundations. If another geotechnical firm is selected to perform the testing and observation services during construction operations, that firm should prepare a letter indicating their intent to assume the responsibilities of project geotechnical engineer of record. A copy of the letter should be provided to the regulatory agency for their records. In addition, that firm should provide revised recommendations concerning the geotechnical aspects of the proposed development, or a written acknowledgement of their concurrence with the recommendations presented in our report. They should also perform additional analyses deemed necessary to assume the role of Geotechnical Engineer of Record.

2. The recommendations of this report pertain only to the site investigated and are based upon the assumption that the soil conditions do not deviate from those disclosed in the investigation. If any variations or undesirable conditions are encountered during construction, or if the proposed construction will differ from that anticipated herein, Geocon Incorporated should be notified so that supplemental recommendations can be given. The evaluation or identification of the potential presence of hazardous or corrosive materials was not part of the scope of services provided by Geocon Incorporated.

3. This report is issued with the understanding that it is the responsibility of the owner or his representative to ensure that the information and recommendations contained herein are brought to the attention of the architect and engineer for the project and incorporated into the plans, and the necessary steps are taken to see that the contractor and subcontractors carry out such recommendations in the field.

4. The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether they be due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and should not be relied upon after a period of three years.

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VICINITY MAP

SOLANA HIGHLANDS
SOLANA BEACH, CALIFORNIA

RM / AML		DSK/GTYPD	DATE 08 - 28 - 2014	PROJECT NO. G1198 - 42 - 04	FIG. 1

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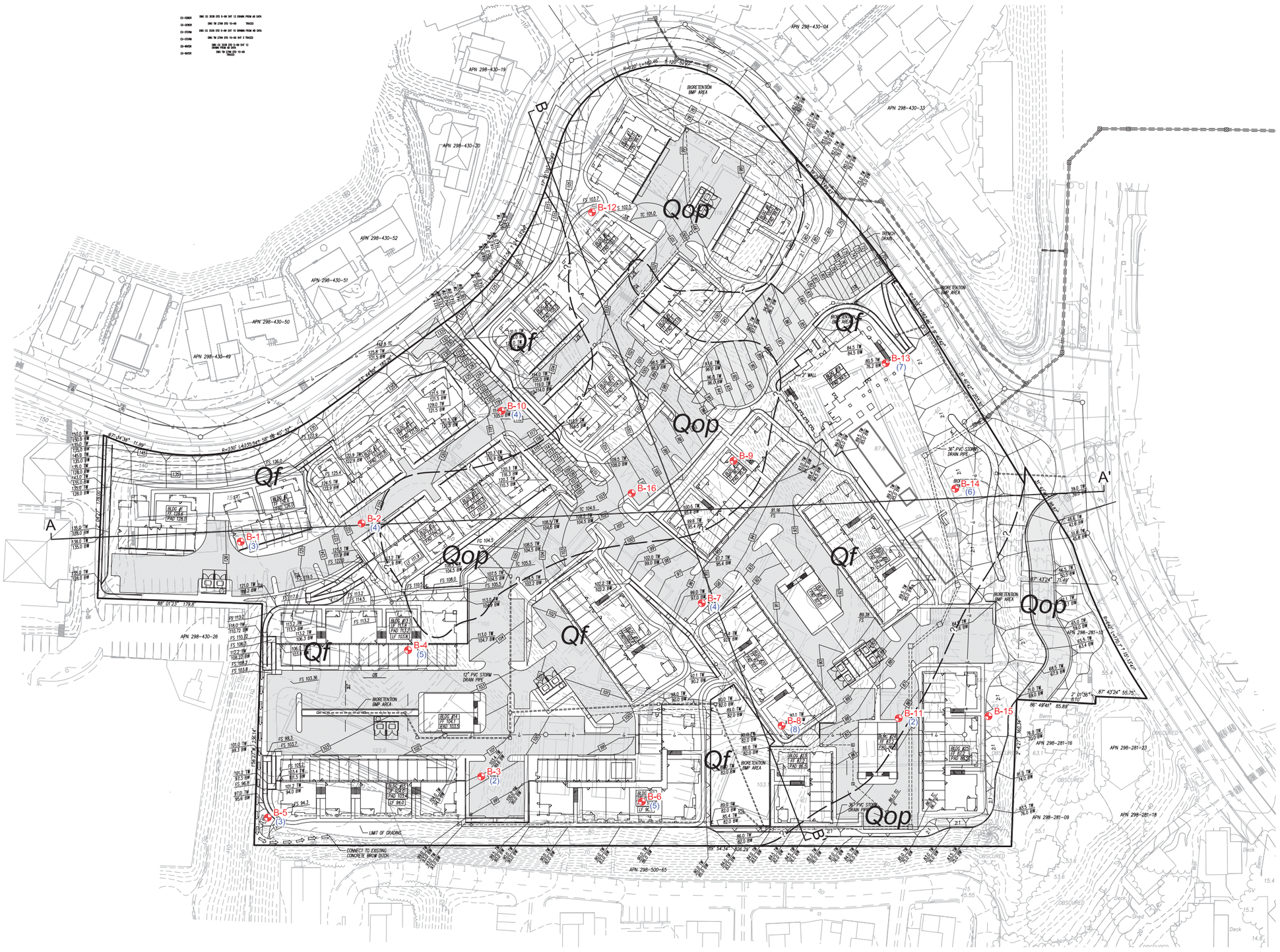

GEOCON LEGEND

Qf.....FILL

Qop.....OLD TERRACE DEPOSITS

.....APPROX. LOCATION OF GEOLOGIC CONTACT (Queried Where Uncertain)

B-16.....APPROX. LOCATION OF BORING

(6).....APPROX. THICKNESS OF SURFICIAL SOILS

GEOLOGIC MAP

SOLANA HIGHLANDS
SOLANA BEACH, CALIFORNIA

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SCALE 1" = 50'	DATE 08 - 28 - 2014	
PROJECT NO. G1198 - 42 - 04		FIGURE 2
SHEET 1 OF 1		

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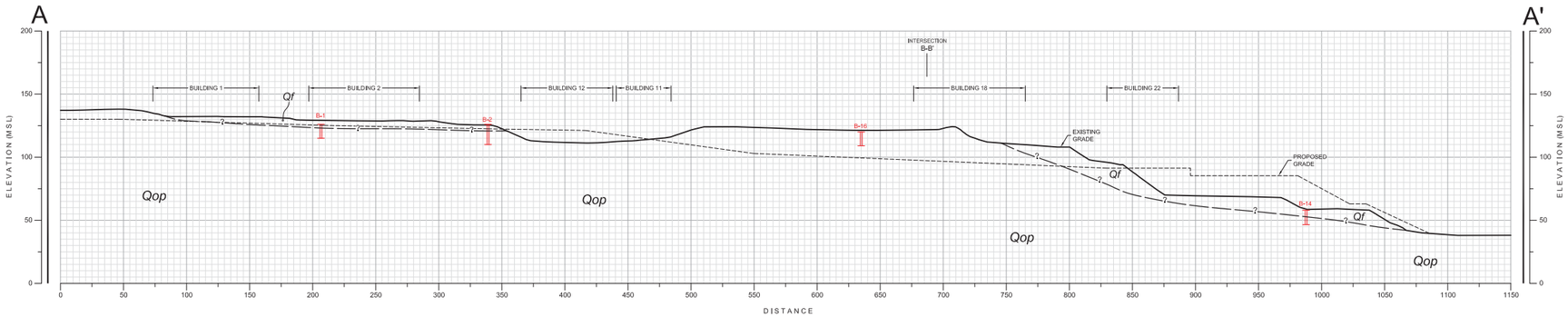
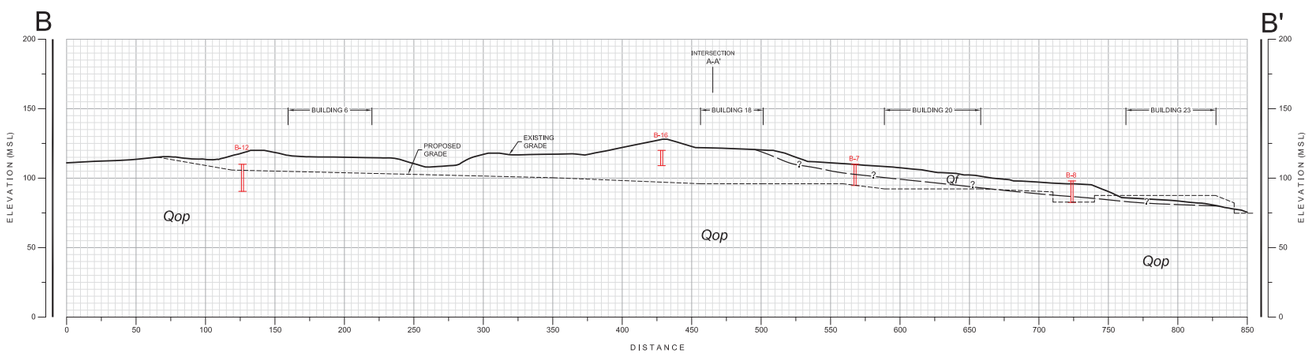


GEOLOGIC CROSS-SECTION A-A'

SCALE: 1" = 50' (Vert. = Horiz.)



GEOLOGIC CROSS-SECTION B-B'

SCALE: 1" = 50' (Vert. = Horiz.)

GEOCON LEGEND

Qf.....FILL

Qop.....OLD TERRACE DEPOSITS

.....APPROX. LOCATION OF GEOLOGIC CONTACT (Queried Where Uncertain)

B-16 .....APPROX. LOCATION OF BORING

GEOLOGIC CROSS SECTION

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SCALE 1" = 50	DATE 08 - 28 - 2014	
PROJECT NO. G1198 - 42 - 04		FIGURE 3
SHEET 1 OF 1		

LADRILLONO

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ASSUMED CONDITIONS :

SLOPE HEIGHT	H	= 40 feet
SLOPE INCLINATION	2 : 1	(Horizontal : Vertical)
TOTAL UNIT WEIGHT OF SOIL	γ_t	= 130 pounds per cubic foot
ANGLE OF INTERNAL FRICTION	ϕ	= 36 degrees
APPARENT COHESION	C	= 240 pounds per square foot
NO SEEPAGE FORCES		

ANALYSIS :

$\gamma_{c\phi}$	=	$\frac{\gamma H \tan\phi}{C}$	EQUATION (3-3), REFERENCE 1
FS	=	$\frac{NcfC}{\gamma H}$	EQUATION (3-2), REFERENCE 1
$\gamma_{c\phi}$	=	15.7	CALCULATED USING EQ. (3-3)
Ncf	=	44	DETERMINED USING FIGURE 10, REFERENCE 2
FS	=	2.0	FACTOR OF SAFETY CALCULATED USING EQ. (3-2)

REFERENCES :

1.....Janbu, N., Stability Analysis of Slopes with Dimensionless Parameters, Harvard Soil Mechanics, Series No. 46, 1954

2.....Janbu, N., Discussion of J.M. Bell, Dimensionless Parameters for Homogeneous Earth Slopes, Journal of Soil Mechanics and Foundation Design, No. SM6, November 1967.

SLOPE STABILITY ANALYSIS - CUT SLOPES

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ASSUMED CONDITIONS :

SLOPE HEIGHT	H	= 60 feet
SLOPE INCLINATION	2 : 1	(Horizontal : Vertical)
TOTAL UNIT WEIGHT OF SOIL	γ_t	= 125 pounds per cubic foot
ANGLE OF INTERNAL FRICTION	ϕ	= 28 degrees
APPARENT COHESION	C	= 400 pounds per square foot
NO SEEPAGE FORCES		

ANALYSIS :

$\gamma c\phi$	=	$\frac{\gamma H \tan\phi}{C}$	EQUATION (3-3), REFERENCE 1
FS	=	$\frac{NcfC}{\gamma H}$	EQUATION (3-2), REFERENCE 1
$\gamma c\phi$	=	10	CALCULATED USING EQ. (3-3)
Ncf	=	33	DETERMINED USING FIGURE 10, REFERENCE 2
FS	=	1.8	FACTOR OF SAFETY CALCULATED USING EQ. (3-2)

REFERENCES :

1.....Janbu, N., Stability Analysis of Slopes with Dimensionless Parameters, Harvard Soil Mechanics, Series No. 46, 1954

2.....Janbu, N., Discussion of J.M. Bell, Dimensionless Parameters for Homogeneous Earth Slopes, Journal of Soil Mechanics and Foundation Design, No. SM6, November 1967.

SLOPE STABILITY ANALYSIS - FILL SLOPES

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ASSUMED CONDITIONS :

SLOPE HEIGHT	H	=	Infinite
DEPTH OF SATURATION	Z	=	3 feet
SLOPE INCLINATION	2 : 1 (Horizontal : Vertical)		
SLOPE ANGLE	i	=	26.6 degrees
UNIT WEIGHT OF WATER	γ_w	=	62.4 pounds per cubic foot
TOTAL UNIT WEIGHT OF SOIL	γ_t	=	125 pounds per cubic foot
ANGLE OF INTERNAL FRICTION	ϕ	=	28 degrees
APPARENT COHESION	C	=	400 pounds per square foot

SLOPE SATURATED TO VERTICAL DEPTH Z BELOW SLOPE FACE

SEEPAGE FORCES PARALLEL TO SLOPE FACE

ANALYSIS :

$$FS = \frac{C + (\gamma_t - \gamma_w)\ Z\ \cos^2 i\ \tan \phi}{\gamma_t\ Z\ \sin i\ \cos i} = 2.6$$

REFERENCES :

1.....Haefeli, R. *The Stability of Slopes Acted Upon by Parallel Seepage*, Proc. Second International Conference, SMFE, Rotterdam, 1948, 1, 57-62

2.....Skempton, A. W., and F.A. Delory, *Stability of Natural Slopes in London Clay*, Proc. Fourth International Conference, SMFE, London, 1957, 2, 378-81

SURFICIAL SLOPE STABILITY ANALYSIS

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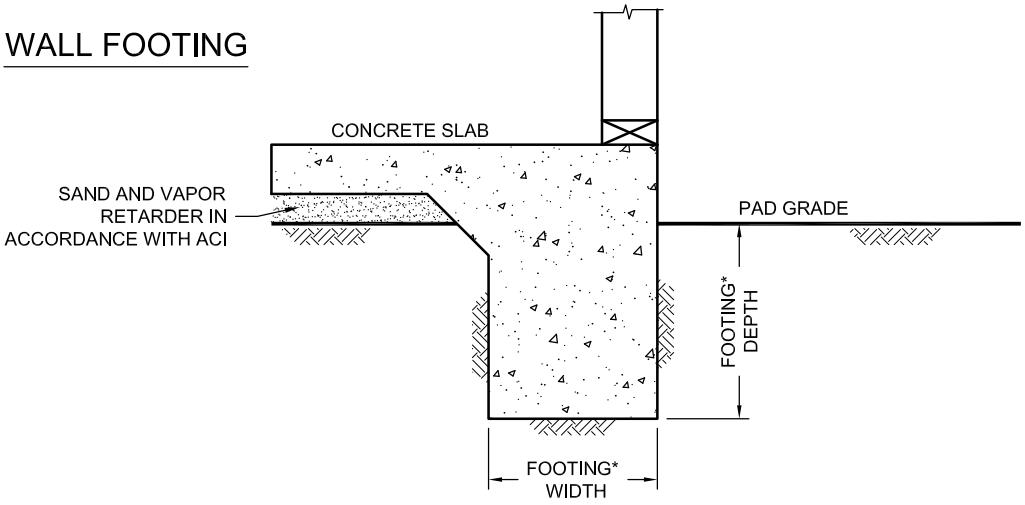
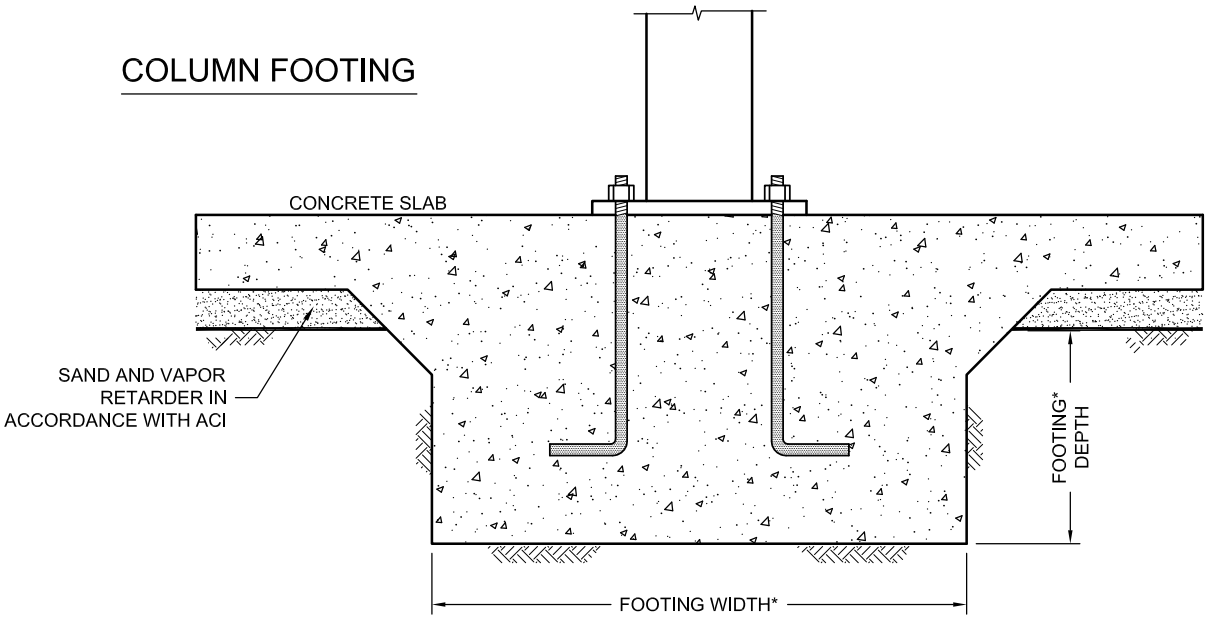
WALL FOOTING



COLUMN FOOTING



NO SCALE

*....SEE REPORT FOR FOUNDATION WIDTH AND DEPTH RECOMMENDATION

WALL / COLUMN FOOTING DIMENSION DETAIL

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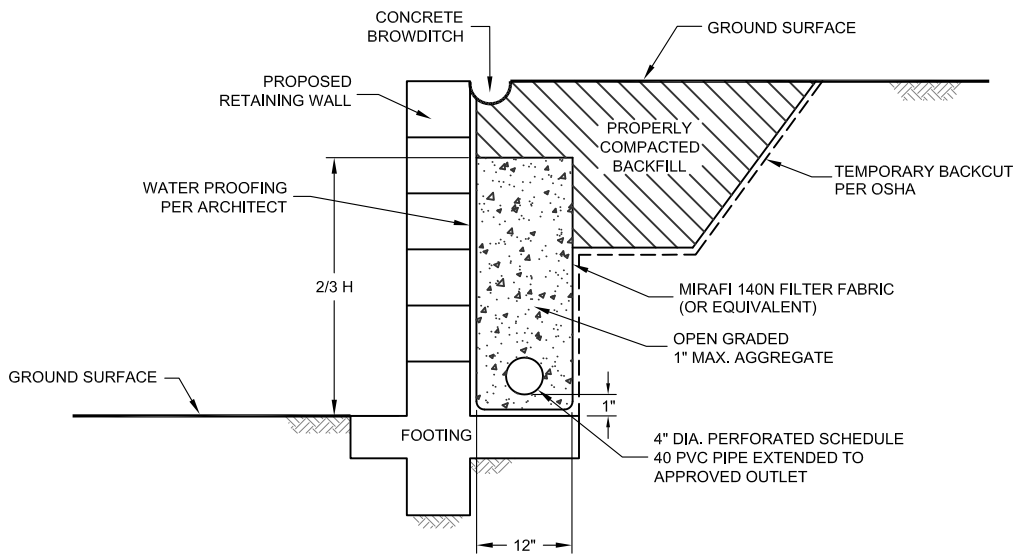

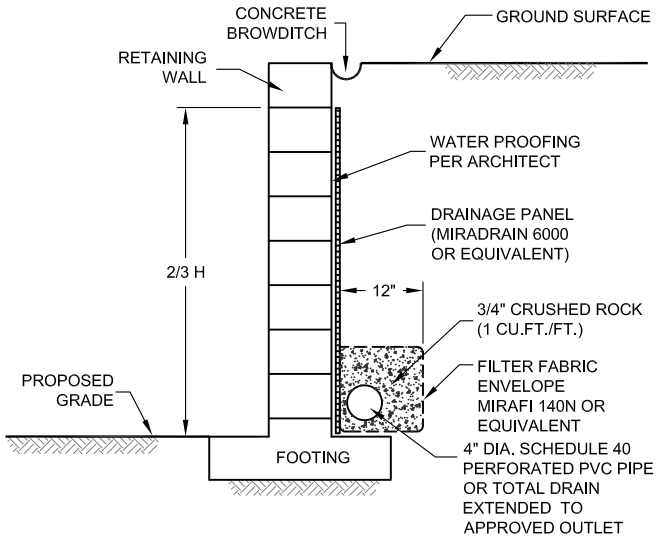

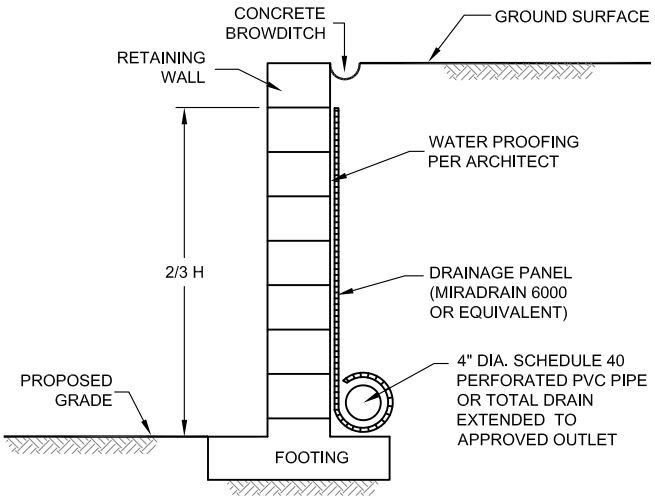

NOTE :

DRAIN SHOULD BE UNIFORMLY SLOPED TO GRAVITY OUTLET OR TO A SUMP WHERE WATER CAN BE REMOVED BY PUMPING

NO SCALE

TYPICAL RETAINING WALL DRAIN DETAIL

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RWDD7A

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APPENDIX A

APPENDIX **A**

FIELD INVESTIGATION

We performed the field investigation on August 12 and 13, 2014. The field investigation consisted of drilling 16, exploratory borings to depths of up to 31 feet. The approximate locations of the exploratory borings are shown on the Geologic Map, Figure 2.

The borings were drilled using CME 75 drill rig, equipped with 8-inch-diameter, hollow-stem augers. Relatively undisturbed samples were obtained from the borings by driving a 3-inch-diameter, split-tube sampler 12 inches into the undisturbed soil mass with blows from a hammer weighing 140 pounds, dropped from a height of 30 inches. The sampler was equipped with 1-inch-by-2.5-inch brass sampler rings to facilitate removal and testing of the soil. Bulk samples were also obtained and returned to the lab for testing.

The soil conditions encountered in the borings were visually examined, classified, and logged in general accordance with American Society for Testing and Materials (ASTM) practice for Description and Identification of Soils (Visual-Manual Procedure D 2488). Logs of the exploratory borings and trenches are presented in Appendix A, Figures A-1 through A-16. The logs depict the soil and geologic conditions encountered and the depth at which samples were obtained.

PROJECT NO. G1198-42-04

BORING B 1

ELEV. (MSL.) **126'** DATE COMPLETED **08-12-2014**

EQUIPMENT **CME 75** BY: **M. MEHTA**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0	B1-1			SC	4" **ASPHALT CONCRETE**			
					FILL Loose, moist, brown, Clayey, fine to medium SAND			
2	B1-2			SM	**OLD TERRACE DEPOSITS** Dense, damp, reddish brown, Silty, fine to medium SAND	52		
4								
	B1-3					67		
6								
8								
10	B1-4				Very dense, damp, light brown, Silty, fine SAND	82		

BORING TERMINATED AT 11 FEET
Groundwater not encountered
Backfilled on 08-12-2014

Figure A-1,
Log of Boring B 1, Page 1 of 1

G1198-42-04.GPJ

SAMPLE SYMBOLS

... SAMPLING UNSUCCESSFUL
... STANDARD PENETRATION TEST
... DRIVE SAMPLE (UNDISTURBED)
... DISTURBED OR BAG SAMPLE
... CHUNK SAMPLE
... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

PROJECT NO. G1198-42-04

BORING B 2

ELEV. (MSL.) **126'** DATE COMPLETED **08-12-2014**

EQUIPMENT **CME 75** BY: **M. MEHTA**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0	B2-1			SM	3" **ASPHALT CONCRETE**			
					FILL Medium dense, damp, brown, Silty, fine to medium SAND; little clay			
2								
4				SM	**OLD TERRACE DEPOSITS** Very dense, damp, brown to reddish brown, Silty, fine to medium SAND			
	B2-2					50/4"		
6								
8								
10	B2-3			SM	Medium dense, damp, light gray, Silty, fine SAND	34		
12								
14								
	B2-4					31		
16					BORING TERMINATED AT 16 FEET Groundwater not encountered Backfilled on 08-12-2014			

Figure A-2,
Log of Boring B 2, Page 1 of 1

G1198-42-04.GPJ

SAMPLE SYMBOLS

- ... SAMPLING UNSUCCESSFUL
- ... STANDARD PENETRATION TEST
- ... DRIVE SAMPLE (UNDISTURBED)
- ... DISTURBED OR BAG SAMPLE
- ... CHUNK SAMPLE
- ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

PROJECT NO. G1198-42-04

BORING B 3

ELEV. (MSL.) **104'** DATE COMPLETED **08-12-2014**

EQUIPMENT **CME 75** BY: **M. MEHTA**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0	B3-1			SM	4" **ASPHALT CONCRETE**			
					FILL Medium dense, moist, reddish brown, Silty, fine to coarse SAND; trace gravel			
2				SC/SM	**OLD TERRACE DEPOSITS** Medium dense, moist, light reddish brown, Clayey, fine to coarse SAND to Silty SAND; gravel maximum 1-inch diameter			
	B3-2					21		
4								
	B3-3					24	113.9	6.5
6								
8								
10	B3-4					26		
12								
14								
	B3-5					49		
16								
18								
	B3-6			SM	Very dense, damp, light yellowish brown, Silty, fine SAND	50/5"		

BORING TERMINATED AT 19.5 FEET
Groundwater not encountered
Backfilled on 08-12-2014

Figure A-3,
Log of Boring B 3, Page 1 of 1

G1198-42-04.GPJ

SAMPLE SYMBOLS

- ... SAMPLING UNSUCCESSFUL
- ... STANDARD PENETRATION TEST
- ... DRIVE SAMPLE (UNDISTURBED)
- ... DISTURBED OR BAG SAMPLE
- ... CHUNK SAMPLE
- ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

PROJECT NO. G1198-42-04

BORING B 4

ELEV. (MSL.) **112'** DATE COMPLETED **08-12-2014**

EQUIPMENT **CME 75** BY: **M. MEHTA**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0	B4-1			SM	4" **ASPHALT CONCRETE**			
					FILL Medium dense, damp, brown, Silty, fine to medium SAND			
2	B4-2					20		
4								
	B4-3					15	106.5	5.1
6				SM	**OLD TERRACE DEPOSITS** Very dense, moist, light reddish brown, Silty, fine to coarse SAND; trace gravel			
8								
10	B4-4					50/5"		
	B4-5							
12								
14								
	B4-6					53		
16								
18								
20	B4-7					50/6"		
22								
24								
	B4-8					66		
26								
28								

Figure A-4,
Log of Boring B 4, Page 1 of 2

G1198-42-04.GPJ

SAMPLE SYMBOLS

- ... SAMPLING UNSUCCESSFUL
- ... STANDARD PENETRATION TEST
- ... DRIVE SAMPLE (UNDISTURBED)
- ... DISTURBED OR BAG SAMPLE
- ... CHUNK SAMPLE
- ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

PROJECT NO. G1198-42-04

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	**BORING B 4** ELEV. (MSL.) **112'** DATE COMPLETED **08-12-2014** EQUIPMENT **CME 75** BY: **M. MEHTA**	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					MATERIAL DESCRIPTION			
30	B4-9			SM	Very dense, damp, light yellowish brown, Silty, fine SAND	50/4"		
					BORING TERMINATED AT 31 FEET Groundwater not encountered Backfilled on 08-12-2014			

Figure A-4,
Log of Boring B 4, Page 2 of 2

G1198-42-04.GPJ

SAMPLE SYMBOLS			
	... SAMPLING UNSUCCESSFUL	... STANDARD PENETRATION TEST	... DRIVE SAMPLE (UNDISTURBED)
	... DISTURBED OR BAG SAMPLE	... CHUNK SAMPLE	... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

PROJECT NO. G1198-42-04

BORING B 5

ELEV. (MSL.) **96'** DATE COMPLETED **08-12-2014**

EQUIPMENT **CME 75** BY: **M. MEHTA**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0	B5-1			SM	3" **ASPHALT CONCRETE**			
					FILL Loose, moist, brown, Silty, fine to medium SAND			
2	B5-2					33		
				SM	**OLD TERRACE DEPOSITS** Medium dense, damp, brown, Silty, fine to medium SAND			
4								
6	B5-3					27	106.4	8.0
8	B5-4							
10	B5-5					30		
12								
14								
16	B5-6			SM	Medium dense, dry, light yellowish brown, Silty, fine SAND	44		
	B5-7							
18								
20	B5-8					50/4"		
					BORING TERMINATED AT 20 FEET Groundwater not encountered Backfilled on 08-12-2014			

Figure A-5,
Log of Boring B 5, Page 1 of 1

G1198-42-04.GPJ

SAMPLE SYMBOLS

- ... SAMPLING UNSUCCESSFUL
- ... STANDARD PENETRATION TEST
- ... DRIVE SAMPLE (UNDISTURBED)
- ... DISTURBED OR BAG SAMPLE
- ... CHUNK SAMPLE
- ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

PROJECT NO. G1198-42-04

BORING B 6

ELEV. (MSL.) **92'** DATE COMPLETED **08-12-2014**

EQUIPMENT **CME 75** BY: **M. MEHTA**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0				SM	4" **ASPHALT CONCRETE**			
					FILL Loose, moist, brown, Silty, fine to medium SAND; little clay; trace gravel			
2	B6-1					20	122.2	9.8
4	B6-2							
	B6-3			SM/SC	**OLD TERRACE DEPOSITS** Dense, moist, reddish brown, Silty, fine to coarse SAND; trace clay	16		
6								
8								
10	B6-4				-No recovery	30		
12								
14								
	B6-5				-No recovery	50/4"		
16								
18								
	B6-6			SM	Very dense, damp, light yellowish brown, Silty, fine SAND	50/6"	99.7	4.9

BORING TERMINATED AT 19.5 FEET
Groundwater not encountered
Backfilled on 08-12-2014

Figure A-6,
Log of Boring B 6, Page 1 of 1

G1198-42-04.GPJ

SAMPLE SYMBOLS

- ... SAMPLING UNSUCCESSFUL
- ... STANDARD PENETRATION TEST
- ... DRIVE SAMPLE (UNDISTURBED)
- ... DISTURBED OR BAG SAMPLE
- ... CHUNK SAMPLE
- ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

PROJECT NO. G1198-42-04

BORING B 7

ELEV. (MSL.) **110'** DATE COMPLETED **08-13-2014**

EQUIPMENT **CME 75** BY: **N. BORJA**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0					4" **ASPHALT CONCRETE**			
				SM	**FILL** Medium dense, damp, brown, Silty, fine to coarse SAND; trace gravel			
2								
4				SM	**OLD TERRACE DEPOSITS** Medium dense to dense, damp, mottled light brown and tan, Silty, fine to coarse SAND; trace gravel			
6	B7-1					34		
8								
10	B7-2					48		
12								
14					-Becomes very dense			
	B7-3					50/3"		
					BORING TERMINATED AT 15.3 FEET Groundwater not encountered Backfilled on 08-13-2014			

Figure A-7,
Log of Boring B 7, Page 1 of 1

G1198-42-04.GPJ

SAMPLE SYMBOLS

- ... SAMPLING UNSUCCESSFUL
- ... STANDARD PENETRATION TEST
- ... DRIVE SAMPLE (UNDISTURBED)
- ... DISTURBED OR BAG SAMPLE
- ... CHUNK SAMPLE
- ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

PROJECT NO. G1198-42-04

BORING B 8

ELEV. (MSL.) **96'** DATE COMPLETED **08-12-2014**

EQUIPMENT **CME 75** BY: **M. MEHTA**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0					6" **ASPHALT CONCRETE**			
				SM	**FILL** Loose, moist, dark reddish brown, Silty, fine to medium SAND; little clay			
2	B8-1					9	117.5	7.6
4	B8-2							
	B8-3			SC	Loose to medium dense, moist, reddish brown, Clayey, fine to medium SAND	17	123.3	10.8
6								
8				SM	**OLD TERRACE DEPOSITS** Very dense, damp, light reddish brown, Silty, fine to coarse SAND; little gravel up to 1½-inch diameter			
10	B8-4					56		
12								
14								
	B8-5					50/2"		
	B8-6					50/4"		
					REFUSAL AT 15.5 FEET Groundwater not encountered Backfilled on 08-12-2014			

Figure A-8,
Log of Boring B 8, Page 1 of 1

G1198-42-04.GPJ

SAMPLE SYMBOLS

... SAMPLING UNSUCCESSFUL
... STANDARD PENETRATION TEST
... DRIVE SAMPLE (UNDISTURBED)
... DISTURBED OR BAG SAMPLE
... CHUNK SAMPLE
... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

PROJECT NO. G1198-42-04

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	**BORING B 9** ELEV. (MSL.) **110'** DATE COMPLETED **08-13-2014** EQUIPMENT **CME 75** BY: **N. BORJA**	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					MATERIAL DESCRIPTION			
0					4" **ASPHALT CONCRETE**			
				SM	**OLD TERRACE DEPOSITS** Very dense, dry to damp, light brown to light yellowish brown, Silty, fine to coarse SAND			
2								
4								
	B9-1					97		
6					BORING TERMINATED AT 6 FEET Groundwater not encountered Backfilled on 08-13-2014			

Figure A-9,
Log of Boring B 9, Page 1 of 1

G1198-42-04.GPJ

SAMPLE SYMBOLS			
	... SAMPLING UNSUCCESSFUL	... STANDARD PENETRATION TEST	... DRIVE SAMPLE (UNDISTURBED)
	... DISTURBED OR BAG SAMPLE	... CHUNK SAMPLE	... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

PROJECT NO. G1198-42-04

BORING B 10

ELEV. (MSL.) **126'** DATE COMPLETED **08-13-2014**

EQUIPMENT **CME 75** BY: **N. BORJA**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0				SM	2" **ASPHALT CONCRETE**			
					FILL Medium dense, damp to moist, brown, Silty, fine to coarse SAND; trace gravel			
2								
4				SM	**OLD TERRACE DEPOSITS** Medium dense, dry, light grayish brown to light brown and light reddish brown, Silty, fine to medium SAND			
	B10-1					33	105.8	6.8
6								
8								
					-Becomes dense, damp, brown to yellowish brown			
10	B10-2					66		
					BORING TERMINATED AT 11 FEET Groundwater not encountered Backfilled on 08-13-2014			

Figure A-10,
Log of Boring B 10, Page 1 of 1

G1198-42-04.GPJ

SAMPLE SYMBOLS

- ... SAMPLING UNSUCCESSFUL
- ... STANDARD PENETRATION TEST
- ... DRIVE SAMPLE (UNDISTURBED)
- ... DISTURBED OR BAG SAMPLE
- ... CHUNK SAMPLE
- ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

PROJECT NO. G1198-42-04

BORING B 11

ELEV. (MSL.) **73'** DATE COMPLETED **08-13-2014**

EQUIPMENT **CME 75** BY: **N. BORJA**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0					6" **ASPHALT CONCRETE**			
	B11-1			SM	**FILL** Medium dense, moist, brown to dark brown, Silty, fine to medium SAND			
2				SM	**OLD TERRACE DEPOSITS** Dense, moist, light yellowish brown and brown, Silty, fine to medium SAND			
4								
	B11-2					68		
6					BORING TERMINATED AT 6 FEET Groundwater not encountered Backfilled on 08-13-2014			

Figure A-11,
Log of Boring B 11, Page 1 of 1

G1198-42-04.GPJ

SAMPLE SYMBOLS

- ... SAMPLING UNSUCCESSFUL
- ... STANDARD PENETRATION TEST
- ... DRIVE SAMPLE (UNDISTURBED)
- ... DISTURBED OR BAG SAMPLE
- ... CHUNK SAMPLE
- ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

PROJECT NO. G1198-42-04

BORING B 12

ELEV. (MSL.) **110'** DATE COMPLETED **08-13-2014**

EQUIPMENT **CME 75** BY: **N. BORJA**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0				SP-SM	1" **ASPHALT CONCRETE**			
					OLD TERRACE DEPOSITS Dense, damp, light yellowish brown and white, fine to medium SAND; some silt; trace gravel			
2								
4								
6	B12-1					50		
				SM	Dense, damp, light brown to light grayish brown, Silty, fine to medium SAND			
8								
10	B12-2					51	101.9	3.1
	B12-3							
12								
					-Becomes moist, dark yellowish brown to light reddish brown			
14								
16	B12-4					66		
18								
	B12-5					87/9"		
					BORING TERMINATED AT 19.5 FEET Groundwater not encountered Backfilled on 08-13-2014			

Figure A-12,
Log of Boring B 12, Page 1 of 1

G1198-42-04.GPJ

SAMPLE SYMBOLS

- ... SAMPLING UNSUCCESSFUL
- ... STANDARD PENETRATION TEST
- ... DRIVE SAMPLE (UNDISTURBED)
- ... DISTURBED OR BAG SAMPLE
- ... CHUNK SAMPLE
- ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

PROJECT NO. G1198-42-04

BORING B 13

ELEV. (MSL.) **66'** DATE COMPLETED **08-13-2014**

EQUIPMENT **CME 75** BY: **N. BORJA**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0	B13-1			SM	3" **ASPHALT CONCRETE**			
2					**FILL** Loose, moist, dark brown to dark grayish brown and black, Silty, fine to medium SAND			
4								
6	B13-2					10	108.6	6.3
8				SM	**OLD TERRACE DEPOSITS** Medium dense, moist, brown to reddish brown, Silty, fine to medium SAND			
10	B13-3					43		
12				SM	Medium dense, moist, light yellowish brown and light gray, Silty, fine- to medium-grained SAND			
14	B13-4					50/4"		

BORING TERMINATED AT 15.5 FEET
Groundwater not encountered
Backfilled on 08-13-2014

Figure A-13,
Log of Boring B 13, Page 1 of 1

G1198-42-04.GPJ

SAMPLE SYMBOLS

... SAMPLING UNSUCCESSFUL
... STANDARD PENETRATION TEST
... DRIVE SAMPLE (UNDISTURBED)
... DISTURBED OR BAG SAMPLE
... CHUNK SAMPLE
... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

PROJECT NO. G1198-42-04

BORING B 14

ELEV. (MSL.) **58'** DATE COMPLETED **08-13-2014**

EQUIPMENT **CME 75** BY: **N. BORJA**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0					4" **ASPHALT CONCRETE**			
	B14-1			SM	**FILL** Loose, damp to moist, brown, Silty, fine to medium SAND			
2								
					-Becomes dark reddish brown to dark brown, fine grained			
4								
	B14-2					15	113.3	4.0
6								
				SM	**OLD TERRACE DEPOSITS** Loose to medium dense, moist, brown, Silty, fine to medium SAND			
8				SM	Very dense, damp, mottled light gray and light yellowish brown, Silty, fine- to medium-grained SAND			
10	B14-3					50/6"		
	B14-4					66/6"		
					BORING TERMINATED AT 11.5 FEET Groundwater not encountered Backfilled on 08-13-2014			

Figure A-14,
Log of Boring B 14, Page 1 of 1

G1198-42-04.GPJ

SAMPLE SYMBOLS

... SAMPLING UNSUCCESSFUL
... STANDARD PENETRATION TEST
... DRIVE SAMPLE (UNDISTURBED)
... DISTURBED OR BAG SAMPLE
... CHUNK SAMPLE
... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

PROJECT NO. G1198-42-04

BORING B 15

ELEV. (MSL.) **71'** DATE COMPLETED **08-13-2014**

EQUIPMENT **CME 75** BY: **N. BORJA**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0					5" **ASPHALT CONCRETE**			
				SM	**OLD TERRACE DEPOSITS** Dense, moist, brown, Silty, fine to medium SAND; trace clay			
2								
4								
	B15-1					51		
6					BORING TERMINATED AT 6 FEET Groundwater not encountered Backfilled on 08-13-2014			

Figure A-15,
Log of Boring B 15, Page 1 of 1

G1198-42-04.GPJ

SAMPLE SYMBOLS

... SAMPLING UNSUCCESSFUL
... STANDARD PENETRATION TEST
... DRIVE SAMPLE (UNDISTURBED)
... DISTURBED OR BAG SAMPLE
... CHUNK SAMPLE
... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

PROJECT NO. G1198-42-04

BORING B 16

ELEV. (MSL.) **120'** DATE COMPLETED **08-13-2014**

EQUIPMENT **CME 75** BY: **N. BORJA**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0				SM	2" **ASPHALT CONCRETE**			
					OLD TERRACE DEPOSITS Dense, moist, reddish brown, Silty, fine to coarse SAND; trace gravel; few clay			
2				SP-SM	Dense, dry, mottled brown and white, fine to medium SAND; some stiff; trace gravel			
	B16-1							
4								
	B16-2					56	113.1	8.8
6								
				SM	Dense, moist, reddish brown to brown, Silty, fine to medium SAND			
8								
10	B16-3					61		

BORING TERMINATED AT 11 FEET
Groundwater not encountered
Backfilled on 08-13-2014

Figure A-16,
Log of Boring B 16, Page 1 of 1

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SAMPLE SYMBOLS

... SAMPLING UNSUCCESSFUL
... STANDARD PENETRATION TEST
... DRIVE SAMPLE (UNDISTURBED)
... DISTURBED OR BAG SAMPLE
... CHUNK SAMPLE
... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

APPENDIX B

APPENDIX B

LABORATORY TESTING

We performed laboratory tests in accordance with generally accepted test methods of the American Society for Testing and Materials (ASTM) or other suggested procedures. We tested selected samples for their in-place dry density and moisture content, maximum dry density and optimum moisture content, expansion index, shear strength, water-soluble sulfate, chloride ion content, and consolidation characteristics. The results of our laboratory tests are presented in the following tables and graphs. The in-place dry density and moisture content test results are presented on the exploratory boring logs in Appendix A.

TABLE B-I
SUMMARY OF LABORATORY MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT TEST RESULTS
ASTM D 1557

Sample No.	Description	Maximum Dry Density (pcf)	Optimum Moisture Content (% dry wt.)
B2-1	Dark brown, Clayey, fine to coarse SAND; trace silt	136.6	6.9

TABLE B-II
SUMMARY OF LABORATORY EXPANSION INDEX TEST RESULTS
ASTM D 4829

Sample No.	Moisture Content (%)		Dry Density (pcf)	Expansion Index	Expansion Classification
	Before Test	After Test			
B2-1	7.3	12.6	120.1	8	Very Low
B16-1	6.8	11.8	123.1	5	Very Low

TABLE B-III
SUMMARY OF LABORATORY DIRECT SHEAR TEST RESULTS
ASTM D 3080

Sample No.	Dry Density (pcf)	Moisture Content (%)		Angle of Shear Resistance (degrees)	Unit Cohesion (psf)
		Initial	Final		
*B2-1	123.0	6.9	11.4	28	400
B12-2	101.9	3.1	17.4	36	240
B16-2	113.1	8.8	13.8	30	250

*Sample was remolded to 90 percent of the laboratory maximum dry density and optimum moisture content.

TABLE B-IV
SUMMARY OF LABORATORY WATER-SOLUBLE SULFATE TEST RESULTS
CALIFORNIA TEST NO. 417

Sample No.	Water-Soluble Sulfate (%)	Classification
B2-1	0.029	Negligible
B16-1	0.016	Negligible

TABLE B-V
SUMMARY OF LABORATORY CHLORIDE ION CONTENT TEST RESULTS
AASHTO T 291

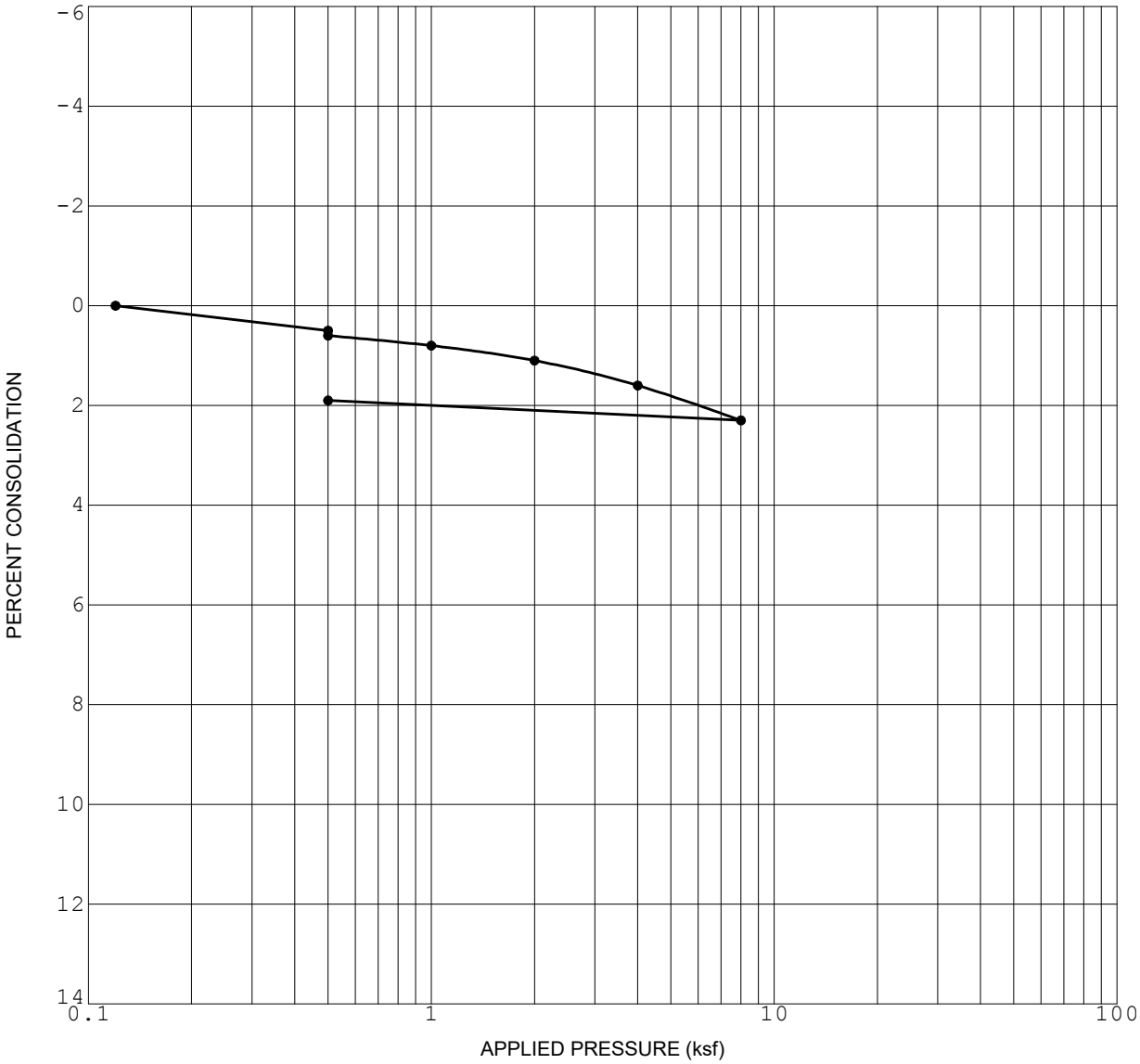
Sample No.	Chloride Ion Content (ppm)	Chloride Ion Content (%)
B2-1	474	0.047

TABLE B-VI
SUMMARY OF LABORATORY POTENTIAL OF
HYDROGEN (PH) AND RESISTIVITY TEST RESULTS
CALIFORNIA TEST NO. 643

Sample No.	pH	Minimum Resistivity (ohm-centimeters)
B2-1	7.3	730
B16-1	8.6	2,200

PROJECT NO. G1198-42-04

SAMPLE NO. B3-3



Initial Dry Density (pcf)	113.9
Initial Water Content (%)	6.5

Initial Saturation (%)	38
Sample Saturated at (ksf)	0.5

CONSOLIDATION CURVE

SOLANA HIGHLANDS

SOLANA BEACH, CALIFORNIA

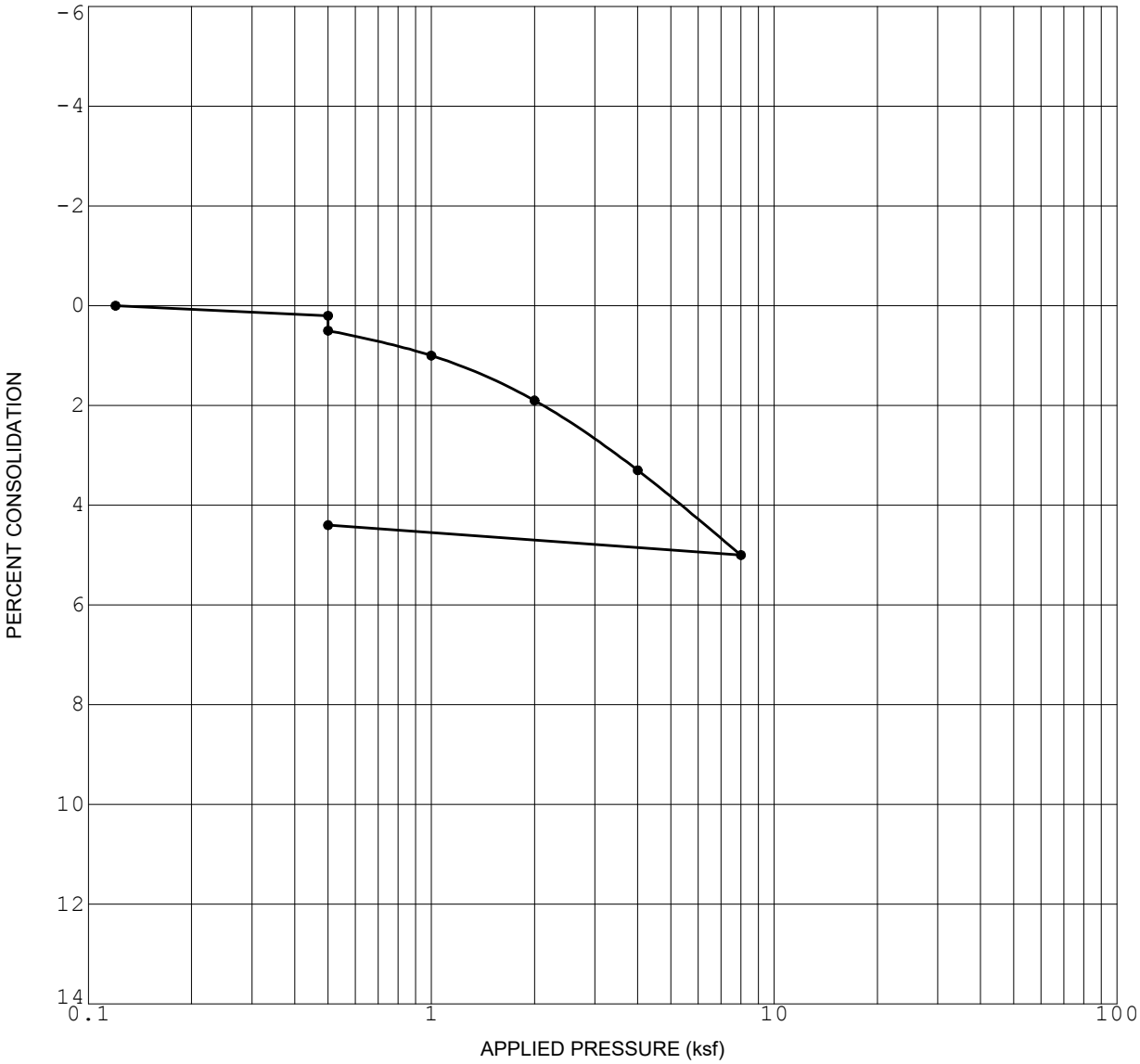
G1198-42-04.GPJ

Figure B-1

GEOCON

PROJECT NO. G1198-42-04

SAMPLE NO. B4-3



Initial Dry Density (pcf)	106.5
Initial Water Content (%)	5.1

Initial Saturation (%)	24
Sample Saturated at (ksf)	0.5

CONSOLIDATION CURVE

SOLANA HIGHLANDS

SOLANA BEACH, CALIFORNIA

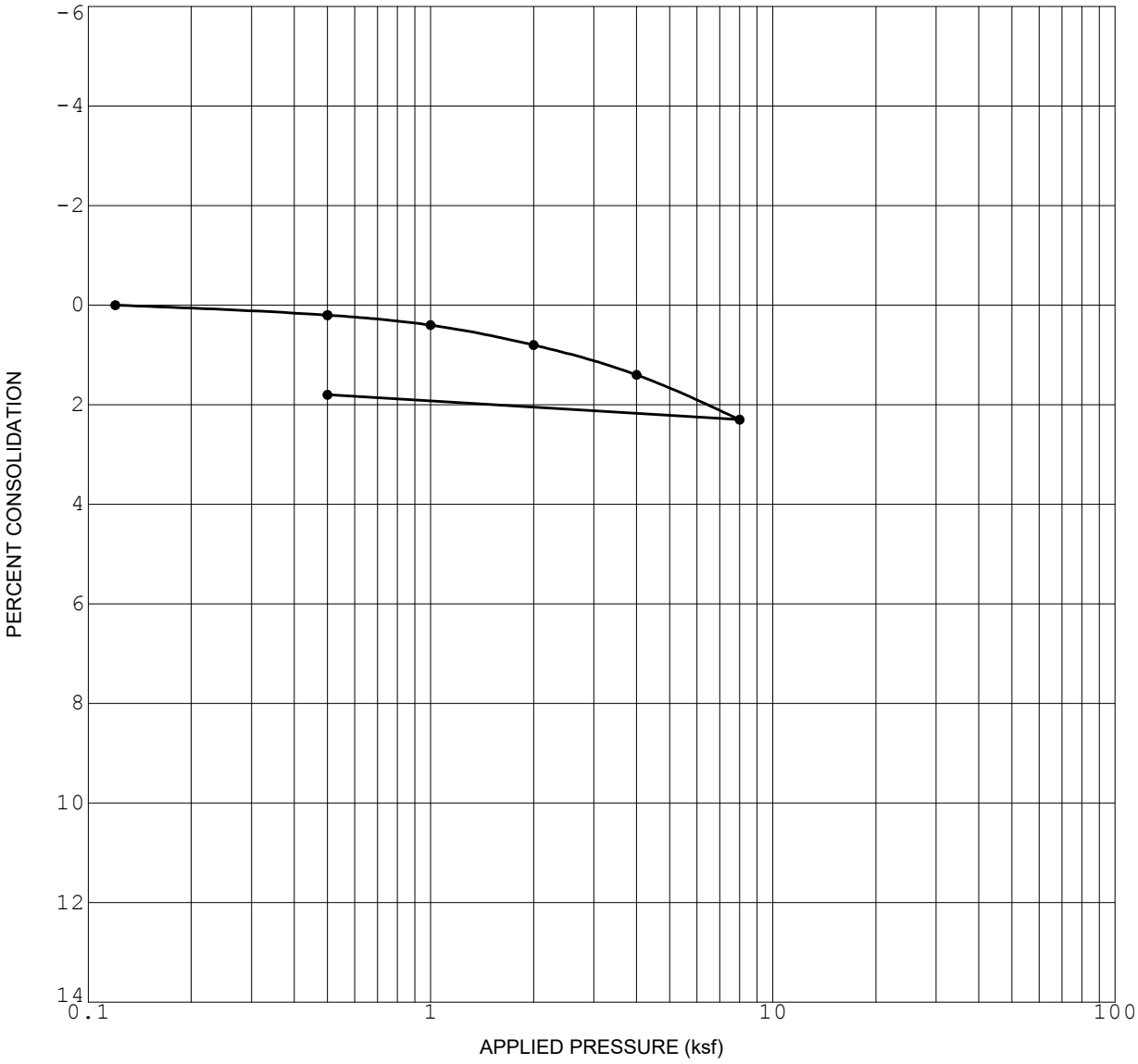
G1198-42-04.GPJ

Figure B-2

GEOCON

PROJECT NO. G1198-42-04

SAMPLE NO. B5-3



Initial Dry Density (pcf)	106.4
Initial Water Content (%)	8.0

Initial Saturation (%)	38
Sample Saturated at (ksf)	0.5

CONSOLIDATION CURVE

SOLANA HIGHLANDS

SOLANA BEACH, CALIFORNIA

G1198-42-04.GPJ

Figure B-3

GEOCON

APPENDIX C

APPENDIX C

RECOMMENDED GRADING SPECIFICATIONS

FOR

SOLANA HIGHLANDS
SOLANA BEACH, CALIFORNIA

PROJECT NO. G1198-42-04

RECOMMENDED GRADING SPECIFICATIONS

1. GENERAL

1.1 These Recommended Grading Specifications shall be used in conjunction with the Geotechnical Report for the project prepared by Geocon Incorporated. The recommendations contained in the text of the Geotechnical Report are a part of the earthwork and grading specifications and shall supersede the provisions contained hereinafter in the case of conflict.

1.2 Prior to the commencement of grading, a geotechnical consultant (Consultant) shall be employed for the purpose of observing earthwork procedures and testing the fills for substantial conformance with the recommendations of the Geotechnical Report and these specifications. The Consultant should provide adequate testing and observation services so that they may assess whether, in their opinion, the work was performed in substantial conformance with these specifications. It shall be the responsibility of the Contractor to assist the Consultant and keep them apprised of work schedules and changes so that personnel may be scheduled accordingly.

1.3 It shall be the sole responsibility of the Contractor to provide adequate equipment and methods to accomplish the work in accordance with applicable grading codes or agency ordinances, these specifications and the approved grading plans. If, in the opinion of the Consultant, unsatisfactory conditions such as questionable soil materials, poor moisture condition, inadequate compaction, adverse weather, result in a quality of work not in conformance with these specifications, the Consultant will be empowered to reject the work and recommend to the Owner that grading be stopped until the unacceptable conditions are corrected.

2. DEFINITIONS

2.1 **Owner** shall refer to the owner of the property or the entity on whose behalf the grading work is being performed and who has contracted with the Contractor to have grading performed.

2.2 **Contractor** shall refer to the Contractor performing the site grading work.

2.3 **Civil Engineer** or **Engineer of Work** shall refer to the California licensed Civil Engineer or consulting firm responsible for preparation of the grading plans, surveying and verifying as-graded topography.

2.4 **Consultant** shall refer to the soil engineering and engineering geology consulting firm retained to provide geotechnical services for the project.

2.5 **Soil Engineer** shall refer to a California licensed Civil Engineer retained by the Owner, who is experienced in the practice of geotechnical engineering. The Soil Engineer shall be responsible for having qualified representatives on-site to observe and test the Contractor's work for conformance with these specifications.

2.6 **Engineering Geologist** shall refer to a California licensed Engineering Geologist retained by the Owner to provide geologic observations and recommendations during the site grading.

2.7 **Geotechnical Report** shall refer to a soil report (including all addenda) which may include a geologic reconnaissance or geologic investigation that was prepared specifically for the development of the project for which these Recommended Grading Specifications are intended to apply.

3. MATERIALS

3.1 Materials for compacted fill shall consist of any soil excavated from the cut areas or imported to the site that, in the opinion of the Consultant, is suitable for use in construction of fills. In general, fill materials can be classified as *soil* fills, *soil-rock* fills or *rock* fills, as defined below.

3.1.1 **Soil fills** are defined as fills containing no rocks or hard lumps greater than 12 inches in maximum dimension and containing at least 40 percent by weight of material smaller than ¾ inch in size.

3.1.2 **Soil-rock fills** are defined as fills containing no rocks or hard lumps larger than 4 feet in maximum dimension and containing a sufficient matrix of soil fill to allow for proper compaction of soil fill around the rock fragments or hard lumps as specified in Paragraph 6.2. **Oversize rock** is defined as material greater than 12 inches.

3.1.3 **Rock fills** are defined as fills containing no rocks or hard lumps larger than 3 feet in maximum dimension and containing little or no fines. Fines are defined as material smaller than ¾ inch in maximum dimension. The quantity of fines shall be less than approximately 20 percent of the rock fill quantity.

3.2 Material of a perishable, spongy, or otherwise unsuitable nature as determined by the Consultant shall not be used in fills.

3.3 Materials used for fill, either imported or on-site, shall not contain hazardous materials as defined by the California Code of Regulations, Title 22, Division 4, Chapter 30, Articles 9 and 10; 40CFR; and any other applicable local, state or federal laws. The Consultant shall not be responsible for the identification or analysis of the potential presence of hazardous materials. However, if observations, odors or soil discoloration cause Consultant to suspect the presence of hazardous materials, the Consultant may request from the Owner the termination of grading operations within the affected area. Prior to resuming grading operations, the Owner shall provide a written report to the Consultant indicating that the suspected materials are not hazardous as defined by applicable laws and regulations.

3.4 The outer 15 feet of *soil-rock* fill slopes, measured horizontally, should be composed of properly compacted *soil* fill materials approved by the Consultant. *Rock* fill may extend to the slope face, provided that the slope is not steeper than 2:1 (horizontal:vertical) and a soil layer no thicker than 12 inches is track-walked onto the face for landscaping purposes. This procedure may be utilized provided it is acceptable to the governing agency, Owner and Consultant.

3.5 Samples of soil materials to be used for fill should be tested in the laboratory by the Consultant to determine the maximum density, optimum moisture content, and, where appropriate, shear strength, expansion, and gradation characteristics of the soil.

3.6 During grading, soil or groundwater conditions other than those identified in the Geotechnical Report may be encountered by the Contractor. The Consultant shall be notified immediately to evaluate the significance of the unanticipated condition

4. CLEARING AND PREPARING AREAS TO BE FILLED

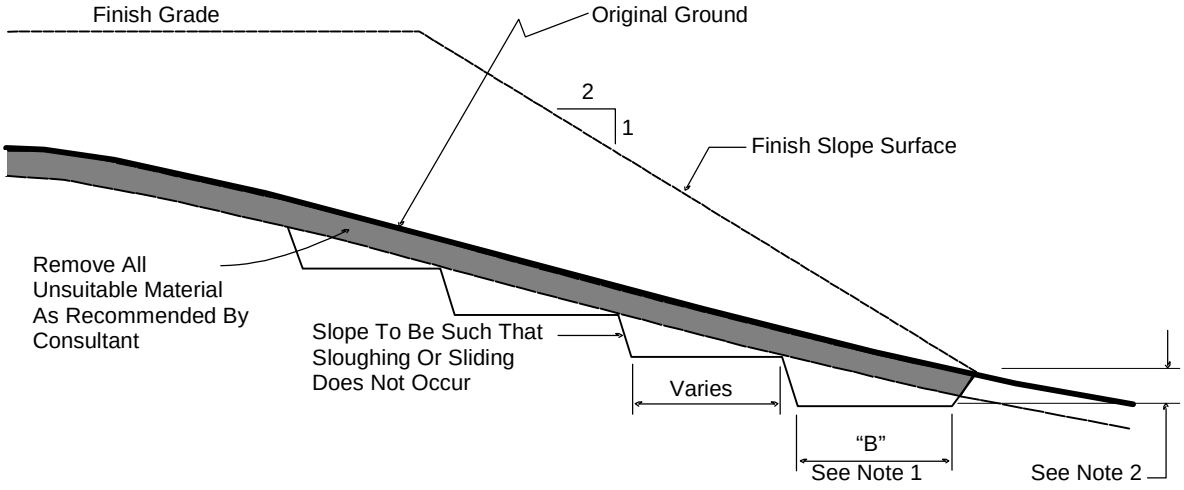
4.1 Areas to be excavated and filled shall be cleared and grubbed. Clearing shall consist of complete removal above the ground surface of trees, stumps, brush, vegetation, man-made structures, and similar debris. Grubbing shall consist of removal of stumps, roots, buried logs and other unsuitable material and shall be performed in areas to be graded. Roots and other projections exceeding 1½ inches in diameter shall be removed to a depth of 3 feet below the surface of the ground. Borrow areas shall be grubbed to the extent necessary to provide suitable fill materials.

4.2 Any asphalt pavement material removed during clearing operations should be properly disposed at an approved off-site facility. Concrete fragments that are free of reinforcing steel may be placed in fills, provided they are placed in accordance with Section 6.2 or 6.3 of this document.

4.3 After clearing and grubbing of organic matter and other unsuitable material, loose or porous soils shall be removed to the depth recommended in the Geotechnical Report. The depth of removal and compaction should be observed and approved by a representative of the Consultant. The exposed surface shall then be plowed or scarified to a minimum depth of 6 inches and until the surface is free from uneven features that would tend to prevent uniform compaction by the equipment to be used.

4.4 Where the slope ratio of the original ground is steeper than 5:1 (horizontal:vertical), or where recommended by the Consultant, the original ground should be benched in accordance with the following illustration.

TYPICAL BENCHING DETAIL



No Scale

DETAIL NOTES:

(1) Key width "B" should be a minimum of 10 feet, or sufficiently wide to permit complete coverage with the compaction equipment used. The base of the key should be graded horizontal, or inclined slightly into the natural slope.

(2) The outside of the key should be below the topsoil or unsuitable surficial material and at least 2 feet into dense formational material. Where hard rock is exposed in the bottom of the key, the depth and configuration of the key may be modified as approved by the Consultant.

4.5 After areas to receive fill have been cleared and scarified, the surface should be moisture conditioned to achieve the proper moisture content, and compacted as recommended in Section 6 of these specifications.

5. COMPACTION EQUIPMENT

5.1 Compaction of *soil* or *soil-rock* fill shall be accomplished by sheepsfoot or segmented-steel wheeled rollers, vibratory rollers, multiple-wheel pneumatic-tired rollers, or other types of acceptable compaction equipment. Equipment shall be of such a design that it will be capable of compacting the *soil* or *soil-rock* fill to the specified relative compaction at the specified moisture content.

5.2 Compaction of *rock* fills shall be performed in accordance with Section 6.3.

6. PLACING, SPREADING AND COMPACTION OF FILL MATERIAL

6.1 *Soil* fill, as defined in Paragraph 3.1.1, shall be placed by the Contractor in accordance with the following recommendations:

6.1.1 *Soil* fill shall be placed by the Contractor in layers that, when compacted, should generally not exceed 8 inches. Each layer shall be spread evenly and shall be thoroughly mixed during spreading to obtain uniformity of material and moisture in each layer. The entire fill shall be constructed as a unit in nearly level lifts. Rock materials greater than 12 inches in maximum dimension shall be placed in accordance with Section 6.2 or 6.3 of these specifications.

6.1.2 In general, the *soil* fill shall be compacted at a moisture content at or above the optimum moisture content as determined by ASTM D 1557-09.

6.1.3 When the moisture content of *soil* fill is below that specified by the Consultant, water shall be added by the Contractor until the moisture content is in the range specified.

6.1.4 When the moisture content of the *soil* fill is above the range specified by the Consultant or too wet to achieve proper compaction, the *soil* fill shall be aerated by the Contractor by blading/mixing, or other satisfactory methods until the moisture content is within the range specified.

6.1.5 After each layer has been placed, mixed, and spread evenly, it shall be thoroughly compacted by the Contractor to a relative compaction of at least 90 percent. Relative compaction is defined as the ratio (expressed in percent) of the in-place dry density of the compacted fill to the maximum laboratory dry density as determined in accordance with ASTM D 1557-09. Compaction shall be continuous over the entire area, and compaction equipment shall make sufficient passes so that the specified minimum relative compaction has been achieved throughout the entire fill.

6.1.6 Where practical, soils having an Expansion Index greater than 50 should be placed at least 3 feet below finish pad grade and should be compacted at a moisture content generally 2 to 4 percent greater than the optimum moisture content for the material.

6.1.7 Properly compacted *soil* fill shall extend to the design surface of fill slopes. To achieve proper compaction, it is recommended that fill slopes be over-built by at least 3 feet and then cut to the design grade. This procedure is considered preferable to track-walking of slopes, as described in the following paragraph.

6.1.8 As an alternative to over-building of slopes, slope faces may be back-rolled with a heavy-duty loaded sheepsfoot or vibratory roller at maximum 4-foot fill height intervals. Upon completion, slopes should then be track-walked with a D-8 dozer or similar equipment, such that a dozer track covers all slope surfaces at least twice.

6.2 *Soil-rock* fill, as defined in Paragraph 3.1.2, shall be placed by the Contractor in accordance with the following recommendations:

6.2.1 Rocks larger than 12 inches but less than 4 feet in maximum dimension may be incorporated into the compacted *soil* fill, but shall be limited to the area measured 15 feet minimum horizontally from the slope face and 5 feet below finish grade or 3 feet below the deepest utility, whichever is deeper.

6.2.2 Rocks or rock fragments up to 4 feet in maximum dimension may either be individually placed or placed in windrows. Under certain conditions, rocks or rock fragments up to 10 feet in maximum dimension may be placed using similar methods. The acceptability of placing rock materials greater than 4 feet in maximum dimension shall be evaluated during grading as specific cases arise and shall be approved by the Consultant prior to placement.

6.2.3 For individual placement, sufficient space shall be provided between rocks to allow for passage of compaction equipment.

6.2.4 For windrow placement, the rocks should be placed in trenches excavated in properly compacted *soil* fill. Trenches should be approximately 5 feet wide and 4 feet deep in maximum dimension. The voids around and beneath rocks should be filled with approved granular soil having a Sand Equivalent of 30 or greater and should be compacted by flooding. Windrows may also be placed utilizing an "open-face" method in lieu of the trench procedure, however, this method should first be approved by the Consultant.

6.2.5 Windrows should generally be parallel to each other and may be placed either parallel to or perpendicular to the face of the slope depending on the site geometry. The minimum horizontal spacing for windrows shall be 12 feet center-to-center with a 5-foot stagger or offset from lower courses to next overlying course. The minimum vertical spacing between windrow courses shall be 2 feet from the top of a lower windrow to the bottom of the next higher windrow.

6.2.6 Rock placement, fill placement and flooding of approved granular soil in the windrows should be continuously observed by the Consultant.

6.3 *Rock* fills, as defined in Section 3.1.3, shall be placed by the Contractor in accordance with the following recommendations:

6.3.1 The base of the *rock* fill shall be placed on a sloping surface (minimum slope of 2 percent). The surface shall slope toward suitable subdrainage outlet facilities. The *rock* fills shall be provided with subdrains during construction so that a hydrostatic pressure buildup does not develop. The subdrains shall be permanently connected to controlled drainage facilities to control post-construction infiltration of water.

6.3.2 *Rock* fills shall be placed in lifts not exceeding 3 feet. Placement shall be by rock trucks traversing previously placed lifts and dumping at the edge of the currently placed lift. Spreading of the *rock* fill shall be by dozer to facilitate *seating* of the rock. The *rock* fill shall be watered heavily during placement. Watering shall consist of water trucks traversing in front of the current rock lift face and spraying water continuously during rock placement. Compaction equipment with compactive energy comparable to or greater than that of a 20-ton steel vibratory roller or other compaction equipment providing suitable energy to achieve the

required compaction or deflection as recommended in Paragraph 6.3.3 shall be utilized. The number of passes to be made should be determined as described in Paragraph 6.3.3. Once a *rock* fill lift has been covered with *soil* fill, no additional *rock* fill lifts will be permitted over the *soil* fill.

6.3.3 Plate bearing tests, in accordance with ASTM D 1196-09, may be performed in both the compacted *soil* fill and in the *rock* fill to aid in determining the required minimum number of passes of the compaction equipment. If performed, a minimum of three plate bearing tests should be performed in the properly compacted *soil* fill (minimum relative compaction of 90 percent). Plate bearing tests shall then be performed on areas of *rock* fill having two passes, four passes and six passes of the compaction equipment, respectively. The number of passes required for the *rock* fill shall be determined by comparing the results of the plate bearing tests for the *soil* fill and the *rock* fill and by evaluating the deflection variation with number of passes. The required number of passes of the compaction equipment will be performed as necessary until the plate bearing deflections are equal to or less than that determined for the properly compacted *soil* fill. In no case will the required number of passes be less than two.

6.3.4 A representative of the Consultant should be present during *rock* fill operations to observe that the minimum number of "passes" have been obtained, that water is being properly applied and that specified procedures are being followed. The actual number of plate bearing tests will be determined by the Consultant during grading.

6.3.5 Test pits shall be excavated by the Contractor so that the Consultant can state that, in their opinion, sufficient water is present and that voids between large rocks are properly filled with smaller rock material. In-place density testing will not be required in the *rock* fills.

6.3.6 To reduce the potential for "piping" of fines into the *rock* fill from overlying *soil* fill material, a 2-foot layer of graded filter material shall be placed above the uppermost lift of *rock* fill. The need to place graded filter material below the *rock* should be determined by the Consultant prior to commencing grading. The gradation of the graded filter material will be determined at the time the *rock* fill is being excavated. Materials typical of the *rock* fill should be submitted to the Consultant in a timely manner, to allow design of the graded filter prior to the commencement of *rock* fill placement.

6.3.7 *Rock* fill placement should be continuously observed during placement by the Consultant.

7. OBSERVATION AND TESTING

7.1 The Consultant shall be the Owner's representative to observe and perform tests during clearing, grubbing, filling, and compaction operations. In general, no more than 2 feet in vertical elevation of *soil* or *soil-rock* fill should be placed without at least one field density test being performed within that interval. In addition, a minimum of one field density test should be performed for every 2,000 cubic yards of *soil* or *soil-rock* fill placed and compacted.

7.2 The Consultant should perform a sufficient distribution of field density tests of the compacted *soil* or *soil-rock* fill to provide a basis for expressing an opinion whether the fill material is compacted as specified. Density tests shall be performed in the compacted materials below any disturbed surface. When these tests indicate that the density of any layer of fill or portion thereof is below that specified, the particular layer or areas represented by the test shall be reworked until the specified density has been achieved.

7.3 During placement of *rock* fill, the Consultant should observe that the minimum number of passes have been obtained per the criteria discussed in Section 6.3.3. The Consultant should request the excavation of observation pits and may perform plate bearing tests on the placed *rock* fills. The observation pits will be excavated to provide a basis for expressing an opinion as to whether the *rock* fill is properly seated and sufficient moisture has been applied to the material. When observations indicate that a layer of *rock* fill or any portion thereof is below that specified, the affected layer or area shall be reworked until the *rock* fill has been adequately seated and sufficient moisture applied.

7.4 A settlement monitoring program designed by the Consultant may be conducted in areas of *rock* fill placement. The specific design of the monitoring program shall be as recommended in the Conclusions and Recommendations section of the project Geotechnical Report or in the final report of testing and observation services performed during grading.

7.5 The Consultant should observe the placement of subdrains, to verify that the drainage devices have been placed and constructed in substantial conformance with project specifications.

7.6 Testing procedures shall conform to the following Standards as appropriate:

7.6.1 Soil and Soil-Rock Fills:

7.6.1.1 Field Density Test, ASTM D 1556-07, *Density of Soil In-Place By the Sand-Cone Method*.

7.6.1.2 Field Density Test, Nuclear Method, ASTM D 6938-08A, *Density of Soil and Soil-Aggregate In-Place by Nuclear Methods (Shallow Depth).*

7.6.1.3 Laboratory Compaction Test, ASTM D 1557-09, *Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10-Pound Hammer and 18-Inch Drop*.

7.6.1.4. Expansion Index Test, ASTM D 4829-08A, *Expansion Index Test*.

7.6.2 Rock Fills

7.6.2.1 Field Plate Bearing Test, ASTM D 1196-09 (Reapproved 1997) *Standard Method for Nonreparative Static Plate Load Tests of Soils and Flexible Pavement Components, For Use in Evaluation and Design of Airport and Highway Pavements.*

8. PROTECTION OF WORK

8.1 During construction, the Contractor shall properly grade all excavated surfaces to provide positive drainage and prevent ponding of water. Drainage of surface water shall be controlled to avoid damage to adjoining properties or to finished work on the site. The Contractor shall take remedial measures to prevent erosion of freshly graded areas until such time as permanent drainage and erosion control features have been installed. Areas subjected to erosion or sedimentation shall be properly prepared in accordance with the Specifications prior to placing additional fill or structures.

8.2 After completion of grading as observed and tested by the Consultant, no further excavation or filling shall be conducted except in conjunction with the services of the Consultant.

9. CERTIFICATIONS AND FINAL REPORTS

9.1 Upon completion of the work, Contractor shall furnish Owner a certification by the Civil Engineer stating that the lots and/or building pads are graded to within 0.1 foot vertically of elevations shown on the grading plan and that all tops and toes of slopes are within 0.5 foot horizontally of the positions shown on the grading plans. After installation of a section of subdrain, the project Civil Engineer should survey its location and prepare an *as-built* plan of the subdrain location. The project Civil Engineer should verify the proper outlet for the subdrains and the Contractor should ensure that the drain system is free of obstructions.

9.2 The Owner is responsible for furnishing a final as-graded soil and geologic report satisfactory to the appropriate governing or accepting agencies. The as-graded report should be prepared and signed by a California licensed Civil Engineer experienced in geotechnical engineering and by a California Certified Engineering Geologist, indicating that the geotechnical aspects of the grading were performed in substantial conformance with the Specifications or approved changes to the Specifications.

LIST OF REFERENCES

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2. Brain S. J. Chiou and Robert R. Youngs, *A NGA Model for the Average Horizontal Component of Peak Ground Motion and Response Spectra,* preprint for article to be published in NGA Special Edition for Earthquake Spectra, Spring 2008.

3. California Department of Conservation, Division of Mines and Geology, *Probabilistic Seismic Hazard Assessment for the State of California,* Open File Report 96-08, 1996.

4. California Highway Design Manual, State of Californian Department of Transportation, Fifth Edition, July 1, 1995.

5. California Geological Survey, *Seismic Shaking Hazards in California, Based on the USGS/CGS Probabilistic Seismic Hazards Assessment (PSHA) Model,* 2002 (revised April 2003). 10% probability of being exceeded in 50 years. http://redirect.conservation.ca.gov/cgs/rghm/pshamap/pshamain.html

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7. *City of San Diego Seismic Safety Study, Geologic Hazards and Faults, Grid Tile: 42,* dated April 3, 2008.

8. *Fault Activity Map of California and Adjacent Areas,* California Division of Mines and Geology, Map No. 6 (1994)

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10. Risk Engineering, *EZ-FRISK (version 7.62)*, 2012.

11. Treiman, J. A., 1993, *The Rose Canyon Fault Zone, Southern California,* Division of Mines and Geology, DMG Open-File Report 93-02.

12. Unpublished reports and maps on file with Geocon Incorporated.

13. USGS Earthquake Hazards web-based program, U.S. Seismic Design Maps, last modified date June 12, 2014 (http://earthquake.usgs.gov/designmaps/us/application.php).

APPENDIX I

Phase I

Environmental Site Assessment (ESA) Report

EnviroApplications, Inc.
Engineering & Consulting

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT FOR

MULTI-TENANT RESIDENTIAL PROPERTY
Solana Highlands
821 Stevens Avenue, Solana Beach
San Diego County, CA 92075-4401

EAI Project Number: 01.HGFC001.15

June 25, 2015

APNs: 298-164-22-00 (S. Nardo Ave.) & 298-281-10-00 (821 Stevens Ave.)

Prepared For:

HG Fenton Company
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EXECUTIVE SUMMARY

EnviroApplications, Inc. (*EAI*) is pleased to present this Phase I Environmental Site Assessment (ESA) report. Following is an overview of the project with a summary of our findings:

Subject Property Name:	Multi-Tenant Residential Property.
Subject Property Address (and/or Other Physical Location Description):	821 Stevens Avenue, Solana Beach, San Diego County, California 92075-4401. West side of Stevens Avenue, at the southwest corner of the intersection of South Nardo Avenue and Stevens Avenue.
Subject Property and Area Description:	Based on reconnaissance visit observations and information provided by the property management company, the subject property consists of two lots (north; vacant) and south (occupied by one, 2-unit apartment [#1 and #2] building on the eastern portion, one single-unit apartment [#3] building located on the western portion, and another [larger] single-unit apartment [#4] located on the southern portion. The subject property is accessible via a driveway from Stevens Avenue that leads into a parking lot area and also Apt. #4 is accessible from the southeast corner area driveway of the adjacent Solana Highland Apartments complex. The subject property is located in a residential land use area of Solana Beach.
Observed Current Subject Property Use/Operations:	All four apartments at the subject property were observed to be occupied with tenants. The studio apartments #1 and #2 building has a storage garage beneath its southern portion. The building is constructed into the hillside that slopes upwards to the north. Crawlspace storage is located beneath the southern portion of the 1-bedroom apartment #3 building located to the west of apartments #1 and #2. A washing machine and dryer for the apartment tenants is located beneath an overhang outside the south wall of the apartment #3 building. A storage shed, reportedly leased separately to a construction contractor for storage use, is located on the slope between the studio and 1-bedroom apartment buildings and the south 3-bedroom apartment #4 building.

Year	Summary of Subject Property History
Since at least as early as 1939 to circa 1946	Open hillside land with Stevens Avenue (Ave.) and South Nardo Ave. present.
Circa 1947 – 2015	.15thern lot always vacant. Southern lot occupied by the three existing apartment buildings.

CONCLUSIONS

EAI has performed a Phase I ESA in conformance with the Scope of Work (SOW) required by 40 CFR Part 312 (All Appropriate Inquiry; AAI) and ASTM International (ASTM) E1527-13 for a Phase I Environmental Site Assessment (ESA) of the residential apartment property located at 821 Stevens Avenue in Solana Beach, San Diego County, California (CA) 92075 (subject property). Any exceptions to, or deviations from the SOW are described in this report, where applicable.

The subject property is included in the Environmental Data Resources, Inc. (EDR) government database search report (EDR Report) that was obtained and reviewed during this ESA on the Cal/EPA HAZNET database listings for the disposal of 0.4 tons of asbestos containing waste in 2011. As far as could be determined, the subject property has never come to the attention of the Local (San Diego County Department of Environmental Health; DEH) or Federal (EPA Region 9) regulatory agencies. No records regarding the asbestos abatement work in 2011 were found by the City of Solana Beach or San Diego County Air Pollution Control District (APCD). The subject property owner provided documentation regarding the asbestos survey and abatement.

No known environmental release sites located either hydrogeologically up or immediately side-gradient of the subject property that qualify as a potential adverse environmental contaminant impact source condition to the subject property were identified in the EDR Report.

No issues associated with the presence of lead-based paint (LBP) were identified. The more recent layers of latex paint covering the LBP at the subject property should continue to be maintained and Federal Housing and Urban Development (HUD) requirements should continue to be complied with. Painted surfaces that were observed appeared to be in good condition. No issues associated with the presence of asbestos containing material (ACM) were identified. Building materials that were observed appeared to be in good condition.

This ESA has revealed no evidence of a currently existing ASTM recognized environmental condition (REC), historical REC (HREC) or controlled REC (CREC) of the subject property.

No additional environmental assessment work is recommended at this time.

1.0 INTRODUCTION

1.1 Subject Property Name and Location

Subject Property Name:	Multi-Tenant Residential Property.
Street Address:	821 Stevens Avenue, Solana Beach, San Diego County, California 92075-4401.
Assessor's Parcel Nos.:	298-164-22-00 (vacant northern portion) and 298-281-10-00 (southern portion occupied by apartment buildings).

Figure 1 presents a map showing the location of the subject property.

1.2 Contact Information

Client (User):	HG Fenton Company, Attn.: Andrea Ferentz
Subject Property Owner:	TM-Stevens LLC, a California limited liability corporation.
Key Site Manager:	Eduardo Moehlecke, Sr. R.E. Mgr., Meissner Jacquet CRES.
Date Project Authorized:	May 6, 2015.

1.3 Objective

This Phase I ESA has been completed in accordance with the practices identified in the ASTM *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, ASTM Designation E1527-13 and pursuant to the terms set forth in the Authorization For Environmental Investigation and Contracting Services (AEICS) between *EAI* and H.G. Fenton Co., Attn.: Andrea Ferentz, dated May 6, 2015.

1.4 Scope Of Work, Significant Assumptions, Terms and Conditions, Reliance

The scope of work, significant assumptions, and terms and conditions applicable to this Phase I ESA are identified in the following documents:
AEICS #01.037.15.
ASTM E1527-13 Phase I ESA Standard.
Certifications are presented in Section 2 of this report.
This report was prepared for the exclusive use of the following:
H.G. Fenton Co., Attn.: Andrea Ferentz, Transaction & Project Manager.

2.0 SCOPE AND DECLARATIONS

2.1 Introduction

EAI has completed a Phase I ESA of the subject property. This Phase I ESA Report was prepared for H.G. Fenton Co., Attn.: Andrea Ferentz for real estate environmental due diligence purposes. Photographs of the subject and surrounding properties are provided in Attachment 1. The location of the subject property is depicted on Figure 1 (Site Location Map). Figure 2 is a Site Plan based on a recent aerial photograph that includes adjacent property uses. A copy of the 2010 Environmental Questionnaire for the subject property completed by the prior owner (Henrietta Rubalcaba) is presented in Attachment 2. A map showing the subject property in its physiographic setting is presented as Figure 3.

2.2 Scope

The objective of this ESA was to perform all appropriate inquiry (AAI) into the past ownership and uses of the subject property consistent with good commercial or customary practice as outlined by the ASTM in Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E1527-13. The purpose of this ESA work was to identify, to the extent feasible, adverse environmental conditions (including RECs) of the subject property that potentially have and/or may cause an adverse environmental impact to the subject property. The effective date of this ESA is the same as its date of issue. In accordance with ASTM E1527-13 Section 4.6, its continued viability extends to 180 days after its effective date. The viability of this ESA can be extended beyond 180 days, up to one (1) year, if the specific ESA components specified in ASTM E1527-13 Section 4.0 are updated.

2.3 Declarations

Frederic A. Allee and Craig M. Skiera of *EAI* declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 40 Code of Federal Regulations (CFR) Part 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

The term recognized environmental condition is defined by ASTM Standard E 1527-13 as:

> *"…the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property due to release to the environment; under conditions indicative of a release to the environment or under conditions that pose a material threat of future release."*

The term does not include *de minimis* conditions, which generally do not present a material risk to human health or the environment and would not likely be subject to enforcement action if brought to the attention of governmental agencies. An example of such a *de minimis* condition would be the engine oil stains typically present on the pavement surfaces of parking spaces due to various types of minor leaks from parked vehicles.

The SOW for this ESA consisted of a visual reconnaissance of the subject property, interviews, review of historical aerial photographs, maps and telephone directories, a current Environmental Data Resources, Inc. Report (EDR Report), and, a review of the practically-available pertinent records of local, state, and federal agencies. The SOW did not include an assessment for historical overall environmental regulatory compliance of every facility or entity that ever operated at the subject property or sampling and analyzing of environmental media. *EAI* was not contracted to perform any independent evaluation of the purchase or lease price of the subject property and its relationship to current fair market value. The conclusions presented in this ESA Report are professional opinions based on data described herein. Any data gaps resulting from the ESA described in this report are listed and discussed in the following table:

Deletions or Exceptions From Scope of Work Referenced in Section 1.4:	None.
Weather-Related Restrictions to Site Reconnaissance:	None.
Facility Access Restrictions to Site Reconnaissance:	None.
Other Site Reconnaissance Restrictions:	None.
Data Gaps from Environmental Records Review:	None.
Data Gaps from Historical records Review:	No historical Sanborn fire insurance industry map coverage was found for the subject property and surrounding area. The Sanborn map data gap does not alter the conclusions of this report, since adequate historical aerial photograph coverage, maps and other data were obtained.
Data Gaps from Interviews:	None.
Other Data Gaps:	None.

No other entity may rely on the information presented in the report without the expressed written consent of *EAI*. Any use of this Phase I ESA report constitutes acceptance of the terms and conditions under which it was prepared. *EAI*'s liability extends only to its Client and not to third parties or any other entities who may obtain copies of this Phase I ESA Report.

3.0 USER-PROVIDED INFORMATION

Prior to initiating a reconnaissance visit to the subject property, *EAI* reviewed information relevant to performance of this Phase I ESA received from the Client/User.

3.1 Information

1) Past Uses	Apartments since 1947.
2) Current Conditions	Four residential apartments.
Reason Why the User Wants to Have this Phase I ESA Performed:	Phase I ESA Report prepared for real estate transaction environmental due diligence purposes.

3.2 User-Provided Documents

The following documents were provided by the Client (ASTM User) to *EAI* and are summarized as follows:

Property Background Information Questionnaire, Completed by Henrietta Rubalcaba for Geocon Inc., dated September 18, 2010.	Indicates the use of the property for 4 rental units of residential apartments since construction more than 60 years ago with no known environmental issues including asbestos containing materials (ACM), lead-based paint (LP) or mold (Attachment 2).
Phase I ESA User's Questionnaire, Completed by Andrea Ferentz of HG Fenton Co. on June 24, 2015.	Indicates that there are no environmental issues associated with the subject property that the ASTM Phase I ESA User is aware of and no known previous environmental assessment reports (Attachment 2).
Preliminary Title Insurance Report (PTIR) for the subject property dated April 27, 2015, and prepared by Stewart Title of California, Inc.	Ownership and parcel information for the subject property and adjacent Solana Highlands Apartments is contained in the report, but no information about the environmental condition of the subject property. Indicates that no environmental cleanup liens or activity and use limitations exist in association with the subject property (Attachment 2).
Confidential Inspection Report, prepared by Complete Home Inspections for Tim Meissner and dated September 21, 2010.	Indicates that the subject property buildings were in typical poor condition for their age at the time of the inspection with recommendations for electrical, foundation, plumbing and structural upgrades. The presence of asbestos-containing duct insulation was indicated along with the likelihood of asbestos in other areas and lead-based paint. The presence of a mold-like substance was indicated inside the unpermitted contractor's storage shed (copy not attached).

Geotechnical Due Diligence Study, prepared by Geocon, Inc. for Meissner Jacquet and dated September 28, 2010.	Presents a comprehensive assessment of the condition of the foundations of the subject property structures with recommendations regarding correcting several ground settlement and other problems. Contains no information regarding the environmental condition of the subject property (copy not attached).
Limited Lead Paint (LBP) Investigation, prepared by JMR for Tim Meissner and dated October 18, 2010.	The report indicates that LBP was identified on interior and exterior surfaces of all four of the subject property apartments under more recent coats of latex paints. Areas where the latex paint was in fair to poor condition (peeling or chipped) were recommended to be repainted. Special precautions were recommended for workers doing any apartment renovation or demolition work at the subject property to avoid exposure to dust containing lead. Children (especially sensitive to lead exposure) were observed to be included amongst the tenants living in the southern-most, 3-bedroom apartment #4 at the subject property. Federal Housing and Urban Development (HUD) guidelines regarding LBP should be taken into account and the LBP should be kept sealed with latex paint or removed from the apartments if they are going to continue to be occupied (Attachment 2).
Asbestos Survey, prepared by JMR for Tim Meissner and dated October 20, 2010 and associated asbestos waste disposal manifest dated April 6, 2011.	The report indicates that based on sample analytical results, the floor tiles and HVAC insulation were found to contain asbestos. Since the floor tiles were observed to be in good condition and non-friable if left undisturbed, abatement was not recommended prior to renovation or demolition. The insulation was observed to be in poor condition and although abatement was not recommended until renovation or demolition, the owners opted to remove the ducting and insulation (Attachment 2). A copy of the disposal manifest for the resulting asbestos-containing waste (that triggered the Cal/EPA HAZNET listing for the subject property found in the EDR Report; Attachment 3) is also included in Attachment 2.

No other documents were provided by the Client/User to *EA!* for review.

4.0 SUBJECT PROPERTY AND AREA RECONNAISSANCE

The reconnaissance visit to the subject property was conducted by *EAI* on May 26, 2015. Eduardo Moehlecke granted permission to visit the subject property and provided access to all areas. Mr. Moehlecke accompanied *EAI* during the on-property and interior portions of the subject property reconnaissance visit.

4.1 Site Reconnaissance Methodology

EAI utilized the following methodology to observe the subject property:
Observed the interior of the subject property buildings.
Walked the reasonably-accessible exterior areas of the subject property and property boundaries.
Observed adjacent property areas from public thoroughfares.

4.2 General Description

Subject Property and Area Description:	Based on reconnaissance visit observations and information provided by the property management company, the subject property consists of two lots (north; vacant) and south (occupied by one, 2-unit apartment [#1 and #2] building on the eastern portion, one single-unit apartment [#3] building located on the western portion, and another [larger] single-unit apartment [#4] located on the southern portion. The subject property is accessible via a driveway from Stevens Avenue that leads into a parking lot area and also Apt. #4 is accessible from the southeast corner area driveway of the adjacent Solana Highland Apartments complex. The subject property is located in a residential land use area of Solana Beach.
Structures, Roads, Other Improvements:	The subject property buildings are constructed with wood frame and stucco walls. To accommodate the upward hill slope to the south, the subject property buildings are constructed on raised concrete foundations. The doors and windows appear to be wood-framed. The roof is flat and covered with rolled asphalt sheets. There are metal, rollup bay doors in the north, east and south walls. The driveways and parking areas are concrete-paved. Metal, temporary, portable bins (used to store wood stock) are located in the northeast corner area of the subject property.
Subject Property Size:	0.36 acres (lot), 2,103 square feet (buildings).
Estimated % of Property Covered by Buildings/Pavement:	Approximately 40 (based on reconnaissance visit).

Observed Current Subject Property Use/Operations:	All four apartments at the subject property were observed to be occupied with tenants. The studio apartments #1 and #2 building on the eastern portion of the subject property has a storage garage beneath its southern portion. The building is constructed into the hillside that slopes upwards to the north. Crawlspace storage is located beneath the southern portion of the 1-bedroom apartment #3 building located to the west of apartments #1 and #2. A washing machine and dryer for the apartment tenants is located beneath an overhang outside the south wall of the apartment #3 building. A storage shed, reportedly leased separately to a construction contractor for storage use, is located on the slope between the studio and 1-bedroom apartment buildings and the south 3-bedroom apartment #4 building.
Observed Evidence of Past Subject Property Use(s):	None.
Sewage Disposal Method (and age):	City of Solana Beach, lateral installed circa 1947, approximately 68 years old.
Emergency Generator	None observed or reported to be present.
Potable Water Source:	Rancho Santa Fe Irrigation District.
Electric Utilities:	San Diego Gas & Electric (SDG&E).
Gas Utility:	SDG&E.

4.3 Hazardous Substances and Petroleum Products

EAI made the following visual observations during the subject property reconnaissance visit and identified the following information about hazardous substances at the subject property during the interview/records review portions of the ESA:

Observation	Description
Hazardous Substances and Petroleum Products:	None observed.
Drums (≥ 5 gallons):	None observed.
Strong, Pungent, or Noxious Odors:	None observed.
Pools of Liquid:	None observed.
Unidentified Substance Containers:	None observed.

PCB-Containing Equipment:	None observed.
Other Observed Evidence of Hazardous Substances or Petroleum Products:	None.

4.4 Interior Observations

EAI made the following observations during the reconnaissance of the interior areas of the subject property and/or identified the following information during the interview or records review portions of the assessment:

Observation	Description
Heating/Cooling Method:	The buildings appeared to be heated (natural gas) with wall units. No air-conditioning equipment was observed.
Surface Stains or Corrosion:	No corrosion observed. Floor and wall stains appeared typical for residential storage garage areas the age of the ones on the subject property.
Floor Drains and Sumps:	None observed.
Other Interior Observations:	No interior subterranean structures were observed.

4.5 Exterior Observations

EAI made the following observations during the reconnaissance of exterior areas of the subject property and/or identified the following information during the interview or records review portions of the assessment:

Observation	Description
On-site Pits, Ponds, or Lagoons:	None observed.
Stained Soil or Pavement:	No stained soil observed. Asphalt stained by oil from parked cars was observed in the parking lot spaces. The staining was typical of a residential apartment property of this age.
Stressed Vegetation:	None observed.
Waste Streams and Waste Collection Areas:	None observed.

Solid Waste Disposal:	Trash and recycling bins from Waste Management were observed in the northwest corner of the parking lot.
Potential Areas of Fill Placement:	None observed.
Wastewater:	No existing direct sources were observed except for the kitchens, restrooms and clothes washer. No industrial wastewater discharge was observed or found to have ever been permitted.
Storm water:	Storm water appears to drain away from the buildings and then north to where a metal-grated storm drain opening was observed along the eastern edge of the parking lot. The subject property is not listed on the National Pollutant Discharge and Elimination System (NPDES) database in the EDR Report (Attachment 3). No indication of a discharge that would require a NPDES permit was observed.
Wells:	None observed.
Septic Systems:	None observed.
Electromagnetic Radiation Source:	No high-voltage electrical power transmission lines, cellular communications stations or other sources observed.
Other Exterior Observations:	No subterranean features were observed on the subject property exterior except for the previously indicated storm drain.

4.6 Underground Storage Tanks/Structures

Existing USTs:	None observed.
Former USTs:	No evidence observed.
Other Underground Structures:	None observed.

4.7 Aboveground Storage Tanks

Existing ASTs:	None observed.
Former ASTs:	No evidence observed.

4.8 Adjoining Properties

As viewed from the subject property and/or from public rights-of-way, *EAI* made the following observations about use and activities on adjoining properties:

North:	The South Nardo Avenue roadway followed by the Solana Pointe Apartments complex at 766 South Nardo Avenue.
East:	The Stevens Avenue roadway followed by single family residences.
South:	Single family residences.
West:	The Solana Highlands Apartments complex at 701 South Nardo Avenue.

4.9 Observed Past Uses of Adjoining Properties

Observations of adjoining properties providing indications of past use and activities, if any, are described as follows:

North:	None observed.
South:	None observed.
East:	None observed.
West:	None observed.

4.9.1 Pits, Ponds or Lagoons on Adjoining Properties

As viewed from the subject property and/or from public right-of-ways, *EAI* made the following observations about the presence of pits, ponds and lagoons on adjoining properties:

North:	None observed.
South:	None observed.
East:	None observed.
West:	None observed.

4.10 Observed Physical Setting

Topography of the Subject Property and Surrounding Area:	The topography of the subject property and surrounding area is hilly.

4.11 Summary of Findings From Subject Property Reconnaissance

No indication of any adverse environmental impact to the subject property was observed during the reconnaissance visit for this ESA. There were no observed potential adverse environmental conditions and no evidence of an ASTM REC of the subject property based on the reconnaissance visit.

5.0 PHYSICAL SETTING

Topography:	The 1979 USGS 7.5-minute Encinitas, CA Quadrangle Map was reviewed to identify physical features in the vicinity of the subject property. The subject property is depicted at an elevation of approximately 39 feet above mean sea level (MSL). Based on the review of the map and confirmed with observations made during the reconnaissance visit, the terrain in the vicinity of the subject property is hilly.
Soil/Bedrock Data:	The subject property lies within the Peninsular Ranges Geomorphic Province of California. This province is transversed by a group of northwest trending sub-parallel fault zones and encompasses an area that extends 125 miles from the Transverse Ranges and the Los Angeles Basin south to the Mexican Border (and beyond another 775 miles to the tip of Baja California, Cabo San Lucas). Rocks within the province were emplaced during Cretaceous-age orogenic events and uplifted into the present mountain ranges during the late Tertiary and Quaternary-ages. Igneous, metamorphic and sedimentary rock is all found within the Peninsular Ranges. The subject property area is underlain by Quaternary-age sedimentary deposits which include granitic tonalite and diorite and some clay layers that are Marine in origin.
Estimated Depth to Groundwater: **Estimated Direction of Gradient:**	Based on a review of the California State GeoTracker Database, the expected depth-to-groundwater beneath the subject property is approximately 50 feet below ground surface (bgs) and groundwater movement direction is to the southwest toward the Pacific Ocean. According to the San Diego Regional Water Quality Control Board (SDRWQCB), the subject property is located in the Rancho Santa Fe Hydrologic Subarea (HSA; 905.11) of the Solana Beach Hydrologic Area (HA; 905.10) within the San Dieguito Hydrologic Unit (HU; 905.00) a non-beneficial ground water use area (within the portion of the unit located to the west of Interstate 5) with beneficial surface water uses for industrial and recreational purposes.
Known Regional Groundwater Impairment:	None known.

Sources of this information:

- EDR Report (Attachment 3).
- California Division of Mines and Geology Bulletin 200, 2001, Geology of the San Diego Metropolitan Area, California.
- USGS Topographic Map “Encinitas, CA” Quad., 7.5 Minute, 1979 (Figure 3).
- SDRWQCB, 2009, Basin Plan.

6.0 ENVIRONMENTAL RECORDS REVIEW

6.1 Federal, State and Tribal Environmental Records

A government agency database search report was obtained from Environmental Data Resources, Inc. (EDR), a third-party environmental database search firm. A complete copy of the database search report, including the date the report was prepared, the date the information was last updated, and the definition of databases searched, is provided in Attachment 3.

EAI evaluated the properties listed within the EDR Report on the basis of their potential to environmentally impact the subject property. As part of this process, inferences have been made regarding the likely groundwater movement direction (southwest towards the Pacific Ocean). The following table summarizes the listings:

Agency List / Database	Search Radius	Number of Listed Sites
Federal NPL Sites	1.0 mile	0
Federal Delisted NPL Sites	1.0 mile	0
Federal CERCLIS List	0.5 mile	0
Federal CERCLIS NFRAP List	0.5 mile	0
Federal RCRA CORRACTS Facilities	1.0 mile	0
Federal RCRA Non-CORRACTS TSDF	0.5 mile	0
Federal RCRA SQG/CESQG Generators	0.25 mile Subject Property	0 Not Listed.
Federal RCRA LQG Generators	0.25 mile	0
Federal RCRA Non-Gen	0.25 mile	0
Federal ERNS	Subject Property	Not Listed.
State and Tribal - Equivalent NPL (a.k.a. RESPONSE)	1.0 mile	0
State and Tribal - Equivalent CERCLIS (a.k.a. ENVIROSTOR/SLIC)	1.0 mile	2 (ENVIROSTOR) 3 (SLIC)
State and Tribal Solid Waste Facilities (a.k.a. SWF/LF)	0.5 mile	0

Agency List / Database	Search Radius	Number of Listed Sites
State and Tribal Registered Storage Tank Sites (a.k.a. UST & AST)	0.25 mile	1 UST 0 AST
State and Tribal Leaking Storage Tank Sites (a.k.a. LUST)	0.5 mile Near Subject Property	5 0
State and Tribal Institutional Control/Engineering Control Registries	0.5 mile	0
State and Tribal Voluntary Cleanup Sites	0.5 mile	0
U.S. Brownfield Sites	0.5 mile	0
Local Lists of Registered Storage Tanks (a.k.a. CA FID/HIST/SWEEPS)	0.5 mile Subject Property	0 Not Listed.
Local Lists of Hazardous Waste Generator/Contaminated Sites (a.k.a. San Diego Co. HMMD & SAM)	0.25 mile Subject Property	4 (HMMD) 3 (SAM) Not Listed
Local Land Records (Liens 2)	Subject Property	Not Listed.
EDR Historical Cleaners	0.25 mile	0
EDR Historical Auto Stations	0.25 mile	1
EPA FINDS, CHMIRS, DTSC HAZNET, DTSC HWT, EMI	**Subject Property**	**Listed (HAZNET)**

6.1.1 Listings For Subject Property

The subject property is included in the EDR Report on the Cal/EPA HAZNET (hazardous waste disposal tracking) database as a result of the disposal of 0.4 tons of asbestos containing waste in 2011. Copies of the records regarding the associated asbestos abatement work provided by the property management company, Meissner Jacquet, are included in Attachment 2. No records associated with the HAZNET listing were found by the City of Solana Beach or San Diego County Air Pollution Control District (APCD).

6.1.2 Listings for Nearby Sites with Potential to Impact Subject Property

The listings (including two site listings with poor or inadequate address information, a.k.a. Orphan Sites) in the EDR Report, provided in Attachment 3, for a ¼-mile radius of the subject property were evaluated as potential sources of impact and/or RECs of the subject property. Those sites hydrogeologically down-gradient of the subject property (southwest) were not considered to be potential environmental impact sources. The area hydrogeologically up-gradient of the subject property (to the northeast) does not have any open or closed case release sites.

The remainder of the listed sites were evaluated in accordance with the *Database Assessment Criteria* presented in Attachment 4 and determined to not qualify as potential sources of environmental impact and/or ASTM RECs of the subject property.

Oil & Gas Wells

The EDR Report and California Department of Conservation, Division of Oil, Gas and Geothermal Resources database indicate that there are no active or inactive oil and gas wells within a 1-mile search radius of the subject property.

6.2 Local/Regional Environmental Records

EAI checked the following sources to obtain information pertaining to subject property use and/or indicative of potential RECs in connection with the subject property.

6.2.1 Local Environmental Health Department

Agency Name, Contact Information	Finding
San Diego County Department of Environmental Health (DEH): Joyce Ellman, Records Mgr. Joyce.Ellman@sdcounty.ca.gov	The DEH indicated they have no records for the subject property (Attachment 5).

6.2.2 Fire Department

Agency Name, Contact Information	Finding
Solana Beach Fire Department (SBFD): Vaida Pavolas, City Clerk - 858.720.2423	*EAI* visited the SBFD and requested copies of the records for the subject property. The SBFD replied that there are no records, outstanding violations or hazardous materials or fire incidents associated with the subject property (Attachment 5).

6.2.3 Building Department

Agency Name, Contact Information	Finding
Solana Beach Building Department (SBBD): Vaida Pavolas, City Clerk - 858.720.2423	*EAI* visited the SBBD and requested copies of the records for the subject property. The SBBD indicated that they have no records in their files and initiated a search of archived records that yielded no records for the subject property (Attachment 5).

6.2.4 State Environmental Departments

Agency Name, Contact Information	Finding
DTSC (Cal/EPA): Julie Johnson - Jjohnson@dtsc.ca.gov	No files pertaining to the subject property were found (Attachment 5).
SDRWQCB (Cal/EPA): Lucas Lima - RB9_Records @waterboards.ca.gov	No records associated with the subject property were found (Attachment 5).

6.2.5 Air District

Agency Name, Contact Information	Finding
San Diego County Air Pollution Control District (APCD): Teresa Caine, Aide - Teresa.Cain@ sdcounty.ca.gov	*EAI* requested copies of all APCD records for the subject property. No files pertaining to the subject property were found (Attachment 5).

6.2.6 Industrial Wastewater Agency

Agency Name, Contact Information	Finding
Encina Wastewater Authority (EWA): Jerome Jovenal – jjovenal@encinajpa.com	No records associated with the subject property were found (Attachment 5).

6.3 Discussion and Summary of Findings from Environmental Records Review

No records, or records of any consequence with regard to the environmental condition of the subject property, were found at the agencies. No indication of an ASTM REC or CREC of the subject property was found in the environmental records review.

7.0 HISTORICAL RECORDS REVIEW

7.1 Land Title Records/Deeds

The San Diego County Assessor's Office was contacted and the subject property APNs were confirmed to be 298-281-10-00 and 298-164-22-00. The owner of record is listed as TM-Stevens LLC, Timothy Paul Meissner, Member, 5330 Carroll Canyon Road, Suite 200, San Diego, CA 92121. See the PTIR discussion in the next section for information regarding land title records, deeds and lien information.

7.2 Environmental Lien Search

In lieu of an environmental cleanup lien search report, the Client provided a copy of the PTIR for the subject property parcel completed by Stewart Title of California, Inc. The PTIR is dated April 27, 2015, and identified no environmental cleanup liens or associated activity and use limitations assigned to the subject property. The owner of the subject property is listed as TM-Stevens LLC, a California limited liability company. A copy of the PTIR is included in Attachment 2.

7.3 Aerial Photographs

EAI contracted with EDR to provide historical aerial photographs of the subject property and surrounding area. The following table summarizes the features observed during a review of the photographs:

Year	Scale	Observations, Subject Property and Adjoining Properties
1939	1"=555'	The subject and adjoining properties appear to be open hillside land in a rural setting. The South Nardo Ave. and Stevens Ave. roadways are present in approximately their current alignment.
1953 1963	1"=555' 1"=555'	The three apartment structures are present on the subject property. A driveway leads from Stevens Avenue, west to the garage at 821 Stevens Avenue (now under a studio apartment). The Solana Highlands Apartments are not yet present to the west.
1974 1990 1994 2002 2005	1"=600' 1"=666' 1"=666' 1"=666' 1"=604'	The subject property and surrounding area appear similar to the way they did during the reconnaissance visit for this ESA.

No structures or conditions that might obviously affect the environmental condition of the subject property were observed in the photographs. Copies of the aerial photographs are included in Attachment 6.

7.4 City Directories

EAI contracted EDR to research available reverse city telephone directories. EDR found directories for the years 1970 through 2013 that indicated the subject property was occupied by the following persons:

- Josefina Santiago (1970);
- Mike Gonzalez and Diane Huff (1976);
- Josephine Acosta, Felipe Curiel and Martin D. Puentes (1980);
- Josephine Acosta and Juan Martinez (1985);
- Terry Sittinger (1999);
- Terry Sittinger and W. Seeley (2003);
- Terry Sittinger (2008); and
- Valencia Bulmaro (2013).

No listings of concern with regard to the environmental condition of the subject property were found in the directories.

7.5 Historical Fire Insurance Maps

Fire insurance maps were developed for use by insurance companies to depict facilities, properties, and their uses for many locations throughout the United States. These maps provide prior land use history and assist in assessing whether there may be potential environmental contamination on or near the subject property. These maps (which were periodically updated from the late 19th Century to 1971, when they were replaced with satellite imagery and other information sources) often provide valuable insight into historical property uses.

EAI contracted with EDR to provide copies of historical Sanborn® fire insurance maps covering the subject and adjacent properties. EDR replied that no coverage exists (Attachment 3).

7.6 Historical Topographic Maps

A copy of the 1979 US Geological Survey (USGS) Topographic Map (provided by EDR as a report map over layer) that includes the subject property was reviewed. The subject property and immediately surrounding area appears as hillside land. The three currently-existing residential structures are depicted on the map. No evidence of RECs of the subject property was observed on the USGS map. A copy of the USGS topographic map is presented as Figure 3.

7.7 Other Historical Sources

No other historical sources were found during this ESA.

7.8 Summary of Findings from Historical Records Review

The historical records reviewed indicate that the subject property was open land until circa 1947, when the three currently-existing residential structures were constructed on it. No historical information reviewed indicated a potential ASTM HREC of the subject property.

8.0 INTERVIEWS

8.1 Interview With Client/User

The following table summarizes the information provided on the Phase I User Questionnaire completed for the subject property:

Name, Title, Telephone, Years Familiar with subject property:	Andrea Ferentz, Transaction & Project Manager, H.G. Fenton Co., familiar with the subject property for one year, 619.246.8551.
Are you aware of any environmental cleanup liens against the subject property that are filed or recorded under federal, tribal, state or local law? If yes, explain:	No.
Are you aware or any activity and land use limitations (ALLs), such as engineering controls, land use restrictions or institutional controls that are in place at the subject property and/or have been filed or recorded in a registry under federal, tribal, state or local law? If yes, explain:	No.
Do you have any specialized knowledge or experience related to the subject property or nearby properties?	No.
In your opinion does the purchase price being paid for the subject property reasonable reflect the fair market value of the property?	N/A.
Are you aware of commonly known or reasonably ascertainable information about the subject property that would help the environmental professional to identify conditions indicative of releases or threatened releases?	No.

Do you know anything about the past use of subject property?	No.
Do you know of specific chemicals that are present or once present at the subject property?	No.
Do you know of spills or other chemical releases that have taken place at the subject property?	No.
Do you know of any environmental cleanups that have taken place at the subject property?	No.
Based on your knowledge and experience related to the subject property, are there any obvious indicators that point to the presence or likely presence of contamination at the subject property?	No.
Are you aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property?	No.
Are you aware of any correspondence from any government agency relating to past or current violations of environmental laws with respect to the subject property?	No.
Do you know whether any documents such as reports, environmental reports, permits, registrations, manifests exist related to the subject property? If so, list:	No.

8.2 Interview With Key Site Manager

According to ASTM E-1527-13, the key site manager is defined as the person identified by the owner or operator of the subject property as having good knowledge of the uses and physical characteristics of the site. *EAI* identified the tenant manager of the subject property apartments, Mr. Eduardo Moehlecke, Sr. Real Estate Manager for Meissner-Jacquet, as the key site manager. Mr. Moehlecke indicated that to the best of his knowledge, he has not been made aware of any:

- Past or present chemical leaks or spills of reportable quantities on the subject or adjacent properties;
- Gasoline or other fuel ASTs, USTs, piping or pumps formerly present at the subject property;
- Remaining ACM or LBP used in the construction of the building at the subject property;
- Sumps, clarifiers or other interior or exterior subterranean structures on the subject property;
- Pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property;
- Pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property; or,
- Pending, threatened, or past notices from a governmental entity regarding violations of environmental laws or liability relating to hazardous substances or petroleum products.

8.3 Summary of Findings from Interviews

A copy of the completed questionnaire is provided in Attachment 2. Based on the interview responses described above, no ASTM RECs, CRECs or HRECs of the subject property are indicated.

9.0 SUMMARY OF HISTORICAL SUBJECT AND ADJACENT PROPERTY USE

The following summary of the historical uses of the subject property and adjoining properties was compiled from the referenced materials and interviews detailed in Sections 5.0, 6.0, and 7.0.

9.1 Subject Property Use

Year	Summary of Subject Property History
Since at least as early as 1939 to circa 1946	Open hillside land with Stevens Avenue (Ave.) and South Nardo Ave. present.
Circa 1947 – 2015	Northern lot always vacant. Southern lot occupied by the three existing apartment buildings.

9.2 Surrounding/Adjacent Property Use

Direction	Summary of Historical Surrounding Property Use
North:	Originally open hillside land that became developed with the South Nardo Avenue roadway followed by the Solana Pointe Apartments complex at 766 South Nardo Avenue.
East:	Originally open hillside land that became developed with the Stevens Avenue roadway followed by single family residences.
South:	Originally open hillside land that became developed with single family residences.
West:	Originally open hillside land that became developed with the Solana Highlands Apartments complex at 701 South Nardo Avenue.

10.0 NON-ASTM ENVIRONMENTAL CONSIDERATIONS

10.1 Lead-Based Paint

Due to their circa 1947 construction date, the residential buildings on the subject property have been assessed for the presence of LBP. A copy of the Limited Lead Paint Investigation Report, dated October 18, 2010, is included in Attachment 2. The report indicates that LBP was identified on interior and exterior surfaces of all four of the subject property apartments under more recent coats of latex paints. Areas where the latex paint was in fair to poor condition (peeling or chipped) were recommended to be repainted. Special precautions were recommended for workers doing any apartment renovation or demolition work at the subject property to avoid exposure to dust containing lead. Children (especially sensitive to lead exposure) were observed to be included amongst the tenants living in the southern-most, 3-bedroom apartment #4 at the subject property. Federal HUD guidelines regarding LBP should be taken into account and the LBP should be kept sealed with latex paint or removed from the apartments if they are going to continue to be occupied. *EAI* concurs with the recommendations contained in the 2010 LBP report concerning future renovation and demolition work. Painted surfaces that were observed during the reconnaissance visit for this ESA appeared to be in good condition.

10.2 Asbestos

The subject property buildings were constructed circa 1947 and the following potential ACMs were used according to a 2010 ACM survey report (Attachment 2):

- Forced air furnace ducting insulation;
- Drywall composite;
- Exterior stucco;
- Floor tile/mastic;
- Sheet vinyl flooring; and
- Wall plaster.

Based on sample analytical results, the floor tiles and insulation were found to contain asbestos. Since the floor tiles were observed to be in good condition and non-friable if left undisturbed, abatement was not recommended prior to renovation or demolition. The insulation was observed to be in poor condition and although abatement was not recommended until renovation or demolition, the owners opted to remove the ducting and insulation. A copy of the 04-06-2011 disposal manifest for the resulting asbestos-containing waste (that triggered the Cal/EPA HAZNET listing for the subject property found in the EDR Report; Attachment 3) is included in Attachment 2.

The construction materials that were observed appeared to be in good condition, with no damaged areas, potential ACM exposure or other asbestos concerns associated with the subject property. *EAI* makes no warranty as to the possible existence or absence of observed or inaccessible materials or to their evaluation with respect to asbestos content. An ACM survey should be performed prior to any renovation or building demolition, in accordance with EPA National Emission Standard for Hazardous Air Pollutants (NESHAP) regulations. In addition, if

ACM are identified, an appropriate asbestos operations and maintenance (O&M) plan should be implemented.

10.3 Flood Zones

EAI reviewed the Federal Emergency Management Agency (FEMA) flood insurance information for the subject property presented in the EDR Report. They indicate the subject property is not located in either a 100-year or 500-year flood plain. A copy of the EDR Report is included in Attachment 3 of this report. The information is summarized on the following table:

FLOOD INSURANCE RATE MAPS	
Map Source & Name:	EDR Report – FEMA Panel 06073C - DFIRM Flood Data.
Subject Property Within 100-Year Flood Plain:	No.
Subject Property Within 500-Year Flood Plain:	No.

10.4 Wetlands

Wetlands cannot be definitively identified through visual observation alone. Defensible wetland delineations require taxonomic classification of subject site vegetation, an investigation into the surface and subsurface hydrology of the subject property, and identification of hydric soils. This level of delineation is outside of the scope or work for this assessment. However, *EAI* reviewed US Fish and Wildlife Service National Wetland Inventory maps and USDA Soil Survey reports included in the EDR Report. No wetlands are mapped on or near the subject property.

10.5 Indoor Air Quality & Subsurface Contaminant Vapor Intrusion

EAI's assessment of indoor air quality issues was not included in the SOW for this ESA. No indoor air quality issues are known to exist at the subject property according to Mr. Moehlecke. *EAI* did not identify any volatile organic compound (VOC) or other environmental release sites located hydrogeologically up-gradient of the subject property that could act as a source of contamination to soil gas underlying the subject property thereby causing a potential vapor intrusion risk for the subject property buildings. Based on the data contained in the EDR Report the potential for subsurface contaminant vapor intrusion from the subsurface into the subject property building (defined by ASTM as a vapor encroachment condition; VEC) is considered to be low to non-existent (Attachment 3).

10.6 Radon

Radon is a colorless, tasteless radioactive gas with a U.S. Environmental Protection Agency (EPA) specified action level of 4.0 picocuries per liter (pCi/L) of air. Radon gas has a very short half-life of 3.8 days. The health risk potential of radon is associated with its rate of accumulation within confined areas, particularly confined areas near to the ground, where vapors can readily transfer to indoor air from the ground through foundation cracks or other pathways. Large, adequately-ventilated rooms generally present limited risk for radon

exposure. According to the EPA, the radon concentrations in buildings and homes depend on many factors, including soil types, temperature, barometric pressure, and building construction.

EAI reviewed the California Department of Health Services (CDHS) Radon Database for California (last updated in May 2010) and found that in zip code area 92075 where the subject property is located, seventeen (17) tests were taken as part of the survey. The 92075 zip code test results indicated that two (2; 11.8%) of the air samples had a radon level greater than 4.0 pCi/L, the concentration beyond which EPA recommends action be taken to lower radon gas exposure as indicated in the following summary table:

Subject property Location:	**State**	**County & Zip Code**
	California	San Diego 92075
EPA Radon Zones (with Average Measured Indoor Radon Concentrations)		
Zone 1 – High (> 4.0 pCi/L)	Zone 2 - Moderate (2 to 4 pCi/L)	Zone 3 – Low (< 2 pCi/L)
No.	No.	Yes.
Normally-occupied sub grade areas (i.e., basements, etc.)?		
No (None Exist; Storage Garages and Raise Foundation Crawlspaces).		

Information regarding the presence of radon at the subject property relies on regional data and does not represent site-specific data. Based on the Federal EPA Radon Zone rating, CDHS survey results and lack of normally-occupied basement or crawlspaces under the subject property buildings, radon is not expected to represent an environmental impact risk at the subject property and no further consideration appears to be warranted.

10.7 Dry-Cleaning Operations

No dry-cleaning operations (a potential source of the release of solvents to the environment) were reported or observed to be at or near the subject property. The EDR Report does not indicate the former presence of any other historical, dry cleaning shops within a ¼-mile search radius (Attachment 3).

10.8 Pesticides & Other Agricultural Chemicals

The historical research for this ESA does not indicate that the subject property was ever used as farmland. Based on the grading for foundation construction and the existing buildings and asphalt-paved driveway and parking lot areas, there are no concerns regarding the potential presence of residual pesticides and other agricultural chemicals at the subject property.

10.9 Mold

No areas of moisture accumulation or readily evident/obvious mold-like substances were observed at the subject property.

10.10 Electromagnetic Radiation

No high-voltage electrical power transmission lines, cellular communication stations, or other obvious sources of elevated electromagnetic radiation were observed on or near the subject property.

11.0 CONCLUSIONS AND RECOMMENDATIONS

EAI has performed a Phase I ESA in conformance with the Scope of Work required by 40 CFR §312 and ASTM E1527-13 for a Phase I ESA of the residential apartment property located at 821 Stevens Avenue in Solana Beach, San Diego County, CA 92075-4401. Any exceptions to, or deviations from the SOW were described in this report, where applicable.

The subject property is included in the EDR Report that was obtained and reviewed during this ESA on the Cal/EPA HAZNET database listings for the disposal of 0.4 tons of asbestos containing waste in 2011. As far as could be determined, the subject property has never come to the attention of the DEH or EPA Region 9 environmental regulatory agencies. No records regarding the asbestos abatement work in 2011 were found by the City of Solana Beach or APCD. Documentation regarding the asbestos survey and abatement was provided by the property owner.

No known environmental release sites located either hydrogeologically up or immediately side-gradient of the subject property that qualify as a potential adverse environmental contaminant impact source condition to the subject property were identified in the EDR Report.

No issues associated with the presence of LBP were identified. The more recent layers of latex paint covering the LBP at the subject property should continue to be maintained and HUD requirements should continue to be complied with. Painted surfaces that were observed appeared to be in good condition. No issues associated with the presence of ACM were identified. Building materials that were observed appeared to be in good condition.

No evidence of an existing ASTM REC, CREC or HREC of the subject property was found.

No additional environmental assessment work is recommended at this time.

12.0 LIMITATIONS

The conclusions and recommendations contained in this report/assessment are based upon professional opinions with regard to the subject matter. These opinions were prepared in accordance with generally accepted environmental consulting and engineering standards and practices applicable to this location and existing at this time. The use of this report is subject to the following limitations:

1. The data and findings presented in this report are valid as of the dates when the investigations were performed. The passage of time, manifestation of latent conditions or occurrence of future events may require further exploration at the Subject Property, analysis of the data, and reevaluation of the findings, observations, and conclusions expressed in the report.
2. The data reported and the findings, observations, and conclusions expressed in the report are limited by the Scope of Work, budget, site access and schedule, as defined in EnviroApplications's Proposal for the work.
3. This report is based, in part, on unverified information supplied to EnviroApplications by third-party sources, such as regulatory agencies, prior owners or operators of the property, analytical laboratories, subcontractors, etc. Whereas efforts may have been made to substantiate this third-party information, EnviroApplications cannot guarantee the completeness or accuracy of this information.
4. The findings, observations, and conclusions expressed by EnviroApplications in this report are not, and should not be, considered an opinion concerning the compliance of any past or present owner or operator of the Subject Property with any Federal, state or local law or regulation.
5. No warranty or guarantee, whether expressed or implied, is made with respect to the data or the reported findings, observations, and conclusions, which are based solely upon conditions in existence at the time of investigation.
6. EnviroApplications reports present professional opinions and findings of a scientific and technical nature. Whereas attempts were made to relate the data and findings to applicable environmental laws and regulations, the report shall not be construed to offer a legal opinion or representations as to the requirements of, nor compliance with, environmental laws, rules, regulations or policies of Federal, state or local governmental agencies. Issues raised by the report should be reviewed by appropriate legal counsel.

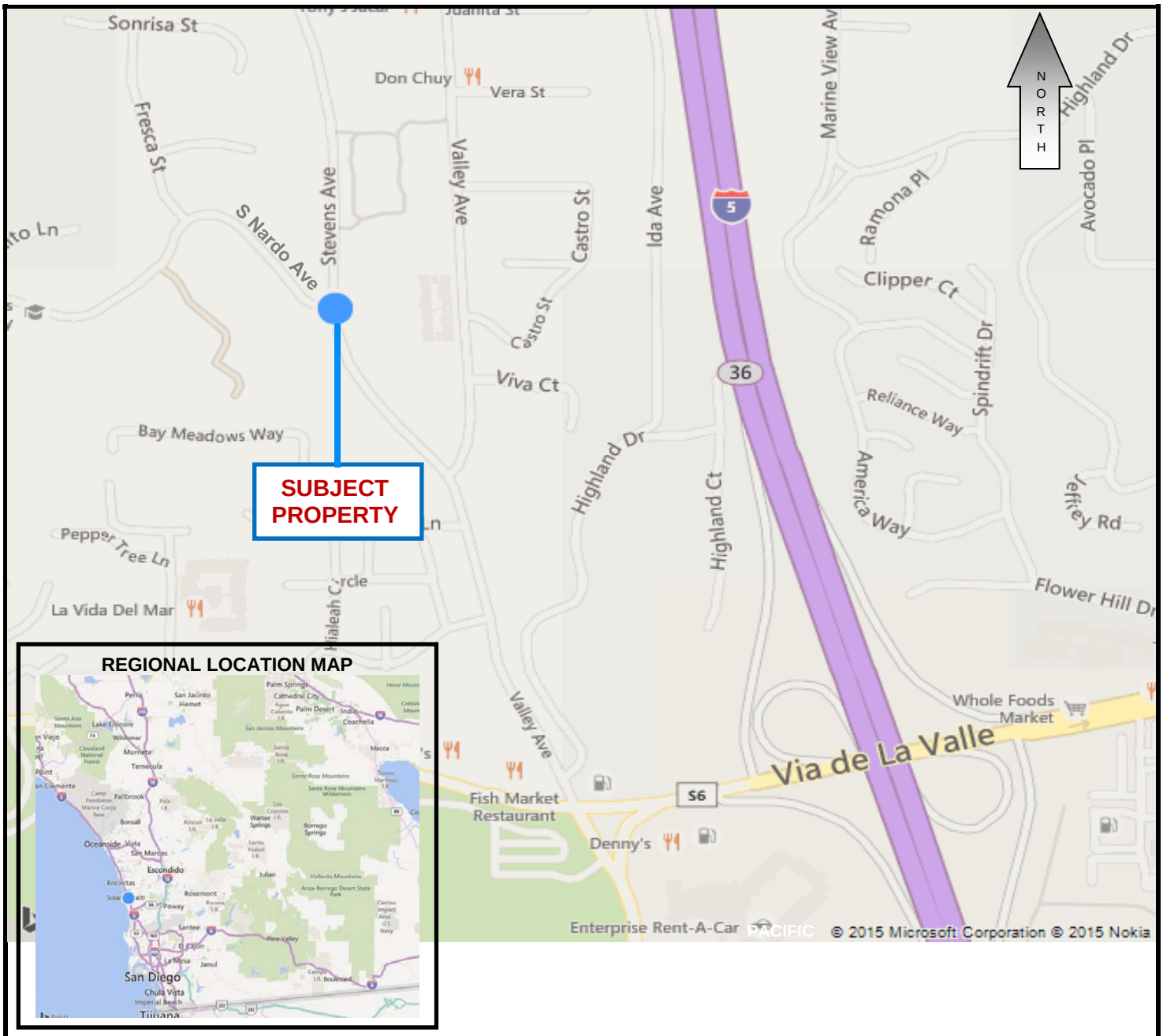
This report is intended for the use of EnviroApplications' Client; any other use must be approved by EnviroApplications and the Client in writing. If any such unauthorized use occurs, it shall be at the user's sole risk without liability to EnviroApplications.

FIGURES

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

4 Residential Apartments and a Storage Shed Property
821 Stevens Avenue
Solana Beach, CA 92075-4401

June 25, 2015
EAI Project No.: 01.HGFC001.15
APNs: 298-281-10-00 and 298-164-22-000



Relative Location in California

Project No.: 01.HGFC001.15

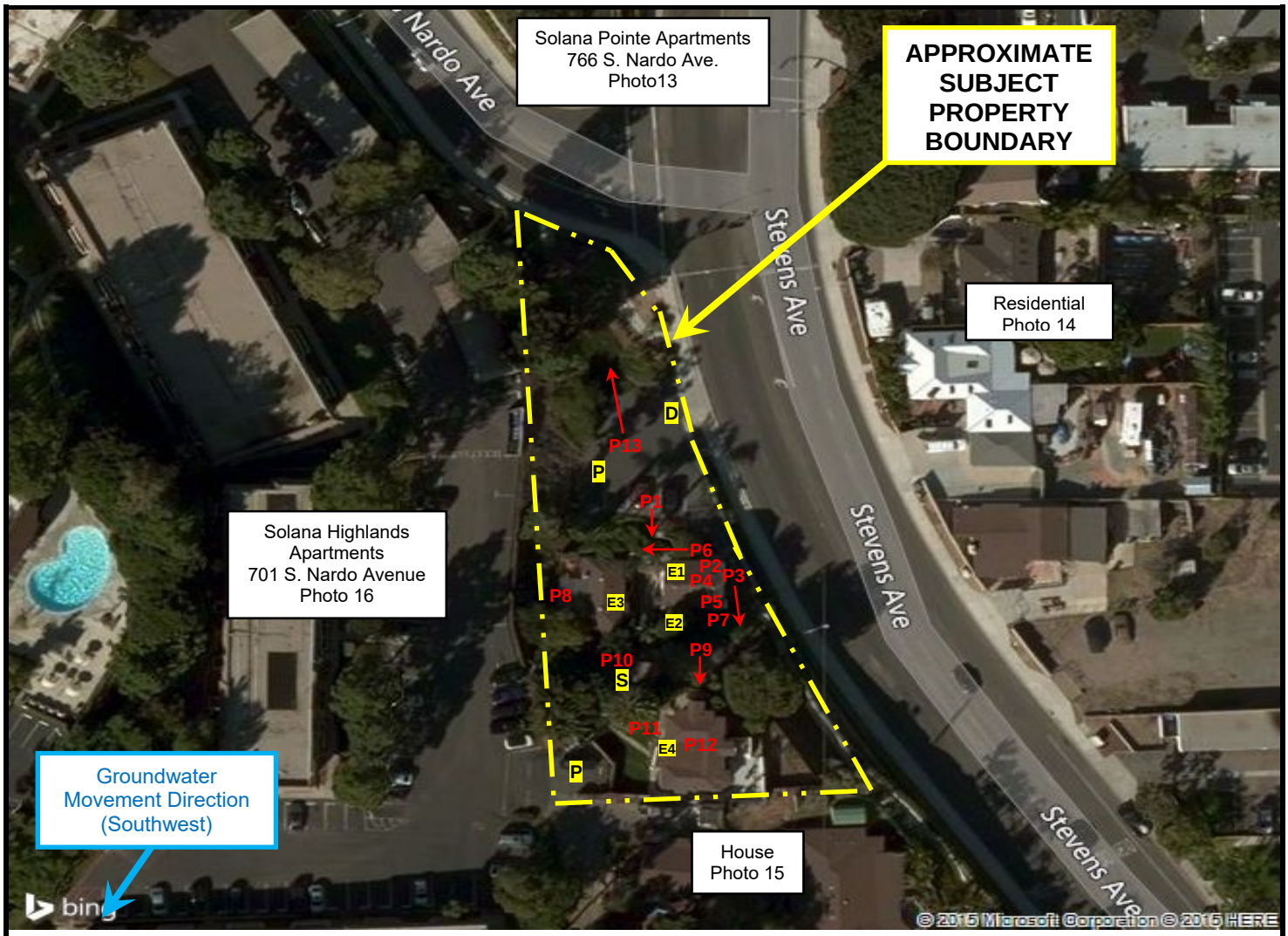
SITE LOCATION MAP

4-APARTMENT RESIDENTIAL PROPERTY
821 Stevens Avenue, Solana Beach
San Diego County, CA 92075-4401

EnviroApplications, Inc.
Engineering & Consulting

Rio Sur Office Complex
2831 Camino Del Rio South
Suite 214, Mission Valley
San Diego, CA 92108-3828

Date: 06-08-2015	**Source:** Reconnaissance Visit & Nokia, 2015	**Scale:** None.	**Figure: 1**
Client: H.G. Fenton Company	**By:** Fred Allee **Checked:** Craig Skiera		**Revision:** 0



NORTH

Notes: See Photos in Attachment 1. No Hazardous Materials or Wastes Observed.
Photo Number & Approximate Location/Direction Taken. **P** = Parking Area.
See Description in Report Section 4.0. **D** = Driveway.
S = Contractor's Storage Shed. **E1** = Apt. 1 Entrance (Etc.).
See Attachment 2 For Additional Descriptions.
Figure Best Viewed At 150% Zoom.

Relative Location in California

Project No.: 01.HGFC001.15

SITE PLAN WITH ADJACENT PROPERTY USES

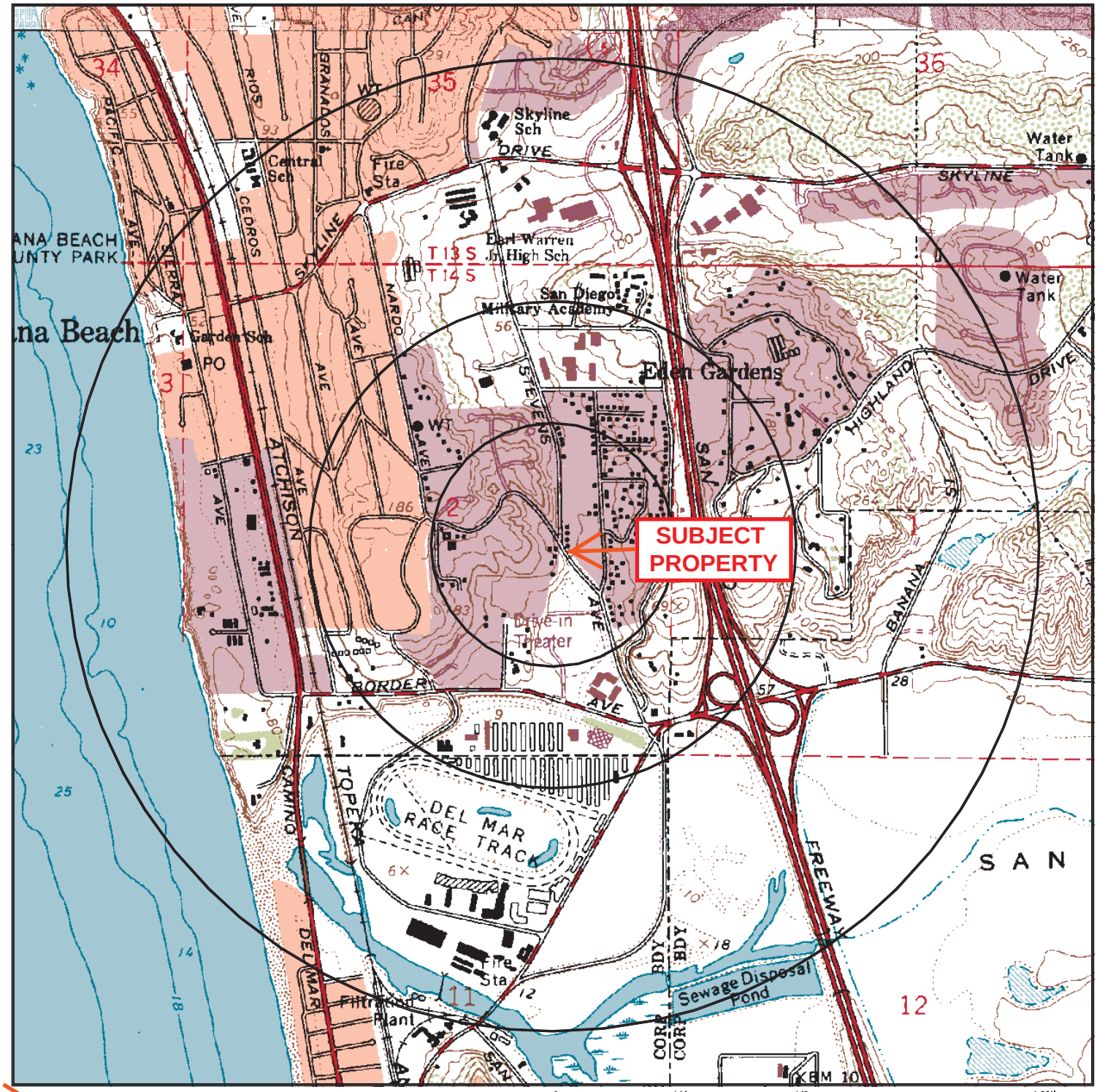
4-APARTMENT RESIDENTIAL PROPERTY
821 Stevens Avenue, Solana Beach
San Diego County, CA 92075-4401

EnviroApplications, Inc.
Engineering & Consulting

Rio Sur Office Complex
2831 Camino Del Rio South
Suite 214, Mission Valley
San Diego, CA 92108-3828

Date: 06-22-2015	**Sources:** Reconnaissance Visit & Nokia, 2015	**Scale:** None.	**Figure: 2**
Client: H.G. Fenton Company	**By:** Fred Allee **Checked:** Craig Skiera		**Revision:** 1

OVERVIEW MAP - 4289823.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

FIGURE 3: SITE PHYSIOGRAPHIC SETTING MAP

SOURCE: USGS Topographic Map, Solana Beach, CA Quadrangle 1979.

SITE NAME:	Solana Beach Residential Land	CLIENT:	Enviroapplications Inc.
ADDRESS:	821 Stevens Avenue Solana Beach CA 92075	CONTACT:	Fred Allee
		INQUIRY #:	4289823.2s
LAT/LONG:	32.9846 / 117.2601	DATE:	May 08, 2015 8:51 pm

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ATTACHMENT 1
PHOTOGRAPHS OF THE SUBJECT & ADJACENT PROPERTIES

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

4 Residential Apartments and a Storage Shed Property
821 Stevens Avenue
Solana Beach, CA 92075-4401

June 25, 2015
EAI Project No.: 01.HGFC001.15
APNs: 298-281-10-00 and 298-164-22-000

ENVIROAPPLICATIONS, INC.
PHOTOGRAPHIC RECORD

Client:	H.G. Fenton Company	**Job Number:**	01.HGFC001.15
Subject Name:	Solana Beach Residential Apartments APNs: 298-281-10 and -164-22-00	**Location:**	821 Stevens Avenue, Solana Beach, San Diego County, CA 92075-4401
Photographer:	Fred Allee	**Date:**	May 26, 2015

Photograph No. 1 of 16

Looking south from parking lot toward subject property Apts. 1 & 2 (left) and Apt. 3 (right) buildings.

Photograph No. 2 of 16

View inside the storage garage beneath Apt. 1.

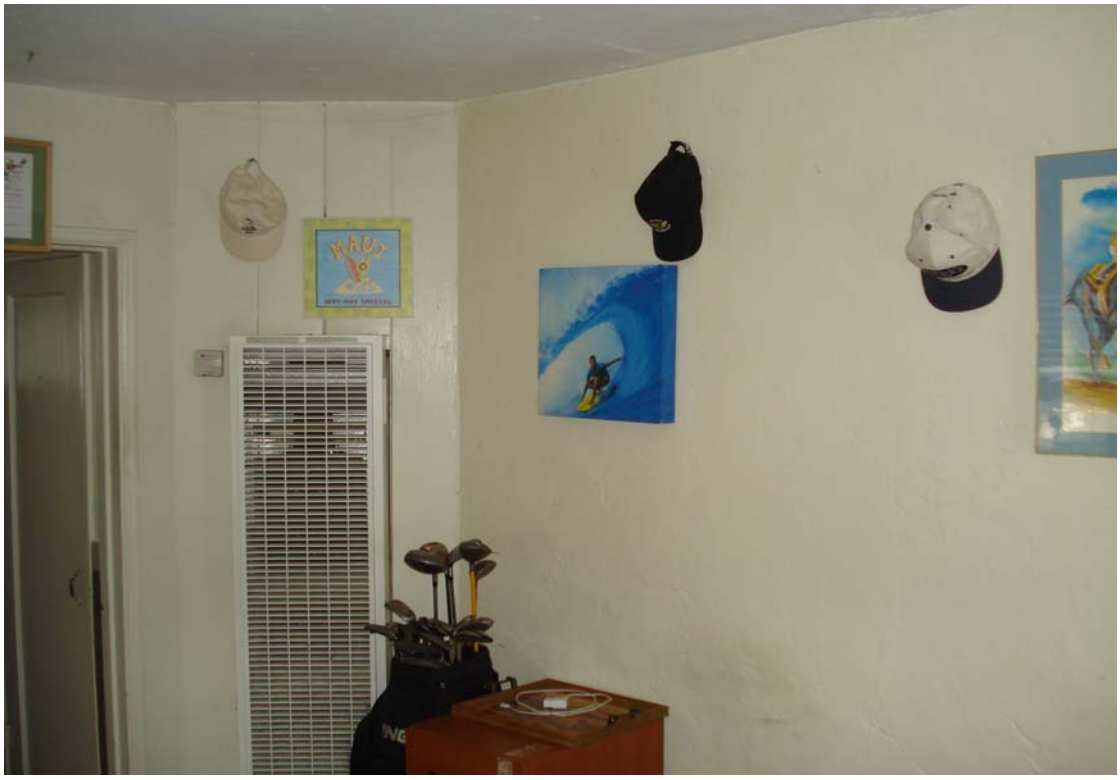
ENVIROAPPLICATIONS, INC.
PHOTOGRAPHIC RECORD

Client:	H.G. Fenton Company	**Job Number:**	01.HGFC001.15
Subject Name:	Solana Beach Residential Apartments APNs: 298-281-10 and -164-22-00	**Location:**	821 Stevens Avenue, Solana Beach, San Diego County, CA 92075-4401
Photographer:	Fred Allee	**Date:**	May 26, 2015

Photograph No. 3 of 16

Looking south, up hill along garage door and east wall of Apts. 1 & 2 building showing construction into hillside.

Photograph No. 4 of 16

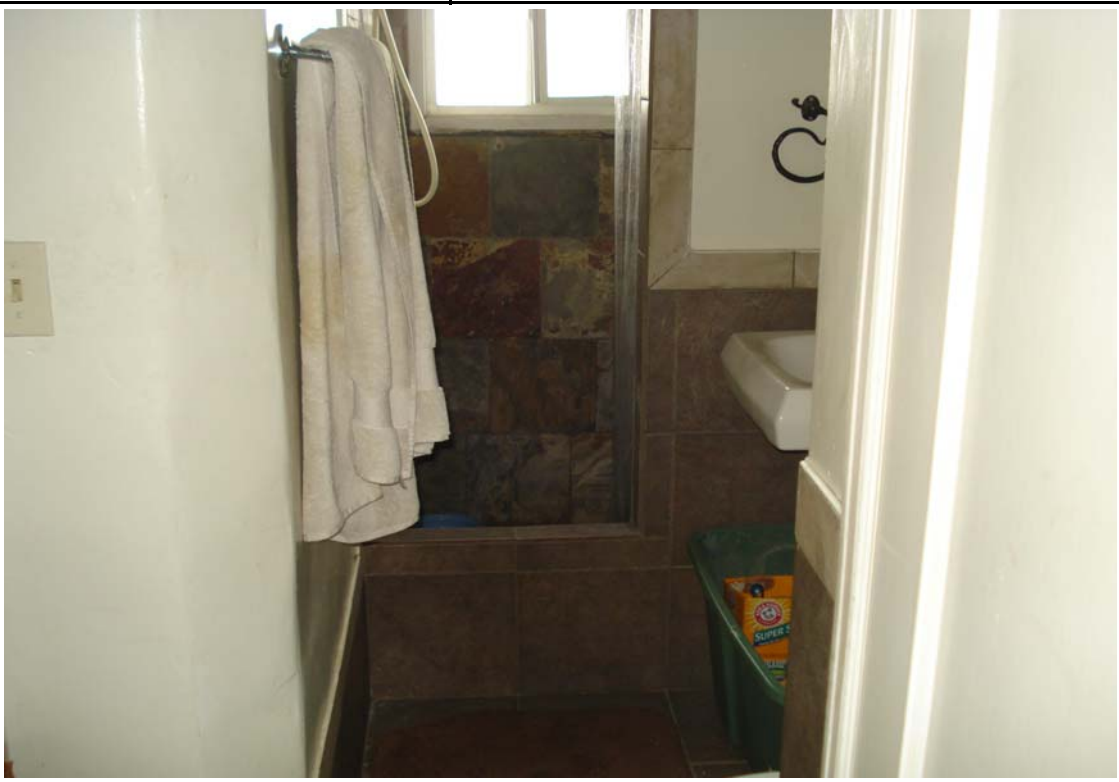


View inside Apt. 1 showing painted plaster walls and gas-fired wall heater.

ENVIROAPPLICATIONS, INC.
PHOTOGRAPHIC RECORD

Client:	H.G. Fenton Company	**Job Number:**	01.HGFC001.15
Subject Name:	Solana Beach Residential Apartments APNs: 298-281-10 and -164-22-00	**Location:**	821 Stevens Avenue, Solana Beach, San Diego County, CA 92075-4401
Photographer:	Fred Allee	**Date:**	May 26, 2015

Photograph No. 5 of 16



View inside Apt. 1 bathroom showing results of remodeling with tile work (typical of all the bathrooms observed).

Photograph No. 6 of 16

Looking west along Apt. 1 (north) wall up steps towards Apt. 3 building.

ENVIROAPPLICATIONS, INC.
PHOTOGRAPHIC RECORD

Client:	H.G. Fenton Company	**Job Number:**	01.HGFC001.15
Subject Name:	Solana Beach Residential Apartments APNs: 298-281-10 and -164-22-00	**Location:**	821 Stevens Avenue, Solana Beach, San Diego County, CA 92075-4401
Photographer:	Fred Allee	**Date:**	May 26, 2015

Photograph No. 7 of 16

View inside Apt. 2 kitchen (typical of all the kitchens that were observed).

Photograph No. 8 of 16

Looking north along back (west) deck of Apt. 3 building.

ENVIROAPPLICATIONS, INC.
PHOTOGRAPHIC RECORD

Client:	H.G. Fenton Company	**Job Number:**	01.HGFC001.15
Subject Name:	Solana Beach Residential Apartments APNs: 298-281-10 and -164-22-00	**Location:**	821 Stevens Avenue, Solana Beach, San Diego County, CA 92075-4401
Photographer:	Fred Allee	**Date:**	May 26, 2015

Photograph No. 9 of 16

Looking up hill (south) toward Apt. 4 building on southern portion of the subject property.

Photograph No. 10 of 16

View of the contractor's storage shed located on slope between the northern and southern apartments.

ENVIROAPPLICATIONS, INC.
PHOTOGRAPHIC RECORD

Client:	H.G. Fenton Company	**Job Number:**	01.HGFC001.15
Subject Name:	Solana Beach Residential Apartments APNs: 298-281-10 and -164-22-00	**Location:**	821 Stevens Avenue, Solana Beach, San Diego County, CA 92075-4401
Photographer:	Fred Allee	**Date:**	May 26, 2015

Photograph No. 11 of 16

View of western wall of Apt. 4 showing one of several vinyl replacement windows installed during remodeling.

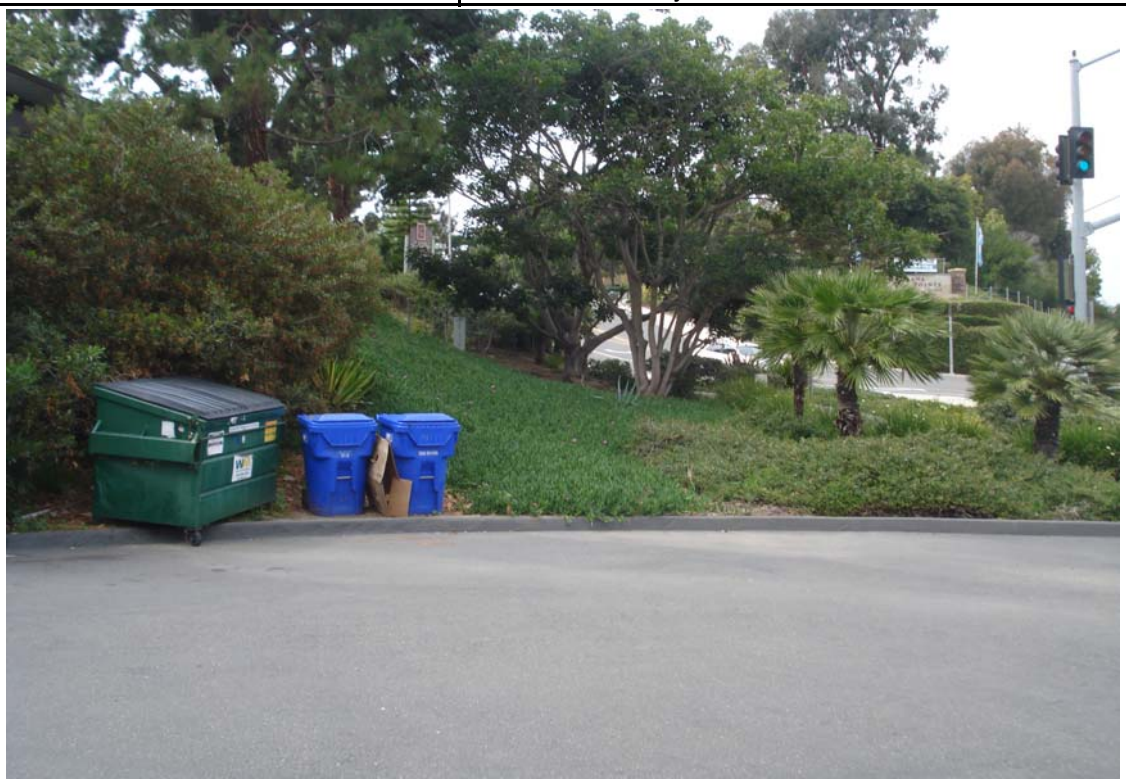
Photograph No. 12 of 16

View inside Apt. 4 showing painted plaster walls and extensive wood paneling and moulding.

ENVIROAPPLICATIONS, INC.
PHOTOGRAPHIC RECORD

Client:	H.G. Fenton Company	**Job Number:**	01.HGFC001.15
Subject Name:	Solana Beach Residential Apartments APNs: 298-281-10 and -164-22-00	**Location:**	821 Stevens Avenue, Solana Beach, San Diego County, CA 92075-4401
Photographer:	Fred Allee	**Date:**	May 26, 2015

Photograph No. 13 of 16



Looking north across triangular lot portion of subject property towards S. Nardo Ave. and Solana Pointe Apartments

Photograph No. 14 of 16

View east past subject property driveway storm drain grate across Stevens Avenue towards nearby houses.

ENVIROAPPLICATIONS, INC.
PHOTOGRAPHIC RECORD

Client:	H.G. Fenton Company	**Job Number:**	01.HGFC001.15
Subject Name:	Solana Beach Residential Apartments APNs: 298-281-10 and -164-22-00	**Location:**	821 Stevens Avenue, Solana Beach, San Diego County, CA 92075-4401
Photographer:	Fred Allee	**Date:**	May 26, 2015

Photograph No. 15 of 16

View of the single family residence located to the south of the subject property.

Photograph No. 16 of 16

Looking west from the southern apartment on the subject property toward the adjacent Solana Highlands Apartments

ATTACHMENT 2
USER PROVIDED INFORMATION

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

4 Residential Apartments and a Storage Shed Property
821 Stevens Avenue
Solana Beach, CA 92075-4401

June 25, 2015
EAI Project No.: 01.HGFC001.15
APNs: 298-281-10-00 and 298-164-22-000

PHASE I ESA USER'S QUESTIONNAIRE

In order to qualify for protection from land owner liability under CERCLA as an *innocent landowner, bona fide prospective purchaser,* or *contiguous property owner*, ASTM standard practice E1527-13 and the federal all appropriate inquiry (AAI) rule (40 CFR 312) require that the User of the Phase I ESA report provide certain information (if available) to the Environmental Professional completing the assessment. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete. Information that is not or cannot be provided to the Environmental Professional may be identified as a "data gap" in the Phase I ESA report.

Please answer the following questions as completely as possible. Attach additional pages if needed. Return the completed questionnaire to EnviroApplications along with the executed authorization for services form.

1. **Property Information.** Property Name: 821 Stevens Avenue

   Property Address: 821 Stevens Avenue

   City: Solana Beach State CA Zip 92075

   Property Owner Name: TM Stevens LLC

   Property Owner Phone #: 619-400-0120

2. **Contact For Site Access.** Name: Eduardo Moehlecke

   Company/Organization/Title: Meissner Jacquet

   Phone #: 858-373-1335 E-Mail Address: eduardoM@meissnerjacquet.com

3. **Environmental Cleanup Liens.** Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?

   _____ Yes ___X___ No

   If yes, describe or attach details of the lien_____

4. **Activity and Land Use Limitations.** Are you aware of any activity and use limitations, such as engineering controls, land use restrictions, or institutional controls that are in place at the property and/or have been filed or recorded as applicable to the property as a result of environmental contamination, investigation, cleanup, or related matters?

   _____ Yes ___X___ No

   If yes, describe or attach details of the limitations_____

5. **Specialized Knowledge or Experience.** As the User of this ESA, do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property, such that you would have specialized knowledge about chemicals and processes used by this type of business?

   _____ Yes ___X___ No

   If yes, describe or attach details of your specialized knowledge or experience_____

6. **Relationship of Purchase Price to Fair Market Value of Property.** Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, do you have any reason to believe that the reduced purchase price may be related to contamination known or believed to be present at the property?

_____ Yes, I have reason to believe that the purchase price for the property has been reduced in comparison with the fair market value due to contamination known or believed to be present at the property?

_____ No, I have no reason to believe that the purchase price for the property has been reduced in comparison with the fair market value due to contamination known or believed to be present at the property?

X Not applicable. User is not involved in a purchase of the property.

7. **Commonly Known or Reasonably Ascertainable Information.** Are you aware of commonly known or reasonably ascertainable information about the property that would help the Environmental Professional to identify conditions indicative of releases or threatened releases of hazardous substances or petroleum products? For example:

Do you know the past uses of the property?

_____ Yes (describe) _____

X No

Do you know of chemicals, hazardous substances or petroleum products that are present or once were present at the property?

_____ Yes (describe) _____

X No

Do you know of spills or other releases of chemicals, hazardous substances or petroleum products that have taken place at the property?

_____ Yes (describe) _____

X No

Do you know of any environmental cleanups that have taken place at the property?

_____ Yes (describe) _____

X No

8. **The Degree of Obviousness of Contamination.** E1527-05 and the federal AAI rule (40 CFR 312.31) require that the Phase I ESA consider the degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation. Based on your knowledge and experience related to the property, are there any *obvious* indictors that point to the presence or likely presence of contamination at the property?

_____ Yes (describe) _____

X No

9. **Availability of Previous Environmental, Geotechnical and Preliminary Title Insurance Reports.** Are you aware of previous environmental site assessment reports, other environmental reports, documents, correspondence, etc. concerning the property and its environmental condition?

_____ No

X Yes (please identify and provide copies, if available): PTR

Environmental Site Assessment Reports N/A

Environmental Compliance Audit Reports N/A

Risk Assessments N/A

Geotechnical Studies N/A

Reports regarding hydrogeologic conditions on the property or surrounding area N/A

Environmental permits or registrations for above and/or underground storage tanks, underground injection or waste water storage systems, hazardous materials handling, hazardous waste generation or disposal, wastewater treatment systems and NPDES permits. N/A

Signature: Andrea Ferentz **Name (printed):** Andrea Ferentz

Title: Project Mgr **Date:** 6/24/15 **Months/Years Familiar With Property:** 1 year

PROPERTY BACKGROUND INFORMATION QUESTIONNAIRE FOR SITE OWNER, OCCUPANT, OR REPRESENTATIVE

SITE:

***Please elaborate on any question answered "yes." If the question does not apply to the site, please answer "N/A".**

1) Describe the current uses of the Site.

4 units of rental Property

2) How long has the Site been used for theses purposes?

60+ years

3) How long have you occupied the Site?

10 yrs

4) List the existing structures on the property and their age.

3 br house and 2 Building containing 2 Studio units
1 br room unit

5) Describe the past uses, owners, and operators of the Site. (Be as detailed as possible and note approximate time periods.) Rubalcaba Properties
always been rentals

6) Utilities including electricity, natural gas, water, sewer, and trash removal are provided to the Site by which utility/companies.

Water - Rancho Santa Fe Irrigation
Sewer - Solana Beach
Electricity - SDG&E
Natural Gas - SDG&E
Trash – Waste Management

7) What type of heating, ventilating, and air conditioning (HVAC) system is located at the Site and how is the HVAC system powered?

heating – gas wall heaters

8) Have the Site or adjoining properties been used for industrial activities, such the following? (Please note that an adjoining property is a property that is contiguous with, or directly across the street from the Site.)

Gasoline Station	[ ] Yes [X] No
Printing Facility	[ ] Yes [X] No
Metal Plating Manufacturing	[ ] Yes [X] No
Landfill	[ ] Yes [X] No
Motor Repair Facility	[ ] Yes [X] No
Dry Cleaners	[ ] Yes [X] No
Junkyard	[ ] Yes [X] No
Waste Treatment	[ ] Yes [X] No
Storage, Disposal, or Recycling Facility	[ ] Yes [X] No

Describe other industrial activities, if any. N/A

9) Have any hazardous substances, petroleum products, unidentified waste materials, tires, automotive or industrial batteries, or other waste materials been dumped aboveground, buried, or burned on the Site?

[ ] Yes [X] No

10) Have any of the following items been stored on the Site in containers greater than 5 gallons?

Paint	[ ] Yes	[X] No
Chemicals	[ ] Yes	[X] No
Pesticides	[ ] Yes	[X] No

11) Are hazardous wastes generated at the Site? If yes, describe the means of disposal and frequency of disposal.

[ ] Yes [X] No

12) Have petroleum products been stored on the Site or transferred across the Site in pipelines, either above or belowground?

[ ] Yes [X] No

13) Has fill dirt been brought onto the Site from an offsite source?

[ ] Yes [X] No

14) Is there evidence that the fill dirt in Question 13 may be contaminated?

[ ] Yes [ ] No N/A

15) Are there currently any pits, ponds, or lagoons on the Site?

[ ] Yes [X] No

16) Have any pits, ponds, or lagoons previously existed on the Site?

[ ] Yes [X] No

17) Are there currently areas on the Site with stained soil?

[ ] Yes [X] No

18) Have stained soils previously existed on the Site?

[ ] Yes [X] No

19) Do chemical-containing underground or aboveground storage tanks exist, or have they existed previously on the Site?

[ ] Yes [X] No

20) Do fill pipes, vent pipes, or access ways indicating the presence of current or former underground storage tanks exist on the Site?

[ ] Yes [X] No

21) Have fill pipes or vent pipes which may indicate the presence of a current or former underground storage tank been removed from the Site?

[ ] Yes [X] No

22) Are floor drains stained with anything other than water in any area on the Site?

[ ] Yes [X] No

23) Do floor drains on the Site emit foul odors?

[ ] Yes [X] No N/A

24) Is the Site served by a private well or a non-public water source?

[ ] Yes [X] No

25) Are contaminants known to exist in any private well or non-public water system serving the Site?

[ ] Yes [X] No N/A

26) Does the Site discharge wastewater, other than domestic wastewater or storm water, into the sewer?

[ ] Yes [X] No

27) Other than permission for domestic hookup, have any city, county, or local permits for wastewater discharge been issued to the Site?

[ ] Yes [X] No

28) Does a septic tank exist, or has one existed previously on the Site?

[ ] Yes [X] No

29) Do cesspools or cisterns currently exist on the Site?

[ ] Yes [X] No

30) Have cesspools or cisterns previously existed on the Site?

[ ] Yes [X] No

31) Other than storm water, does the Site discharge waste water onto the neighboring Site?

[ ] Yes [X] No

32) Is there a transformer or capacitor that may contain PCBs on the Site?

[ ] Yes [X] No

33) Is there hydraulic equipment such as automobile lifts or elevators on the Site?

[ ] Yes [X] No

34) Are PCBs contained in hydraulic oil associated with hydraulic equipment located on the Site?

[ ] Yes [X] No

35) Has an asbestos and/or lead-based paint survey been conducted at the Site? If so, what were the findings?

[ ] Yes [X] No

36) Other than small quantities of legal pesticides used for landscape maintenance (e.g., Roundup), have pesticides, herbicides, or insecticides been applied on the Site?
[ ] Yes [X] No

37) Are you aware of any environmental liens against the Site that are filed or recorded under federal, tribal, state, or local law?

[ ] Yes [X] No

38) Have any environmental violations or citations associated with activities conducted on the Site been issued?

[ ] Yes [X] No

39) Has the Site been included in other environmental assessments? If so, can copies of the reports be provided?

[ ] Yes [X] No

40) Have other environmental assessments identified hazardous substances or petroleum products that exist, or may have existed on the Site?

[ ] Yes [X] No

41) Are there any pending law suits that involve the release or threatened release of hazardous substances associated with the Site?

[ ] Yes [X] No

42) Are you aware of any activity and land use limitations, such as engineering controls, land use restrictions or institutional controls that are in place on the Site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

[ ] Yes [X] No

43) Are you aware of any commonly known or reasonably ascertainable information about the Site that would help the environmental professional to identify conditions indicative of hazardous substance releases or threatened hazardous substance releases?

[ ] Yes [X] No

44) Do you have any specialized knowledge or experience related to the Site or nearby properties, including the knowledge of the chemicals and processes used by this type of business?

[ ] Yes [X] No

45) Based in your knowledge or experience related to the Site, are there any obvious indicators that point to the presence or likely presence of contamination at the Site?

[ ] Yes [X] No

46) If the purchase price of the Site was below fair market value, did this occur because contamination was/is known or believed to be present on the Site?

[ ] Yes [ ] No [X] N/A

Henrietta Blever Rubalcaba Sept 18 - 2010
NAME (IN PRINT) DATE

Henrietta Blever Rubalcaba
SIGNATURE

[X] Owner [ ] Occupant [ ] Owner Representative

Please feel free to contact me if you have any questions.
When complete, return the questionnaire via email or fax:

Mr. Matthew Lesh
Geocon Incorporated
lesh@geoconinc.com
(858) 558-6900 PHONE
(858) 558-6159 FAX

LIMITED
LEAD PAINT INVESTIGATION
CONDUCTED AT
821 STEVENS STREET
SOLANA BEACH, CA 92075

JMR JOB # 1-647

Issued to: Tim Meissner

5330 Carroll Canyon Road
San Diego, CA 92121

October 18, 2010

October 18, 2010

Tim Meissner
5330 Carroll Canyon Road
San Diego, CA 92121

RE: 821 Steven Street, Solana Beach CA 92075

PROJECT: Limited Lead Paint Investigation

Mr. Meissner:

An investigation to identify the presence of lead-based paint (LBP) was performed by JMR Environmental Services Inc. (JMR) at 821 Stevens Street in Solana Beach CA, on October 12, 2010.

JMR's survey included a thorough inspection of each room in the subject buildings, including the exteriors of building structures. The purpose of this survey was to determine the presence and assess the condition of LBP on fixed and painted surfaces. Many building components at this site appeared to be homogeneous. The buildings located on these properties are currently scheduled for renovation.

Equipment used to perform the survey was an X-Ray Fluorescence (XRF) EDAX Map 4 Spectrum Analyzer. I

This report includes XRF results. Also attached are a summary of Cal/OSHA's Lead in Construction Standard Title 8, CCR Section 1532.1 and a copy of the California Department of Health Services (DHS) Inspector's Certification.

Lead Standards

Several government agencies have definitions for what amount of lead constitutes paint to be considered "lead-based." The Department of Housing and Urban Development (HUD) has designated the amount to be 1.0 mg/cm^2, via XRF, or 5,000 ppm, via Atomic Absorption Spectrometry (AAS). The HUD regulations are related to potential hazards in the home environment and not to construction activities.

DHS has created lead-related regulations that have been adopted into Title 17 of the California Code of Regulations. These regulations also define LBP as surface coatings containing lead concentrations of 1.0 mg/cm^2, via XRF, or 5,000 ppm, via AAS. The DHS regulations apply only to lead hazard abatement activities.

The Consumer Product Safety Commission (CPSC) has defined lead-based paint as surface coatings containing lead concentrations greater than 600 ppm, via AAS. In 1978, the CPSC banned the sale of lead-based paint to consumers and the use of lead-based paint in residences and public buildings.

The California Department of Occupational Safety and Health (Cal/OSHA) Lead in Construction Standard (Title 8, CCR Section 1532.1) requires contractors to protect their workers when there is a potential for lead exposure due to the construction activities. Currently, Cal/OSHA has no lead concentration listed where contractors are exempt from Title 8, CCR Section 1532.1.

Test Procedures

Representative fixed, painted, surfaces were tested using the EDAX XRF Map 4 Spectrum Analyzer. Results greater than 1.0 mg/cm^2 are considered to be positive for lead. Paint chip samples are collected from representative components when XRF results are inconclusive. Paint chip samples are also collected from damaged paint with negative XRF results. Paint chip samples are then analyzed in a laboratory using Atomic Absorption Spectrometry (AAS).

Sites are surveyed using the clockwise theory. When using this theory the inspector must first identify the main entry point of the unit, enter at that location, sample that room first, and then sample all remaining rooms in a clockwise rotation. The wall numbers are also identified using the clockwise theory. Walls are numbered in the following manner. When an inspector is standing in the entry way to a room, that entry wall is wall #1; the wall immediately to the inspector's left is wall #2; the wall opposite the inspector is wall #3; and the wall to the inspector's right is wall #4.

XRF assays were performed using the "unlimited" mode. At this setting the XRF continues to assay the substrate until is has determined the painted surface to be either positive or negative with a confidence level of 95%. XRF assay results are given on the following pages. Positive assay results are shaded.

Discussion

In this summary the tested surfaces are grouped into one of three ranges of lead content. The purpose of this is to categorize the surface lead content as relatively high, mid-ranged, or relatively low. This will help in complying with the Cal/OSHA lead standard as explained later. Furthermore, this categorization identifies which surface coatings HUD, DHS, and CPSC consider "lead-based."

Based on XRF and laboratory results, the following surfaces are considered to contain lead concentrations in excess of 1.0 mg/cm^2 or 5,000 ppm.

Unit 1

- Entry Door
- Entry Door Frame
- All Window Components
- Bathroom Door
- Bathroom N. Wall
- Kitchen Door Frame
- Kitchen Countertop (Ceramic Tile)
- Exterior Door
- Exterior Door Frame
- Exterior Window Components
- Exterior Awning

Unit 4

- Dining Room Entry Door
- Dining Room Entry Door Frame
- Dining Room Wall Molding
- Dining Room Lower Walls
- All Window Components
- Dining Room Door Frames
- Dining Room Baseboards
- East Bedroom Door
- East Bedroom Closet Door

Unit 3

- Kitchen North and South Wall
- Kitchen Countertop (Ceramic Tile)
- Kitchen Window Components
- Exterior Window Components
- Exterior Awning

A visual inspection determined several paints to be in "fair" or "poor" condition, including but not necessarily limited to the following:

- Unit 4 – Most Surfaces in Fair Conditions

Loose and peeling paints must be removed and remaining paint stabilized prior to building demolition or renovation.

Please note that although some of the tested paints did not exceed the HUD/DHS definition of LBP, all site paints should be considered having a lead content requiring dust controls and personal protection during building demolition or renovation, in compliance with Title 8, CCR Section 1532.1. This is further explained in the following section.

Cal/OSHA Compliance Recommendations

Title 8, CCR Section 1532.1 requirements apply to all construction activities where lead is disturbed and a potential for employee exposure exists. Since common lead analysis methods have a minimum detection limit, a painted surface cannot be shown by practical means to be completely lead-free. In effect, Cal/OSHA's requirements apply to all paint that is disturbed by an employee. Newer paints often contain small amounts of lead (up to 600 ppm is allowed) due to contamination during the manufacturing process.

When any amount of lead is disturbed an employee initial exposure assessment must be performed. If an employer has exposure data (air sample results) from similar workplace operations and conditions within the past 12 months then this data can be utilized.

If employee exposure data from similar workplace operations are not available, then initial air monitoring is required. Several provisions are required during the initial air monitoring including respiratory protection, protective clothing, change areas with storage facilities, hand washing facilities, biological monitoring, and various types of training (see the included summary of Title 8, CCR Section 1532.1).

We recommend initial air monitoring begin in areas where painted surfaces have higher lead concentrations so that the results, if favorable, can apply to other painted surfaces with similar or lower lead concentrations (if the work practices are similar). Favorable results would be those that are below the action level of 30 micrograms per cubic meter of air ($\mu g/m^3$).

Inspection Limitations

This investigation was planned, developed, and implemented based on previous experience in performing LBP investigations. This inspection was patterned after Chapter 7 of the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (1997 Revision). JMR utilized state of the art practices and techniques in accordance with regulatory standards while performing this investigation. Evaluation of the relative risk of exposure to lead identified during this investigation is based on conditions observed at the time of the investigation. JMR cannot be responsible for changing conditions that may alter the relative exposure risk or for future changes in accepted methodology.

JMR Environmental Services Inc. appreciates the opportunity to provide these services.

Sincerely,
JMR ENVIRONMENTAL SERVICES INC.

Gil Cortinas, Project Manager
DHS Certification #15758

Appendices:
- XRF Results
- XRF Calibration Form
- Summary of Title 8, CCR Section 1532.1
- DHS Inspector's Certification

Meissner 821 Stevens St. Ltd LBP Inv

JMR Environmental Services Inc.
4560 Alvarado Canyon Rd.
Suite 2D
San Diego CA 92120

XRF Data

Customer: Tim Meissner

Project Name: 821 Stevens Street

Site Name: Unit 1

Solana Beach,CA 92075

Action Level 1.000 mg /cm2 Lab 1.000 mg /cm2

Total Assays Reported 41

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Type	Result
8497	0002	Calibration	*	*	*	*	*	0.000 X	0.000 X	0	ID	
8498	0002	Living Room	1	1	Entry Door	Wood	Good	4.912 K	-0.015 L	0	UNLM	Pos
8499	0002	Living Room	1	1	Entry Dr Fr	Wood	Good	0.938 K	0.113 L	0	UNLM	Incl
8500	0002	Living Room	1	1	Entry Dr Fr	Wood	Good	0.925 K	0.013 L	0	UNLM	Incl
8501	0002	Living Room	1	1	Entry Dr Fr	Wood	Good	6.991 K	1.009 L	0	UNLM	Pos
8502	0002	Living Room	1	1	Upper Wall	Wallboard	Good	0.086 K	0.114 L	0	UNLM	Neg
8503	0002	Living Room	1	1	Window Casing	Wood	Good	2.621 K	0.015 L	0	UNLM	Pos
8504	0002	Living Room	1	2	Upper Wall	Plaster	Good	-0.209 K	-0.102 L	0	UNLM	Neg
8505	0002	Living Room	1	3	Upper Wall	Wallboard	Good	-0.634 K	0.254 L	0	UNLM	Neg
8506	0002	Living Room	1	3	Door Frame	Wood	Good	0.501 K	-0.174 L	0	UNLM	Neg
8507	0002	Living Room	1	4	Upper Wall	Wallboard	Good	-0.310 K	0.021 L	0	UNLM	Neg
8508	0002	Kitchen	1	1	Door	Wood	Good	8.782 K	0.250 L	0	UNLM	Pos
8509	0002	Kitchen	1	1	Upper Wall	Plaster	Good	1.806 K	0.116 L	0	UNLM	Pos
8510	0002	Kitchen	1	2	Upper Wall	Plaster	Good	0.514 K	0.065 L	0	UNLM	Neg
8511	0002	Kitchen	1	2	Door	Wood	Good	0.610 K	0.045 L	0	UNLM	Neg
8512	0002	Kitchen	1	2	Door Frame	Wood	Good	0.907 K	0.154 L	0	UNLM	Incl
8513	0002	Kitchen	1	2	Door Frame	Wood	Good	0.877 K	0.021 L	0	UNLM	Incl
8514	0002	Kitchen	1	3	Upper Wall	Plaster	Good	-0.080 K	-0.069 L	0	UNLM	Neg
8515	0002	Kitchen	1	4	Upper Wall	Plaster	Good	0.253 K	0.123 L	0	UNLM	Neg
8516	0002	Kitchen	1	4	Lower Wall	Ceramic	Good	0.149 K	-3.000 L	0	UNLM	Neg

No Averaging Selected

JMR Environmental Services Inc.
4560 Alvarado Canyon Rd.
Suite 2D
San Diego CA 92120

XRF Data

Customer: Tim Meissner

Project Name: 821 Stevens Street

Site Name: Unit 1

Solana Beach,CA 92075

Action Level 1.000 mg /cm2 Lab 1.000 mg /cm2

Total Assays Reported 41

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Type	Result
8517	0002	Kitchen	1	4	Ceiling	Ceramic	Good	0.166 K	0.072 L	0	UNLM	Neg
8518	0002	Kitchen	1	1	Door Frame	Wood	Good	6.653 K	0.323 L	0	UNLM	Pos
8519	0002	Kitchen	1	1	Upper Wall	Plaster	Good	0.653 K	-0.073 L	0	UNLM	Neg
8520	0002	Kitchen	1	2	Upper Wall	Plaster	Good	0.244 K	-0.117 L	0	UNLM	Neg
8521	0002	Kitchen	1	3	Upper Wall	Wallboard	Good	-0.054 K	-0.156 L	0	UNLM	Neg
8522	0002	Kitchen	1	3	Cabinet	Wood	Good	0.864 K	-0.090 L	0	UNLM	Incl
8523	0002	Kitchen	1	3	Cabinet	Wood	Good	0.713 K	-0.132 L	0	UNLM	Neg
8524	0002	Kitchen	1	3	Countertop	Ceramic	Good	21.540 K	3.630 L	0	UNLM	Pos
8525	0002	Kitchen	1	3	Sink Cabinet	Wood	Good	0.734 K	-0.128 L	0	UNLM	Neg
8526	0002	Kitchen	1	4	Upper Wall	Plaster	Good	-0.617 K	0.265 L	0	UNLM	Neg
8527	0002	Kitchen	1	4	Closet Door	Wood	Good	0.736 K	-0.012 L	0	UNLM	Neg
8528	0002	Kitchen	1	4	Closet Door	Wood	Good	0.729 K	0.061 L	0	UNLM	Neg
8529	0002	Kitchen	1	4	Window Casing	Wood	Good	1.012 K	0.134 L	0	UNLM	Incl
8530	0002	Kitchen	1	4	Window Casing	Wood	Good	3.430 K	0.468 L	0	UNLM	Pos
8531	0002	Exterior	1	1	Entry Door	Wood	Good	6.065 K	1.136 L	0	UNLM	Pos
8532	0002	Exterior	1	1	Entry Dr Fr	Wood	Good	9.125 K	0.304 L	0	UNLM	Pos
8533	0002	Exterior	1	1	Upper Wall	Masonry	Good	-0.663 K	-0.946 L	0	UNLM	Neg
8534	0002	Exterior	1	1	Ext. Handrail	Wood	Good	0.038 K	0.042 L	0	UNLM	Neg
8535	0002	Exterior	1	1	Window Sill	Wood	Fair	8.651 K	0.720 L	0	UNLM	Pos
8536	0002	Exterior	1	1	Awnings	Wood	Good	5.390 K	0.410 L	0	UNLM	Pos

No Averaging Selected

JMR Environmental Services Inc.
4560 Alvarado Canyon Rd.
Suite 2D
San Diego CA 92120

XRF Data

Customer: Tim Meissner

Project Name: 821 Stevens Street

Site Name: Unit 1

Solana Beach,CA 92075

Action Level 1.000 mg /cm2 Lab 1.000 mg /cm2

Total Assays Reported 41

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Type	Result
8557	0002	Exterior	1	1	Awnings	Wood	Good	3.771 K	1.130 L	0	UNLM	Pos

No Averaging Selected

JMR Environmental Services Inc.
4560 Alvarado Canyon Rd.
Suite 2D
San Diego CA 92120

XRF Data

Customer: Tim Meissner

Project Name: 821 Stevens Street

Site Name: Unit 3

Solana Beach,CA 92075

Action Level 1.000 mg /cm2 Lab 1.000 mg /cm2

Total Assays Reported 53

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Type	Result
8539	0003	Calibration	*	*	*	*	*	0.000 X	0.000 X	0	ID	
8540	0003	Kitchen	1	1	Entry Door	Wood	Good	0.166 K	0.037 L	0	UNLM	Neg
8541	0003	Kitchen	1	1	Entry Dr Fr	Wood	Good	0.578 K	0.018 L	0	UNLM	Neg
8542	0003	Kitchen	1	1	Upper Wall	Wallboard	Good	-0.221 K	0.372 L	0	UNLM	Neg
8543	0003	Kitchen	1	1	Baseboard	Wood	Good	0.118 K	0.016 L	0	UNLM	Neg
8544	0003	Kitchen	1	2	Upper Wall	Wallboard	Good	4.242 K	-0.090 L	0	UNLM	Pos
8545	0003	Kitchen	1	2	Door Frame	Wood	Good	0.428 K	0.081 L	0	UNLM	Neg
8546	0003	Kitchen	1	1	Cabinet	Wood	Good	0.168 K	0.144 L	0	UNLM	Neg
8547	0003	Kitchen	1	2	Molding, Wood	Wood	Good	0.194 K	-0.049 L	0	UNLM	Neg
8548	0003	Kitchen	1	3	Cabinet	Wood	Good	1.002 K	0.071 L	0	UNLM	Incl
8549	0003	Kitchen	1	3	Cabinet	Wood	Good	0.940 K	-0.055 L	0	UNLM	Incl
8550	0003	Kitchen	1	3	Countertop	Ceramic	Good	22.457 K	4.127 L	0	UNLM	Pos
8551	0003	Kitchen	1	3	Window Casing	Wood	Good	1.668 K	-0.035 L	0	UNLM	Pos
8552	0003	Kitchen	1	4	Upper Wall	Wallboard	Good	1.579 K	0.292 L	0	UNLM	Pos
8553	0003	Living Room	1	1	Upper Wall	Wood	Good	0.173 K	-0.158 L	0	UNLM	Neg
8554	0003	Living Room	1	1	Door Frame	Wood	Good	-0.318 K	0.012 L	0	UNLM	Neg
8555	0003	Living Room	1	2	Upper Wall	Wood	Good	-0.016 K	0.079 L	0	UNLM	Neg
8556	0003	Living Room	1	2	Baseboard	Wood	Good	0.284 K	-0.047 L	0	UNLM	Neg
8557	0003	Living Room	1	2	Window Casing	Wood	Good	-0.063 K	-0.150 L	0	UNLM	Neg
8558	0003	Living Room	1	3	Upper Wall	Wood	Good	-0.139 K	-0.150 L	0	UNLM	Neg

JMR Environmental Services Inc.
4560 Alvarado Canyon Rd.
Suite 2D
San Diego CA 92120

XRF Data

Customer: Tim Meissner

Project Name: 821 Stevens Street

Site Name: Unit 3

Solana Beach,CA 92075

Action Level 1.000 mg /cm2 Lab 1.000 mg /cm2

Total Assays Reported 53

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Type	Result
8559	0003	Living Room	1	3	Door Frame	Wood	Good	0.577 K	0.071 L	0	UNLM	Neg
8560	0003	Living Room	1	4	Upper Wall	Wallboard	Good	-0.245 K	-0.026 L	0	UNLM	Neg
8561	0003	Living Room	1	4	Window Casing	Wood	Good	0.185 K	-0.116 L	0	UNLM	Neg
8562	0003	Living Room	1	4	Entry Door	Wood	Good	-0.253 K	-0.216 L	0	UNLM	Neg
8563	0003	Living Room	1	4	Entry Dr Fr	Wood	Good	-0.328 K	-0.271 L	0	UNLM	Neg
8564	0003	Bedroom	1	1	Door Frame	Wood	Good	-0.355 K	-0.052 L	0	UNLM	Neg
8565	0003	Bedroom	1	1	Upper Wall	Wood	Good	0.065 K	-0.362 L	0	UNLM	Neg
8566	0003	Bedroom	1	2	Upper Wall	Wood	Good	0.276 K	0.080 L	0	UNLM	Neg
8567	0003	Bedroom	1	2	Window Casing	Wood	Good	0.840 K	-0.052 L	0	UNLM	Incl
8568	0003	Bedroom	1	2	Window Casing	Wood	Good	0.696 K	0.012 L	0	UNLM	Incl
8569	0003	Bedroom	1	3	Upper Wall	Wood	Good	0.159 K	-0.178 L	0	UNLM	Neg
8570	0003	Bedroom	1	3	Cabinet	Wood	Good	0.102 K	0.162 L	0	UNLM	Neg
8571	0003	Bedroom	1	3	Closet Door	Wood	Good	0.749 K	0.234 L	0	UNLM	Incl
8572	0003	Bedroom	1	3	Closet Door	Wood	Good	0.456 K	0.048 L	0	UNLM	Neg
8573	0003	Bathroom	1	1	Door	Wood	Good	0.356 K	0.123 L	0	UNLM	Neg
8574	0003	Bathroom	1	1	Door Frame	Wood	Good	0.643 K	0.137 L	0	UNLM	Neg
8575	0003	Bathroom	1	1	Upper Wall	Wallboard	Good	0.412 K	0.057 L	0	UNLM	Neg
8576	0003	Bathroom	1	2	Upper Wall	Wallboard	Good	-0.197 K	0.283 L	0	UNLM	Neg
8577	0003	Bathroom	1	3	Upper Wall	Ceramic	Good	-0.487 K	-3.083 L	0	UNLM	Neg
8578	0003	Bathroom	1	4	Upper Wall	Wallboard	Good	-1.474 K	-0.013 L	0	UNLM	Neg

 No Averaging Selected

JMR Environmental Services Inc.
4560 Alvarado Canyon Rd.
Suite 2D
San Diego CA 92120

XRF Data

Customer: Tim Meissner

Project Name: 821 Stevens Street

Site Name: Unit 3

Solana Beach,CA 92075

Action Level 1.000 mg /cm2 Lab 1.000 mg /cm2

Total Assays Reported 53

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Type	Result
8579	0003	Bathroom	1	4	Ceiling	Wallboard	Good	0.340 K	0.047 L	0	UNLM	Neg
8580	0003	Exterior	1	1	Entry Door	Wood	Good	0.308 K	-0.035 L	0	UNLM	Neg
8581	0003	Exterior	1	1	Entry Dr Fr	Wood	Fair	1.064 K	0.247 L	0	UNLM	Incl
8582	0003	Exterior	1	1	Entry Dr Fr	Wood	Fair	0.187 K	0.134 L	0	UNLM	Neg
8583	0003	Exterior	1	1	Upper Wall	Masonry	Good	-0.457 K	0.167 L	0	UNLM	Neg
8584	0003	Exterior	1	1	Window Sill	Wood	Fair	1.572 K	0.176 L	0	UNLM	Pos
8585	0003	Exterior	1	1	Awnings	Wood	Good	1.113 K	0.290 L	0	UNLM	Incl
8586	0003	Exterior	1	1	Awnings	Wood	Good	0.993 K	0.329 L	0	UNLM	Incl
8587	0003	Exterior	1	1	Awnings	Wood	Good	1.475 K	-0.004 L	0	UNLM	Pos
8588	0003	Exterior	1	4	Window Sill	Wood	Good	1.213 K	0.070 L	0	UNLM	Incl
8589	0003	Exterior	1	4	Window Sill	Wood	Good	1.462 K	0.198 L	0	UNLM	Pos
8590	0003	Exterior	1	4	Fascia	Wood	Good	0.782 K	0.039 L	0	UNLM	Neg
8591	0003	Exterior	1	4	Eave	Wood	Good	0.484 K	0.028 L	0	UNLM	Neg

No Averaging Selected

JMR Environmental Services Inc.
4560 Alvarado Canyon Rd.
Suite 2D
San Diego CA 92120

XRF Data

Customer: Tim Meissner

Project Name: 821 Stevens Street

Site Name: Unit 4

Solana Beach,CA 92075

Action Level 1.000 mg /cm2 Lab 1.000 mg /cm2

Total Assays Reported 68

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Type	Result
8426	0001	Calibration	*	*	*	*	*	0.000 X	0.000 X	0	ID	
8427	0001	Dining Room	1	1	Entry Door	Wood	Good	1.349 K	0.224 L	0	UNLM	Pos
8428	0001	Dining Room	1	1	Entry Dr Fr	Wood	Fair	1.690 K	0.373 L	0	UNLM	Pos
8429	0001	Dining Room	1	1	Upper Wall	Wallboard	Fair	0.353 K	0.088 L	0	UNLM	Neg
8430	0001	Dining Room	1	1	Molding	Wood	Good	2.126 K	0.162 L	0	UNLM	Pos
8431	0001	Dining Room	1	1	Lower Wall	Wood	Good	1.382 K	0.247 L	0	UNLM	Pos
8432	0001	Dining Room	1	1	Window Casing	Wood	Fair	2.755 K	-0.053 L	0	UNLM	Pos
8433	0001	Dining Room	1	1	Window Sill	Wood	Good	2.582 K	0.570 L	0	UNLM	Pos
8434	0001	Dining Room	1	1	Ceiling	Wood	Fair	0.089 K	0.037 L	0	UNLM	Neg
8435	0001	Dining Room	1	2	Upper Wall	Wallboard	Good	0.241 K	0.292 L	0	UNLM	Neg
8436	0001	Dining Room	1	2	Lower Wall	Wood	Good	-0.059 K	0.290 L	0	UNLM	Neg
8437	0001	Dining Room	1	2	Lower Wall	Wood	Good	2.060 K	0.183 L	0	UNLM	Pos
8438	0001	Dining Room	1	2	Door Frame	Wood	Fair	0.342 K	-0.120 L	0	UNLM	Neg
8439	0001	Dining Room	1	2	Door Frame	Wood	Fair	1.618 K	-0.032 L	0	UNLM	Pos
8440	0001	Dining Room	1	3	Upper Wall	Wallboard	Good	-0.038 K	0.049 L	0	UNLM	Neg
8441	0001	Dining Room	1	3	Molding, Wood	Wood	Fair	2.274 K	0.283 L	0	UNLM	Pos
8442	0001	Dining Room	1	1	Lower Wall	Wood	Good	1.528 K	0.261 L	0	UNLM	Pos
8443	0001	Dining Room	1	3	Door Frame	Wood	Fair	1.504 K	0.076 L	0	UNLM	Pos
8444	0001	Dining Room	1	4	Upper Wall	Wallboard	Good	0.312 K	0.028 L	0	UNLM	Neg
8445	0001	Dining Room	1	4	Door Frame	Wood	Fair	1.886 K	0.045 L	0	UNLM	Pos

 No Averaging Selected

JMR Environmental Services Inc.
4560 Alvarado Canyon Rd.
Suite 2D
San Diego CA 92120

XRF Data

Customer: Tim Meissner

Project Name: 821 Stevens Street

Site Name: Unit 4

Solana Beach,CA 92075

Action Level 1.000 mg /cm2 Lab 1.000 mg /cm2

Total Assays Reported 68

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Type	Result
8446	0001	Dining Room	1	4	Lower Wall	Wood	Fair	1.465 K	0.172 L	0	UNLM	Pos
8447	0001	Dining Room	1	4	Baseboard	Wood	Fair	1.405 K	0.252 L	0	UNLM	Pos
8449	0001	Dining Room	1	1	Upper Wall	Wood	Good	-0.331 K	-0.445 L	0	UNLM	Neg
8450	0001	Dining Room	1	1	Ceiling	Wood	Good	0.144 K	0.112 L	0	UNLM	Neg
8451	0001	Dining Room	1	2	Upper Wall	Wood	Good	-0.343 K	-0.025 L	0	UNLM	Neg
8452	0001	Dining Room	1	2	Baseboard	Wood	Good	0.260 K	0.026 L	0	UNLM	Neg
8453	0001	Dining Room	1	2	Door Frame	Wood	Fair	0.900 K	0.048 L	0	UNLM	Incl
8454	0001	Dining Room	1	2	Door Frame	Wood	Fair	-0.090 K	-0.017 L	0	UNLM	Neg
8455	0001	Dining Room	1	3	Upper Wall	Wood	Good	-0.217 K	-0.412 L	0	UNLM	Neg
8456	0001	Dining Room	1	4	Upper Wall	Wood	Good	0.197 K	0.071 L	0	UNLM	Neg
8457	0001	Bedroom	1	1	Door	Wood	Fair	0.336 K	0.199 L	0	UNLM	Neg
8458	0001	Bedroom	1	1	Door Frame	Wood	Fair	0.476 K	0.103 L	0	UNLM	Neg
8459	0001	Bedroom	1	1	Upper Wall	Wallboard	Good	0.373 K	0.013 L	0	UNLM	Neg
8460	0001	Bedroom	1	1	Molding, Wood	Wood	Good	0.490 K	-0.048 L	0	UNLM	Neg
8461	0001	Bedroom	1	1	Baseboard	Wood	Good	0.520 K	0.217 L	0	UNLM	Neg
8462	0001	Bedroom	1	2	Upper Wall	Wallboard	Fair	0.142 K	0.116 L	0	UNLM	Neg
8463	0001	Bedroom	1	3	Upper Wall	Wallboard	Fair	-0.214 K	-0.022 L	0	UNLM	Neg
8464	0001	Bedroom	1	3	Window Casing	Wood	Fair	0.755 K	0.070 L	0	UNLM	Neg
8465	0001	Bedroom	1	3	Window Sill	Wood	Fair	0.689 K	-0.066 L	0	UNLM	Neg
8466	0001	Bedroom	1	4	Upper Wall	Wallboard	Good	-0.379 K	0.056 L	0	UNLM	Neg

JMR Environmental Services Inc.
4560 Alvarado Canyon Rd.
Suite 2D
San Diego CA 92120

XRF Data

Customer: Tim Meissner

Project Name: 821 Stevens Street

Site Name: Unit 4

Solana Beach,CA 92075

Action Level 1.000 mg /cm2 Lab 1.000 mg /cm2

Total Assays Reported 68

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Type	Result
8467	0001	Bedroom	1	4	Closet Door	Wood	Fair	0.870 K	0.120 L	0	UNLM	Incl
8468	0001	Bedroom	1	4	Closet Door	Wood	Fair	0.614 K	0.006 L	0	UNLM	Neg
8469	0001	Bedroom	1	4	Floor	Wood	Fair	0.296 K	0.057 L	0	UNLM	Neg
8470	0001	Bathroom	1	1	Door	Wood	Fair	0.328 K	0.185 L	0	UNLM	Neg
8471	0001	Bathroom	1	1	Door Frame	Wood	Fair	-0.110 K	-0.142 L	0	UNLM	Neg
8472	0001	Bathroom	1	1	Upper Wall	Wallboard	Good	-0.511 K	0.300 L	0	UNLM	Neg
8473	0001	Bathroom	1	1	Ceiling	Wallboard	Good	0.101 K	0.270 L	0	UNLM	Neg
8474	0001	Bathroom	1	2	Upper Wall	Wallboard	Good	-0.153 K	-0.134 L	0	UNLM	Neg
8475	0001	Bathroom	1	2	Baseboard	Wood	Good	-0.566 K	0.230 L	0	UNLM	Neg
8476	0001	Bathroom	1	2	Upper Wall	Ceramic	Good	0.161 K	-2.319 L	0	UNLM	Neg
8477	0001	Bathroom	1	3	Upper Wall	Ceramic	Good	-0.974 K	-2.285 L	0	UNLM	Neg
8478	0001	Bathroom	1	4	Upper Wall	Wallboard	Good	0.426 K	0.092 L	0	UNLM	Neg
8479	0001	Bedroom	2	1	Door	Wood	Fair	1.856 K	0.106 L	0	UNLM	Pos
8480	0001	Bedroom	2	1	Door	Wood	Fair	1.879 K	0.142 L	0	UNLM	Pos
8482	0001	Bedroom	2	1	Upper Wall	Wallboard	Good	-0.318 K	0.099 L	0	UNLM	Neg
8483	0001	Bedroom	2	1	Molding, Wood	Wood	Good	0.544 K	0.074 L	0	UNLM	Neg
8484	0001	Bedroom	2	2	Upper Wall	Wallboard	Good	-0.218 K	-0.426 L	0	UNLM	Neg
8485	0001	Bedroom	2	2	Closet Door	Wood	Fair	0.958 K	0.056 L	0	UNLM	Incl
8486	0001	Bedroom	2	2	Closet Door	Wood	Fair	1.472 K	0.273 L	0	UNLM	Pos
8487	0001	Bedroom	2	2	Window Casing	Wood	Fair	1.662 K	0.250 L	0	UNLM	Pos

No Averaging Selected

JMR Environmental Services Inc.
4560 Alvarado Canyon Rd.
Suite 2D
San Diego CA 92120

XRF Data

Customer: Tim Meissner

Project Name: 821 Stevens Street

Site Name: Unit 4

Solana Beach,CA 92075

Action Level 1.000 mg /cm2 Lab 1.000 mg /cm2

Total Assays Reported 68

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Type	Result
8488	0001	Bedroom	2	2	Window Sill	Wood	Fair	1.026 K	0.080 L	0	UNLM	Incl
8489	0001	Bedroom	2	2	Window Sill	Wood	Fair	1.054 K	0.078 L	0	UNLM	Incl
8490	0001	Bedroom	2	3	Upper Wall	Wallboard	Fair	0.228 K	0.217 L	0	UNLM	Neg
8491	0001	Bedroom	2	3	Baseboard	Wood	Good	1.021 K	0.278 L	0	UNLM	Incl
8492	0001	Bedroom	2	3	Baseboard	Wood	Good	0.929 K	0.208 L	0	UNLM	Incl
8493	0001	Bedroom	2	4	Upper Wall	Wallboard	Good	0.572 K	0.158 L	0	UNLM	Neg
8494	0001	Bedroom	2	4	Door Frame	Wood	Good	0.998 K	0.136 L	0	UNLM	Incl
8495	0001	Bedroom	2	4	Door Frame	Wood	Good	0.214 K	-0.007 L	0	UNLM	Neg

ASBESTOS SURVEY
CONDUCTED AT
821 STEVENS STREET
SOLANA BEACH, CA 92075

JMR JOB # 1-647

Issued to: Tim Meissner

5330 Carroll Canyon road
San Diego, CA 92121

October 20, 2010

October 20, 2010

Tim Meissner
5330 Carroll Canyon Road
San Diego, CA 92121

RE: 821 Stevens Street, Solana Beach CA 92075

PROJECT: Asbestos Survey

Mr. Meissner:

An asbestos survey was performed by JMR Environmental Services, Inc. (JMR) at 821 Stevens Street in Solana Beach CA on October 12, 2010.

The purpose of this survey was to determine the presence of friable (easily crumbled by hand pressure) and non-friable asbestos-containing materials within the bungalows. This survey addressed the following types of building materials:

Drywall Composite
Exterior Stucco
Floor Tile/Mastic
Sheet Vinyl Flooring
Wall Plaster
Insulation

This report includes laboratory results and a list of asbestos-containing materials with estimates of square and linear footage. Recommendations as to the most practical remedial action shall also be provided.

Procedure

Sample analysis of bulk materials was performed in accordance with EPA.600/R-93/116 Test Method: Method for the Determination of Asbestos in Bulk Building Materials. This procedure involves examination of the samples with a petrographic microscope utilizing polarized light, a procedure commonly known as polarized light microscopy (PLM).

All results generated via bulk asbestos analysis are reported in terms of approximate percent by volume. Laboratory results and field data sheets are attached.

Asbestos Results

The following tables include an inventory of the identified asbestos-containing materials for this project.

Material / Location	Type	Total % by Volume	Approx.* Quantity	Condition**
HVAC Insulation/Unit 4 - Basement	Chrysotile	50%	75 LF	Poor
Floor Tile/Unit 3 – Under Carpet	Chrysotile	4%	Unknown	Good
Floor Tile/Unit 4 – Under Carpet	Chrysotile	3%	Unknown	Good

* *Quantities are approximations and not for bidding purposes. LF: Linear feet.*

** *The following condition types were used to assess the asbestos-containing materials:*

- *Good* - *Material is intact and shows no signs of damage or deterioration. No debris is present.*
- *Fair* - *Moderate damage or deterioration. Material is breaking up into layers or beginning to come loose from the substrate. The material is deteriorating in small areas. Minor debris may be present.*
- *Poor* - *Severe damage or deterioration. The material is non-cohesive. Pieces are dislodged and debris is evident. Non-friable material has become friable.*
- *Unknown* - *Materials located but impossible to assess, i.e., underneath new finishes.*

Discussion/Recommendations

All accessible areas were inspected for possible asbestos-containing materials. If materials that are similar to those found to be asbestos containing are observed they must be assumed positive until tested to prove otherwise.

Due to the non-destructive nature of the survey, inaccessible areas (such as inside walls) were not sampled. If during renovation suspect materials are observed in these areas, bulk sampling and analysis is recommended prior to resuming the renovation activities.

Floor Tile

Asbestos fibers were detected in the floor tile located under the carpet in Units 3 and 4. The floor tiles are in good condition. Asbestos containing floor tile is considered to be non-friable with a low potential for fiber release, unless aggressively disturbed as occurs in renovation or demotion. No remedial action is required unless renovation or demolition is planned.

HVAC Insulation

Asbestos fibers were identified in the HVAC insulation located in the basement of Unit 4. This insulation is covering the vents on all sides. The HVAC insulation is in poor condition. This material is friable and has a very high potential for fiber release if condition. This material must be removed in accordance with all local, state and federal regulations prior to renovation or demolition.

If asbestos-containing materials are to be removed or disturbed for demolition or renovation then a licensed, California Division of Safety and Health (Cal/OSHA) registered asbestos abatement contractor must be used and the work must conform to Title 8, Section 1529 of the California Code of Regulations. If asbestos is present in quantities greater that 1% then all work must also conform to Federal Environmental Protection Agency (EPA) regulations Title 40 CFR 61 Final Rule, and Federal Occupational Safety and Health Administration (OSHA) regulations Title 29 CFR 1926.1101. Various other federal, state, or local regulations may apply as well.

JMR Environmental Services Inc. appreciates the opportunity to provide these services.

Sincerely,

Gil Cortinas, Project Manager
Asbestos Certification #05-3780

Reviewed by,

Derik Martin, General Manager
Asbestos Certification #96-2068

Meissner 821 Stevens Street Asb Survey

ASBESTOS LABORATORY RESULTS

STATE OF CALIFORNIA
DIVISION OF OCCUPATIONAL SAFETY AND HEALTH
TECHNICIAN CERTIFICATION

Project:	821 Stevens Street Solana Beach, CA 92075	JMR Lab Number Date Analyzed	1-647-101310-B October 13, 2010

Sample Number	Sample ID	Type of Asbestos Present	Total Percentage by Volume	Other Materials Present		Gross Appearance
141700	1. HVAC Insulation Unit 4- Basement	Chrysotile	50%	Cellulose Quartz Binder	30%	Homogenous Fibrous Light Grey
141701	2. Blown in Insulation Unit 1- Attic	None Detected		Cellulose Glass Wool Quartz	3% 95%	Homogenous Fibrous Off White
141702	3A. 12x12 Floor Tile Unit 1- Kitchen	None Detected		Quartz Vinyl		Homogenous Non-Fibrous Off White
141703	3B. Adhesive Unit 1- Kitchen	None Detected		Cellulose Synthetic	< 1%	Homogenous Fibrous Off White
141704	4. Floor Tile Unit 3- Under Carpet	Chrysotile	4%	Cellulose Quartz Clay	< 1%	Homogenous Fibrous Dark Brown
141705	5A. 9x9 Floor Tile Unit 4- Living Room Under Carpet	Chrysotile	3%	Cellulose Quartz Clay	< 1%	Homogenous Fibrous Brown
141706	5B. 9x9 Floor Tile Mastic Unit 4- Living Room Under Carpet	None Detected		Cellulose Quartz Bitumen	1%	Homogenous Fibrous Black
141707	6. Sheet Vinyl Flooring Unit 4- Kitchen	None Detected		Cellulose Quartz Vinyl	15%	Layered Fibrous Light Brown Light Grey
141708	7. Sheet Vinyl Flooring Unit4- Bathroom	None Detected		Cellulose Fiberglas Quartz Vinyl	10% 2%	Layered Fibrous Light Brown Light Grey
141709	8. Exterior Stucco Unit 4- East Wall	None Detected		Cellulose Vermiculite Quartz Gypsum Binder	< 1%	Layered Fibrous Off White Grey
141710	9. Exterior Stucco Unit 4- North Wall	None Detected		Cellulose Vermiculite Quartz Binder	< 1%	Homogenous Fibrous Grey
141711	10. Exterior Stucco Unit 4- West Wall Front	None Detected		Cellulose Vermiculite Quartz Gypsum Binder	< 1%	Layered Fibrous Off White Grey

JMR Environmental Services, Inc.

Project:	821 Stevens Street Solana Beach, CA 92075	JMR Lab Number Date Analyzed	1-647-101310-B October 13, 2010

Sample Number	Sample ID	Type of Asbestos Present	Total Percentage by Volume	Other Materials Present		Gross Appearance
141712	11. Exterior Stucco Unit 4- South Wall	None Detected		Cellulose Vermiculite Quartz Binder	< 1%	Homogenous Fibrous Grey
141713	12. Ceiling Tile Unit 3- Bedroom	None Detected		Cellulose Binder	98%	Homogenous Fibrous Brown
141714	13. Wall Sample Unit 1- Kitchen	None Detected		Cellulose Vermiculite Quartz Gypsum Binder	< 1%	Layered Fibrous White Off White
141715	14. Wall Plaster Unit 1- Bathroom	None Detected		Cellulose Vermiculite Quartz Gypsum Binder	< 1%	Layered Fibrous White Off White
141716	15. Wall Plaster Unit 4- Bathroom	None Detected		Cellulose Vermiculite Quartz Gypsum Binder	< 1%	Layered Fibrous White Off White
141717	16. Composite Wall Unit 3- Bathroom	None Detected		Cellulose Fiberglas Quartz Gypsum	< 1% 3%	Layered Fibrous Off White Off White
141718	17. Composite Wall Unit 4- Living Room	None Detected		Cellulose Quartz Gypsum	10%	Layered Fibrous Brown Off White
141719	18. Composite Wall Unit 3- Kitchen	None Detected		Cellulose Quartz Gypsum	15%	Layered Fibrous Brown Off White
141720	19. Composite Drywall Unit 2- Living Room Ceiling	None Detected		Cellulose Fiberglas Quartz Gypsum	10% < 1%	Layered Fibrous Off White Brown Off White

JMR Environmental Services, Inc.

Project:	**821 Stevens Street** **Solana Beach, CA 92075**	**JMR Lab Number** **Date Analyzed**	**1-647-101310-B** **October 13, 2010**

Sample Number	Sample ID	Type of Asbestos Present	Total Percentage by Volume	Other Materials Present		Gross Appearance
141721	20. Composite Drywall Unit 4- Bedroom	None Detected		Cellulose Quartz Gypsum	10%	Layered Fibrous Brown Off White
141722	21. Composite Drywall Unit 4- Kitchen	None Detected		Cellulose Fiberglas Quartz Gypsum	3% < 1%	Layered Fibrous Off White Brown Off White

JMR Environmental Services, Inc.

MVR ENVIRONMENTAL SERVICES, INC
4660 ALVARADO CANYON ROAD, SUITE 20, SAN DIEGO, CA 92120
TEL 619 358 7200 FAX 619 358 7264

PAGE # 1 of 3

1-647-101310-B

BULK ASBESTOS CHAIN OF CUSTODY

COMPANY:
CONTACT: Tim Meissner
ADDRESS: 5330 Carroll Canyon Rd.
CITY, STATE & ZIP: San Diego CA 92121

PHONE #: 619-807-6960 ~~FAX #~~ Alt. 858-373-1234
JOB #:
P.O. #:

PROJECT NAME: 921 Stevens St.
Solana Beach, CA 92075

SAMPLES COLLECTED BY & DATE: G. Cortinas 10/12

TURNAROUND TIME: ☐ RUSH ☒ SAME DAY ☐ NEXT DAY ☐ TWO DAYS ☐ FIVE DAYS

PROJECT	SAMPLE #	MATERIAL SAMPLED	LOCATION	RESULT
141700	1	HVAC Insulation	Unit 4 - Basement	50% CH
01	2	Blown In Insulation	Attic	ND
02	3A	12x12 Floor Tile	Unit 1 - Kitchen	
03	3B	Adhesive	Unit 1 - Kitchen	
04	4	Floor Tile under carpet	Unit 3	4% CH
05	5A	9x9 Floor Tile under carpet	Unit 4 - Living Room	3% CH
06	5B	" " Mastic	" "	ND
07	6	Sheet Vinyl Flooring	Unit 4 - Kitchen	
08	7	Sheet Vinyl Flooring	Unit 4 - Bathroom	
09	8	Exterior Stucco	Unit 4 - East Wall	

RELINQUISHED BY: G. Galed
DATE: 10/13/10 TIME: 9:30Am.

RECEIVED BY: G Galed
DATE: 10/13/10 TIME: 9:30Am

COMMENTS: timm@meissnerjacquet.com

E-MAILED 10/13/10

A.R. ENVIRONMENTAL SERVICES, INC
ALVARADO CANYON ROAD, SUITE 2D, SAN DIEGO, CA 92120
PHONE: 619 [illegible]
FAX: 619 [illegible]

Q 3

1-647-101310-B

BULK ASBESTOS CHAIN OF CUSTODY

COMPANY
CONTACT: Tim Meissner
ADDRESS
CITY, STATE & ZIP

PHONE #: 619-807-6960 FAX #:
JOB #: P.O. #:

PROJECT NAME: 821 Stevens St. Solana Beach, CA 92075

SAMPLES COLLECTED BY & DATE: G. Cortinas 10/12

TURNAROUND TIME: ☐ RUSH ☒ SAME DAY ☐ NEXT DAY ☐ TWO DAYS ☐ FIVE DAYS

	SAMPLE #	MATERIAL SAMPLED	LOCATION	RESULT
14 ~~700~~	9	Exterior Stucco	Unit 4- North wall	NO
11	10	Exterior Stucco	Unit 4- West wall	
12	11	Exterior Stucco	Front South wall-Unit 4	
13	12	Ceiling Tile.	Unit 3	
14	13	Wall Sample	Unit 1- Kitchen	
15	14	Wall Plaster	Unit 1- Bathroom	
16	15	Wall Plaster	Unit 4- Bathroom	
17	16	Composite wall	Unit 3- Bathroom	
18	17	Composite wall	Unit 4- Living Room	
19	18	" "	Unit 3- Kitchen	

RELINQUISHED BY: G. Garcia
DATE: 10/13/10 TIME: 930Am.

RECEIVED BY: G. Garcia
DATE: 10/13/10 TIME: 930Am

COMMENTS:

A F ENVIRONMENTAL SERVICES, INC
ALVARADO CANYON ROAD, SUITE D, SAN DIEGO, CA 92123
TEL 619 548-7285 FAX 619 858-7264

1-6477-101310-B

BULK ASBESTOS CHAIN OF CUSTODY

COMPANY
CONTACT Tim Meissner
ADDRESS
CITY, STATE & ZIP

PHONE #: 619-807-6960 FAX #:
JOB #: P.O. #:

PROJECT NAME: 621 Stevens St. Solana Beach, CA 92075

SAMPLES COLLECTED BY & DATE: G. Cortinas 10/12

TURNAROUND TIME: ☐ RUSH ☒ SAME DAY ☐ NEXT DAY ☐ TWO DAYS ☐ FIVE DAYS

	SAMPLE #	MATERIAL SAMPLED	LOCATION	RESULT
191720	19	Composite Drywall	Unit 2 - Living Room Ceiling	NO
21	20	Composite Drywall	Unit 4 - Bedroom	
22	21	" "	Unit 4 - Kitchen	

RELINQUISHED BY: G. Garcia
DATE: 10/13/10 TIME: 930Am.

RECEIVED BY: G. Garcia
DATE: 10/13/10 TIME: 930Am

COMMENTS:

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) APR 21 2011 Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: CAC002664623
2. Page 1 of: 1
3. Emergency Response Phone: 800-535-5053
4. Manifest Tracking Number: 002516559 FLE

5. Generator's Name and Mailing Address: TM - STEVENS, LLC
5330 Carroll Canyon Rd #200, San Diego, CA 9212
Generator's Phone: (858) 373-1335 Attn: Eduardo Moehlecke

Generator's Site Address (if different than mailing address): 821 STEVENS AVENUE
UNIT 4
SOLANA BEACH, CA 92075

6. Transporter 1 Company Name: NEXON CORPORATION (858) 571-9100 — U.S. EPA ID Number: CAR000199091

7. Transporter 2 Company Name: E.C.T.I. (909) 884-7424 — U.S. EPA ID Number: CAR000049064

8. Designated Facility Name and Site Address: LA PAZ COUNTY LANDFILL
26999 HIGHWAY 95, MILE POST 128, PARKER, AZ 85344
Facility's Phone: (928) 669-2559
U.S. EPA ID Number: AZC950823111

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
R.Q.	1. NA2212, ASBESTOS, 9, III	10	BA	1	Y	151
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
E.P.A. REGION IX - 75 HAWTHORNE ST., SAN FRANCISCO, CA 94102 TEL: (415) 774-1089
S.C.A.Q.M.D. - 21865 E. COPLEY DRIVE, DIAMOND BAR, CA 91765 TEL: (909) 396-2336
ERG# 171 LL6496316 JOB REF#: 1219GW

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: MIKE JANAMILLO (FOR OWNER) — Signature: [signature] — Month 4 Day 6 Year 11

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: BENJAMIN VALDEZ — Signature: [signature] — Month 4 Day 8 Year 11
Transporter 2 Printed/Typed Name: Patricia Berry — Signature: Patricia Berry — Month 4 Day 11 Year 11

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: F. TAYLOR — Signature: [signature] — Month 4 Day 12 Year 11

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

State of California – California Environmental Protection Agency
Department of Toxic Substances Control (DTSC)
P O Box 1288
Sacramento, CA 95812-1288

Generator Information Services Section
1-877-454-4012 (Toll-free)
or 1-916-255-4439
www.dtsc.ca.gov

EPA ID Number: CAC002664623

TM/STEVEN LLC
5330 CARROLL CANYON RD STE 200
SAN DIEGO, CA 92121-0000

Location Address:
821 STEVENS AVE
SOLANA BEACH, CA 92075-4401

2011 MANIFEST COUNT
Non-Recycled: **1**
Recycled: **0**

MANIFEST FEE CALCULATION SHEET FOR 2011 MANIFESTS (January 1, 2011 – December 31, 2011)
RETURN THIS FORM WITHIN 30 DAYS -- ***Please Read Information and Instructions on Back***

If you are a home owner or property owner, you received this notice because you had work done on your home or property between 1/1/11 and 12/31/11 where hazardous waste was removed as a result of this work. In order to remove the hazardous waste, a temporary EPA ID Number was obtained in your name and used on manifest(s) to transport the hazardous waste.

Employee Count for your business during calendar year 2011 **(Required)** _____ (If you are not a business, enter 0.)

Federal Employer Identification Number (FEIN) **(Required)** _____ (Also called a Federal Tax ID.)
If you do not have a FEIN Number, please enter your Social Security Number.

1. Enter the number of **non-recycled** manifests from the 2011 Manifest Count in the box above... [1]
2. **Manifest Fee Exemption** – If you are a homeowner, property owner or a business with **less than 100 employees**, you may claim the first four non-recycled manifests as free. Read the information on back before completing this section.

   In order to receive the credit, list the manifest tracking number(s) of each of the non-recycled manifest(s) you are claiming as free. **Do not call DTSC for manifest tracking numbers. You must refer to your records; you are required to keep copies of your hazardous waste manifests for 3 years.** If you do not have a copy of your manifest(s), contact your hazardous waste transporter or the contractor who performed the work for you to get copies for your records. List manifest tracking number(s) below:

   (1) 002516559 (2) _____ (3) _____ (4) _____

   Enter the number of **non-recycled** manifests claimed free--maximum of four..... [1] (Enter 0 if none.)
3. Enter the number of **non-recycled** manifests that were used solely for hazardous waste derived from air compliance solvents. (See back for more information.) ..... [0] x $3.50 = $ 0.00
4. Subtract the number of manifests in Lines 2 and 3 from Line 1..... [0] x $7.50 = $ 0.00

THE MANIFEST COUNT IN BOXES 2, 3, AND 4 SHOULD EQUAL. THE MANIFEST COUNT IN BOX 1

5. No fee due for **recycled** manifests.....$ 0.00
6. Add $ totals in Lines 3 and 4. **Enter total $ amount due**.....$ 0.00

Make your check payable to DTSC for the amount due on **Line 6.** Return this form and your payment, if any is due, in the enclosed envelope. When paying by credit card, complete the enclosed credit card form.

YOU MUST COMPLETE AND RETURN THIS FORM WITHIN 30 DAYS WHETHER OR NOT YOU OWE FEES.

I hereby certify under penalty of perjury that the information above is true and correct.

Signature of Preparer: _____ **Title:** REAL ESTATE MANAGER

Name (please print): EDUARDO MOEHLECKE **Date:** 6/13/12 **Phone:** (858) 373-1335

THIS SECTION FOR DEPARTMENT USE ONLY			
CHECK NO:	$ AMOUNT:	DATE:	CID#:
STATE ACCOUNTS	**FEDERAL ACCOUNTS**	**UNCLEARED**	
12560035:	12560091:	12560065:	
12560075:	12260096:	**AMOUNT DUE:**	
		PRIMARY ID #:	

Frank Green
Commercial Title Mgr/ATO

Stewart Title of California, Inc.
San Diego, CA 92108
Phone (619) 398-8035
Fax
fgreen@stewart.com

PRELIMINARY REPORT

Order No.	:	01180-94546
Title Unit No.	:	7034
Your File No.	:	Solana Highlands
Buyer/Borrower Name	:	
Seller Name	:	Fenton Solana Highlands, LLC and TM-Stevens LLC

Property Address: 661 South Nardo Avenue, Solana Beach, CA
821 Stevens Avenue, Solana Beach, CA

In response to the above referenced application for a Policy of Title Insurance, Stewart Title of California, Inc. hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a Policy or Policies of Title Insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referenced to as an Exception on Schedule B or not excluded from coverage pursuant to the printed Schedules, Conditions, and Stipulations of said Policy forms.

The printed Exceptions and Exclusions from the coverage and Limitations on covered Risks of said policy or policies are set forth in Exhibit A attached. The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. Limitations on Covered Risks applicable to the CLTA and ALTA Homeowner's Policies of Title Insurance which establish a Deductible Amount and a Maximum Dollar Limits of Liability for certain coverages are also set forth in Exhibit A. Copies of the policy forms should be read. They are available from the office which issued this report.

Please read the exceptions shown or referred to below and the exceptions and exclusions set forth in Exhibit A of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters, which are not covered under the terms of the title insurance policy and should be carefully considered.

It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects, and encumbrances affecting title to the land.

This report, (and any supplements or amendments thereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance a binder or commitment should be requested.

Dated as of April 27, 2015 at 7:30 a.m.

Update No. One

Frank Green, Title Officer

When replying, please contact: Frank Green, Title Officer

PRELIMINARY REPORT

The form of Policy of Title Insurance contemplated by this report is:

☐ CLTA Standard Coverage Policy

☐ CLTA/ALTA Homeowners Policy

☐ 2006 ALTA Owner's Policy

☐ 2006 ALTA Loan Policy

☐ ALTA Short Form Residential Loan Policy

☒ Report Only

SCHEDULE A

The estate or interest in the land hereinafter described or referred to covered by this report is:

A Fee

Title to said estate or interest at the date hereof is vested in:

TM-Stevens LLC, a California limited liability company, as to Parcels 1 and 2;

and

Fenton Solana Highlands LLC, a Delaware limited liability company, as to Parcel 3

LEGAL DESCRIPTION

The land referred to herein is situated in the State of California, County of San Diego, City of Solana Beach and described as follows:

PARCEL 1:

THE NORTHERLY 122.31 FEET OF LOT 13 OF EDEN GARDENS SUBDIVISION, IN THE CITY OF SOLANA BEACH, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA AS PER MAP NO. 1757 THEREOF, OF SAN DIEGO COUNTY RECORDS, SAID DISTANCE BEING MEASURED ALONG THE WESTERLY BOUNDARY OF SAID LOT 13 TOGETHER WITH THAT PORTION OF LOT 13, EDEN GARDENS IN THE CITY OF SOLANA BEACH, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF NO. 1757, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JUNE 27, 1923, DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT IN THE WEST LINE OF SAID LOT 13, WHICH POINT IS SOUTH 1°28'00" WEST A DISTANCE OF 122.31 FEET FROM THE NORTHWEST CORNER OF SAID LOT 13; THENCE SOUTH 88°17'00", EAST 86.33 FEET; THENCE SOUTH 1°28'00" WEST 8.10 FEET; THENCE NORTH 57°23'17" WEST 56.35 FEET TO A POINT IN THE WEST LINE OF SAID LOT 13 DISTANT 6.75 FEET SOUTHERLY OF THE POINT OF BEGINNING; THENCE NORTH 1°28'00" EAST 6.75 FEET TO THE POINT OF BEGINNING.

EXCEPTING FROM ALL, OF SAID LAND THAT PORTION DEEDED TO THE CITY OF SOLANA BEACH BY DEED RECORDED JULY 12, 1995 AS DOCUMENT NO. 295095 OF OFFICIAL RECORDS AND DESCRIBED AS FOLLOWS:

THOSE PORTIONS OF LOTS 13 AND 14 OF THE EDEN GARDENS SUBDIVISION, IN THE CITY OF SOLANA BEACH, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 1757 FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY ON JUNE 27, 1923, DESCRIBED AS A WHOLE AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE NORTHEASTERLY LINE OF SAID LOT 13 WITH THE SOUTHERLY LINE OF THE NORTHERLY 122.31 FEET OF SAID LOT 13, SAID 122.31 FEET BEING MEASURED ALONG THE WESTERLY BOUNDARY OF SAID LOT 13; THENCE, FOLLOWING ALONG SAID NORTHEASTERLY LINE AND THE SOUTHWESTERLY LINE OF ROAD SURVEY NO. 714 ON FILE IN THE OFFICE OF THE COUNTY SURVEYOR OF SAN DIEGO COUNTY, NORTH 33°01'47" WEST 144.10 FEET; THENCE NORTH 31°40'21" WEST 59.69 FEET TO A POINT OF CUSP WITH A CURVE CONCAVE NORTHEASTERLY HAVING A RADIUS OF 642 .00 FEET WHICH IS CONCENTRIC WITH AND DISTANT 42.00 FEET SOUTHWESTERLY OF THAT CERTAIN COURSE IN THE CENTERLINE OF STEVENS AVENUE AS SHOWN AS HAVING A CENTRAL ANGLE OF 36°12'02" AND RADIUS OF 600.00 FEET ON EXHIBIT "B-1" ATTACHED HERETO, AND TO WHICH A RADIAL LINE BEARS SOUTH 72°29'31" WEST; THENCE LEAVING SAID SOUTHWESTERLY LINE OF ROAD SURVEY NO. 714, SOUTHERLY AND SOUTHEASTERLY 173.92 FEET ALONG SAID CONCENTRIC CURVE THROUGH A CENTRAL ANGLE OF 15°31'18"; THENCE SOUTH 33°01'47" EAST 16.37 FEET TO SAID SOUTHERLY LINE OF THE NORTHERLY 122.31 FEET OF LOT 13; THENCE SOUTH 87° 40'12' EAST 26.98 FEET TO THE POINT OF BEGINNING.

PARCEL 2:

ALL THAT PORTION OF LOT 14, EDEN GARDENS, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 1757 FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY LYING SOUTHERLY OF ROAD SURVEY NO. 714.

EXCEPTING FROM ALL OF SAID LAND THAT PORTION DEEDED TO THE CITY OF SOLANA BEACH BY DEED RECORDED JULY 12, 1995 AS DOCUMENT NO. 295095 OF OFFICIAL RECORDS AND

DESCRIBED AS FOLLOWS:

THOSE PORTIONS OF LOTS 13 AND 14 OF THE EDEN GARDENS SUBDIVISION, IN THE CITY OF SOLANA BEACH, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 1757 FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY ON JUNE 27, 1923, DESCRIBED AS A WHOLE AS FOLLOWS

BEGINNING AT THE INTERSECTION OF THE NORTHEASTERLY LINE OF SAID LOT 13 WITH THE SOUTHERLY LINE OF THE NORTHERLY 122.31 FEET OF SAID LOT 13, SAID 122.31 FEET BEING MEASURED ALONG THE WESTERLY BOUNDARY OF SAID LOT 13; THENCE, FOLLOWING ALONG SAID NORTHEASTERLY LINE AND THE SOUTHWESTERLY LINE OF ROAD SURVEY NO. 714 ON FILE IN THE OFFICE OF THE COUNTY SURVEYOR OF SAN DIEGO COUNTY, NORTH 33°01'47" WEST 144.10 FEET; THENCE NORTH 31°40'21" WEST 59.69 FEET TO A POINT OF CUSP WITH A CURVE CONCAVE NORTHEASTERLY HAVING A RADIUS OF 642.00 FEET WHICH IS CONCENTRIC WITH AND DISTANT 42.00 FEET SOUTHWESTERLY OF THAT CERTAIN COURSE IN THE CENTERLINE OF STEVENS AVENUE SHOWN AS HAVING A CENTRAL ANGLE OF 36°12'02" AND RADIUS OF 600.00 FEET ON EXHIBIT "B-1" ATTACHED HERETO, AND TO WHICH A RADIAL LINE BEARS SOUTH 72°29'31" WEST; THENCE, LEAVING SAID SOUTHWESTERLY LINE OF ROAD SURVEY NO. 714, SOUTHERLY AND SOUTHEASTERLY 173.92 FEET ALONG SAID CONCENTRIC CURVE THROUGH A CENTRAL ANGLE OF 15°31'18"; THENCE SOUTH 33°01'47" EAST 16.37 FEET TO SAID SOUTHERLY LINE OF THE NORTHERLY 122.31 FEET OF LOT 13; THENCE SOUTH 87° 40'12" EAST 26.98 FEET TO THE POINT OF BEGINNING.

APN: 298-281-10-00 & 298-164-22-00

PARCEL 3:

LOTS 1, 2 AND 3 OF TURF CLUB VIEW, IN THE CITY OF SOLANA BEACH, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 6672, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JUNE 25, 1970.

APN: 298-260-33-00

APN: 298-281-10-00, 298-164-22-00, and 298-260-33-00
(End of Legal Description)

SCHEDULE B

At the date hereof, exceptions to coverage in addition to the printed exceptions and exclusions contained in said policy or policies would be as follows:

Taxes:

A. Property taxes, which are a lien not yet due and payable, including any assessments collected with taxes, to be levied for the fiscal year 2015 - 2016.

B. General and Special City and/or County taxes, including any personal property taxes and any assessments collected with taxes, for the fiscal year 2014 - 2015:
1st Installment : $4,073.15 Paid
2nd Installment : $4,073.15 Paid
Parcel No. : 298-281-10-00
Code Area : 18009

Said matter affects: Parcel 1.

C. General and Special City and/or County taxes, including any personal property taxes and any assessments collected with taxes, for the fiscal year 2014 - 2015:
1st Installment : $836.49 Paid
2nd Installment : $836.49 Paid
Parcel No. : 298-164-22-00
Code Area : 18009

Said matter affects: Parcel 2.

D. General and Special City and/or County taxes, including any personal property taxes and any assessments collected with taxes, for the fiscal year 2013 - 2014:
1st Installment : $158,163.20 Paid
2nd Installment : $158,163.20 Paid
Parcel No. : 298-260-33-00
Code Area : 18009

Said matter affects: Parcel 3.

E. Supplemental taxes for the fiscal year 2014-2015 issued pursuant to the provisions of Chapter 3.5 (commencing with Section 75) of the Revenue and Taxation Code of the State California:
Code Area : 18013
Parcel No. : 900-001-44-00
First Installment : $40,637.70 Paid
Second Installment : $40,637.70 Paid

Said matter affects: Parcel 3.

F. Assessments, if any, for Community Facilities Districts or a Mello-Roos District affecting said land which may exist by virtue of assessment maps or notices filed by said districts. Said assessments are collected with the County Taxes.

G. The lien of supplemental taxes, if any, assessed pursuant to the provisions of Chapter 3.5 (commencing with Section 75) of the revenue and taxation code of the State of California.

Exceptions:

++++++++++The Following Items Affects Parcels 1 and 2+++++++++++++++++++

1. The recital contained on the map of said land which agrees to allow the crossarms of poles or similar structures placed along the right of way for certain highways to hang over the abutting land.

2. An easement for the purpose shown below and rights incidental thereto as set forth in a document:
   Grantee: Santa Fe Irrigation District
   Purpose: water pipeline
   Recorded: March 23, 1925, as Instrument No. 138949 in Book 1065, Page 431 of Deeds
   Affects: Parcel 1

   The exact location of the easement is not disclosed by the instrument.

3. An easement for the purpose shown below and rights incidental thereto as set forth in a document:
   Grantee: San Diego Consolidated Gas & Electric Company
   Purpose: poles and wires for the transmission and distribution of electricity
   Recorded: April 23, 1942, as Instrument No. 23174 in Book 1330, Page 486, of Official Records
   Affects: a portion of said land

   Said matter affects: Parcel 1.

4. An easement for the purpose shown below and rights incidental thereto as set forth in a document:
   Grantee: E. C. Batchelder and Maud Clark Batchelder
   Purpose: sewer, water, gas, mains, poles and wires for the conveyance of electricity, with the right of ingress and egress for the maintenance and operation thereof
   Recorded: January 7, 1943, as Instrument No. 00875 in Book 1453, Page 64, of Official Records
   Affects: said land

   The exact location of the easement is not disclosed by the instrument.

   Said matter affects: Parcel 1.

5. Recital in deed from Jose Granados and Elvira Granados to James Rubalcaba and Mary Rubalcaba, husband and wife as joint tenants recorded November 26, 1943 as Instrument/File No. 77671 in Book 1587, Page 457, of Official Records.

   Subject to an easement for road purposes along the westerly boundary of said property ten feet in width, also subject to any agreements or rights of way now of record.

   Said matter affects: Parcel 1.

6. An easement for the purpose shown below and rights incidental thereto as set forth in a document:
   Grantee: San Diego Gas and Electric Company
   Purpose: public utilities, ingress and egress
   Recorded: May 15, 1973, as Instrument No. 73-130639, Official Records
   Affects: a portion of said land

   Said matter affects: Parcel 1.

7. The effect, if any, of record of survey map no. 17708 which sets forth, or purports to set forth

certain dimensions and bearings of the herein described property.

8. Please be advised that our search did not disclose any open deeds of trust of record. If you should have knowledge of any outstanding obligation, please contact your title officer immediately for further review.

9. Matters which may be disclosed by an inspection or by a survey of said land satisfactory to this Company, or by inquiry of the parties in possession thereof.

10. Rights of parties in possession.

++++++++++++++++++The Following Items Affects Parcel 3++++++++++++++++++++++++

11. An easement for the purpose shown below and rights incidental thereto as set forth in a document to Santa Fe Irrigation District, for the purpose of water pipeline purposes, recorded November 13, 1969, as Instrument/File No. 208650 of Official Records.

    Said matter affects: a portion of Lots 1 and 2 as shown on Map 6672.

12. An easement for the purpose shown below and rights incidental thereto as set forth in a document to James Rubalcaba and Mary Rubalcaba, husband and wife, as joint tenants, et al, for the purpose of roadway purposes, recorded May 18, 1970, as Instrument/File No. 85823 of Official Records.

    Said matter affects: a portion of Lot 3 as shown on map.

13. An easement for the purpose shown below and rights incidental thereto as set forth in a document to James Rubalcaba and Mary Rubalcaba, husband and wife, as joint tenants, et al, for the purpose of roadway, recorded May 14, 1970, as Instrument/File No. 83868 of Official Records.

    Said matter affects: a portion of Lot 3 as shown on map 6672.

14. An easement affecting the portion of said land and for the purposes stated herein and incidental purposes, shown or dedicated by Map No.: 6672, for: sewer, affects: As shown on said Map.

15. An easement for the purpose shown below and rights incidental thereto as set forth in a document to the County of San Diego, for the purpose of open space, recorded July 6, 1970, as Instrument/ File No. 118110 of Official Records.

    Said matter affects a portion of said land as more particularly described in said document.

16. An easement for the purpose shown below and rights incidental thereto as set forth in a document to the San Diego Gas and Electric Company, for the purpose of access and utilities, recorded July 27, 1970, as Instrument/File No. 131500 of Official Records.

    Location of said easement cannot be plotted from record.

17. An easement for the purpose shown below and rights incidental thereto as set forth in a document to the San Diego Gas and Electric Company, for the purpose of access and utilities, recorded December 21, 1970, as Instrument/File No. 233870 of Official Records.

    Location of said easement cannot be plotted from record.

18. An easement for the purpose shown below and rights incidental thereto as set forth in a document to The Times Mirror Company, a Corporation, for the purpose of cable television facilities, recorded November 23, 1973, as Instrument/File No. 73-326372 of Official Records.

Said matter affects a portion of said land as more particularly described in said document.

19. Deed of Trust to secure an indebtedness in the amount shown below, and any other obligations secured thereby:

Amount	:	$10,000,000.00
Dated	:	June 1, 1995
Trustor	:	Solana Beach Partners
Trustee	:	Chicago Title Insurance Company
Beneficiary	:	Washington Mortgage Financial Group, Ltd.
Recorded	:	June 27, 1995, as Instrument No. 1995-0267517
	:	of Official Records

An assignment of the beneficial interest under said Deed of Trust which names:

As Assignee	:	Federal National Mortgage Association
Recorded	:	June 27, 1995 as Instrument No. 1995-0267519 of Official Records

An agreement to which reference is made for full particulars dated October 30, 198 by and between Solana Beach Partners, a California general partnership ("Transferor"), James L. Bosler and Christopher E. Hashioka, ("Original Key Principals"), Fenton Solana Highlands LLC, a Delaware limited liability company ("Transferee"), H. G. Fenton Company, a California corporation ("The New Key Principal"), and Fannie Mae, regarding "Assumption and Release Agreement", recorded October 30, 1998 as Instrument No. 1998-0707275, of Official Records.

20. A Regulatory Agreement and declaration of restrictive covenants by and among housing authority of the County of San Diego, California and First Trust of California, National Association, as trustee and Solana Beach Partners, a California General Partnership dated as of June 1, 1995 recorded June 27, 1995 as File No. 1995-0267516 of Official Records.

An agreement to which reference is made for full particulars dated October 30, 1998, by and between Solana Beach Partners, a California General Partnership (“Assignor”), and Fenton Solana Highlands LLC, a Delaware Limited Liability Company (“Assignee”), regarding “Assignment and Assumption of Regulatory Agreement and Related Documents”, recorded October 30, 1998, as Instrument/File No. 1998-0707277 of Official Records.

An agreement to which reference is made for full particulars dated July 15, 2003, by and between The Housing Authority of the County of San Diego, California, a public body corporate and politic of the State of California, BNY Western Trust Company, a National Banking Association, as trustee and Fenton Solana Highlands LLC, a Delaware Limited Liability Company (The “Owner”), regarding “Amendment to Regulatory Agreement and Declaration of Respective Covenants”, recorded July 31, 2003, as Instrument/File No. 2003-0919890 of Official Records.

21. An agreement to which reference is made for full particulars by and between Fenton Solana Highlands LLC and CoxCom, Inc., dba Cox Communications San Diego, a Delaware corporation, recorded December 23, 2009 as File No. 2009-0709361 of Official Records.

22. Deed of Trust to secure an indebtedness in the amount shown below, and any other obligations secured thereby:

Amount	:	$16,000,000.00
Dated	:	September 20, 2010
Trustor	:	Fenton Solana Highlands LLC,
	:	a California limited liability company
Trustee	:	UnionBancal Mortgage Corporation,
	:	a California corporation
Beneficiary	:	Union Bank, N.A.
Recorded	:	September 27, 2010, as Instrument No. 2010-0512118
	:	of Official Records

An Agreement to modify the above Deed of Trust was recorded September 17, 2013 as

Instrument No. 2013-0571293 of Official Records.

23. Matters which may be disclosed by an inspection or by a survey of said land satisfactory to this Company, or by inquiry of the parties in possession thereof.

24. Rights of parties in possession.

    Type/Rev: PVA

(End of Exceptions)

NOTES AND REQUIREMENTS

A. There are no conveyances affecting said land, recorded with the County Recorder within 24 months of the date of this report.

B. This Company will require the following documents in order to insure a conveyance or encumbrance by the limited liability company named below:

Limited liability company: TM-Stevens, LLC & Fenton Solana Highlands LLC

a. A certified copy of the articles of organization (LLC-1), and any amendment (LLC-2) or restatement (LLC-10) to be recorded in the appropriate county.

b. A copy of the operating agreement and any amendment.

c. Other requirements that the Company may set forth following its review of said documents.

CALIFORNIA "GOOD FUNDS" LAW

California Insurance Code Section 12413.1 regulates the disbursement of escrow and sub-escrow funds by title companies. The law requires that funds be deposited in the title company escrow account and available for withdrawal prior to disbursement. Funds received by Stewart Title of California, Inc. via wire transfer may be disbursed upon receipt. Funds received via cashier's checks or teller checks drawn on a California Bank may be disbursed on the next business day after the day of deposit. If funds are received by any other means, recording and/or disbursement may be delayed, and you should contact your title or escrow officer. All escrow and sub-escrow funds received will be deposited with other escrow funds in one or more non-interest bearing escrow accounts in a financial institution selected by Stewart Title of California, Inc.. Stewart Title of California, Inc. may receive certain direct or indirect benefits from the financial institution by reason of the deposit of such funds or the maintenance of such accounts with the financial institution, and Stewart Title of California, Inc. shall have no obligation to account to the depositing party in any manner for the value of, or to pay to such party, any benefit received by Stewart Title of California, Inc.. Such benefits shall be deemed additional compensation to Stewart Title of California, Inc. for its services in connection with the escrow or sub-escrow.

If any check submitted is dishonored upon presentation for payment, you are authorized to notify all principals and/or their respective agents of such nonpayment.

EXHIBIT "A"

LEGAL DESCRIPTION

Order No.: 01180-94546
Escrow No.: 01180-94546

The land referred to herein is situated in the State of California, County of San Diego, City of Solana Beach and described as follows:

PARCEL 1:

THE NORTHERLY 122.31 FEET OF LOT 13 OF EDEN GARDENS SUBDIVISION, IN THE CITY OF SOLANA BEACH, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA AS PER MAP NO. 1757 THEREOF, OF SAN DIEGO COUNTY RECORDS, SAID DISTANCE BEING MEASURED ALONG THE WESTERLY BOUNDARY OF SAID LOT 13 TOGETHER WITH THAT PORTION OF LOT 13, EDEN GARDENS IN THE CITY OF SOLANA BEACH, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF NO. 1757, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JUNE 27, 1923, DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT IN THE WEST LINE OF SAID LOT 13, WHICH POINT IS SOUTH 1°28’00” WEST A DISTANCE OF 122.31 FEET FROM THE NORTHWEST CORNER OF SAID LOT 13; THENCE SOUTH 88°17’00”, EAST 86.33 FEET; THENCE SOUTH 1°28’00” WEST 8.10 FEET; THENCE NORTH 57°23’17” WEST 56.35 FEET TO A POINT IN THE WEST LINE OF SAID LOT 13 DISTANT 6.75 FEET SOUTHERLY OF THE POINT OF BEGINNING; THENCE NORTH 1°28’00” EAST 6.75 FEET TO THE POINT OF BEGINNING.

EXCEPTING FROM ALL, OF SAID LAND THAT PORTION DEEDED TO THE CITY OF SOLANA BEACH BY DEED RECORDED JULY 12, 1995 AS DOCUMENT NO. 295095 OF OFFICIAL RECORDS AND DESCRIBED AS FOLLOWS:

THOSE PORTIONS OF LOTS 13 AND 14 OF THE EDEN GARDENS SUBDIVISION, IN THE CITY OF SOLANA BEACH, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 1757 FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY ON JUNE 27, 1923, DESCRIBED AS A WHOLE AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE NORTHEASTERLY LINE OF SAID LOT 13 WITH THE SOUTHERLY LINE OF THE NORTHERLY 122.31 FEET OF SAID LOT 13, SAID 122.31 FEET BEING MEASURED ALONG THE WESTERLY BOUNDARY OF SAID LOT 13; THENCE, FOLLOWING ALONG SAID NORTHEASTERLY LINE AND THE SOUTHWESTERLY LINE OF ROAD SURVEY NO. 714 ON FILE IN THE OFFICE OF THE COUNTY SURVEYOR OF SAN DIEGO COUNTY, NORTH 33°01’47” WEST 144.10 FEET; THENCE NORTH 31°40’21” WEST 59.69 FEET TO A POINT OF CUSP WITH A CURVE CONCAVE NORTHEASTERLY HAVING A RADIUS OF 642 .00 FEET WHICH IS CONCENTRIC WITH AND DISTANT 42.00 FEET SOUTHWESTERLY OF THAT CERTAIN COURSE IN THE CENTERLINE OF STEVENS AVENUE AS SHOWN AS HAVING A CENTRAL ANGLE OF 36°12’02” AND RADIUS OF 600.00 FEET ON EXHIBIT “B-1” ATTACHED HERETO, AND TO WHICH A RADIAL LINE BEARS SOUTH 72°29’31” WEST; THENCE LEAVING SAID SOUTHWESTERLY LINE OF ROAD SURVEY NO. 714, SOUTHERLY AND SOUTHEASTERLY 173.92 FEET ALONG SAID CONCENTRIC CURVE THROUGH A CENTRAL ANGLE OF 15°31’18”; THENCE SOUTH 33°01’47” EAST 16.37 FEET TO SAID SOUTHERLY LINE OF THE NORTHERLY 122.31 FEET OF LOT 13; THENCE SOUTH 87° 40’12’ EAST 26.98 FEET TO THE POINT OF BEGINNING.

PARCEL 2:

ALL THAT PORTION OF LOT 14, EDEN GARDENS, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 1757 FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY LYING SOUTHERLY OF ROAD SURVEY NO. 714.

EXCEPTING FROM ALL OF SAID LAND THAT PORTION DEEDED TO THE CITY OF SOLANA BEACH BY DEED RECORDED JULY 12, 1995 AS DOCUMENT NO. 295095 OF OFFICIAL RECORDS AND DESCRIBED AS FOLLOWS:

THOSE PORTIONS OF LOTS 13 AND 14 OF THE EDEN GARDENS SUBDIVISION, IN THE CITY OF SOLANA BEACH, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 1757 FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY ON JUNE 27, 1923, DESCRIBED AS A WHOLE AS FOLLOWS

BEGINNING AT THE INTERSECTION OF THE NORTHEASTERLY LINE OF SAID LOT 13 WITH THE SOUTHERLY LINE OF THE NORTHERLY 122.31 FEET OF SAID LOT 13, SAID 122.31 FEET BEING MEASURED ALONG THE WESTERLY BOUNDARY OF SAID LOT 13; THENCE, FOLLOWING ALONG SAID NORTHEASTERLY LINE AND THE SOUTHWESTERLY LINE OF ROAD SURVEY NO. 714 ON FILE IN THE OFFICE OF THE COUNTY SURVEYOR OF SAN DIEGO COUNTY, NORTH 33°01’47” WEST 144.10 FEET; THENCE NORTH 31°40’21” WEST 59.69 FEET TO A POINT OF CUSP WITH A CURVE CONCAVE NORTHEASTERLY HAVING A RADIUS OF 642.00 FEET WHICH IS CONCENTRIC WITH AND DISTANT 42.00 FEET SOUTHWESTERLY OF THAT CERTAIN COURSE IN THE CENTERLINE OF STEVENS AVENUE SHOWN AS HAVING A CENTRAL ANGLE OF 36°12’02” AND RADIUS OF 600.00 FEET ON EXHIBIT “B-1” ATTACHED HERETO, AND TO WHICH A RADIAL LINE BEARS SOUTH 72°29’31” WEST; THENCE, LEAVING SAID SOUTHWESTERLY LINE OF ROAD SURVEY NO. 714, SOUTHERLY AND SOUTHEASTERLY 173.92 FEET ALONG SAID CONCENTRIC CURVE THROUGH A CENTRAL ANGLE OF 15°31’18”; THENCE SOUTH 33°01’47” EAST 16.37 FEET TO SAID SOUTHERLY LINE OF THE NORTHERLY 122.31 FEET OF LOT 13; THENCE SOUTH 87° 40’12” EAST 26.98 FEET TO THE POINT OF BEGINNING.

APN: 298-281-10-00 & 298-164-22-00

PARCEL 3:

LOTS 1, 2 AND 3 OF TURF CLUB VIEW, IN THE CITY OF SOLANA BEACH, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 6672, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JUNE 25, 1970.

APN: 298-260-33-00

APN: 298-281-10-00, 298-164-22-00, and 298-260-33-00

(End of Legal Description)

AFFILIATED BUSINESS ARRANGEMENT DISCLOSURE STATEMENT

Date: May 04, 2015

Escrow No.: 01180-94546

Property: 661 South Nardo Avenue, Solana Beach, CA
821 Stevens Avenue, Solana Beach, CA

From:

This is to give you notice that ("Stewart Title") has a business relationship with Stewart Solutions, LLC, DBA – Stewart Specialty Insurance Services, LLC ("Stewart Insurance"). Stewart Information Services Corporation owns 100% of Stewart Insurance and Stewart Title of California. Because of this relationship, this referral may provide Stewart Title a financial or other benefit.

Set forth below is the estimated charge or range of charges for the settlement services listed. You are NOT required to use the listed provider(s) as a condition for purchase, sale, or refinance of the subject Property. THERE ARE FREQUENTLY OTHER SETTLEMENT SERVICE PROVIDERS AVAILABLE WITH SIMILAR SERVICES. YOU ARE FREE TO SHOP AROUND TO DETERMINE THAT YOU ARE RECEIVING THE BEST SERVICES AND THE BEST RATE FOR THESE SERVICES.

Stewart Insurance Settlement Service	***Charge or range of charges***
Hazard Insurance	$400.00 to $6,500.00
Home Warranty	$255.00 to $ 780.00
Natural Hazard Disclosure Report	$ 42.50 to $ 149.50

Exhibit A (Revised 06-03-11)

CALIFORNIA LAND TITLE ASSOCIATION STANDARD COVERAGE POLICY – 1990 EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
   (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
   (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.

3. Defects, liens, encumbrances, adverse claims or other matters:
   (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;
   (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
   (c) resulting in no loss or damage to the insured claimant;
   (d) attaching or created subsequent to Date of Policy; or
   (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.

4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.

5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.

6. Any claim, which arises out of the transaction vesting in the insured the estate of interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.
   Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.

2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.

3. Easements, liens or encumbrances, or claims thereof, which are not shown by the public records.

4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.

5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.

6. Any lien or right to a lien for services, labor or material not shown by the public records.

CLTA HOMEOWNER'S POLICY OF TITLE INSURANCE (02-03-10)
ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE
EXCLUSIONS

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:

   a. building;
   b. zoning;
   c. land use;
   d. improvements on the Land;
   e. land division;
   f. environmental protection.

This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.

2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.

3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.

4. Risks:
   a. that are created, allowed, or agreed to by You, whether or not they appear in the Public Records;
   b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
   c. that result in no loss to You; or
   d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.

5. Failure to pay value for Your Title.

6. Lack of a right:
   a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
   b. in streets, alleys, or waterways that touch the Land.

This Exclusion does not limit the coverage described in Covered Risk 11 or 21.

7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:
* For Covered Risk 16, 18, 19, and 21 Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.
The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	Your Deductible Amount	Our Maximum Dollar Limit of Liability
Covered Risk 16:	1% of Policy Amount or $2,500.00 (whichever is less)	$10,000.00
Covered Risk 18:	1% of Policy Amount or $5,000.00 (whichever is less)	$25,000.00
Covered Risk 19:	1% of Policy Amount or $5,000.00 (whichever is less)	$25,000.00
Covered Risk 21:	1% of Policy Amount or $2,500.00 (whichever is less)	$5,000.00

2006 ALTA LOAN POLICY (06-17-06)
EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions, or location of any improvement erected on the Land;
   (iii) the subdivision of land; or
   (iv) environmental protection;
   or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
   (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.

2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.

3. Defects, liens, encumbrances, adverse claims, or other matters
   (a) created, suffered, assumed, or agreed to by the Insured Claimant;
   (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13, or 14); or
   (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.

4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.

5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.

6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
   (a) a fraudulent conveyance or fraudulent transfer, or
   (b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.

7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.

2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.

3. Easements, liens or encumbrances, or claims thereof, which are not shown by the Public Records.

4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.

5. (a) unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.
6. Any lien or right to a lien for services, labor or material not shown by the public records.

2006 ALTA OWNER'S POLICY (06-17-06)
EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions, or location of any improvement erected on the Land;
   (iii) the subdivision of land; or
   (iv) environmental protection;
   or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
   (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.

2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.

3. Defects, liens, encumbrances, adverse claims, or other matters
   (a) created, suffered, assumed, or agreed to by the Insured Claimant;
   (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
   (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.

4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
   (a) a fraudulent conveyance or fraudulent transfer; or
   (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.

5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.

2. Any facts, rights, interests or claims which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.

3. Easements, liens or encumbrances, or claims thereof, which are not shown by the public records.

4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and that are not shown by the Public Records.

5. (a) unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.

6. Any lien or right to a lien for services, labor or material not shown by the public records.

WARNING: THIS DOCUMENT MUST BE COMPLETED IN ITS ENTIRETY (1 THROUGH 9, BELOW MUST BE FILLED IN) FOR IT TO BE ACCEPTED BY . IF THIS IS NOT COMPLETED WILL REQUIRE A COMPLETE COPY OF THE TRUST, WITH A SIGNED AND ACKNOWLEDGED AFFIDAVIT.

TRUSTEE CERTIFICATE

(California Probate Code Section 18100.5)

SCETRUST

STG Privacy Notice
Stewart Title Companies

WHAT DO THE STEWART TITLE COMPANIES DO WITH YOUR PERSONAL INFORMATION?

Federal and applicable state law and regulations give consumers the right to limit some but not all sharing. Federal and applicable state law regulations also require us to tell you how we collect, share, and protect your personal information. Please read this notice carefully to understand how we use your personal information. This privacy notice is distributed on behalf of the Stewart Title Guaranty Company and its title affiliates (the Stewart Title Companies), pursuant to Title V of the Gramm-Leach-Bliley Act (GLBA).

The types of personal information we collect and share depend on the product or service that you have sought through us. This information can include social security numbers and driver's license number.

All financial companies, such as the Stewart Title Companies, need to share customers' personal information to run their everyday business—to process transactions and maintain customer accounts. In the section below, we list the reasons that we can share customers' personal information; the reasons that we choose to share; and whether you can limit this sharing.

Reasons we can share your personal information.	Do we share	Can you limit this sharing?
For our everyday business purposes— to process your transactions and maintain your account. This may include running the business and managing customer accounts, such as processing transactions, mailing, and auditing services, and responding to court orders and legal investigations.	Yes	No
For our marketing purposes— to offer our products and services to you.	Yes	No
For joint marketing with other financial companies	No	We don't share
For our affiliates' everyday business purposes— information about your transactions and experiences. Affiliates are companies related by common ownership or control. They can be financial and non-financial companies. *Our affiliates may include companies with a Stewart name; financial companies, such as Stewart Title Company*	Yes	No
For our affiliates' everyday business purposes— information about your creditworthiness.	No	We don't share
For our affiliates to market to you — For your convenience, Stewart has developed a means for you to opt out from its affiliates marketing even though such mechanism is not legally required.	Yes	Yes, send your first and last name, the email address used in your transaction, your Stewart file number and the Stewart office location that is handling your transaction by email to optout@stewart.com or fax to 1-800-335-9591.
For non-affiliates to market to you. Non-affiliates are companies not related by common ownership or control. They can be financial and non-financial companies.	No	We don't share

We may disclose your personal information to our affiliates or to non-affiliates as permitted by law. If you request a transaction with a non-affiliate, such as a third party insurance company, we will disclose your personal information to that non-affiliate. [We do not control their subsequent use of information, and suggest you refer to their privacy notices.]

SHARING PRACTICES

How often do the Stewart Title Companies notify me about their practices?	We must notify you about our sharing practices when you request a transaction.
How do the Stewart Title Companies protect my personal information?	To protect your personal information from unauthorized access and use, we use security measures that comply with federal law. These measures include computer, file, and building safeguards.
How do the Stewart Title Companies collect my personal information?	We collect your personal information, for example, when you ▪ request insurance-related services ▪ provide such information to us We also collect your personal information from others, such as the real estate agent or lender involved in your transaction, credit reporting agencies, affiliates or other companies.
What sharing can I limit?	Although federal and state law give you the right to limit sharing (e.g., opt out) in certain instances, we do not share your personal information in those instances.

Contact us: If you have any questions about this privacy notice, please contact us at: **Stewart Title Guaranty Company, 1980 Post Oak Blvd., Privacy Officer, Houston, Texas 77056**

Order No. 01180-94546

AVAILABLE DISCOUNTS DISCLOSURE STATEMENT

This is to give you notice that Stewart Title of California, Inc. (“Stewart Title”) is pleased to inform you that upon proper qualification, there are premium discounts available upon the purchase of title insurance covering improved property with a one to four family residential dwelling.

Such discounts apply to and include:

Property located within an area proclaimed a state or federal disaster area;

Property purchased from a foreclosing beneficiary or successful bidder at a foreclosure sale;

Property being refinanced.

Please talk with your escrow or title officer to determine your qualification for any of these discounts.

ATTACHMENT 3
GOVERNMENT DATABASE SEARCH REPORT

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

4 Residential Apartments and a Storage Shed Property
821 Stevens Avenue
Solana Beach, CA 92075-4401

June 25, 2015
EAI Project No.: 01.HGFC001.15
APNs: 298-281-10-00 and 298-164-22-000

Solana Beach Residential Land
821 Stevens Avenue
Solana Beach, CA 92075

Inquiry Number: 4289823.2s
May 08, 2015

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

821 STEVENS AVENUE
SOLANA BEACH, CA 92075

COORDINATES

Latitude (North):	32.9846000 - 32˚ 59' 4.56''
Longitude (West):	117.2601000 - 117˚ 15' 36.36''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	475697.8
UTM Y (Meters):	3649418.8
Elevation:	39 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	32117-H3 DEL MAR OE W, CA
Most Recent Revision:	0
East Map:	32117-H2 DEL MAR, CA
Most Recent Revision:	1975

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20120519
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
821 STEVENS AVENUE
SOLANA BEACH, CA 92075

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	TM/STEVEN LLC	821 STEVENS AVE	HAZNET		TP
2		679 S NARDO AVE	EDR US Hist Auto Stat	Higher	713, 0.135, WNW
A3	ARCO STATION #1919/P	660 VIA DE LA VALLE	LUST, SLIC, HIST UST	Lower	2140, 0.405, SSE
A4	ARCO STATION #1919/P	660 VIA DE LA VALLE	UST, SAN DIEGO CO. SAM	Lower	2140, 0.405, SSE
A5	ARCO #01919	660 VIA DE LA VALLE	HIST CORTESE, LUST, San Diego Co. HMMD, EMI	Lower	2140, 0.405, SSE
A6	AM/PM MINI MARKET #7	660 VIA DE LA VALLE	HIST CORTESE, LUST	Lower	2140, 0.405, SSE
B7	DEL MAR TEXACO	2205 VIA DE LA VALLE	UST, SWEEPS UST, San Diego Co. HMMD, SAN DIEGO CO....	Lower	2286, 0.433, SE
B8	TEXACO SERVICE STATI	2205 VIA DE LA VALLE	LUST, SLIC, HIST UST	Lower	2286, 0.433, SE
B9	SHELL OIL PRODUCTS U	2205 VIA DE LA VALLE	HIST CORTESE, LUST, EMI	Lower	2286, 0.433, SE
10	KAYPRO INC	533 STEVENS AV	SLIC, San Diego Co. HMMD, SAN DIEGO CO. SAM	Higher	2459, 0.466, NNW
11	CAMP C.J. MILLER		ENVIROSTOR	Lower	3493, 0.662, South
12	SOLANA BEACH PLAZA	124 LOMAS SANTA FE D	SLIC, San Diego Co. HMMD, ENVIROSTOR	Higher	4160, 0.788, NW
13	CEDROS & LOMA SANTA	143 CEDROS	Notify 65	Higher	4335, 0.821, NW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
TM/STEVEN LLC 821 STEVENS AVE SOLANA BEACH, CA 92075	HAZNET GEPAID: CAC002664623	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators

RCRA-SQG ..... RCRA - Small Quantity Generators
RCRA-CESQG ..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS ..... Engineering Controls Sites List
US INST CONTROL ..... Sites with Institutional Controls
LUCIS ..... Land Use Control Information System

Federal ERNS list

ERNS ..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ..... State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ..... Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

UST ..... Active UST Facilities
AST ..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST ..... Underground Storage Tanks on Indian Land
FEMA UST ..... Underground Storage Tank Listing

State and tribal voluntary cleanup sites

INDIAN VCP ..... Voluntary Cleanup Priority Listing
VCP ..... Voluntary Cleanup Program Properties

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI ..... Open Dump Inventory
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
SWRCY ..... Recycler Database
HAULERS ..... Registered Waste Tire Haulers Listing
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands
WMUDS/SWAT ..... Waste Management Unit Database

Local Lists of Hazardous waste / Contaminated Sites

US CDL ..... Clandestine Drug Labs

HIST Cal-Sites	Historical Calsites Database
SCH	School Property Evaluation Program
Toxic Pits	Toxic Pits Cleanup Act Sites
CDL	Clandestine Drug Labs
San Diego Co. HMMD	Hazardous Materials Management Division Database
US HIST CDL	National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

CA FID UST	Facility Inventory Database
HIST UST	Hazardous Substance Storage Container Database
SWEEPS UST	SWEEPS UST Listing

Local Land Records

LIENS 2	CERCLA Lien Information
LIENS	Environmental Liens Listing
DEED	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
DOT OPS	Incident and Accident Data
DOD	Department of Defense Sites
FUDS	Formerly Used Defense Sites
CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records Of Decision
UMTRA	Uranium Mill Tailings Sites
US MINES	Mines Master Index File
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
RADINFO	Radiation Information Database
FINDS	Facility Index System/Facility Registry System
RAATS	RCRA Administrative Action Tracking System
RMP	Risk Management Plans
CA BOND EXP. PLAN	Bond Expenditure Plan
NPDES	NPDES Permits Listing
UIC	UIC Listing
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List

EXECUTIVE SUMMARY

DRYCLEANERS	Cleaner Facilities
WIP	Well Investigation Program Case List
ENF	Enforcement Action Listing
EMI	Emissions Inventory Data
INDIAN RESERV	Indian Reservations
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
WDS	Waste Discharge System
MWMP	Medical Waste Management Program Listing
PCB TRANSFORMER	PCB Transformer Registration Database
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
LEAD SMELTERS	Lead Smelter Sites
Financial Assurance	Financial Assurance Information Listing
PROC	Certified Processors Database
HWT	Registered Hazardous Waste Transporter Database
HWP	EnviroStor Permitted Facilities Listing
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
US AIRS	Aerometric Information Retrieval System Facility Subsystem
COAL ASH DOE	Steam-Electric Plant Operation Data
2020 COR ACTION	2020 Corrective Action Program List
PRP	Potentially Responsible Parties

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LUST	Recovered Government Archive Leaking Underground Storage Tank
RGA LF	Recovered Government Archive Solid Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 03/11/2015 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SOLANA BEACH PLAZA Facility Id: 37720034 Status: Refer: 1248 Local Agency	***124 LOMAS SANTA FE D***	***NW 1/2 - 1 (0.788 mi.)***	***12***	***46***

Lower Elevation	Address	Direction / Distance	Map ID	Page
CAMP C.J. MILLER Facility Id: 80000974 Status: Inactive - Needs Evaluation		S 1/2 - 1 (0.662 mi.)	11	45

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 03/13/2015 has revealed that there are 5 LUST sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ARCO STATION #1919/P Global Id: T0607301584 Global Id: T0607300649 Status: Completed - Case Closed	***660 VIA DE LA VALLE***	***SSE 1/4 - 1/2 (0.405 mi.)***	***A3***	***9***
ARCO #01919 Case Number: 9UT1864 Status: Remediation Plan	***660 VIA DE LA VALLE***	***SSE 1/4 - 1/2 (0.405 mi.)***	***A5***	***13***
AM/PM MINI MARKET #7 Case Number: 9UT2826 Status: Remediation Plan	***660 VIA DE LA VALLE***	***SSE 1/4 - 1/2 (0.405 mi.)***	***A6***	***24***
TEXACO SERVICE STATI Global Id: T0607301562 Status: Completed - Case Closed	***2205 VIA DE LA VALLE***	***SE 1/4 - 1/2 (0.433 mi.)***	***B8***	***33***

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
SHELL OIL PRODUCTS U	***2205 VIA DE LA VALLE***	***SE 1/4 - 1/2 (0.433 mi.)***	***B9***	***38***
Case Number: 9UT2802				
Status: Preliminary site assessment underway				

SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the SLIC list, as provided by EDR, and dated 03/13/2015 has revealed that there are 3 SLIC sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KAYPRO INC	***533 STEVENS AV***	***NNW 1/4 - 1/2 (0.466 mi.)***	***10***	***44***
Global Id: T0608186917				
Facility Status: Completed - Case Closed				

Lower Elevation	Address	Direction / Distance	Map ID	Page
ARCO STATION #1919/P	***660 VIA DE LA VALLE***	***SSE 1/4 - 1/2 (0.405 mi.)***	***A3***	***9***
Global Id: T0608162359				
Global Id: T0608163027				
Facility Status: Completed - Case Closed				
TEXACO SERVICE STATI	***2205 VIA DE LA VALLE***	***SE 1/4 - 1/2 (0.433 mi.)***	***B8***	***33***
Global Id: T0608101305				
Facility Status: Completed - Case Closed				

SAN DIEGO CO. SAM: The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

A review of the SAN DIEGO CO. SAM list, as provided by EDR, and dated 03/23/2010 has revealed that there are 3 SAN DIEGO CO. SAM sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KAYPRO INC	***533 STEVENS AV***	***NNW 1/4 - 1/2 (0.466 mi.)***	***10***	***44***
Facility Status: Closed Case				
Case Number: H09184-001				

Lower Elevation	Address	Direction / Distance	Map ID	Page
ARCO STATION #1919/P	***660 VIA DE LA VALLE***	***SSE 1/4 - 1/2 (0.405 mi.)***	***A4***	***12***
Facility Status: Closed Case				
Case Number: H05166-001				
Case Number: H05166-003				
Case Number: H05166-004				
Case Number: H05166-002				
DEL MAR TEXACO	***2205 VIA DE LA VALLE***	***SE 1/4 - 1/2 (0.433 mi.)***	***B7***	***25***
Facility Status: Remedial Investigation				
Facility Status: Closed Case				
Case Number: H13470-001				
Case Number: H13470-002				

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 3 HIST CORTESE sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ARCO #01919 Reg Id: 9UT1864	***660 VIA DE LA VALLE***	***SSE 1/4 - 1/2 (0.405 mi.)***	***A5***	***13***
AM/PM MINI MARKET #7 Reg Id: 9UT2826	***660 VIA DE LA VALLE***	***SSE 1/4 - 1/2 (0.405 mi.)***	***A6***	***24***
SHELL OIL PRODUCTS U Reg Id: 9UT2802	***2205 VIA DE LA VALLE***	***SE 1/4 - 1/2 (0.433 mi.)***	***B9***	***38***

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 10/21/1993 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CEDROS & LOMA SANTA	143 CEDROS	NW 1/2 - 1 (0.821 mi.)	13	49

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there is 1 EDR US Hist Auto Stat site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	679 S NARDO AVE	WNW 1/8 - 1/4 (0.135 mi.)	2	8

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

Site Name	Database(s)
JOANN XIE, LAC	San Diego Co. HMMD
DBA BACK INTO BALANCE	San Diego Co. HMMD

OVERVIEW MAP - 4289823.2S

0 1/4 1/2 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Solana Beach Residential Land	CLIENT: Enviroapplications Inc.
ADDRESS: 821 Stevens Avenue Solana Beach CA 92075	CONTACT: Fred Allee
LAT/LONG: 32.9846 / 117.2601	INQUIRY #: 4289823.2s DATE: May 08, 2015 8:51 pm

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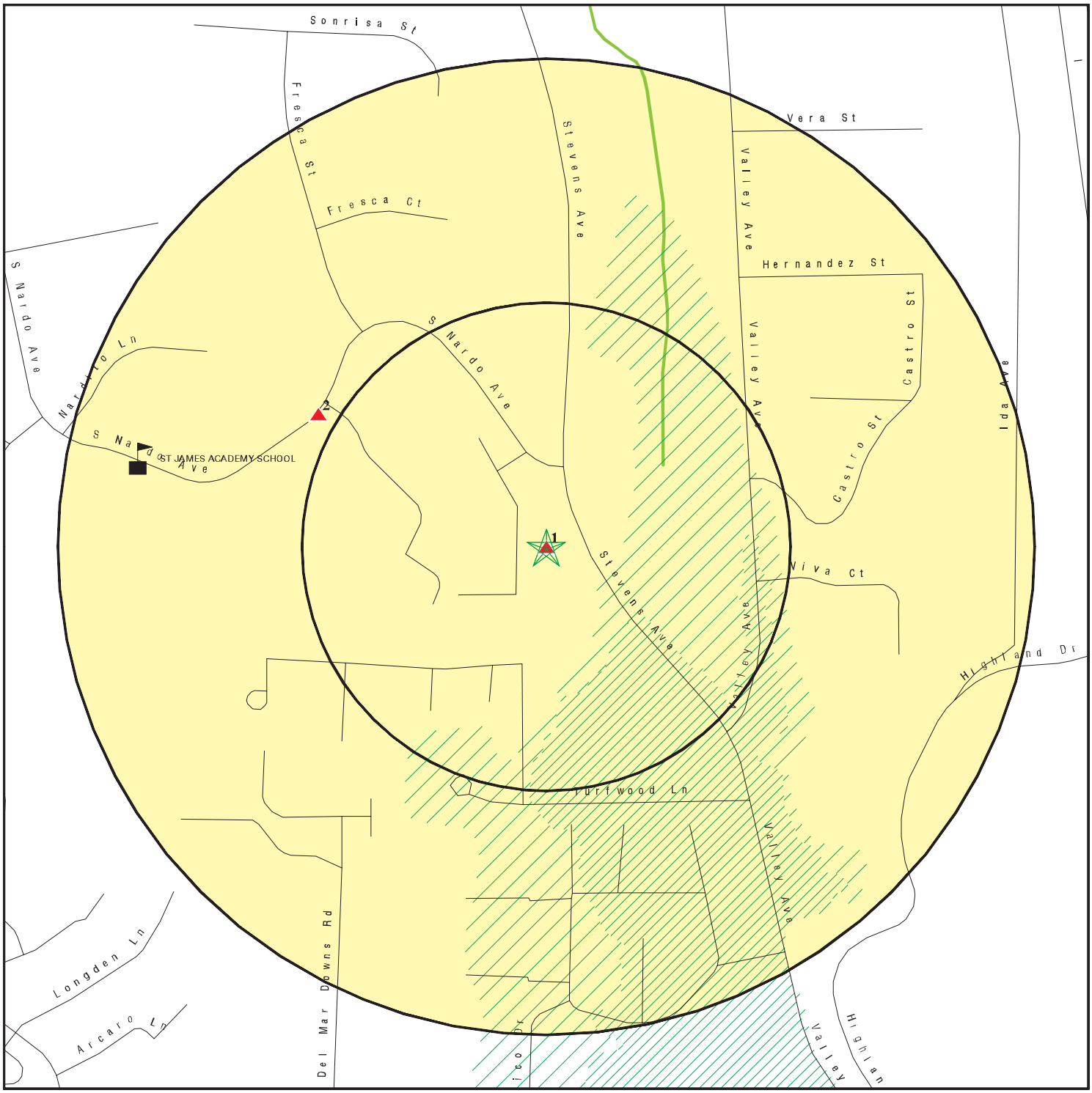
DETAIL MAP - 4289823.2S



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Solana Beach Residential Land ADDRESS: 821 Stevens Avenue Solana Beach CA 92075 LAT/LONG: 32.9846 / 117.2601	CLIENT: Enviroapplications Inc. CONTACT: Fred Allee INQUIRY #: 4289823.2s DATE: May 08, 2015 8:52 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	2	NR	2
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	5	NR	NR	5

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SLIC	0.500		0	0	3	NR	NR	3
SAN DIEGO CO. SAM	0.500		0	0	3	NR	NR	3
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
San Diego Co. HMMD	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA FID UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
SWEEPS UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
LIENS	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
Cortese	0.500		0	0	0	NR	NR	0
HIST CORTESE	0.500		0	0	3	NR	NR	3
CUPA Listings	0.250		0	0	NR	NR	NR	0
Notify 65	1.000		0	0	0	1	NR	1
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
HAZNET	TP	1	NR	NR	NR	NR	NR	1
EMI	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
HWT	0.250		0	0	NR	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
US AIRS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	1	NR	NR	NR	1
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA LF	TP		NR	NR	NR	NR	NR	0
- Totals --		1	0	1	14	3	0	19

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1 Target Property | **TM/STEVEN LLC**
821 STEVENS AVE
SOLANA BEACH, CA 92075 | **HAZNET** | **S112984721**
N/A

Actual: 39 ft.

HAZNET:

envid:	S112984721
Year:	2011
GEPAID:	CAC002664623
Contact:	EDUARDO MOEHLECKE
Telephone:	8583731335
Mailing Name:	Not reported
Mailing Address:	5330 CARROLL CANYON RD STE 200
Mailing City,St,Zip:	SAN DIEGO, CA 92121
Gen County:	Not reported
TSD EPA ID:	AZC950823111
TSD County:	Not reported
Waste Category:	Asbestos containing waste
Disposal Method:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.4
Facility County:	San Diego

envid:	S112984721
Year:	2011
GEPAID:	CAC002664623
Contact:	EDUARDO MOEHLECKE
Telephone:	8583731335
Mailing Name:	Not reported
Mailing Address:	5330 CARROLL CANYON RD STE 200
Mailing City,St,Zip:	SAN DIEGO, CA 92121
Gen County:	Not reported
TSD EPA ID:	AZC950823111
TSD County:	Not reported
Waste Category:	Asbestos containing waste
Disposal Method:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.4
Facility County:	San Diego

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2 WNW 1/8-1/4 0.135 mi. 713 ft. | **679 S NARDO AVE**
SOLANA BEACH, CA 92075 | **EDR US Hist Auto Stat** | **1015598242**
N/A

Relative: Higher

Actual: 111 ft.

EDR Historical Auto Stations:

Name:	HAMPTON STATION INC
Year:	2005
Address:	679 S NARDO AVE

A3 SSE 1/4-1/2 0.405 mi. 2140 ft.

ARCO STATION #1919/PSI 704
660 VIA DE LA VALLE
SOLANA BEACH, CA 92075

LUST SLIC HIST UST

U001572314 N/A

Site 1 of 4 in cluster A

Relative: Lower

Actual: 19 ft.

LUST:

Region:	STATE
Global Id:	T0607301584
Latitude:	32.9796043
Longitude:	-117.2561609
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	02/07/2006
Lead Agency:	SAN DIEGO COUNTY LOP
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	9UT2826
LOC Case Number:	H05166-004
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Status History:

Global Id:	T0607301584
Status:	Completed - Case Closed
Status Date:	02/07/2006
Global Id:	T0607301584
Status:	Open - Case Begin Date
Status Date:	10/15/1993

Regulatory Activities:

Global Id:	T0607301584
Action Type:	Other
Date:	10/15/1993
Action:	Leak Began
Global Id:	T0607301584
Action Type:	Other
Date:	10/15/1993
Action:	Leak Discovery
Global Id:	T0607301584
Action Type:	ENFORCEMENT
Date:	10/22/1993
Action:	Notice of Responsibility
Global Id:	T0607301584
Action Type:	Other
Date:	10/15/1993
Action:	Leak Stopped
Global Id:	T0607301584
Action Type:	Other
Date:	10/15/1993

ARCO STATION #1919/PSI 704 (Continued) **U001572314**

Action:	Leak Reported

Region:	STATE
Global Id:	T0607300649
Latitude:	32.9796819
Longitude:	-117.256576
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	02/07/2006
Lead Agency:	SAN DIEGO COUNTY LOP
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	9UT1864
LOC Case Number:	H05166-002
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Status History:

Global Id:	T0607300649
Status:	Completed - Case Closed
Status Date:	02/07/2006

Global Id:	T0607300649
Status:	Open - Case Begin Date
Status Date:	11/19/1990

Regulatory Activities:

Global Id:	T0607300649
Action Type:	Other
Date:	11/19/1990
Action:	Leak Began

Global Id:	T0607300649
Action Type:	Other
Date:	11/19/1990
Action:	Leak Discovery

Global Id:	T0607300649
Action Type:	ENFORCEMENT
Date:	12/18/1990
Action:	Notice of Responsibility

Global Id:	T0607300649
Action Type:	Other
Date:	11/20/1990
Action:	Leak Reported

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	02/26/1991

ARCO STATION #1919/PSI 704 (Continued) **U001572314**

Global Id:	T0608162359
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H05166-003
Latitude:	32.979697
Longitude:	-117.256575
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Under Investigation
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	04/18/1988
Global Id:	T0608163027
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H05166-001
Latitude:	32.979697
Longitude:	-117.256575
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

HIST UST:

Region:	STATE
Facility ID:	00000026662
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	0000000000
Owner Name:	ARCO PETROLEUM PRODUCTS CO.
Owner Address:	515 SOUTH FLOWER STREET
Owner City,St,Zip:	LOS ANGELES, CA 90071
Total Tanks:	0005
Tank Num:	001
Container Num:	0000000001
Year Installed:	1966
Tank Capacity:	00004000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	0000167
Leak Detection:	Stock Inventor, 10
Tank Num:	002

ARCO STATION #1919/PSI 704 (Continued) **U001572314**

Container Num:	0000000002
Year Installed:	1966
Tank Capacity:	00004000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	0000167
Leak Detection:	Stock Inventor, 10

Tank Num:	003
Container Num:	0000000003
Year Installed:	1966
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	0000240
Leak Detection:	Stock Inventor, 10

Tank Num:	004
Container Num:	0000000004
Year Installed:	1973
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	0000240
Leak Detection:	Stock Inventor, 10

Tank Num:	005
Container Num:	0000000005
Year Installed:	1979
Tank Capacity:	00008000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, 10

A4 **ARCO STATION #1919/PSI 704** **UST** **U003938230**
SSE **660 VIA DE LA VALLE** **SAN DIEGO CO. SAM** **N/A**
1/4-1/2 **SOLANA BEACH, CA 92075**
0.405 mi.
2140 ft. **Site 2 of 4 in cluster A**

Relative:
Lower

Actual:
19 ft.

UST:

Facility ID:	H05166
Permitting Agency:	SAN DIEGO COUNTY
Latitude:	32.9811219
Longitude:	-117.2550094

SAN DIEGO CO. SAM:

Case Number:	H05166-001
Agency:	DEH Site Assessment & Mitigation
Funding:	**Non Billable**
Facility Type:	Failed Integrity Test
Facility Status:	Closed Case
Date:	4/18/1988
Date Began:	3/3/1988

Case Number:	H05166-003

ARCO STATION #1919/PSI 704 (Continued) **U003938230**

Agency:	DEH Site Assessment & Mitigation
Funding:	**Non Billable**
Facility Type:	Failed Integrity Test
Facility Status:	Closed Case
Date:	2/26/1991
Date Began:	2/26/1991

Case Number:	H05166-004
Agency:	DEH Site Assessment & Mitigation
Funding:	**POP**
Facility Type:	GW With No Beneficial Use Designation
Facility Status:	Closed Case
Date:	2/7/2006
Date Began:	10/15/1993

Case Number:	H05166-002
Agency:	DEH Site Assessment & Mitigation
Funding:	**LOP - Federal Fund**
Facility Type:	GW With No Beneficial Use Designation
Facility Status:	Closed Case
Date:	2/7/2006
Date Began:	11/19/1990

A5 **ARCO #01919** **HIST CORTESE** **S104160469**
SSE **660 VIA DE LA VALLE** **LUST** **N/A**
1/4-1/2 **SOLANA BEACH, CA 92075** **San Diego Co. HMMD**
0.405 mi. **EMI**
2140 ft. **Site 3 of 4 in cluster A**

Relative:
Lower

Actual:
19 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	37
Reg By:	LTNKA
Reg Id:	9UT1864

LUST REG 9:

Region:	9
Status:	Remediation Plan
Case Number:	9UT1864
Local Case:	H05166-002
Substance:	Regular Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Local Agency:	San Diego
How Found:	Tank Closure
How Stopped:	Close Tank
Source:	Unknown
Cause:	Unknown
Lead Agency:	Local Agency
Case Type:	Other ground water affected
Date Found:	11/20/1990
Date Stopped:	11/20/1990
Confirm Date:	11/20/1990
Submit Workplan:	12/17/90
Prelim Assess:	12/18/1992
Desc Pollution:	Not reported
Remed Plan:	11/20/1990

ARCO #01919 (Continued) **S104160469**

Remed Action: Not reported
Began Monitor: Not reported
Release Date: 11/20/1990
Enforce Date: Not reported
Closed Date: Not reported
Enforce Type: Not reported
Pilot Program: LOP
Basin Number: 905.11
GW Depth: Not reported
Beneficial Use: NBNB/EOC
NPDES Number: Not reported
Priority: 2B
File Dispn: File discarded, case closed
Interim Remedial Actions: Yes
Cleanup and Abatement order Number: Not reported
Waste Discharge Requirement Number: Not reported

SAN DIEGO CO. HMMD:
Facility Id: 105166
Business Type: 6HK28
EPA Id Number: Not reported
APN: 298-270-24-00
Last HMMD Inspection: 03/11/2008
Permit Status: CHNG
Permit Expiration: 01/31/2009
Facility Owner: BP WEST COAST PRODUCTS LLC
Facility Address: PO BOX 6038
Facility City: ARTESIA
Facility State: CA
Facility Zip: 90702-6038
UST Owner: BP WEST COAST PRODUCTS LLC
Handle Regulated Hazmat: Y
Own Or Operate UST: Y
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

UST:
UST Name: UNDERGROUND TANK 105166 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 105166
Tank Type: SINGLE WALL
Additional Id: 0000000001
Capacity Gallons: 4000
UST Contents: LEADED
Other Content Info: LEADED
Reg Status: REMOVED
Remove Close Date: 1993-10-15 00:00:00
Year Installed: 1966-01-01 00:00:00
Pipe Type: Not reported
Delivery System: Not reported
Monitor Code: 05
UST Monitor Method: SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name: UNDERGROUND TANK 105166 T002

ARCO #01919 (Continued) **S104160469**

Last Update:	2012-11-02 14:17:38
Permit Number:	105166
Tank Type:	SINGLE WALL
Additional Id:	0000000002
Capacity Gallons:	4000
UST Contents:	LEADED
Other Content Info:	LEADED
Reg Status:	REMOVED
Remove Close Date:	1993-10-15 00:00:00
Year Installed:	1966-01-01 00:00:00
Pipe Type:	Not reported
Delivery System:	Not reported
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name:	UNDERGROUND TANK 105166 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	105166
Tank Type:	SINGLE WALL
Additional Id:	0000000003
Capacity Gallons:	6000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1993-10-15 00:00:00
Year Installed:	1966-01-01 00:00:00
Pipe Type:	Not reported
Delivery System:	Not reported
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name:	UNDERGROUND TANK 105166 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	105166
Tank Type:	SINGLE WALL
Additional Id:	0000000004
Capacity Gallons:	6000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1993-10-15 00:00:00
Year Installed:	1973-01-01 00:00:00
Pipe Type:	Not reported
Delivery System:	PRESSURE
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name:	UNDERGROUND TANK 105166 T005
Last Update:	2012-11-02 14:17:38
Permit Number:	105166
Tank Type:	SINGLE WALL
Additional Id:	0000000005
Capacity Gallons:	8000
UST Contents:	REGULAR UNLEADED

ARCO #01919 (Continued) **S104160469**

Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1993-10-15 00:00:00
Year Installed:	1979-01-01 00:00:00
Pipe Type:	Not reported
Delivery System:	PRESSURE
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR
UST Name:	UNDERGROUND TANK 105166 T006
Last Update:	2012-11-02 14:17:38
Permit Number:	105166
Tank Type:	DOUBLE WALL
Additional Id:	006 RT1941
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1994-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF
UST Name:	UNDERGROUND TANK 105166 T007
Last Update:	2012-11-02 14:17:38
Permit Number:	105166
Tank Type:	DOUBLE WALL
Additional Id:	007 RT1941
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1994-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF
UST Name:	UNDERGROUND TANK 105166 T008
Last Update:	2012-11-02 14:17:38
Permit Number:	105166
Tank Type:	DOUBLE WALL
Additional Id:	008 RT1941
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1994-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE

ARCO #01919 (Continued) **S104160469**

Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 105166 T009
Last Update:	2012-11-02 14:17:38
Permit Number:	105166
Tank Type:	DOUBLE WALL
Additional Id:	009 PREMIUM UNLEADED RT1941
Capacity Gallons:	10000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1994-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

Facility Id:	209646
Business Type:	6HK28
EPA Id Number:	CAL000351941
APN:	298-270-24-00
Last HMMD Inspection:	03/06/2012
Permit Status:	OPEN
Permit Expiration:	06/30/2013
Facility Owner:	KEZIN PARABIA
Facility Address:	660 VIA DE LA VALLE
Facility City:	SOLANA BEACH
Facility State:	CA
Facility Zip:	92075
UST Owner:	SOLANA BEACH NINE DIAMONDS, LLC
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

UST:

UST Name:	UNDERGROUND TANK 105166 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	209646
Tank Type:	SINGLE WALL
Additional Id:	0000000001
Capacity Gallons:	4000
UST Contents:	LEADED
Other Content Info:	LEADED
Reg Status:	REMOVED
Remove Close Date:	1993-10-15 00:00:00
Year Installed:	1966-01-01 00:00:00
Pipe Type:	Not reported
Delivery System:	Not reported
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY

ARCO #01919 (Continued) **S104160469**

MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name:	UNDERGROUND TANK 105166 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	209646
Tank Type:	SINGLE WALL
Additional Id:	0000000002
Capacity Gallons:	4000
UST Contents:	LEADED
Other Content Info:	LEADED
Reg Status:	REMOVED
Remove Close Date:	1993-10-15 00:00:00
Year Installed:	1966-01-01 00:00:00
Pipe Type:	Not reported
Delivery System:	Not reported
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name:	UNDERGROUND TANK 105166 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	209646
Tank Type:	SINGLE WALL
Additional Id:	0000000003
Capacity Gallons:	6000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1993-10-15 00:00:00
Year Installed:	1966-01-01 00:00:00
Pipe Type:	Not reported
Delivery System:	Not reported
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name:	UNDERGROUND TANK 105166 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	209646
Tank Type:	SINGLE WALL
Additional Id:	0000000004
Capacity Gallons:	6000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1993-10-15 00:00:00
Year Installed:	1973-01-01 00:00:00
Pipe Type:	Not reported
Delivery System:	PRESSURE
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name:	UNDERGROUND TANK 105166 T005
Last Update:	2012-11-02 14:17:38
Permit Number:	209646
Tank Type:	SINGLE WALL

ARCO #01919 (Continued) **S104160469**

Additional Id:	0000000005
Capacity Gallons:	8000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1993-10-15 00:00:00
Year Installed:	1979-01-01 00:00:00
Pipe Type:	Not reported
Delivery System:	PRESSURE
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name:	UNDERGROUND TANK 105166 T006
Last Update:	2012-11-02 14:17:38
Permit Number:	209646
Tank Type:	DOUBLE WALL
Additional Id:	006 RT1941,RT5093
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1994-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 105166 T007
Last Update:	2012-11-02 14:17:38
Permit Number:	209646
Tank Type:	DOUBLE WALL
Additional Id:	007 RT1941,RT5093
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1994-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 105166 T008
Last Update:	2012-11-02 14:17:38
Permit Number:	209646
Tank Type:	DOUBLE WALL
Additional Id:	008 RT1941,RT5093
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported

ARCO #01919 (Continued) **S104160469**

Year Installed:	1994-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF
UST Name:	UNDERGROUND TANK 105166 T009
Last Update:	2012-11-02 14:17:38
Permit Number:	209646
Tank Type:	DOUBLE WALL
Additional Id:	009 PREMIUM UNLEADED RT1941,RT5093
Capacity Gallons:	10000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1994-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

Active Permits:

Facility Id:	209646
Update Date:	11/02/2012
Case Number:	8006-61-9
Name:	REGULAR UNLEADED
Other Information:	UNDERGROUND TANK 105166 T007
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported
Facility Id:	209646
Update Date:	11/02/2012
Case Number:	8006-61-9
Name:	REGULAR UNLEADED
Other Information:	UNDERGROUND TANK 105166 T008
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported
Facility Id:	209646
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information:	USED GASOLINE FUEL FLTRS
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported
Facility Id:	209646
Update Date:	11/02/2012
Case Number:	8006-61-9
Name:	REGULAR UNLEADED
Other Information:	UNDERGROUND TANK 105166 T006

ARCO #01919 (Continued) **S104160469**

Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Facility Id: 209646
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Other Information: GASOLINE & WATER MIX
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Facility Id: 209646
Update Date: 11/02/2012
Case Number: 8006-61-9
Name: PREMIUM UNLEADED
Other Information: UNDERGROUND TANK 105166 T009
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Violations Active Permits:
Facility Id: 209646
Update Date: 11/02/2012
Inspection Date: 03/06/2012
Violation Code: 6HV3411
Violation: LLD NOT INSTALLED/NOT FUNCTIONAL
Violation Citation: DOUBLE WALLED PRESSURIZED PIPING-Including Under Dispenser Containment (UDC):Line leak detector is not installed, not functional, or not tested. 2636(f)(2), 25284.1(a)(4)(C), 2641(j)
Activity: ACTIVE

Facility Id: 209646
Update Date: 11/02/2012
Inspection Date: 03/18/2009
Violation Code: 6HV3411
Violation: LLD NOT INSTALLED/NOT FUNCTIONAL
Violation Citation: DOUBLE WALLED PRESSURIZED PIPING-Including Under Dispenser Containment (UDC):Line leak detector is not installed, not functional, or not tested. 2636(f)(2), 25284.1(a)(4)(C), 2641(j)
Activity: ACTIVE

Facility Id: 209646
Update Date: 11/02/2012
Inspection Date: 03/06/2012
Violation Code: 6HV3105
Violation: NO CURRENT FINANCIAL RESPONSIBILITY
Violation Citation: Current evidence of financial responsibility not available. 25292.2(a), 25299.33; 2809
Activity: ACTIVE

Facility Id: 209646
Update Date: 11/02/2012
Inspection Date: 03/24/2010
Violation Code: 6HV3411
Violation: LLD NOT INSTALLED/NOT FUNCTIONAL

ARCO #01919 (Continued) **S104160469**

Violation Citation:	DOUBLE WALLED PRESSURIZED PIPING-Including Under Dispenser Containment (UDC):Line leak detector is not installed, not functional, or not tested. 2636(f)(2), 25284.1(a)(4)(C), 2641(j)
Activity:	ACTIVE
Facility Id:	209646
Update Date:	11/02/2012
Inspection Date:	03/24/2010
Violation Code:	6HV3115
Violation:	NO 2NDARY CONTAINMT. TEST/REPAIRS
Violation Citation:	Secondary containment testing not completed (passed) for all components &/or repairs to secondary containment components not completed. 25284.1, 25291(a)(2); 2637
Activity:	ACTIVE
Facility Id:	209646
Update Date:	11/02/2012
Inspection Date:	03/18/2009
Violation Code:	6HV3255
Violation:	SPILL CONTAIN. NOT DRY/IN GOOD CONDITION
Violation Citation:	Spill container is not in good condition and/or liquid free. 2635(b)(1), 2636(a)(1)
Activity:	ACTIVE
Facility Id:	209646
Update Date:	11/02/2012
Inspection Date:	03/24/2010
Violation Code:	6HV3114
Violation:	2NDRY CONT TEST NOT DONE/SENT TO CUPA
Violation Citation:	Secondary containment testing not done at 6/36 months and/or not sent to CUPA within 30 days. 25284.1; 2637(a)&(e)
Activity:	ACTIVE
Facility Id:	209646
Update Date:	11/02/2012
Inspection Date:	03/17/2011
Violation Code:	6HV3411
Violation:	LLD NOT INSTALLED/NOT FUNCTIONAL
Violation Citation:	DOUBLE WALLED PRESSURIZED PIPING-Including Under Dispenser Containment (UDC):Line leak detector is not installed, not functional, or not tested. 2636(f)(2), 25284.1(a)(4)(C), 2641(j)
Activity:	ACTIVE
Facility Id:	209646
Update Date:	11/02/2012
Inspection Date:	03/06/2012
Violation Code:	6HV3263
Violation:	MONITOR SYSTEM NOT ALL FUNCTIONAL
Violation Citation:	Monitoring system components &/or devices are not all functional. 2630, 2641(j), 2632
Activity:	ACTIVE
Facility Id:	209646
Update Date:	11/02/2012
Inspection Date:	03/18/2009
Violation Code:	6HV3164
Violation:	MONITOR EQUIP NOT PER MANUF. SPECS

ARCO #01919 (Continued) **S104160469**

Violation Citation: All monitoring equipment not installed, calibrated, operated, and/or maintained per manufacturer instructions. 2638(a), 2641(j)
Activity: ACTIVE

EMI:

Year:	2006
County Code:	37
Air Basin:	SD
Facility ID:	3825
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4.42
Reactive Organic Gases Tons/Yr:	4.42
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2007
County Code:	37
Air Basin:	SD
Facility ID:	3825
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4.42
Reactive Organic Gases Tons/Yr:	4.42
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2008
County Code:	37
Air Basin:	SD
Facility ID:	3825
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4.42
Reactive Organic Gases Tons/Yr:	4.42
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

ARCO #01919 (Continued) **S104160469**

Year:	2009
County Code:	37
Air Basin:	SD
Facility ID:	3825
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4.4199999999999999
Reactive Organic Gases Tons/Yr:	4.4199999999999999
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2010
County Code:	37
Air Basin:	SD
Facility ID:	3825
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4.4199999999999999
Reactive Organic Gases Tons/Yr:	4.4199999999999999
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

A6 **AM/PM MINI MARKET #704** **HIST CORTESE** **S102423913**
SSE **660 VIA DE LA VALLE** **LUST** **N/A**
1/4-1/2 **SOLANA BEACH, CA 92075**
0.405 mi.
2140 ft. **Site 4 of 4 in cluster A**

Relative:
Lower

Actual:
19 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	37
Reg By:	LTNKA
Reg Id:	9UT2826

LUST REG 9:

Region:	9
Status:	Remediation Plan
Case Number:	9UT2826
Local Case:	H05166-004
Substance:	Unleaded Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Local Agency:	San Diego
How Found:	Tank Closure
How Stopped:	Close Tank

AM/PM MINI MARKET #704 (Continued) **S102423913**

Source:	Unknown
Cause:	Unknown
Lead Agency:	Local Agency
Case Type:	Other ground water affected
Date Found:	10/15/1993
Date Stopped:	10/15/1993
Confirm Date:	10/15/1993
Submit Workplan:	Not reported
Prelim Assess:	10/15/1993
Desc Pollution:	Not reported
Remed Plan:	10/15/1993
Remed Action:	Not reported
Began Monitor:	Not reported
Release Date:	10/15/1993
Enforce Date:	Not reported
Closed Date:	Not reported
Enforce Type:	Not reported
Pilot Program:	LOP
Basin Number:	905.11
GW Depth:	5.6’
Beneficial Use:	NBNB/EOC
NPDES Number:	Not reported
Priority:	2B
File Dispn:	File discarded, case closed
Interim Remedial Actions:	Yes
Cleanup and Abatement order Number:	Not reported
Waste Discharge Requirement Number:	Not reported

B7 **DEL MAR TEXACO** **UST** **U003789461**
SE **2205 VIA DE LA VALLE** **SWEEPS UST** **N/A**
1/4-1/2 **DEL MAR, CA 92014** **San Diego Co. HMMD**
0.433 mi. **SAN DIEGO CO. SAM**
2286 ft. **Site 1 of 3 in cluster B**

Relative:
Lower

Actual:
31 ft.

UST:

Facility ID:	H13470
Permitting Agency:	SAN DIEGO COUNTY
Latitude:	32.980418
Longitude:	-117.253941

SWEEPS UST:

Status:	Not reported
Comp Number:	13470
Number:	Not reported
Board Of Equalization:	44-000217
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-013470-000001
Tank Status:	Not reported
Capacity:	550
Active Date:	Not reported
Tank Use:	PETROLEUM
STG:	WASTE
Content:	Not reported
Number Of Tanks:	1

DEL MAR TEXACO (Continued) **U003789461**

Status:	Active
Comp Number:	13470
Number:	9
Board Of Equalization:	44-000217
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-013470-000002
Tank Status:	A
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	5

Status:	Active
Comp Number:	13470
Number:	9
Board Of Equalization:	44-000217
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-013470-000003
Tank Status:	A
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	13470
Number:	9
Board Of Equalization:	44-000217
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-013470-000004
Tank Status:	A
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	13470
Number:	9
Board Of Equalization:	44-000217
Referral Date:	Not reported
Action Date:	06-26-92

DEL MAR TEXACO (Continued) **U003789461**

Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-013470-000005
Tank Status:	A
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	OTHER
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	13470
Number:	9
Board Of Equalization:	44-000217
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-013470-000006
Tank Status:	A
Capacity:	550
Active Date:	Not reported
Tank Use:	PETROLEUM
STG:	W
Content:	Not reported
Number Of Tanks:	Not reported

SAN DIEGO CO. HMMD:

Facility Id:	208266
Business Type:	6HK28
EPA Id Number:	CAL000322032
APN:	299-300-09-00
Last HMMD Inspection:	02/15/2012
Permit Status:	OPEN
Permit Expiration:	04/30/2013
Facility Owner:	TESORO SOUTH COAST COMPANY, LLC
Facility Address:	19100 RIDGEWOOD PY
Facility City:	SAN ANTONIO
Facility State:	TX
Facility Zip:	78259
UST Owner:	TESORO SOUTH COAST COMPANY, LLC
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

UST:

UST Name:	UNDERGROUND TANK 113470 T007
Last Update:	2012-11-02 14:17:38
Permit Number:	208266
Tank Type:	DOUBLE WALL
Additional Id:	NT2341/RT3412/RT3718/RT4315/RT4706/RT5230/RT5058/R
Capacity Gallons:	12000
UST Contents:	PREMIUM UNLEADED

DEL MAR TEXACO (Continued) **U003789461**

Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	2002-12-20 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	30A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ WET TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF
UST Name:	UNDERGROUND TANK 113470 T008
Last Update:	2012-11-02 14:17:38
Permit Number:	208266
Tank Type:	DOUBLE WALL
Additional Id:	NT2341/RT3412/RT3718/RT4315/RT4706/RT5058
Capacity Gallons:	20000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	2002-12-20 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	30A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ WET TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF
UST Name:	UNDERGROUND TANK 113470 T009
Last Update:	2012-11-02 14:17:38
Permit Number:	208266
Tank Type:	DOUBLE WALL
Additional Id:	NT2341/RT3412/RT3718, RT3972/RT4315/RT4706/RT5058
Capacity Gallons:	10000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	2002-12-20 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	30A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ WET TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

Active Permits:

Facility Id:	208266
Update Date:	11/02/2012
Case Number:	8006-61-9
Name:	PREMIUM UNLEADED
Other Information:	UNDERGROUND TANK 113470 T007
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	ACUTE
Facility Id:	208266
Update Date:	11/02/2012
Case Number:	Not reported

DEL MAR TEXACO (Continued) **U003789461**

Name: WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Other Information: WATER & FUEL
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Facility Id: 208266
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: USED GASOLINE FUEL FLTRS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Facility Id: 208266
Update Date: 11/02/2012
Case Number: 68476-34-6
Name: DIESEL
Other Information: UNDERGROUND TANK 113470 T009
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: CHRONIC

Facility Id: 208266
Update Date: 11/02/2012
Case Number: 8006-61-9
Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 113470 T008
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: ACUTE

Facility Id: 208266
Update Date: 11/02/2012
Case Number: 68476-85-7
Name: PROPANE
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: PRESSURE RELEASE

Violations Active Permits:
Facility Id: 208266
Update Date: 11/02/2012
Inspection Date: 02/20/2008
Violation Code: 6HV3107
Violation: MONITORING PROCEDURES NOT AVAIL/TO HMD
Violation Citation: Monitoring procedures not available/complete/submitted to HMD 2632(b)& (d), 2634(d), 2641(h), 2711(a)(9)
Activity: ACTIVE

Facility Id: 208266
Update Date: 11/02/2012
Inspection Date: 02/15/2012
Violation Code: 6HV3164
Violation: MONITOR EQUIP NOT PER MANUF. SPECS

DEL MAR TEXACO (Continued) **U003789461**

Violation Citation: All monitoring equipment not installed, calibrated, operated, and/or maintained per manufacturer instructions. 2638(a), 2641(j)
Activity: ACTIVE

Facility Id: 113470
Business Type: 6HK28
EPA Id Number: CAL000018950
APN: 299-300-09-00
Last HMMD Inspection: 02/01/2007
Permit Status: CHNG
Permit Expiration: 04/30/2008
Facility Owner: SHELL OIL COMPANY
Facility Address: 20945 S. WILMINGTON AVE
Facility City: CARSON
Facility State: CA
Facility Zip: 90810
UST Owner: EQUILON ENTERPRISES LLC
Handle Regulated Hazmat: Y
Own Or Operate UST: Y
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

UST:
UST Name: UNDERGROUND TANK 113470 T007
Last Update: 2012-11-02 14:17:38
Permit Number: 113470
Tank Type: DOUBLE WALL
Additional Id: NT2341/RT3412/RT3718
Capacity Gallons: 12000
UST Contents: PREMIUM UNLEADED
Other Content Info: PREMIUM UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 2002-12-20 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 30A
UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ WET TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name: UNDERGROUND TANK 113470 T008
Last Update: 2012-11-02 14:17:38
Permit Number: 113470
Tank Type: DOUBLE WALL
Additional Id: NT2341/RT3412/RT3718
Capacity Gallons: 20000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 2002-12-20 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 30A
UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ WET TANK ANNULAR; POSITIVE SHUT-OFF &

DEL MAR TEXACO (Continued) **U003789461**

FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 113470 T009
Last Update:	2012-11-02 14:17:38
Permit Number:	113470
Tank Type:	DOUBLE WALL
Additional Id:	NT2341/RT3412/RT3718
Capacity Gallons:	10000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	2002-12-20 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	30A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ WET TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 113470 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	113470
Tank Type:	SINGLE WALL
Additional Id:	1
Capacity Gallons:	550
UST Contents:	Not reported
Other Content Info:	WASTE OIL
Reg Status:	REMOVED
Remove Close Date:	1986-11-08 00:00:00
Year Installed:	1984-01-01 00:00:00
Pipe Type:	Not reported
Delivery System:	Not reported
Monitor Code:	90
UST Monitor Method:	NO MONITORING ALTERNATIVE SELECTED. VERIFY AND ENTER MONITORING ALTERNATIVE DURING INSPECTION.

UST Name:	UNDERGROUND TANK 113470 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	113470
Tank Type:	SINGLE WALL
Additional Id:	RT1127/NT2341
Capacity Gallons:	10000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	REMOVED
Remove Close Date:	2002-12-05 00:00:00
Year Installed:	1984-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	PRESSURE
Monitor Code:	13
UST Monitor Method:	SW TANK W/ CERT ATG SW PRESSURE PIPE W/ SHUTOFF LLD + CERT ATG: IN-TANK TEST MONTHLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name:	UNDERGROUND TANK 113470 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	113470
Tank Type:	SINGLE WALL

DEL MAR TEXACO (Continued) **U003789461**

Additional Id:	RT1127/NT2341
Capacity Gallons:	10000
UST Contents:	MIDGRADE UNLEADED
Other Content Info:	MIDGRADE UNLEADED
Reg Status:	REMOVED
Remove Close Date:	2002-12-05 00:00:00
Year Installed:	1984-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	PRESSURE
Monitor Code:	13
UST Monitor Method:	SW TANK W/ CERT ATG SW PRESSURE PIPE W/ SHUTOFF LLD + CERT ATG: IN-TANK TEST MONTHLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name:	UNDERGROUND TANK 113470 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	113470
Tank Type:	SINGLE WALL
Additional Id:	RT1127/NT2341
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	2002-12-05 00:00:00
Year Installed:	1984-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	PRESSURE
Monitor Code:	13
UST Monitor Method:	SW TANK W/ CERT ATG SW PRESSURE PIPE W/ SHUTOFF LLD + CERT ATG: IN-TANK TEST MONTHLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name:	UNDERGROUND TANK 113470 T005
Last Update:	2012-11-02 14:17:38
Permit Number:	113470
Tank Type:	SINGLE WALL
Additional Id:	RT1127/NT2341
Capacity Gallons:	10000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	2002-12-05 00:00:00
Year Installed:	1984-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	PRESSURE
Monitor Code:	13
UST Monitor Method:	SW TANK W/ CERT ATG SW PRESSURE PIPE W/ SHUTOFF LLD + CERT ATG: IN-TANK TEST MONTHLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name:	UNDERGROUND TANK 113470 T006
Last Update:	2012-11-02 14:17:38
Permit Number:	113470
Tank Type:	DOUBLE WALL
Additional Id:	RT1127 / AT5060
Capacity Gallons:	550
UST Contents:	Not reported
Other Content Info:	WASTE OIL
Reg Status:	REMOVED
Remove Close Date:	2004-05-13 00:00:00

DEL MAR TEXACO (Continued) **U003789461**

Year Installed:	1985-01-01 00:00:00
Pipe Type:	Not reported
Delivery System:	Not reported
Monitor Code:	21
UST Monitor Method:	DW TANK DW SUCTION AND/ OR GRAVITY PIPING WITH INTERSTITIAL MONITORS: INTERSTITIAL.

SAN DIEGO CO. SAM:

Case Number:	H13470-001
Agency:	DEH Site Assessment & Mitigation
Funding:	**Non Billable**
Facility Type:	Failed Integrity Test
Facility Status:	Closed Case
Date:	2/1/1994
Date Began:	11/8/1993

Case Number:	H13470-002
Agency:	DEH Site Assessment & Mitigation
Funding:	**LOP - State Fund**
Facility Type:	Drinking Water Aquifer Impacted
Facility Status:	Remedial Investigation
Date:	3/31/1995
Date Began:	6/25/1991

B8 **TEXACO SERVICE STATION** **LUST** **1000144810**
SE **2205 VIA DE LA VALLE** **SLIC** **N/A**
1/4-1/2 **DEL MAR, CA 92014** **HIST UST**
0.433 mi.
2286 ft. **Site 2 of 3 in cluster B**

Relative:
Lower

Actual:
31 ft.

LUST:

Region:	STATE
Global Id:	T0607301562
Latitude:	32.9790559002216
Longitude:	-117.255277633667
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	12/19/2014
Lead Agency:	SAN DIEGO COUNTY LOP
Case Worker:	JS
Local Agency:	SAN DIEGO COUNTY LOP
RB Case Number:	9UT2802
LOC Case Number:	H13470-002
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Refer to "Site Maps/Documents" tab for Closure Letter/Summary.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0607301562
Contact Type:	Local Agency Caseworker
Contact Name:	JON SENAHA
Organization Name:	SAN DIEGO COUNTY LOP
Address:	P.O. Box 129261
City:	San Diego

TEXACO SERVICE STATION (Continued) **1000144810**

Email: jon.senaha@sdcounty.ca.gov
Phone Number: Not reported

Status History:

Global Id: T0607301562
Status: Open - Site Assessment
Status Date: 07/08/2009

Global Id: T0607301562
Status: Open - Site Assessment
Status Date: 07/29/2013

Global Id: T0607301562
Status: Completed - Case Closed
Status Date: 12/19/2014

Global Id: T0607301562
Status: Open - Case Begin Date
Status Date: 06/25/1991

Global Id: T0607301562
Status: Open - Eligible for Closure
Status Date: 07/29/2013

Global Id: T0607301562
Status: Open - Remediation
Status Date: 03/31/1995

Regulatory Activities:

Global Id: T0607301562
Action Type: ENFORCEMENT
Date: 04/16/2010
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301562
Action Type: Other
Date: 06/25/1991
Action: Leak Began

Global Id: T0607301562
Action Type: RESPONSE
Date: 10/10/2012
Action: Other Report / Document - Regulator Responded

Global Id: T0607301562
Action Type: RESPONSE
Date: 10/26/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0607301562
Action Type: ENFORCEMENT
Date: 10/26/2011
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301562
Action Type: Other

TEXACO SERVICE STATION (Continued) **1000144810**

Date: 06/25/1991
Action: Leak Discovery

Global Id: T0607301562
Action Type: RESPONSE
Date: 04/29/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0607301562
Action Type: RESPONSE
Date: 03/23/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0607301562
Action Type: ENFORCEMENT
Date: 02/15/1994
Action: Notice of Responsibility

Global Id: T0607301562
Action Type: RESPONSE
Date: 10/14/2013
Action: Monitoring Report - Semi-Annually

Global Id: T0607301562
Action Type: Other
Date: 02/10/1994
Action: Leak Reported

Global Id: T0607301562
Action Type: RESPONSE
Date: 10/09/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0607301562
Action Type: ENFORCEMENT
Date: 08/06/2008
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301562
Action Type: ENFORCEMENT
Date: 08/06/2008
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301562
Action Type: ENFORCEMENT
Date: 04/11/2013
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301562
Action Type: RESPONSE
Date: 04/03/2013
Action: Monitoring Report - Semi-Annually

Global Id: T0607301562
Action Type: RESPONSE
Date: 05/22/2013
Action: Other Report / Document

TEXACO SERVICE STATION (Continued) **1000144810**

Global Id: T0607301562
Action Type: RESPONSE
Date: 07/09/2013
Action: Correspondence

Global Id: T0607301562
Action Type: ENFORCEMENT
Date: 06/24/2012
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301562
Action Type: ENFORCEMENT
Date: 07/14/2009
Action: Letter - Notice

Global Id: T0607301562
Action Type: ENFORCEMENT
Date: 12/04/2014
Action: Letter - Notice

Global Id: T0607301562
Action Type: ENFORCEMENT
Date: 12/04/2014
Action: Notice of Responsibility

Global Id: T0607301562
Action Type: ENFORCEMENT
Date: 02/14/2014
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301562
Action Type: RESPONSE
Date: 03/11/2014
Action: Correspondence

Global Id: T0607301562
Action Type: ENFORCEMENT
Date: 12/19/2014
Action: Closure/No Further Action Letter

Global Id: T0607301562
Action Type: RESPONSE
Date: 07/23/2009
Action: Monitoring Report - Quarterly

Global Id: T0607301562
Action Type: RESPONSE
Date: 04/17/2009
Action: Monitoring Report - Quarterly

Global Id: T0607301562
Action Type: RESPONSE
Date: 10/22/2009
Action: Monitoring Report - Quarterly

Global Id: T0607301562
Action Type: RESPONSE

TEXACO SERVICE STATION (Continued) **1000144810**

Date:	04/13/2010
Action:	Monitoring Report - Semi-Annually
Global Id:	T0607301562
Action Type:	RESPONSE
Date:	04/09/2009
Action:	Other Workplan - Regulator Responded
Global Id:	T0607301562
Action Type:	RESPONSE
Date:	04/12/2012
Action:	CAP/RAP - Other Report - Regulator Responded
Global Id:	T0607301562
Action Type:	RESPONSE
Date:	07/08/2011
Action:	Site Assessment Report - Regulator Responded
Global Id:	T0607301562
Action Type:	RESPONSE
Date:	10/19/2011
Action:	Monitoring Report - Semi-Annually - Regulator Responded

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	02/01/1994
Global Id:	T0608101305
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H13470-001
Latitude:	32.97907
Longitude:	-117.255286
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Under Investigation
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

HIST UST:

Region:	STATE
Facility ID:	00000068914
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	STRAM
Telephone:	6197559216
Owner Name:	TEXACO REFINING AND MARKETING
Owner Address:	10 UNIVERSAL CITY PLAZA
Owner City,St,Zip:	LOS ANGELES, CA 900511756
Total Tanks:	0005

TEXACO SERVICE STATION (Continued) **1000144810**

Tank Num:	001
Container Num:	1
Year Installed:	1983
Tank Capacity:	00010000
Tank Used for:	WASTE
Type of Fuel:	1
Container Construction Thickness:	X
Leak Detection:	Stock Inventor, Vapor Sniff Well, Sensor Instrument, 10

Tank Num:	002
Container Num:	2
Year Installed:	1983
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, Vapor Sniff Well, Sensor Instrument, 10

Tank Num:	003
Container Num:	3
Year Installed:	1983
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, Vapor Sniff Well, Sensor Instrument, 10

Tank Num:	004
Container Num:	4
Year Installed:	1983
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, Vapor Sniff Well, Sensor Instrument, 10

Tank Num:	005
Container Num:	5
Year Installed:	1985
Tank Capacity:	00000550
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	Sensor Instrument, Groundwater Monitoring Well

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B9 **SHELL OIL PRODUCTS US** **HIST CORTESE** **S101337741**
SE **2205 VIA DE LA VALLE** **LUST** **N/A**
1/4-1/2 **DEL MAR, CA 92014** **EMI**
0.433 mi.
2286 ft. **Site 3 of 3 in cluster B**

Relative:
Lower

Actual:
31 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	37
Reg By:	LTNKA
Reg Id:	9UT2802

SHELL OIL PRODUCTS US (Continued) **S101337741**

LUST REG 9:

Region:	9
Status:	Preliminary site assessment underway
Case Number:	9UT2802
Local Case:	H13470-002
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Local Agency:	San Diego
How Found:	Other Means
How Stopped:	Other Means
Source:	Piping
Cause:	Unknown
Lead Agency:	Local Agency
Case Type:	Other ground water affected
Date Found:	06/25/1991
Date Stopped:	02/10/1994
Confirm Date:	06/28/1991
Submit Workplan:	Not reported
Prelim Assess:	02/10/1994
Desc Pollution:	Not reported
Remed Plan:	/ /
Remed Action:	Not reported
Began Monitor:	Not reported
Release Date:	02/10/1994
Enforce Date:	Not reported
Closed Date:	Not reported
Enforce Type:	Not reported
Pilot Program:	LOP
Basin Number:	905.11
GW Depth:	Not reported
Beneficial Use:	Municipal groundwater use
NPDES Number:	Not reported
Priority:	3A
File Dispn:	File discarded, case closed
Interim Remedial Actions:	Not reported
Cleanup and Abatement order Number:	Not reported
Waste Discharge Requirement Number:	Not reported

EMI:

Year:	1999
County Code:	37
Air Basin:	SD
Facility ID:	4596
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	3
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

SHELL OIL PRODUCTS US (Continued) **S101337741**

Year:	2000
County Code:	37
Air Basin:	SD
Facility ID:	4596
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	3
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2001
County Code:	37
Air Basin:	SD
Facility ID:	4596
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	3
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2002
County Code:	37
Air Basin:	SD
Facility ID:	4596
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	3
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2003
County Code:	37
Air Basin:	SD
Facility ID:	4596
Air District Name:	SD
SIC Code:	5541

SHELL OIL PRODUCTS US (Continued) **S101337741**

Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	3
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2004
County Code:	37
Air Basin:	SD
Facility ID:	4596
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.52
Reactive Organic Gases Tons/Yr:	2.52
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2005
County Code:	37
Air Basin:	SD
Facility ID:	4596
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.52
Reactive Organic Gases Tons/Yr:	2.52
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2006
County Code:	37
Air Basin:	SD
Facility ID:	4596
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.45
Reactive Organic Gases Tons/Yr:	2.45
Carbon Monoxide Emissions Tons/Yr:	0

SHELL OIL PRODUCTS US (Continued) **S101337741**

NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2007
County Code:	37
Air Basin:	SD
Facility ID:	4596
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.45
Reactive Organic Gases Tons/Yr:	2.45
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2008
County Code:	37
Air Basin:	SD
Facility ID:	4596
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.45
Reactive Organic Gases Tons/Yr:	2.45
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2009
County Code:	37
Air Basin:	SD
Facility ID:	4596
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.4500000000000002
Reactive Organic Gases Tons/Yr:	2.4500000000000002
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2010

SHELL OIL PRODUCTS US (Continued) **S101337741**

County Code:	37
Air Basin:	SD
Facility ID:	4596
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.4500000000000002
Reactive Organic Gases Tons/Yr:	2.4500000000000002
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2011
County Code:	37
Air Basin:	SD
Facility ID:	4596
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.45
Reactive Organic Gases Tons/Yr:	2.45
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2012
County Code:	37
Air Basin:	SD
Facility ID:	4596
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.45
Reactive Organic Gases Tons/Yr:	2.45
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

10 NNW 1/4-1/2 0.466 mi. 2459 ft. | **KAYPRO INC**
533 STEVENS AV
SOLANA BEACH, CA 92075 | **SLIC**
San Diego Co. HMMD
SAN DIEGO CO. SAM | **S104746727**
N/A

Relative: Higher

Actual: 87 ft.

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	03/26/1992
Global Id:	T0608186917
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H09184-001
Latitude:	32.991136
Longitude:	-117.263407
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Soil
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

SAN DIEGO CO. HMMD:

Facility Id:	109184
Business Type:	6HK36
EPA Id Number:	CAD008384422
APN:	DEH-109184
Last HMMD Inspection:	12/22/1989
Permit Status:	INAC
Permit Expiration:	12/22/1989
Facility Owner:	KAYPRO CORPORATION
Facility Address:	P O BOX
Facility City:	DEL MAR
Facility State:	CA
Facility Zip:	92014-0376
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

SAN DIEGO CO. SAM:

Case Number:	H09184-001
Agency:	DEH Site Assessment & Mitigation
Funding:	**Private - VAP**
Facility Type:	Soils Only
Facility Status:	Closed Case
Date:	3/26/1992
Date Began:	3/11/1991

11 South 1/2-1 0.662 mi. 3493 ft. | **CAMP C.J. MILLER** | **ENVIROSTOR** | **S107736010** | **N/A**

DEL MAR, CA

Relative: Lower

Actual: 12 ft.

ENVIROSTOR:

Facility ID:	80000974
Status:	Inactive - Needs Evaluation
Status Date:	07/01/2005
Site Code:	Not reported
Site Type:	Military Evaluation
Site Type Detailed:	FUDS
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Douglas Bautista
Division Branch:	Cleanup Cypress
Assembly:	78
Senate:	39
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	DERA
Latitude:	32.975
Longitude:	-117.2597
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CA99799FA35700
Alias Type:	Federal Facility ID
Alias Name:	J09CA7328
Alias Type:	INPR
Alias Name:	80000974
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Inventory Project Report (INPR)
Completed Date:	09/21/1999
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

12 NW 1/2-1 0.788 mi. 4160 ft. | **SOLANA BEACH PLAZA**
124 LOMAS SANTA FE DR
SOLANA BEACH, CA 92075 | **SLIC**
San Diego Co. HMMD
ENVIROSTOR | **S106062900**
N/A

Relative: Higher

Actual: 74 ft.

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	05/18/2006
Global Id:	T0608194095
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H29317-001
Latitude:	32.991855356639
Longitude:	-117.270255088806
Case Type:	Cleanup Program Site
Case Worker:	EM
Local Agency:	SAN DIEGO COUNTY LOP
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Soil
Potential Contaminants of Concern:	* Chlorinated Hydrocarbons
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

SAN DIEGO CO. HMMD:

Facility Id:	129317
Business Type:	6HK53
EPA Id Number:	CAD982508491
APN:	263-351-35-00
Last HMMD Inspection:	04/07/2003
Permit Status:	INAC
Permit Expiration:	11/30/2003
Facility Owner:	PONCE MANITHIP
Facility Address:	124 LOMAS SANTA FE DR #104
Facility City:	SOLANA BEACH
Facility State:	CA
Facility Zip:	92075-1223
UST Owner:	Not reported
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Violations Inactive Permits:

Facility Id:	129317
Update Date:	11/02/2012
Inspection Date:	04/07/2003
Violation Code:	6HV1006
Violation:	HMBP: INVENTORY INADEQUATE
Violation Citation:	Business Plan inventory does not list all hazardous materials on site in disclosable quantities. HSC 25504(a),25503.5
Activity:	Inactive Permit

Facility Id:	129317
Update Date:	11/02/2012

SOLANA BEACH PLAZA (Continued) **S106062900**

Inspection Date:	04/07/2003
Violation Code:	6HV0402
Violation:	TRAINING PROGRAM NOT ADEQUATE
Violation Citation:	Personnel training is not adequate to ensure compliance with hazardous waste regulations. CCR 66265.16(a)&(b)
Activity:	Inactive Permit

Facility Id:	203531
Business Type:	6HK53
EPA Id Number:	CAL000299650
APN:	263-351-35-00
Last HMMD Inspection:	12/09/2005
Permit Status:	INAC
Permit Expiration:	09/30/2006
Facility Owner:	MOSTAFA NEMOVI
Facility Address:	124 LOMAS SANTA FE DR #104
Facility City:	SOLANA BEACH
Facility State:	CA
Facility Zip:	92075
UST Owner:	Not reported
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Violations Inactive Permits:

Facility Id:	203531
Update Date:	11/02/2012
Inspection Date:	05/21/2004
Violation Code:	6HV1002
Violation:	HMBP NOT ESTABISHED/IMPLEMENTED.
Violation Citation:	Hazardous materials handler has not established/implemented a business plan. HSC 25503.5(a)
Activity:	Inactive Permit

Facility Id:	203531
Update Date:	11/02/2012
Inspection Date:	12/09/2005
Violation Code:	6HV0138
Violation:	NO TSDF SIGNED MANIFEST ONSITE
Violation Citation:	Generator has not maintained the required signed copy of the hazardous waste manifest from the TSD facility on site for review. CCR 66262.40(a)
Activity:	Inactive Permit

Facility Id:	207569
Business Type:	6HK18
EPA Id Number:	CAL000314269
APN:	263-351-35-00
Last HMMD Inspection:	01/11/2012
Permit Status:	OPEN
Permit Expiration:	04/30/2013
Facility Owner:	ALAN DISLER
Facility Address:	13290 OCEAN VISTA RD

SOLANA BEACH PLAZA (Continued) **S106062900**

Facility City:	SAN DIEGO
Facility State:	CA
Facility Zip:	92130
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Active Permits:

Facility Id:	207569
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 213 HYDROCARBON SOLVENTS
Other Information:	PETROLEUM DISTILLATES
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

ENVIROSTOR:

Facility ID:	37720034
Status:	Refer: 1248 Local Agency
Status Date:	11/06/2001
Site Code:	Not reported
Site Type:	Evaluation
Site Type Detailed:	Evaluation
Acres:	0.06
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Referred - Not Assigned
Division Branch:	Cleanup Cypress
Assembly:	78
Senate:	39
Special Program:	EPA - PASI
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	EPA Grant
Latitude:	32.99266
Longitude:	-117.2701
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	37720034
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Screening
Completed Date:	06/06/2007
Comments:	EPA approved report.

SOLANA BEACH PLAZA (Continued) **S106062900**

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

13
NW
1/2-1
0.821 mi.
4335 ft.

CEDROS & LOMA SANTA FE
143 CEDROS
SOLANA BEACH, CA 92075

Notify 65 **S100178317**
N/A

Relative:
Higher

Actual:
71 ft.

NOTIFY 65:

Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Incident Description:	92075

Count: 2 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SOLANA BEACH	S110497710	JOANN XIE, LAC	462 STEVENS E	92075	San Diego Co. HMMD
SOLANA BEACH	S110497439	DBA BACK INTO BALANCE	462 STEVENS E	92075	San Diego Co. HMMD

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/16/2014
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 32

Source: EPA
Telephone: N/A
Last EDR Contact: 04/08/2015
Next Scheduled EDR Contact: 07/20/2015
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/16/2014
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 32

Source: EPA
Telephone: N/A
Last EDR Contact: 04/08/2015
Next Scheduled EDR Contact: 07/20/2015
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/16/2014	Source: EPA
Date Data Arrived at EDR: 01/08/2015	Telephone: N/A
Date Made Active in Reports: 02/09/2015	Last EDR Contact: 04/08/2015
Number of Days to Update: 32	Next Scheduled EDR Contact: 07/20/2015
	Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 05/01/2015
Number of Days to Update: 94	Next Scheduled EDR Contact: 06/08/2015
	Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 07/21/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/07/2014	Telephone: 703-603-8704
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 04/08/2015
Number of Days to Update: 13	Next Scheduled EDR Contact: 07/20/2015
	Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 05/01/2015
Number of Days to Update: 94	Next Scheduled EDR Contact: 06/08/2015
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/31/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/31/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/31/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/31/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/31/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 09/18/2014
Date Data Arrived at EDR: 09/19/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/26/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 09/18/2014
Date Data Arrived at EDR: 09/19/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/26/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/03/2014
Date Data Arrived at EDR: 12/12/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 48

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/16/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/29/2014
Date Data Arrived at EDR: 09/30/2014
Date Made Active in Reports: 11/06/2014
Number of Days to Update: 37

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/31/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 03/11/2015
Date Data Arrived at EDR: 03/12/2015
Date Made Active in Reports: 03/18/2015
Number of Days to Update: 6

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/05/2015
Next Scheduled EDR Contact: 08/17/2015
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 03/11/2015
Date Data Arrived at EDR: 03/12/2015
Date Made Active in Reports: 03/18/2015
Number of Days to Update: 6

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/05/2015
Next Scheduled EDR Contact: 08/17/2015
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/16/2015
Date Data Arrived at EDR: 02/17/2015
Date Made Active in Reports: 03/03/2015
Number of Days to Update: 14

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/17/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 03/13/2015
Date Data Arrived at EDR: 03/18/2015
Date Made Active in Reports: 03/24/2015
Number of Days to Update: 6

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/18/2015
Next Scheduled EDR Contact: 06/29/2015
Data Release Frequency: Quarterly

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 03/13/2015
Date Data Arrived at EDR: 03/18/2015
Date Made Active in Reports: 03/24/2015
Number of Days to Update: 6

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/18/2015
Next Scheduled EDR Contact: 06/29/2015
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/03/2015
Date Data Arrived at EDR: 02/12/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 29

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/08/2015
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/08/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 01/28/2015
Date Data Arrived at EDR: 01/30/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 42

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/10/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 31

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 09/30/2014
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 10

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 184

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/03/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 01/30/2015
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 32

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

State and tribal registered storage tank lists

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/13/2015
Date Data Arrived at EDR: 03/18/2015
Date Made Active in Reports: 03/26/2015
Number of Days to Update: 8

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/18/2015
Next Scheduled EDR Contact: 06/29/2015
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 09/10/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 21

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 07/13/2015
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Quarterly

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 28

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 01/29/2015
Date Data Arrived at EDR: 01/30/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 42

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 01/27/2014
Number of Days to Update: 271

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/28/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/03/2015
Date Data Arrived at EDR: 02/12/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 29

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 01/30/2015
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 36

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 09/30/2014
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 10

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Semi-Annually

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 12/14/2014
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 28

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Quarterly

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/13/2015
Next Scheduled EDR Contact: 07/27/2015
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/29/2014
Date Data Arrived at EDR: 10/01/2014
Date Made Active in Reports: 11/06/2014
Number of Days to Update: 36

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 04/02/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 03/11/2015
Date Data Arrived at EDR: 03/12/2015
Date Made Active in Reports: 03/18/2015
Number of Days to Update: 6

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/05/2015
Next Scheduled EDR Contact: 08/17/2015
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/22/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 38

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/24/2015
Next Scheduled EDR Contact: 07/06/2015
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/23/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 03/16/2015
Date Data Arrived at EDR: 03/18/2015
Date Made Active in Reports: 03/26/2015
Number of Days to Update: 8

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/18/2015
Next Scheduled EDR Contact: 06/29/2015
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 04/04/2015
Date Data Arrived at EDR: 04/07/2015
Date Made Active in Reports: 04/13/2015
Number of Days to Update: 6

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 02/16/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 05/01/2015
Next Scheduled EDR Contact: 08/17/2015
Data Release Frequency: Varies

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 05/06/2015
Next Scheduled EDR Contact: 08/24/2015
Data Release Frequency: No Update Planned

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/25/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 15

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/03/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: Quarterly

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 03/11/2015
Date Data Arrived at EDR: 03/12/2015
Date Made Active in Reports: 03/18/2015
Number of Days to Update: 6

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/05/2015
Next Scheduled EDR Contact: 08/17/2015
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/18/2015
Number of Days to Update: 8

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/13/2015
Next Scheduled EDR Contact: 07/27/2015
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/25/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 15

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/03/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009
Date Data Arrived at EDR: 09/23/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 8

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 02/26/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 03/11/2015
Date Data Arrived at EDR: 03/13/2015
Date Made Active in Reports: 03/24/2015
Number of Days to Update: 11

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/09/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/09/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/18/2015
Number of Days to Update: 8

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 03/10/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/29/2014
Date Data Arrived at EDR: 12/30/2014
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 69

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/31/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 01/21/2015
Date Data Arrived at EDR: 01/28/2015
Date Made Active in Reports: 02/26/2015
Number of Days to Update: 29

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 03/13/2015
Date Data Arrived at EDR: 03/18/2015
Date Made Active in Reports: 03/24/2015
Number of Days to Update: 6

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/18/2015
Next Scheduled EDR Contact: 06/29/2015
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 03/13/2015
Date Data Arrived at EDR: 03/18/2015
Date Made Active in Reports: 03/24/2015
Number of Days to Update: 6

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/18/2015
Next Scheduled EDR Contact: 06/29/2015
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/31/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 05/05/2015
Next Scheduled EDR Contact: 08/17/2015
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/14/2015
Next Scheduled EDR Contact: 07/27/2015
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 06/06/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 09/18/2014
Number of Days to Update: 8

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 03/13/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 24

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/30/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/10/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/27/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 12/30/2014
Date Data Arrived at EDR: 12/31/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 29

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 03/06/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 01/29/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/27/2015
Next Scheduled EDR Contact: 07/06/2015
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems
Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/10/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 04/09/2015
Next Scheduled EDR Contact: 07/27/2015
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 10/15/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 33

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/17/2015
Next Scheduled EDR Contact: 07/27/2015
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 12/29/2014
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 21

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 03/09/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 02/27/2015
Date Data Arrived at EDR: 02/27/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/09/2015
Next Scheduled EDR Contact: 07/20/2015
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 01/18/2015
Date Data Arrived at EDR: 02/27/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 26

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 03/09/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2015
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 02/24/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Biennially

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 11/19/2014
Date Data Arrived at EDR: 12/15/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 45

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/20/2015
Next Scheduled EDR Contact: 06/29/2015
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 03/12/2015
Date Data Arrived at EDR: 03/13/2015
Date Made Active in Reports: 03/24/2015
Number of Days to Update: 11

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 03/13/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Quarterly

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 04/10/2015
Number of Days to Update: 10

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/31/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List
The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/23/2015
Next Scheduled EDR Contact: 07/06/2015
Data Release Frequency: No Update Planned

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 02/18/2015
Date Data Arrived at EDR: 02/20/2015
Date Made Active in Reports: 03/12/2015
Number of Days to Update: 20

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 03/09/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Annually

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/30/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 01/26/2015
Date Data Arrived at EDR: 01/28/2015
Date Made Active in Reports: 02/26/2015
Number of Days to Update: 29

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 10/15/2014
Date Made Active in Reports: 11/19/2014
Number of Days to Update: 35

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/17/2015
Next Scheduled EDR Contact: 07/27/2015
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 03/25/2014
Date Made Active in Reports: 04/28/2014
Number of Days to Update: 34

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/27/2015
Next Scheduled EDR Contact: 07/06/2015
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/14/2015
Next Scheduled EDR Contact: 07/27/2015
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/18/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/09/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 02/16/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Quarterly

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/17/2015
Date Data Arrived at EDR: 02/20/2015
Date Made Active in Reports: 03/03/2015
Number of Days to Update: 11

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/16/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 02/02/2015
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 03/03/2015
Number of Days to Update: 25

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/13/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/01/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 01/16/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/18/2015
Number of Days to Update: 8

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/10/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Varies

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 04/15/2015
Next Scheduled EDR Contact: 07/27/2015
Data Release Frequency: Varies

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/13/2015
Date Data Arrived at EDR: 04/15/2015
Date Made Active in Reports: 04/23/2015
Number of Days to Update: 8

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/15/2015
Next Scheduled EDR Contact: 07/27/2015
Data Release Frequency: Quarterly

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/23/2015
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 03/03/2015
Number of Days to Update: 7

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/24/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 03/16/2015
Date Data Arrived at EDR: 03/18/2015
Date Made Active in Reports: 03/24/2015
Number of Days to Update: 6

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/18/2015
Next Scheduled EDR Contact: 06/29/2015
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST
EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/07/2015
Next Scheduled EDR Contact: 08/24/2015
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List
The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/13/2015
Next Scheduled EDR Contact: 05/25/2015
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014
Date Data Arrived at EDR: 11/26/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/10/2015
Next Scheduled EDR Contact: 07/20/2015
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 02/13/2015
Next Scheduled EDR Contact: 05/25/2015
Data Release Frequency: Quarterly

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Quarterly

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/14/2015
Next Scheduled EDR Contact: 07/27/2015
Data Release Frequency: N/A

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/16/2014
Date Data Arrived at EDR: 10/31/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 17

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/30/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/16/2014
Date Data Arrived at EDR: 10/31/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 17

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/30/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Annually

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/21/2015
Date Data Arrived at EDR: 01/28/2015
Date Made Active in Reports: 02/26/2015
Number of Days to Update: 29

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/30/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 01/21/2015
Date Data Arrived at EDR: 01/28/2015
Date Made Active in Reports: 02/26/2015
Number of Days to Update: 29

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/30/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 03/09/2015
Date Data Arrived at EDR: 03/24/2015
Date Made Active in Reports: 03/31/2015
Number of Days to Update: 7

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 03/23/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

Date of Government Version: 11/20/2014
Date Data Arrived at EDR: 11/24/2014
Date Made Active in Reports: 01/07/2015
Number of Days to Update: 44

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 04/14/2015
Next Scheduled EDR Contact: 04/27/2015
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 04/17/2015
Date Data Arrived at EDR: 04/21/2015
Date Made Active in Reports: 05/07/2015
Number of Days to Update: 16

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/30/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 06/11/2014
Date Data Arrived at EDR: 06/13/2014
Date Made Active in Reports: 07/07/2014
Number of Days to Update: 24

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 05/07/2015
Next Scheduled EDR Contact: 08/24/2015
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/23/2015
Date Data Arrived at EDR: 02/25/2015
Date Made Active in Reports: 03/04/2015
Number of Days to Update: 7

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 05/04/2015
Next Scheduled EDR Contact: 08/17/2015
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 02/23/2015
Date Data Arrived at EDR: 02/25/2015
Date Made Active in Reports: 03/03/2015
Number of Days to Update: 6

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 05/04/2015
Next Scheduled EDR Contact: 08/17/2015
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/24/2015
Date Data Arrived at EDR: 02/25/2015
Date Made Active in Reports: 03/03/2015
Number of Days to Update: 6

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 05/04/2015
Next Scheduled EDR Contact: 08/17/2015
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 03/31/2015
Date Data Arrived at EDR: 04/15/2015
Date Made Active in Reports: 04/23/2015
Number of Days to Update: 8

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 04/06/2015
Next Scheduled EDR Contact: 07/20/2015
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 03/11/2015
Date Data Arrived at EDR: 03/13/2015
Date Made Active in Reports: 03/24/2015
Number of Days to Update: 11

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 02/10/2015
Date Data Arrived at EDR: 02/12/2015
Date Made Active in Reports: 03/03/2015
Number of Days to Update: 19

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 07/22/2014
Date Data Arrived at EDR: 11/12/2014
Date Made Active in Reports: 12/19/2014
Number of Days to Update: 37

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/07/2015
Next Scheduled EDR Contact: 08/24/2015
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 03/26/2015
Date Data Arrived at EDR: 04/16/2015
Date Made Active in Reports: 04/23/2015
Number of Days to Update: 7

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 04/10/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/20/2015
Date Data Arrived at EDR: 01/21/2015
Date Made Active in Reports: 02/05/2015
Number of Days to Update: 15

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/16/2015
Next Scheduled EDR Contact: 08/03/2015
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 03/23/2015
Next Scheduled EDR Contact: 07/06/2015
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 11/24/2014
Date Data Arrived at EDR: 01/30/2015
Date Made Active in Reports: 03/04/2015
Number of Days to Update: 33

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/13/2015
Next Scheduled EDR Contact: 07/27/2015
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/20/2015
Date Data Arrived at EDR: 04/20/2015
Date Made Active in Reports: 05/07/2015
Number of Days to Update: 17

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/20/2015
Next Scheduled EDR Contact: 08/03/2015
Data Release Frequency: Varies

City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Date Data Arrived at EDR: 03/10/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 29

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/15/2015
Next Scheduled EDR Contact: 08/03/2015
Data Release Frequency: Varies

Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/15/2015
Date Data Arrived at EDR: 01/29/2015
Date Made Active in Reports: 03/10/2015
Number of Days to Update: 40

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/16/2015
Next Scheduled EDR Contact: 08/03/2015
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/02/2015
Date Made Active in Reports: 04/13/2015
Number of Days to Update: 11

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 03/06/2015
Next Scheduled EDR Contact: 08/03/2015
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 01/29/2015
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 02/26/2015
Number of Days to Update: 13

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/08/2015
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/27/2015
Number of Days to Update: 12

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/13/2015
Next Scheduled EDR Contact: 07/27/2015
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 03/20/2015
Date Data Arrived at EDR: 03/24/2015
Date Made Active in Reports: 03/31/2015
Number of Days to Update: 7

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 03/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 10/08/2014
Date Data Arrived at EDR: 10/22/2014
Date Made Active in Reports: 12/15/2014
Number of Days to Update: 54

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 05/05/2015
Next Scheduled EDR Contact: 07/20/2015
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/23/2015
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 03/03/2015
Number of Days to Update: 7

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 02/27/2015
Date Data Arrived at EDR: 03/06/2015
Date Made Active in Reports: 03/10/2015
Number of Days to Update: 4

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 02/26/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 03/19/2015
Date Data Arrived at EDR: 03/20/2015
Date Made Active in Reports: 03/31/2015
Number of Days to Update: 11

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/06/2011
Date Made Active in Reports: 02/07/2012
Number of Days to Update: 63

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/26/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/26/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/12/2015
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/03/2015
Number of Days to Update: 18

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 05/04/2015
Next Scheduled EDR Contact: 08/17/2015
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/01/2015
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/03/2015
Number of Days to Update: 18

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/06/2015
Next Scheduled EDR Contact: 08/24/2015
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 02/03/2015
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/03/2015
Number of Days to Update: 18

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/06/2015
Next Scheduled EDR Contact: 08/24/2015
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/01/2015
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 02/26/2015
Number of Days to Update: 13

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/09/2015
Next Scheduled EDR Contact: 05/25/2015
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/12/2015
Date Made Active in Reports: 03/18/2015
Number of Days to Update: 6

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 03/09/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 01/28/2015
Date Data Arrived at EDR: 01/29/2015
Date Made Active in Reports: 03/03/2015
Number of Days to Update: 33

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/23/2015
Next Scheduled EDR Contact: 07/06/2015
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/28/2015
Date Data Arrived at EDR: 01/29/2015
Date Made Active in Reports: 02/26/2015
Number of Days to Update: 28

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/23/2015
Next Scheduled EDR Contact: 07/06/2015
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/02/2015
Date Data Arrived at EDR: 04/08/2015
Date Made Active in Reports: 04/16/2015
Number of Days to Update: 8

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/08/2015
Next Scheduled EDR Contact: 07/20/2015
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/02/2015
Date Data Arrived at EDR: 04/08/2015
Date Made Active in Reports: 04/16/2015
Number of Days to Update: 8

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/08/2015
Next Scheduled EDR Contact: 07/20/2015
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 03/02/2015
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/10/2015
Number of Days to Update: 7

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 02/09/2015
Next Scheduled EDR Contact: 05/25/2015
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 23

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/10/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2014
Date Data Arrived at EDR: 11/21/2014
Date Made Active in Reports: 12/29/2014
Number of Days to Update: 38

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 03/09/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 05/06/2015
Next Scheduled EDR Contact: 08/24/2015
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Date Data Arrived at EDR: 03/10/2011
Date Made Active in Reports: 03/15/2011
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 05/06/2015
Next Scheduled EDR Contact: 08/24/2015
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 03/24/2015
Date Data Arrived at EDR: 03/25/2015
Date Made Active in Reports: 03/31/2015
Number of Days to Update: 6

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/23/2015
Next Scheduled EDR Contact: 07/06/2015
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 02/23/2015
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 03/03/2015
Number of Days to Update: 7

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 04/13/2015
Date Data Arrived at EDR: 04/15/2015
Date Made Active in Reports: 04/23/2015
Number of Days to Update: 8

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/16/2015
Next Scheduled EDR Contact: 06/29/2015
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/16/2015
Date Data Arrived at EDR: 03/17/2015
Date Made Active in Reports: 03/24/2015
Number of Days to Update: 7

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/13/2015
Next Scheduled EDR Contact: 06/29/2015
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 02/23/2015
Date Data Arrived at EDR: 02/25/2015
Date Made Active in Reports: 03/03/2015
Number of Days to Update: 6

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/26/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: Annually

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 02/23/2015
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 03/04/2015
Number of Days to Update: 8

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 05/07/2015
Next Scheduled EDR Contact: 08/24/2015
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List

CUPA facility listing.

Date of Government Version: 11/24/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 12/31/2014
Number of Days to Update: 36

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 03/11/2015
Date Data Arrived at EDR: 03/13/2015
Date Made Active in Reports: 03/24/2015
Number of Days to Update: 11

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 03/13/2015
Date Data Arrived at EDR: 03/19/2015
Date Made Active in Reports: 03/24/2015
Number of Days to Update: 5

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/13/2015
Next Scheduled EDR Contact: 06/29/2015
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 03/13/2015
Date Data Arrived at EDR: 03/20/2015
Date Made Active in Reports: 03/31/2015
Number of Days to Update: 11

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/13/2015
Next Scheduled EDR Contact: 06/29/2015
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 03/31/2015
Date Data Arrived at EDR: 04/02/2015
Date Made Active in Reports: 04/10/2015
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/30/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/01/2015
Date Data Arrived at EDR: 04/02/2015
Date Made Active in Reports: 04/13/2015
Number of Days to Update: 11

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/30/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 03/09/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/18/2015
Number of Days to Update: 8

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 03/09/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/30/2015
Date Data Arrived at EDR: 02/03/2015
Date Made Active in Reports: 02/27/2015
Number of Days to Update: 24

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 01/27/2015
Date Data Arrived at EDR: 02/19/2015
Date Made Active in Reports: 03/03/2015
Number of Days to Update: 12

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/16/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/02/2015
Next Scheduled EDR Contact: 07/20/2015
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/16/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Quarterly

Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 12/29/2014
Date Data Arrived at EDR: 01/30/2015
Date Made Active in Reports: 03/03/2015
Number of Days to Update: 32

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/27/2015
Date Data Arrived at EDR: 03/18/2015
Date Made Active in Reports: 03/26/2015
Number of Days to Update: 8

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/18/2015
Next Scheduled EDR Contact: 06/29/2015
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 03/26/2015
Date Data Arrived at EDR: 04/01/2015
Date Made Active in Reports: 04/13/2015
Number of Days to Update: 12

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/23/2015
Next Scheduled EDR Contact: 07/06/2015
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 02/17/2015
Date Data Arrived at EDR: 02/19/2015
Date Made Active in Reports: 03/03/2015
Number of Days to Update: 12

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 05/04/2015
Next Scheduled EDR Contact: 08/17/2015
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 11/17/2014
Next Scheduled EDR Contact: 03/02/2015
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 08/28/2012
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/14/2015
Next Scheduled EDR Contact: 07/27/2015
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2015
Date Data Arrived at EDR: 02/04/2015
Date Made Active in Reports: 02/27/2015
Number of Days to Update: 23

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/06/2015
Next Scheduled EDR Contact: 08/17/2015
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 07/21/2014
Date Made Active in Reports: 08/25/2014
Number of Days to Update: 35

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/16/2015
Next Scheduled EDR Contact: 08/03/2015
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 07/15/2014
Date Made Active in Reports: 08/13/2014
Number of Days to Update: 29

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 03/19/2015
Date Made Active in Reports: 04/07/2015
Number of Days to Update: 19

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/13/2015
Next Scheduled EDR Contact: 06/29/2015
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

SOLANA BEACH RESIDENTIAL LAND
821 STEVENS AVENUE
SOLANA BEACH, CA 92075

TARGET PROPERTY COORDINATES

Latitude (North):	32.9846 - 32° 59' 4.56''
Longitude (West):	117.2601 - 117° 15' 36.36''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	475697.8
UTM Y (Meters):	3649418.8
Elevation:	39 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	32117-H3 DEL MAR OE W, CA
Most Recent Revision:	0
East Map:	32117-H2 DEL MAR, CA
Most Recent Revision:	1975

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

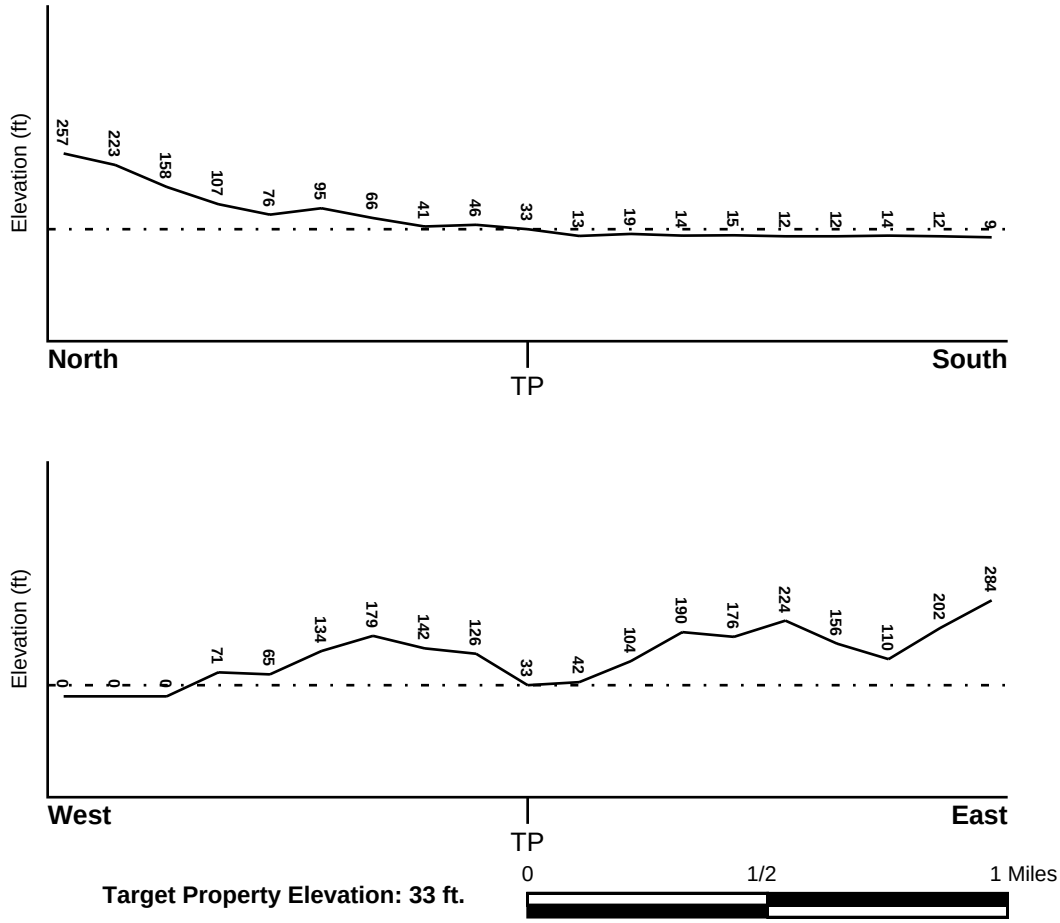
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ESE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 33 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
SAN DIEGO, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 06073C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
WEST DEL MAR (OE)	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
1	1/4 - 1/2 Mile SSE	SW
2	1/2 - 1 Mile ESE	WSW
A4	1/2 - 1 Mile NW	WNW
A5	1/2 - 1 Mile NW	W
6	1/2 - 1 Mile South	WNW

For additional site information, refer to Physical Setting Source Map Findings.

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

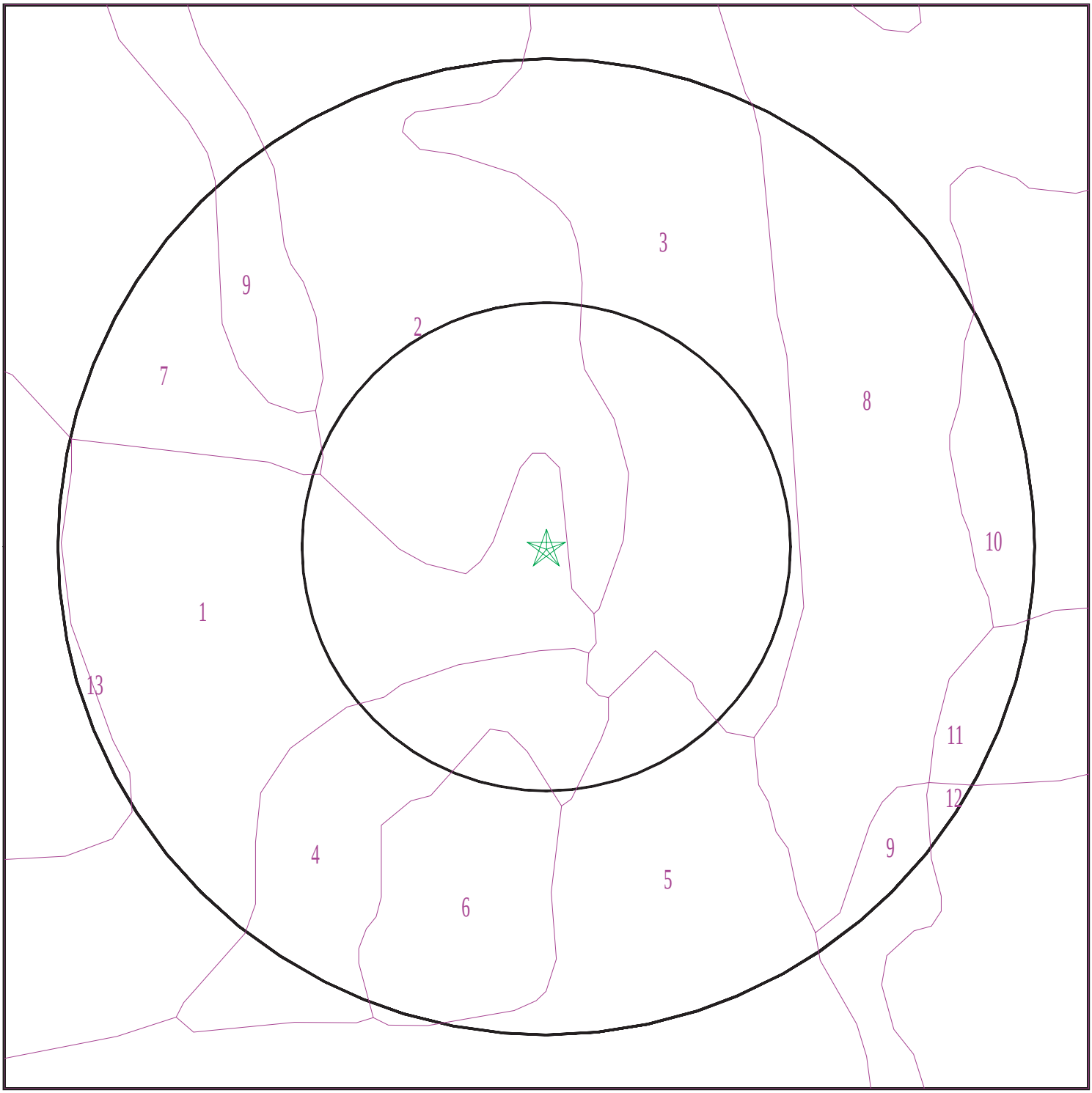
Era:	Cenozoic
System:	Tertiary
Series:	Eocene
Code:	Te *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4289823.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Solana Beach Residential Land ADDRESS: 821 Stevens Avenue Solana Beach CA 92075 LAT/LONG: 32.9846 / 117.2601	CLIENT: Enviroapplications Inc. CONTACT: Fred Allee INQUIRY #: 4289823.2s DATE: May 08, 2015 8:52 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: MARINA

Soil Surface Texture: loamy coarse sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 5.6
2	9 inches	57 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.8 Min: 6.1
3	57 inches	59 inches	sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 7.4

Soil Map ID: 2

Soil Component Name: LOAMY ALLUVIAL LAND

Soil Surface Texture: variable

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches	variable	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 3

Soil Component Name: CORRALITOS

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.1
2	11 inches	42 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.1
3	42 inches	72 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.6

Soil Map ID: 4

Soil Component Name: CORRALITOS

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.1
2	9 inches	42 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.1
3	42 inches	72 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.6

Soil Map ID: 5

Soil Component Name: MADE LAND

Soil Surface Texture: variable

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	variable	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 6

Soil Component Name: HUERHUERO

Soil Surface Texture: loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 5.1
2	11 inches	55 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 0.42 Min: 0.01	Max: 8.4 Min: 7.4
3	55 inches	72 inches	stratified sand to sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4

Soil Map ID: 7

Soil Component Name: MARINA

Soil Surface Texture: loamy coarse sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 5.6
2	9 inches	57 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.8 Min: 6.1
3	57 inches	59 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 7.4

Soil Map ID: 8

Soil Component Name: CORRALITOS

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.1
2	9 inches	42 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.1
3	42 inches	72 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.6

Soil Map ID: 9

Soil Component Name: TERRACE ESCARPMENTS

Soil Surface Texture: variable

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches	variable	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 10

Soil Component Name: CARLSBAD

Soil Surface Texture: gravelly loamy sand

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 6.5 Min: 5.6
2	20 inches	33 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 6.5 Min: 5.1

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
3	33 inches	50 inches	indurated	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 11

Soil Component Name: CARLSBAD

Soil Surface Texture: gravelly loamy sand

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 6.5 Min: 5.6
2	20 inches	27 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 6.5 Min: 5.1

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
3	27 inches	42 inches	indurated	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 12

Soil Component Name: HUERHUERO

Soil Surface Texture: loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 5.1
2	11 inches	55 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 0.42 Min: 0.01	Max: 8.4 Min: 7.4

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
3	55 inches	72 inches	stratified sand to sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4

Soil Map ID: 13

Soil Component Name: CARLSBAD

Soil Surface Texture: gravelly loamy sand

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 6.5 Min: 5.6

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	20 inches	38 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 6.5 Min: 5.1
3	38 inches	50 inches	indurated	Not reported	Not reported	Max: Min:	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
3	CA3702215	1/2 - 1 Mile NW

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 4289823.2s

0 1/4 1/2 1 Miles

- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Solana Beach Residential Land	CLIENT:	Enviroapplications Inc.
ADDRESS:	821 Stevens Avenue Solana Beach CA 92075	CONTACT:	Fred Allee
		INQUIRY #:	4289823.2s
LAT/LONG:	32.9846 / 117.2601	DATE:	May 08, 2015 8:52 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
1 **SSE** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported SW Not Reported Not Reported 9 01/16/1991	**AQUIFLOW**	**38804**
2 **ESE** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported WSW Not Reported Not Reported 20 10/24/1994	**AQUIFLOW**	**38300**

3
NW
1/2 - 1 Mile
Higher

FRDS PWS **CA3702215**

Epa region:	09	State:	CA
Pwsid:	CA3702215		
Pwsname:	LA CASA DEL ZORRO LODGE		
City served:	Not Reported	State served:	CA
Zip served:	Not Reported	Fips county:	06073
Status:	Closed	Pop srvd:	28
Pwssvcconn:	12	Source:	Groundwater
Pws type:	TNCWS	Owner:	Private
Contact:	Not Reported		
Contactor gname:	Not Reported		
Contact phone:	Not Reported	Contact address1:	LA CASA DEL ZORRO LODGE
Contact address2:	PO BOX 127	Contact city:	BORREGO SPRINGS
Contact state:	CA	Contact zip:	92004
Activity code:	I		

Location Information:

Name:	LA CASA DEL ZORRO LODGE		
Pwstypcd:	TNCWS	Primsrccd:	GW
Popserved:	28		
Add1:	LA CASA DEL ZORRO LODGE		
Add2:	PO BOX 127		
City:	BORREGO SPRINGS	State:	CA
Zip:	92004	Phone:	Not Reported
Cityserv:	Not Reported	Cntyserv:	Not Reported
Stateserv:	CA	Zipserv:	Not Reported

PWS ID:	CA3702215		
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	BORREGO SPRINGS PROPERTY, INC BORREGO VILLAGE RESORT 3241 BORREGO VY STRT BORREGO SPRINGS, CA 92004		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Addressee / Facility: System Owner/Responsible Party
BORREGO VILLAGE RESORT
P O BOX 6
SOLANA BEACH, CA 92075

Facility Latitude: 32 59 27
Facility Longitude: 117 16 13
City Served: Not Reported
Treatment Class: Untreated
Population: 00000028

Violations information not reported.

A4
NW
1/2 - 1 Mile
Higher

Site ID:	Not Reported	**AQUIFLOW**	**38823**
Groundwater Flow:	WNW		
Shallow Water Depth:	Not Reported		
Deep Water Depth:	Not Reported		
Average Water Depth:	30		
Date:	04/03/1995		

A5
NW
1/2 - 1 Mile
Higher

Site ID:	Not Reported	**AQUIFLOW**	**37965**
Groundwater Flow:	W		
Shallow Water Depth:	Not Reported		
Deep Water Depth:	Not Reported		
Average Water Depth:	40		
Date:	11/02/1994		

6
South
1/2 - 1 Mile
Lower

Site ID:	Not Reported	**AQUIFLOW**	**38677**
Groundwater Flow:	WNW		
Shallow Water Depth:	Not Reported		
Deep Water Depth:	Not Reported		
Average Water Depth:	11		
Date:	10/15/1991		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92075	17	2

Federal EPA Radon Zone for SAN DIEGO County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SAN DIEGO COUNTY, CA

Number of sites tested: 30

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.677 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.400 pCi/L	100%	0%	0%
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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ATTACHMENT 4
DATABASE ASSESSMENT CRITIERA

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

4 Residential Apartments and a Storage Shed Property
821 Stevens Avenue
Solana Beach, CA 92075-4401

June 25, 2015
EAI Project No.: 01.HGFC001.15
APNs: 298-281-10-00 and 298-164-22-000

DATABASE ASSESSMENT CRITERIA

EnviroApplications used a Commercial Database service in the preparation of this report. Research into environmental regulatory agency database listings was performed by a third-party environmental regulatory agency database search firm. The purpose of the review was to identify reported environmental issues for the Subject Property and other properties in the vicinity. The database search firm utilized the more stringent of the approximate minimum search distances specified in the Scope of Work described in Section 1.4 for each of the referenced Federal and state environmental databases. The definition of the databases searched and the associated search distances from the Subject Property are identified in the regulatory agency database search report.

The regulatory agency database search report commonly lists a number of sites identified as "unmappable." The database search firm was unable to confirm the physical locations of these sites relative to the Subject Property or to assess whether they were located within the designated search radii. EnviroApplications independently reviewed the locations of these "unmappable" sites, to the extent possible, using various maps and our knowledge of the Subject Property area. Any of the "unmappable" sites determined to be within the designated search radii were included in our evaluation of the various listed sites potential to result in a recognized environmental condition relative to the Subject Property.

EnviroApplications reviewed the results of the database search report to note reported release sites in the vicinity of the Subject Property that were considered to have a potential to have adversely impacted the Subject Property (i.e., are known to have or are expected to result in recognized environmental conditions). Reported release sites identified in the regulatory agency database search report were evaluated with respect to the nature and extent of a given release, the distance of the reported release site from the Subject Property, the stratigraphy of soils, the expected soil permeability, and the topographic position of a reported release site with respect to known or expected local and/or regional groundwater flow direction. Those release sites that were considered likely to have impacted the Subject Property are identified in the report as recognized environmental conditions, as defined in ASTM 1527. Sites that were listed in the database search report, but not identified as a release site (for example, a site listed as a hazardous waste generator but not as having had a release), and sites that were listed as being "closed" were not considered likely to have impacted the Subject Property.

ATTACHMENT 5
AGENCY RECORD REQUESTS
AND INFORMATION RESPONSES

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

4 Residential Apartments and a Storage Shed Property
821 Stevens Avenue
Solana Beach, CA 92075-4401

June 25, 2015
EAI Project No.: 01.HGFC001.15
APNs: 298-281-10-00 and 298-164-22-000

OFFICE USE ONLY

Request # 5-98

County of San Diego

GARY W. ERBECK
DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
P.O. BOX 129261, SAN DIEGO, CA 92112-9261
(619) 338-2222 1-800-253-9933 FAX (619) 338-2377
http://www.sdcdeh.org

JACK MILLER
ASSISTANT DIRECTOR

REQUEST TO REVIEW PUBLIC RECORDS FOR THE SITE ASSESSMENT AND MITIGATION (SAM) PROGRAM AND THE HAZARDOUS MATERIALS DIVISION (HMD)

Requestor Name: Fred Allee **E-Mail:** fallee@enviroapplications.com

Phone: (619) 291-3636 **FAX:** (619) 291-3639

Company Name: Enviroapplications, Inc.

Mailing Address: 2831 Camino Del Rio South, Suite 214, San Diego, CA 92108
(You may attach a business card/overprint with business card if preferred)

Additional information on public records maybe accessed from the DEH website, www.sdcdeh.org. Fax your completed form to the Public Records Program at (619) 338-2377 or attach completed form and e-mail to deh.publicrecords@sdcounty.ca.gov. The following information is required so that our files may be accurately searched. Separate forms are needed for each address or parcel number.

_____ or 298-164-22-00
Exact Address (Street, City and Zip Code) Assessor's Parcel Number

Optional information (establishment permit number, business name, etc.):

If you indicate the purpose of your search, it will help us identify all the public records you may wish to review. If you know the program file you want to review, please check below:

☒ Contaminated Property Investigation(s) (SAM Cases)
☒ Hazardous Materials Permit & Underground Storage Tank Files (HMD/UST)
☒ SAM Closure Letter/Report
☒ Other: HIRT Rpts; Complaint (specify)

DEH complies fully with the California Public Records Act and the Federal Freedom of Information Act. Every properly completed request will be processed in the order it is received. Some files are on line as indicated below. Photocopies of file items may be requested. **A fee of $.15 per page is charged to cover cost of copies.**

OFFICE USE ONLY BELOW THIS LINE

Files reviewed by: _____ of _____ Date: / /

Files copied for: _____ of _____ Date: / /

Request cancelled by: _____ Date: / /

Photocopies _____ Cost _____ Picked up/mailed on _____ By _____

A search for DEH records checked above has been conducted and the following apply:

☐ SAM files for the permit number(s) below are available. After the files you have requested are retrieved from storage, an appointment will be scheduled so that you may review SAM records in the DEH main office.

_____ # _____ # _____ # _____ # _____

☐ HMD/UST files for the permit number(s) below are available for review at: http://sdcounty.ca.gov/deh/doing_business/hmd_search.html

_____ # _____ # _____ # _____ # _____

☐ Original records were purged. Database-only records are available (at: http://sdcounty.ca.gov/deh/doing_business/hazmat_search.html) for the following permit number(s):

_____ # _____ # _____ # _____ # _____

☑ No SAM/HMD/UST records were found for the address/APN you requested.

JEllme 5/18/15
Signature - DEH Representative Date

EH-9098 (Rev. 06/08)

DH

OFFICE USE ONLY
Request # 5-97

County of San Diego

GARY W. ERBECK
DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
P.O. BOX 129261, SAN DIEGO, CA 92112-9261
(619) 338-2222 1-800-253-9933 FAX (619) 338-2377
http://www.sdcdeh.org

JACK MILLER
ASSISTANT DIRECTOR

REQUEST TO REVIEW PUBLIC RECORDS FOR THE SITE ASSESSMENT AND MITIGATION (SAM) PROGRAM AND THE HAZARDOUS MATERIALS DIVISION (HMD)

Requestor Name: Fred Allee **E-Mail:** fallee@enviroapplications.com

Phone: (619) 291-3636 **FAX:** (619) 291-3639

Company Name: Enviroapplications, Inc.

Mailing Address: 2831 Camino Del Rio South, Suite 214, San Diego, CA 92108
(You may attach a business card/overprint with business card if preferred)

Additional information on public records maybe accessed from the DEH website, www.sdcdeh.org. Fax your completed form to the Public Records Program at (619) 338-2377 or attach completed form and e-mail to deh.publicrecords@sdcounty.ca.gov. The following information is required so that our files may be accurately searched. Separate forms are needed for each address or parcel number.

821 Stevens Avenue, Solana Beach 92075 **or** 298-281-10-00
Exact Address (Street, City and Zip Code) — Assessor's Parcel Number

Optional information (establishment permit number, business name, etc.):

If you indicate the purpose of your search, it will help us identify all the public records you may wish to review. If you know the program file you want to review, please check below:

- ☒ Contaminated Property Investigation(s) (SAM Cases)
- ☒ Hazardous Materials Permit & Underground Storage Tank Files (HMD/UST)
- ☒ SAM Closure Letter/Report
- ☒ Other: HIRT Rpts; Complaint (specify)

DEH complies fully with the California Public Records Act and the Federal Freedom of Information Act. Every properly completed request will be processed in the order it is received. Some files are on line as indicated below. Photocopies of file items may be requested. **A fee of $.15 per page is charged to cover cost of copies.**

OFFICE USE ONLY BELOW THIS LINE

Files reviewed by: _____ of _____ Date: / /

Files copied for: _____ of _____ Date: / /

Request cancelled by: _____ Date: / /

Photocopies _____ Cost _____ Picked up/mailed on _____ By _____

A search for DEH records checked above has been conducted and the following apply:

☐ SAM files for the permit number(s) below are available. After the files you have requested are retrieved from storage, an appointment will be scheduled so that you may review SAM records in the DEH main office.

_____ # _____ # _____ # _____ # _____

☐ HMD/UST files for the permit number(s) below are available for review at: http://sdcounty.ca.gov/deh/doing_business/hmd_search.html

_____ # _____ # _____ # _____ # _____

☐ Original records were purged. Database-only records are available (at: http://sdcounty.ca.gov/deh/doing_business/hazmat_search.html) for the following permit number(s):

_____ # _____ # _____ # _____ # _____

☑ No SAM/HMD/UST records were found for the address/APN you requested.

Signature - DEH Representative — Date: 5/18/15

EH-9098 (Rev. 06/08)

Department of Toxic Substances Control

Matthew Rodriquez
Secretary for
Environmental Protection

Barbara A. Lee, Director
5796 Corporate Avenue
Cypress, California 90630

Edmund G. Brown Jr.
Governor

RECEIVED
EnviroApplications
MAY 14 2015

May 12, 2015

Fred Allee
ENVIROAPPLICATIONS INC
Rio Sur Office
2831 Camino Del Rio South, #214
San Diego, CA 92108

821 STEVENS AVENUE, SOLANA BEACH, CA
PR4-050815-10

Dear Mr. Allee:

The Department of Toxic Substances Control has received your letter to review records under the Public Records Act.

After a thorough review of our files we have found that no such records exist at this office pertaining to the site/facility referenced above.

We would like to inform you about EnviroStor, a database that provides information and documents on over 5,000 DTSC cleanup sites. EnviroStor can be accesses at: http://www.envirostor.dtsc.ca.gov/public. Also, a computer is available at each DTSC Regional File Room Office for use by community members to view EnviroStor.

If you have any questions or would like further information regarding your request, please contact me at (714) 484-5337.

Sincerely,

Julie Johnson
Julie Johnson
Regional Records Coordinator

Printed on Recycled Paper

Fred Allee

From: Fred Allee
Sent: Friday, May 08, 2015 3:33 PM
To: 'Barrio, Jone@DTSC'
Subject: DTSC Records Request - 821 Stevens Street, Solana Beach 92075

Hi Jone, hope you are all doing well and Happy Friday!

We have just been asked to do an environmental assessment of the following property:

821 Stevens Avenue, Solana Beach 92075 (APNs: 298-281-10-00 and 298-164-22-00).

Would you please check to see if there are any DTSC records for this address?

Thank you,

Fred Allee
Senior Chemical/Environmental Engineer
EnviroApplications, Inc.
Rio Sur Office Complex
2831 Camino Del Rio South, Suite 214
San Diego, CA 92108-3828

EnviroApplications, Inc.
Engineering & Consulting

www.enviroapplications.com

fallee@enviroapplications.com

cell: 619.347.2761
office: 619.291.3636
fax: 619.291.3639

Please consider the impact on the environment before printing this message.
To care for the earth is Biblical, as it is to care for ourselves, each other and care about those who come after us.

Save the Earth....it's the only known planet with chocolate!

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Fred Allee

To: RB9_Records, WB@Waterboards
Subject: RE: SDRWQCB Records Request - Thank You!

Hello and good morning Lucas. As always, I appreciate your checking to make sure there are no records. I hope you have a great week. Respectfully, Fred

---

From: Lima, Lucas@Waterboards [mailto:Lucas.Lima@Waterboards.ca.gov] **On Behalf Of** RB9_Records, WB@Waterboards
Sent: Tuesday, May 12, 2015 8:44 AM
To: Fred Allee
Subject: RE: SDRWQCB Records Request - 821 Stevens Street, Solana Beach 92075

Good morning Fred,

The Regional Board has reviewed its files and has concluded that it does not have any records that are responsive to your request.

Sincerely,

Lucas Lima | Public Records Coordinator
San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100
San Diego, CA 92108
(619) 521-3377
><((((º>`·.¸¸.·´¯`·.¸.·´¯`·...¸><((((º>¸.·´¯`·.¸.·´¯`·.. ><((((º>`·.¸¸.·´¯`·.¸.·´¯`·...¸><((((º>

From: Fred Allee [mailto:fallee@enviroapplications.com]
Sent: Friday, May 08, 2015 3:32 PM
To: RB9_Records, WB@Waterboards
Subject: SDRWQCB Records Request - 821 Stevens Street, Solana Beach 92075

Hi Lucas, hope you are all doing well and Happy Friday!

We have just been asked to do an environmental assessment of the following property:

821 Stevens Avenue, Solana Beach 92075 (APNs: 298-281-10-00 and 298-164-22-00).

Would you please check to see if there are any SDRWQCB records for this address?

Thank you,

Fred Allee
Senior Chemical/Environmental Engineer
EnviroApplications, Inc.
Rio Sur Office Complex
2831 Camino Del Rio South, Suite 214
San Diego, CA 92108-3828

EnviroApplications, Inc.
Engineering & Consulting

www.enviroapplications.com

fallee@enviroapplications.com

cell: 619.347.2761
office: 619.291.3636
fax: 619.291.3639

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Fred Allee

To: Cain, Teresa
Subject: RE: APCD Records Request - Thank You!

I appreciate your checking for those Teresa. Hope you have a good evening, Fred ☺

From: Cain, Teresa [mailto:Teresa.Cain@sdcounty.ca.gov]
Sent: Wednesday, May 20, 2015 4:24 PM
To: Fred Allee
Subject: RE: APCD Records Request - 821 Stevens Street, Solana Beach 92075

No records found for this one.
☺

Teresa Cain, Records Officer
Air Pollution Control District
10124 Old Grove Road
San Diego, CA 92131
Phone- 858-586-2636
Mail Stop O176

From: Fred Allee [mailto:fallee@enviroapplications.com]
Sent: Friday, May 08, 2015 3:50 PM
To: Cain, Teresa
Subject: APCD Records Request - 821 Stevens Street, Solana Beach 92075

Hi Teresa, hope you are all doing well and Happy Friday!

We have just been asked to do an environmental assessment of the following property:

821 Stevens Avenue, Solana Beach 92075 (APNs: 298-281-10-00 and 298-164-22-00).

Would you please check to see if there are any APCD records for this address/APNs?

Thank you and hope you have a great weekend,

Fred Allee
Senior Chemical/Environmental Engineer
EnviroApplications, Inc.
Rio Sur Office Complex
2831 Camino Del Rio South, Suite 214
San Diego, CA 92108-3828

EnviroApplications, Inc.
Engineering & Consulting

www.enviroapplications.com

fallee@enviroapplications.com

cell: 619.347.2761
office: 619.291.3636
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SOURCE CONTROL PROGRAM
INFORMATION REQUEST

Complete top portion and return to:

Encina Wastewater Authority
6200 Avenida Encinas
Carlsbad, CA 92011

Phone: (760) 438-3941
Fax: (760) 476-9852

SECTION A – REQUESTER INFORMATION:

1. Name FRED ALLEE (fallee@enviroapplications.com)
2. Company ENVIROAPPLICATIONS, INC.
3. Address 2831 CAMINO DEL RIO S., SAN DIEGO CA 92108
4. Phone 619.291.3636 Fax 619.291.3639

SECTION B – SITE INFORMATION:

1. Company APARTMENTS
2. Address 821 STEVENS AVENUE, SOLANA BEACH 92075

(*If more than one site is requested, please make copies of this form and submit one for each address*)

SECTION C – FOR EWA USE ONLY:

A search of our records was conducted, and the following information about the above site was found:

1. Permit Number _____ Issued _____/ _____/ _____
2. Member Agency _____
3. Permittee Name _____
4. Category _____ Permitted flow _____
5. General description of permitted operations: _____
6. Violations: _____
7. Other information: _____
8. _____ The above permit was inactivated on _____/ _____/ _____ due to ownership change, facility closure, or other significant changes in operation.
9. X No permit on file.

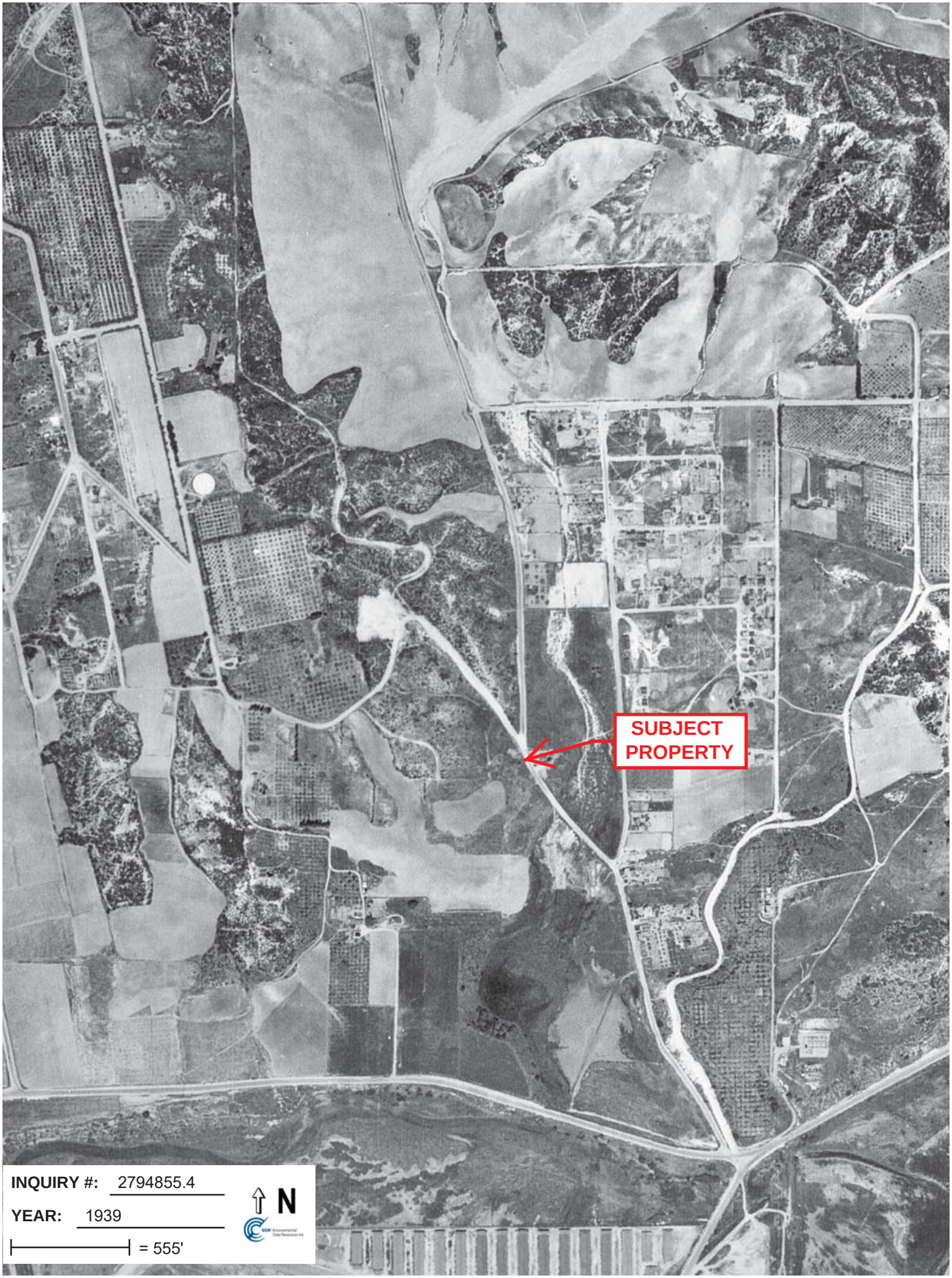
Inspector Jerome Jovenal Date 6 / 12 / 2015

ATTACHMENT 6
HISTORICAL INFORMATION REGARDING THE SUBJECT PROPERTY

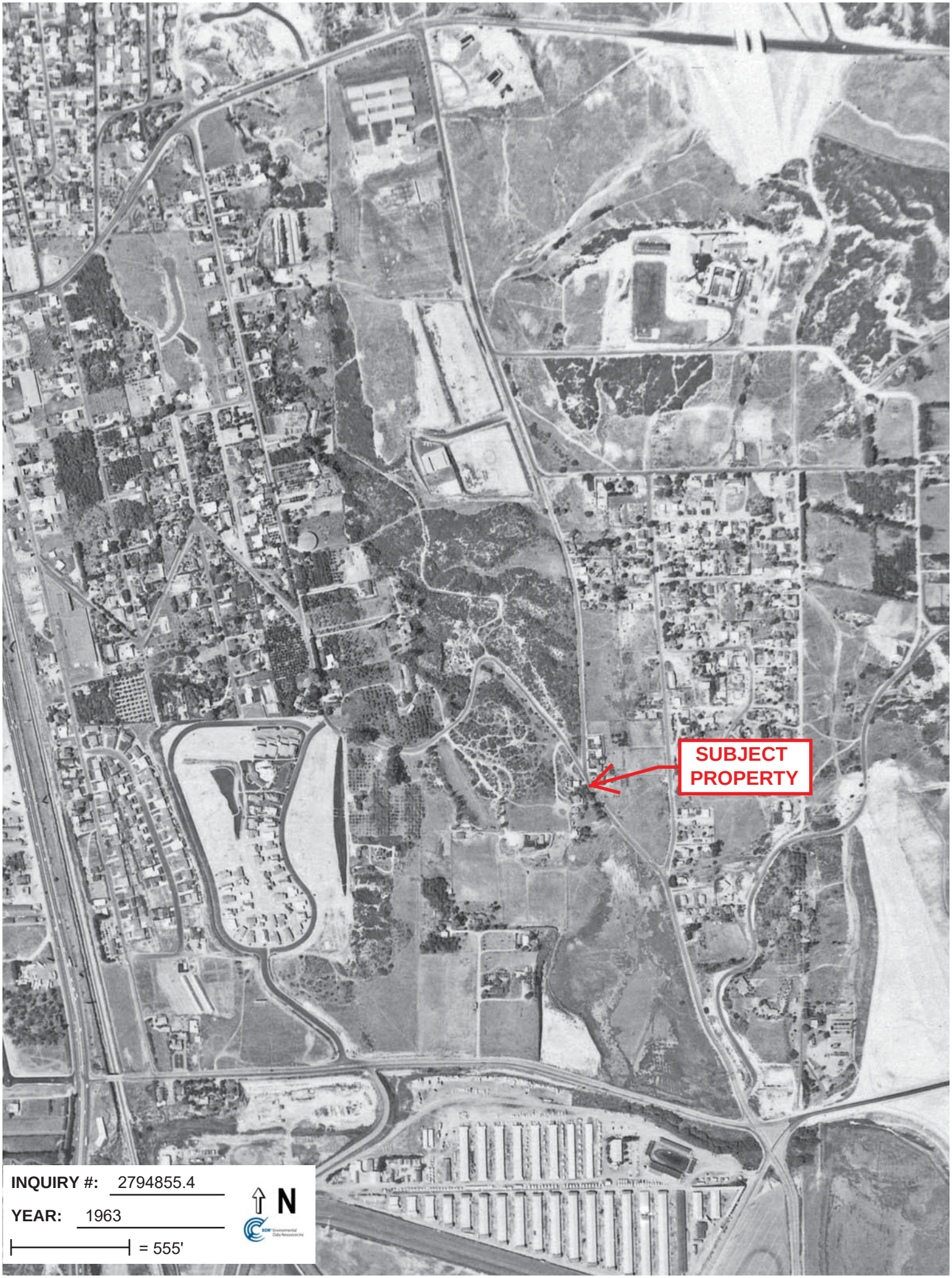
PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

4 Residential Apartments and a Storage Shed Property
821 Stevens Avenue
Solana Beach, CA 92075-4401

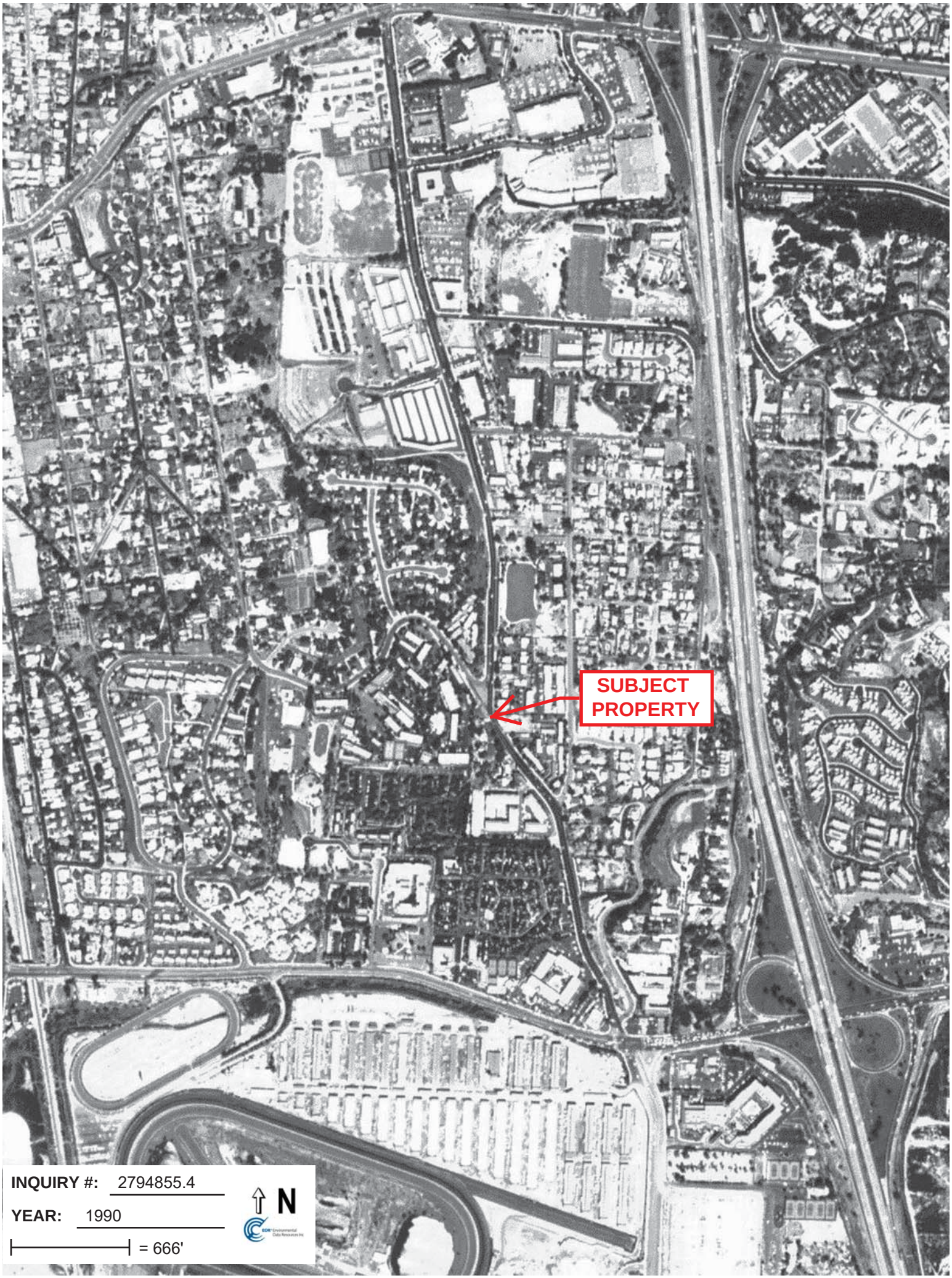
June 25, 2015
EAI Project No.: 01.HGFC001.15
APNs: 298-281-10-00 and 298-164-22-000


SUBJECT PROPERTY
INQUIRY #: 2794855.4
YEAR: 1939
= 555'
N

SUBJECT PROPERTY
INQUIRY #: 2794855.4
YEAR: 1953
= 555'
N


SUBJECT PROPERTY
INQUIRY #: 2794855.4
YEAR: 1963
= 555'
N

SUBJECT PROPERTY
INQUIRY #: 2794855.4
YEAR: 1974
= 600'
N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INQUIRY #: 2794855.4
YEAR: 1990
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N

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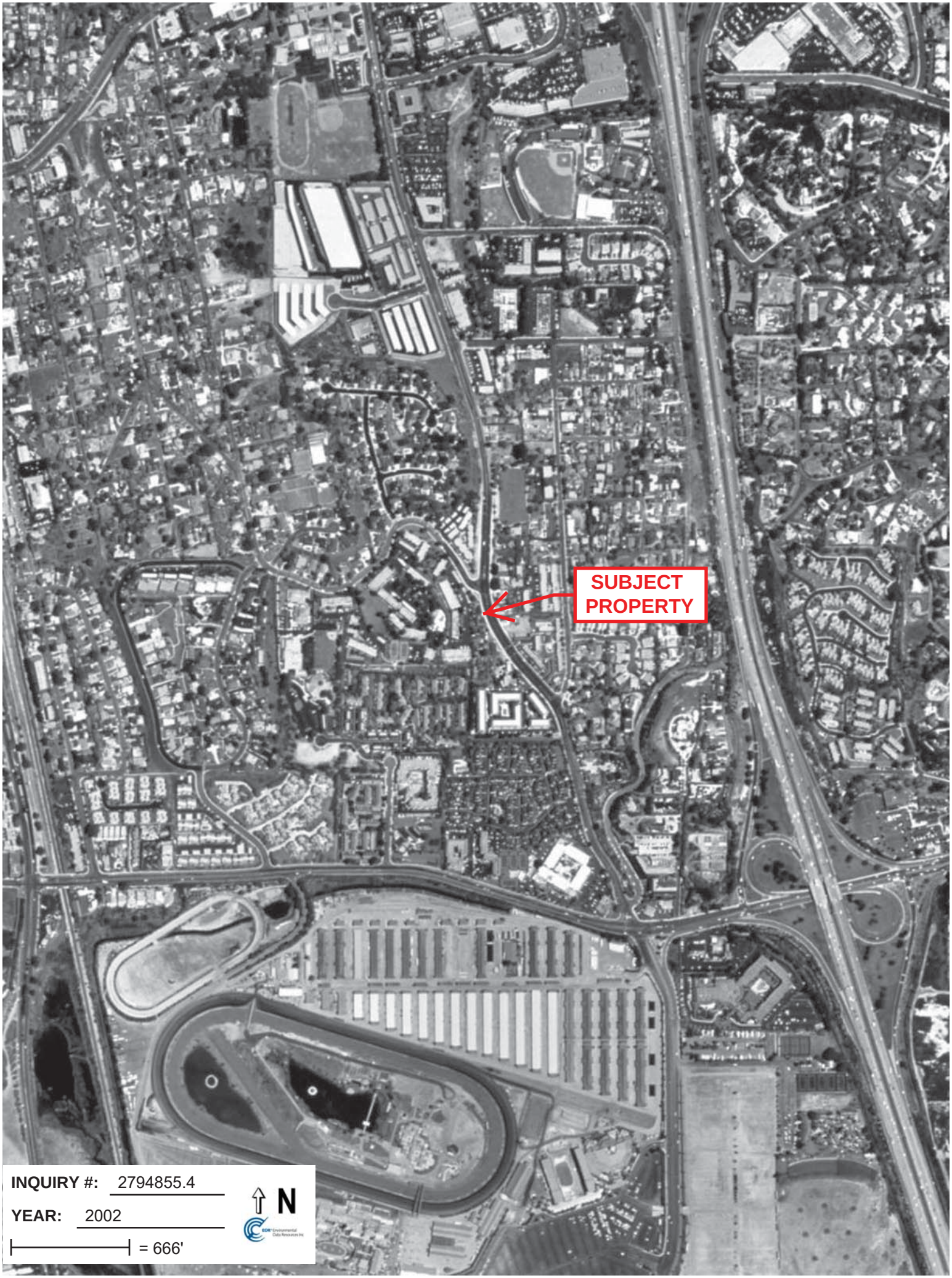
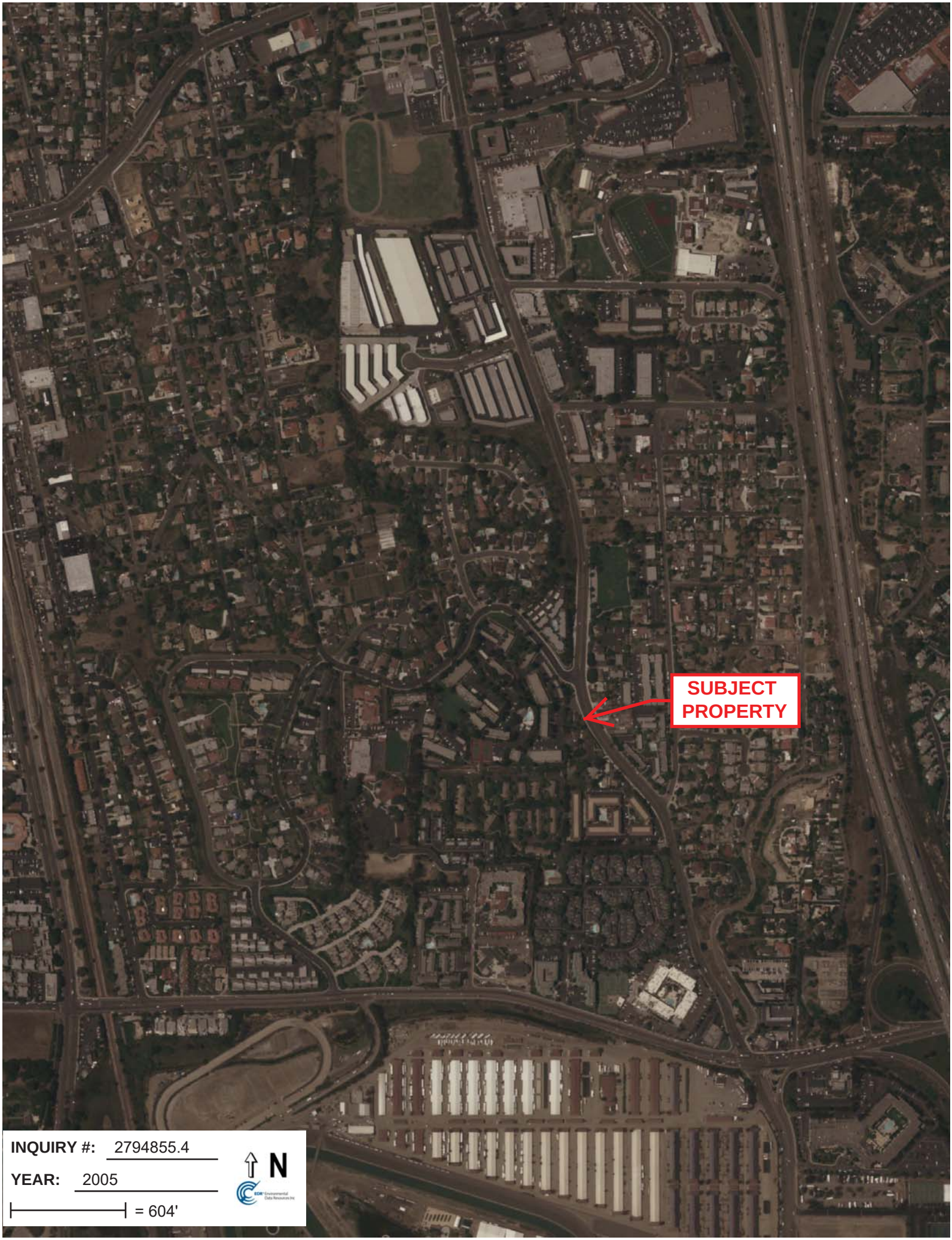
INQUIRY #: 2794855.4
YEAR: 1994
= 666'
N


SUBJECT PROPERTY
INQUIRY #: 2794855.4
YEAR: 2002
= 666'
N


SUBJECT PROPERTY
INQUIRY #: 2794855.4
YEAR: 2005
= 604'
N

Solana Beach Residential Land
821 Stevens Avenue
Solana Beach, CA 92075

Inquiry Number: 4289823.5
May 13, 2015

The EDR-City Directory Image Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2013	☑	☑	Cole Information Services
2008	☑	☑	Cole Information Services
2003	☑	☑	Cole Information Services
1999	☑	☑	Cole Information Services
1995	☑	☑	Cole Information Services
1992	☑	☑	Cole Information Services
1985	☑	☑	Haines Criss-Cross Directory
1980	☑	☑	Haines Criss-Cross Directory
1976	☑	☑	Haines Criss-Cross Directory
1970	☑	☑	Haines Criss-Cross Directory

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FINDINGS

TARGET PROPERTY STREET

821 Stevens Avenue
Solana Beach, CA 92075

Year	***CD Image***	***Source***
STEVENS AVE		
2013	pg A7	Cole Information Services
2008	pg A15	Cole Information Services
2003	pg A23	Cole Information Services
1999	pg A30	Cole Information Services
1995	pg A36	Cole Information Services
1992	pg A40	Cole Information Services
1985	pg A44	Haines Criss-Cross Directory
1985	pg A45	Haines Criss-Cross Directory
1980	pg A47	Haines Criss-Cross Directory
1976	pg A50	Haines Criss-Cross Directory
1976	pg A51	Haines Criss-Cross Directory
1970	pg A53	Haines Criss-Cross Directory

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*

S NARDO AVE

2013	pg. A2	Cole Information Services
2008	pg. A9	Cole Information Services
2003	pg. A17	Cole Information Services
1999	pg. A25	Cole Information Services
1995	pg. A32	Cole Information Services
1992	pg. A37	Cole Information Services
1985	pg. A41	Haines Criss-Cross Directory
1985	pg. A42	Haines Criss-Cross Directory
1985	pg. A43	Haines Criss-Cross Directory
1980	pg. A46	Haines Criss-Cross Directory
1976	pg. A48	Haines Criss-Cross Directory
1976	pg. A49	Haines Criss-Cross Directory
1970	pg. A52	Haines Criss-Cross Directory

City Directory Images

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 2013

1	SOLANA BEACH FLORIST
115	OCCUPANT UNKNOWN
122	OCCUPANT UNKNOWN
126	AMY SANDBERG
129	VAUGHAN SOLOMON
135	COURTNEY NEWMAN
136	ROD VOGELMAN
138	MICHAEL MORRA
139	CHRISTOPHER HENDERSON
142	HOWARD HAMILTON
144	MADELEINE BAUDOIN
148	JOHN CARADINE
151	OCCUPANT UNKNOWN
155	DAVID LOCKHART
166	RANDY OCONNELL
167	MEHRDAD YAZDANI
170	KARL BATCHMAN
173	CRAIG CHRISTENSEN
176	JOSH WRIGHT
181	WILLIAM YATES
182	MICHAEL BAKER
187	NICOLE ZAVODNY
204	BRENDON OBRIEN
208	VOLEY RENNER
209	JOSEPH COOKE
210	HARLEY DAVIS
212	CRAIG HUNSAKER
215	MAC BIBLOWITZ
221	RONALD SILVEIRA
231	EDWARD AMMER
232	ERIC ELLINGSEN
239	JOHN RAMGE
247	TERRI FRANKLIN
248	OCCUPANT UNKNOWN
250	JENS VELKEN
255	JAMES TEMPLES
258	JOHN BARTHELL
302	ANNA SMITH
314	BILL KOFFLER
316	RICHARD FRENCH
318	PAUL HOCK
319	OCCUPANT UNKNOWN
326	ROBERT SCHLIFF
328	OCCUPANT UNKNOWN
330	MARTIN GRIGLAK
336	DAN COOPER
345	RICHARD LAPHAM
354	OCCUPANT UNKNOWN
355	WOLFGANG DILLMAN
356	CARY COLBERT

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 2013 (Cont'd)

360	OCCUPANT UNKNOWN
410	ROBERT MAXWELL
422	CHRISTOPHER SWORTWOOD
430	OCCUPANT UNKNOWN
436	RUSSELL HUNT
438	ERIK JOHNSON
440	TODD MUSGROVE
442	MIKEL WEINBERG
444	RAYMOND ZENICK
454	O GJERDE
502	ALEXANDER GANTMAN
	BAUER CONSTRUCTION INC
508	THOMAS FERRIS
510	DAVID CHECKLEY
512	GRANT GARNER
515	ARNOLD MAGEE
516	CASEY DRAHOS
519	NORMA HASSELMANN
521	AUGUSTUS DADDI
523	DAVID LANGDON
524	OSCAR SANCHEZ
525	OCCUPANT UNKNOWN
544	STEVEN SANBORN
545	RICHARD MOORE
550	OCCUPANT UNKNOWN
558	KERILY MCEVOY
606	OCCUPANT UNKNOWN
614	JOSE RAMIREZ
622	NANCY HULBIRT
623	ST JAMES ACADEMY
625	ST JAMES CATHOLIC CHURCH
	ST JAMES MISSION CIRCLE
630	LORI ANDERSON
638	MARTIN SNYDERMAN
646	OCCUPANT UNKNOWN
654	JOHN WILSON
661	ADAM ROSALES
	ALICIA ORDUNA
	ALLEN WORRAL
	ANDREA KRIEGLER
	BRAD WESSNER
	ESTELA HERNANDEZ
	JENNIFER PALMER
	KEVIN CORCORAN
	LINDSAY HARTSHORN
	MELISSA GILLS
	NOE OLVERA
662	MARK WELLS
	WELLS PUBLISHING INC
665	JODY POUNTAIN

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 2013 (Cont'd)

665	MARJORIE FINLEY
	NICOLE KIRKPATRICK
	SHERRY DOLLARHIDE
669	BILL GREENWOOD
	BOB KIRBY
	DAVID BRITTON
	ESTER PEREZ
	JACQUELINE BRUCHEZ
	JENNIFER BIBAY
	JORGE RUBIO
	JULIO RANGEL
	MONIQUE MENDOZA
	WARREN MURPHY
	WILLIAM BERNARD
	ZAC BROWN
679	AMY VONDEYLEN
	CYNTHIA NORMAN
	DAVID DENNIS
	EMILY CEISEL
	GLORIA BLISS
	JULIA PIALA
	NICHOLAS PIROG
	PHIL JOSEPH
	RICHARD SQUIRES
	SAMUEL WILMURT
	SOMMER SWEET
	VANESSA MEJIA
	VINCENT MASTRANGELO
683	BERT MORA
	BLANCA ARRAZOLA
	EMILIO ROSAS
	FRANK MYERS
	KIMBERLEY KING
	MARCOS ESPINOZA
	RAYMOND BROADFOOT
	SAYDE HERNANDEZ
	SCOTT RUTLEY
687	ALISON ROZETT
	JOSEPH MINEIRO
	LUIS ALVAREZ
	NICOLE MIRANDA
	PABLO SALDIVAR
691	ARIANA THIEM
	BRENDA DEGERALD
	COLIN GREENALW
	JEFFREY GROSS
	JOHN CHAVEZ
695	ANGELA JUSTICE
	ARTURO TORRES
	HEIDI STRUGAZOW

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 2013 (Cont'd)

697	DEEPA NAIR
	KARA DAVIS
	TANYA CASPER
701	SOLANA HIGHLANDS APARTMENTS
702	OCCUPANT UNKNOWN
709	CARRIE SULLIVAN
	CHRISTOPHER WESSELS
	GEORGE SLOSS
	REED JOHNSON
	ROBYN OLSON
710	JASON DAVENPORT
717	BRANDON CONNOLLY
	KATHLEEN MCCLURE
	MELISSA MYERS
718	A CAMDIAZ
725	ANA SOSA
	EDILFONSA CORTEZ
	MAURICIO JOCHINSEN
	MYLES SCHNITMAN
	SARAH JANISSE
	SIVED GUTIERREZ
	THEODORE DODSON
726	WILLIAM EVANS
730	PETER DOODY
740	TIMOTHY HART
757	CHAD DELLINGER
	JOHN BARR
	NOREEN GRUBB
	RUMMY YODER
764	L SADDLERIDGE
765	CHRISTINE BRIGGS
	COREY BURTON
	COREY FITZGERALD
	M GARRIDO
	PAMELA BOYSE
	RENE LOPEZ
	SHANNEN SYMONS
	STEPHEN ONEIL
766	BEN NAQUIN
	BRANDI HOWE
	DIAZ CASTILLO
	ESTRELLA RAMOS
	FAITH SACKLOW
	GEORGE JACOBSEN
	GERARDO ESPANA
	ISSAC VARGAS
	JEFFREY FRANTZ
	KEVIN BOSLEY
	KIM LUNZER
	LEIGH WHITE

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 2013 (Cont'd)

766	LESLIE DICHIARA
	LINDSEY CANTRELL
	MARIA LEDESMA
	MARIO DISALVO
	MEG MCINTOSH
	OTILIO ROJAS
	OTILIO SANTIAGO
	PORFIRIO OXOMULCO
	RACHAEL BALTRUSIS
	RAQUEL ROCHA
	RON ROBERT
	SALVO DI
	SCOTT ENDSLEY
	SENORINA CARRANZA
	SOLANA POINT
773	ADAM ROLOFF
	ALAN GLASSER
	JUSTIN GARDNER
	KATE MURRAY
	RENEE CARTER
	ROSA SALGADO
781	ALEX AGRAPHIOTIS
	ANGEL WILLIAMS
	BRANDYN FORBES
	CHETNA BHATT
	CHRISTINE TRIFF
	CORY DELANEY
	DALLAS COWAN
	ELIZA PUKALESKI
	ERNESTO ARBANIL
	HAROLD KRAMER
	JASON OREFICE
	KATHLEEN CALDWELL
	KYLE BRUCKER
	MARCELA ALBA
	MARCIA ELLISON
	MOVING HELP
	ROBERT BIRD
	SOLANA BEACH TAXI
	TONY PALAZZO

Target Street	Cross Street	Source
✓	-	Cole Information Services

STEVENS AVE 2013

720	ENEDINA SANCHEZ
722	MANUEL SENTENO
724	PORFIRIO AGUILAR
728	LUCIANO ZEPEDA
730	OCCUPANT UNKNOWN
732	RALPH MAGDALENO
736	ABRAHAM DELEON
	CARLOS GONZALEZ
738	OCCUPANT UNKNOWN
740	OCCUPANT UNKNOWN
742	CATHERINE REDLER
	GABRIEL MONTES
744	KEVIN MORAINE
	OCCUPANT UNKNOWN
746	VERNICE MIRANDA
750	NICOLE GORTON
752	JEFF TSAI
802	RONALD ARNAIZ
804	FRANK CORRALES
807	GABRIEL GRANADOS
818	GEORGE MARCINKIEWICZ
820	GREG ANGLEA
821	BULMARO VALENCIA
822	JOSEPH HAWKINS
828	MITRA RAFII
830	CHAD DICKEY
832	EVAN RAMSPOTT
835	MATIAS CHAVEZ
836	TRICIA TAYLOR
838	ROBERT MCCOY
840	GREGORY ADAMS
841	FRANCISCO FLORES
842	EDUARDO ORTEGAMORALES
855	LAURA EGENDORF
	ROBERT REYES
	WILLIAM DOBBS
863	DIRK ANGEL
865	GALE GALE
871	ADAM DANIELS
	ALBINA DAVLIYEVA
	BETSY TRYDER
	CARA TRACEWELL
	CRAIG WENDLAND
	FATIWIE BUN
	FRANCISCO ANDRADE
	HOLLY BOYTIM
	JAMES JOHNSON
	JANE LETVIN
	JIM ELLER
	JONATHAN FARRIS

Target Street	Cross Street	Source
✓	-	Cole Information Services

STEVENS AVE 2013 (Cont'd)

871	KRISTA MILES
	KYLE STILLMAN
	MICHAEL LAY
	NANCY BRUNKHORST
	PAUL DWORAK
	PAUL GUDNASON
	SARAH CARTER
	SERGIO CAPOZZI
	TIMOTHY GOLDMAN

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 2008

115	GABRIELLE SHAPIRO
122	ZAHRA PANAHI
126	DOUG NGUYEN
129	MARK SOLOMON
135	COURTNEY NEWMAN
136	MICHAEL MORRA
	WINDOWSCENES
139	CHRISTOPHER HENDERSON
142	H HAMILTON
144	OCCUPANT UNKNOWN
148	JOHN CARADINE
151	CHARLES ZIMMERMAN
166	RANDY OCONNELL
167	MEHRDAD YAZDANI
170	CASA DE LAS ORQUIDEAS
	LOREN BATCHMAN
173	SCOTT HELD
176	AMY YATES
181	BYRON DISSELHORST
182	MICHAEL BAKER
187	FIVESPROCKETS
	FIVESPROCKETSZ
	RANDY ULLRICH
204	DORUAN LYTLE
208	VOLEY RENNER
209	O CORNELIUS
210	KATHY DAVIS ASSOCIATES INC
	ROGER DAVIS
212	CRAIG HUNSAKER
215	KEN BIBLOWITZ
221	RONALD SILVEIRA
231	EDWARD AMMER
232	LARRY CASE
239	OCCUPANT UNKNOWN
247	TERRI FRANKLIN
248	OCCUPANT UNKNOWN
250	JENS VELKEN
255	JAMES TEMPLES
	TEMPLES ORCHIDS & WEDDINGS
258	ANDREW KAY
302	FRANK NALIBOFF
314	BILL KOFFLER
318	PAUL HOCK
319	WALTER CZERMINSKI
326	OCCUPANT UNKNOWN
328	OCCUPANT UNKNOWN
330	MARTIN GRIGLAK
336	ELC 1
345	MARY LAPHAM
354	OCCUPANT UNKNOWN

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 2008 (Cont'd)

355	WOLFGANG DILLMAN
356	CARY COLBERT
	CM COMMERCIAL REAL ESTATE INC
360	OCCUPANT UNKNOWN
410	ROBERT MAXWELL
422	SUSAN WHEELER
430	OCCUPANT UNKNOWN
436	RUSSELL HUNT
438	ERIK JOHNSON
440	DEANNA BRUNS
	DEANNA FARRELL DESIGNS
442	MIKEL WEINBERG
444	ALVARO CELESTINO
454	O GJERDE
502	MICHAEL BAUER
508	THOMAS FERRIS
510	DAVID CHECKLEY
512	ISMAEL SANCHEZ
	SOLANA ORCHIDS
515	ARNOLD MAGEE
516	ELDA GARNER
519	DETLEV HASSELMANN
521	AUGUSTUS DADDI
523	WILLIAM LANGDON
	WOOD WIZARD
524	OCCUPANT UNKNOWN
525	OCCUPANT UNKNOWN
544	APPROPRATE DIAGNOSTICS FOUNDATION
	PORTABLE MEDICAL LABORATORIES INC
	WARREN SANBORN
545	RICHARD MOORE
550	CALIFORNIA FINANCIAL ASSOCS
558	O WASSEL
606	OCCUPANT UNKNOWN
614	JOSE RAMIREZ
622	NANCY HULBIRT
623	SAINT JAMES ACADEMY
625	ROMAN CATHOLIC BSHP OF SAN DG
	SAINT JAMES CATHOLIC CHURCH
	SAINT JAMES MISSION CIRCLE
630	LORI ANDERSON
638	MARTIN SNYDERMAN
	MARTY SNYDERMAN PRODUCTIONS
654	JOHN A WILSON III INC
	JOHN WILSON
661	ALBERTO VELAZQUEZ
	ALICIA ORDUNA
	AYME GARCIA
	BETTY REDMON
	DAIREUS MANN

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 2008 (Cont'd)

661	FRANCISCO ANDRADE
	JAMES SHOBLOCK
	MARY HUX
	MONICA AVENA
	OTILIO SANTIAGO
	SARAH DRUBIG
662	MARK WELLS
665	KATHIE CRITTENDEN
	KELLI KUHEN
	SHIRLEY MEIER
669	BARBARA HEALEY
	C FRITTS
	CHRISTINA BALANGUE
	DARREN PERESS
	EDDIE DEMEUSE
	FRITTS BOLOVAN
	HOLLY SCHEIDELER
	JACQUELINE BRUCHEZ
	KEVIN KREEGER
	LEO LEE
	ROD SLAGLE
	SIMA SEDIGH
	WARREN MURPHY
679	ALBERT AGHAZARIAN
	BUCKSHOT GRAYHALL
	CAROLINE BRILL
	CYNTHIA NORMAN
	DANA HAYMAN
	DAYIN LIN
	HERMILA ESPANA
	JASON SPINNER
	JUN HASHIMOTO
	LACE ANDERSEN
	MANDY WOLFORD
	PAUL DILEO
	ROBERT PIALA
	RUSSELL STCLAIR
	SAM ROBERTSON
	SKVORC JESSIE
	TIMOTHY MELTON
	VINCENT MASTRANGELO
	WALLY ROBINSON
683	ANSELMO ARIAS
	CODY CULLEN
	CRESPO RAMIREZ
	EMILIO ROSAS
	FRANK MYERS
	GREG MONTULLI
	PABLO DELAO
	PAULA SHAW

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 2008 (Cont'd)

687	ERIC VANDOREN
	ESTEBAN TORRES
	JEFFREY EDINGER
	LUIS ALVAREZ
	MARY MCTERNAN
	RIGOBERTO GARCIA
691	ANGELA VELARDE
	BENITA CARRILLO
	COLIN GREENALW
	GASPAR ARROYO
	JONATHON ALLEN
	SELENA ORTIZ
695	ANGIE SANCHEZ
	D ANASTASI
	DEREK MILLER
	GIAN CURRY
	JENNIFER BIBAY
	JOCELYN VANREUSEN
	JODIE SCHUETZ
	JOHN BURKE
	LISA KAMINSKY
697	DENELLE SMALLEY
	JANEL RIDDLE
	ROBERT ENNIS
702	ROBERT BRUUN
709	ART PARZER
	BEN INSTONE
	IRIS FIGEROA
	LOPEZ CORONA
	MARYANNE GROVE
710	ERICK ABNEY
717	B REEVE
	ELBA ISMAILOGLU
	JULIO RAMIREZ
	LAWRENCE WALSH
718	EAST WEST HEALTH SERVICES
	JILL MAVROMATIS
	WOO RAYMOND M
725	ANA SOSA
	BRISA ESPANA
	CHIKA ISHIBASHI
	EMILIANO VILLA
	FAHAD ABDALY
	ISAIAS SANTIAGO
	MELISSA WATTERS
726	WILLIAM EVANS
730	PETER DOODY
740	TERRANCE HART
757	GUADALUPE HERNANDEZ
	JOHN BARR

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 2008 (Cont'd)

757	KATHRYN MILLER
	MARK WHITLEDGE
	P GOMEZ
764	L SADDLERIDGE
765	AMY LAWRENCE
	DOGS ARE AWESOME PET SITTING SERVICE
	EMESE JUHASZ
	EMITIME INC
	FRANCISCO DELCAMPO
	JAIME FISCHER
	JASON ELLENBURG
	KRISTIN ROGERS
	L MARUYAMA
	LEONOR CASTILLO
	LOIS JACKSON
	MICHAEL FORTIN
	PAMELA BOYSE
	RITA SPARKS
	RUTH KNITTLE
	SCOTT SEWING
	WEEE ENVIRONMENTAL SERVICES LLC
766	A DURKIN
	ALVARO VILLALOBOS
	DAN BUTLER
	DEMITRIOS VAFIADIS
	DENNIS PAULSEN
	DINORA LAINEZ
	ENEDINA SANCHEZ
	ESTRELLA RAMOS
	GUADALUPE ESCOBAR
	JADE UPDEGRAFF
	JEREMY ULLMANN
	JOSEPH MCGINNIS
	JUAN LANDA
	KRISTINA KNIGHTS
	LAZARO ESPANA
	LINDSAY BJORNSON
	LOUIS SOSA
	MARIA LEDESMA
	MATTHEW BIGOS
	MAUREEN PATTERSON
	MICHAEL MILLER
	OSCAR PEREZ
	PAULA MENDOZA
	R GUTIERREZ
	RAQUEL ROCHA
	ROCIO MERIDA
	SADA SHELDON
	SAMUEL ARROYO
	SOFIA GARCIA

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 2008 (Cont'd)

766	SOTO GONZALEZ
773	HERLINDO MARTINEZ
	JUANA TORIVIO
	KELLY AKK
	MARIO BACA
	RENEE CARTER
	ROSA SALGADO
	SILVINA VAZQUEZ
	ULRICH LUDWIG
	VICENTE SOTELO
781	AMY WINBURN
	ANNE AMANTEA
	BRIAN GOMPF
	CAROLE COBURN
	DOUG EVANS
	DOUG MULLER
	ERIN GRAYCE
	JANICE PALAGANAS
	JANNINE MILLS
	JOHN HARTEN
	LANAE FELICE
	LORRAINE TRAVIS
	MARCO RANGEL
	MARIE CAPIZZI
	MEGAN HENRY
	NEIL SMITH
	NICOLE JACKSON
	PATRICIA BUMPASS
	PEDRO SANTIAGO
	ROBERT SCOTT
	SARAH CHRUSH
	SHARON MULLIGAN
	TODD STROTHER
	WEI LI
	YUANMINY ZHANG

Target Street	Cross Street	Source
✓	-	Cole Information Services

STEVENS AVE 2008

720	JIM SARENANA
722	ARTHUR SENTENO
724	JOSE BELTRAN
726	FELIPE LOPEZ
728	LUCIANO ZEPEDA
730	JOEY BETANCOURT
736	ABRAHAM DELEON
	CARLOS GONZALEZ
738	OCCUPANT UNKNOWN
740	JASON THOM
	OCCUPANT UNKNOWN
742	BORA HAN
	JULIAN MAINDONALD
744	GIACOMOS ESPRESSO
	GREGORY BROOKS
	MATT BROCKMAN
	MATT BROCKMANN
	OCCUPANT UNKNOWN
746	ALFRED GUYER
	OCCUPANT UNKNOWN
750	OCCUPANT UNKNOWN
752	OCCUPANT UNKNOWN
802	DANIEL MEDINA
	OCCUPANT UNKNOWN
	SANDRA VALDES
804	FRANK CORRALES
807	GABRIEL GRANADOS
818	GEORGE MARCINKIEWICZ
820	GREG ANGLEA
821	TERRY SITTINGER
822	ELLEN KOLLER
828	MARY KOVALESKI
830	OCCUPANT UNKNOWN
832	MICHAEL WALL
834	JENNIFER JENKINS
	JENNIFER JUDKINS
835	DANIEL LOFTUS
836	ANDRE OLIVEIRA
840	GREGORY ADAMS
841	FRANCISCO FLORES
842	EDUARDO MORALES
847	BEKKAH SNIDER
	OCCUPANT UNKNOWN
	S RODGERS
	VENKATA CHEMBROLU
855	LAURA EGENDORF
	NIC COLGLAZIER
	ROBERT REYES
	WILLIAM DOBBS
857	OCCUPANT UNKNOWN

Target Street	Cross Street	Source
✓	-	Cole Information Services

STEVENS AVE 2008 (Cont'd)

863	DIRK ANGEL
865	GALE GALE
871	ALLISON FLEMING
	AMY OSTER
	ANGEL BELTRAN
	BEATRIZ DURAN
	BENJAMIN HERRERA
	CRAIG WENDLAND
	CRISTINA RIVERA
	DEVIN SIMONDES
	DOUGLAS HANES
	ELIZABETH CARMEN
	HOLLY BOYTIM
	JASON STEPHENSON
	JEREMY TOWNSEND
	JIM ELLER
	JOAN ALLMARAS
	JOSE CUAUTLE
	KATHLEEN WOLF
	LINDA BOOKOUT
	MARIO GARCIA
	MARK WILSON
	NADIA VALDOVINOS
	SHAUNA BANHAGEL
	SOFIYA KANDEL
	STEVEN KERR
	VANESSA NGUYEN

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 2003

115	ANTHONY PERRICONE
122	CD DESIGN ASSOC
	CHRISTOPHER DELUCCHI
126	ERIK VOGT
129	MARK SOLOMON
135	COURTNEY BOULLE
136	MICHAEL MORRA
139	CHRISTOPHER HENDERSON
142	BRUCE PERSON
144	JOE CARROZZO
148	JON CARADINE
151	LISA DELUCA
154	OCCUPANT UNKNOWN
155	ARBUTUS MCLEOD
166	RANDALL OCONNELL
167	DONALD PEPPLER
170	CASA DE LAS ORQUIDEAS
	LOREN BATCHMAN
173	PETER BYRUM
176	NOAH FINK
181	BYRON DISSELHORST
182	MICHAEL BAKER
187	RANDY ULLRICH
204	DORUAN LYTLE
208	VOLEY RENNER
209	PATRICIA CORNELIUS
210	ENDOGENE
	ROGER DAVIS
212	JAMES MULVEY
215	ROBERT BUEHLER
221	RONALD SILVEIRA
231	EDWARD AMMER
232	LARRY CASE
239	DAVIS SUSKIND
247	TERRI FRANKLIN
248	OCCUPANT UNKNOWN
250	JENS VELKEN
255	JAMES TEMPLES
258	STEPHEN KAY
302	FRANK NALIBOFF
	SIX EIGHT LLC
309	GLENN RANKLIN
	RANKIN GLENN
314	WILLIAM KOFFLER
316	OCCUPANT UNKNOWN
319	VIRGIL THOMPSON
326	JEAN GUITTARD
330	MARTIN GRIGLAK
336	EVAN COOPER
355	DILLMAN WOLFGANG MD

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 2003 (Cont'd)

355	WOLFGANG DILLMANN
356	CARY COLBERT
360	MERVYN RIVIERE
410	ROBERT MAXWELL
436	RUSSELL HUNT
438	ERIK JOHNSON
440	DEANNA BRUNS
	DEANNA FARRELL DESIGNS
442	MIKEL WEINBERG
444	RAYMOND ZENICK
454	TORBJORN GJERDE
502	MICHAEL BAUER
508	THOMAS FERRIS
510	DAVID CHECKLEY
512	FELIZ MEJA
515	ARNOLD MAGEE
516	OCCUPANT UNKNOWN
519	DETLEV HASSELMANN
521	AUGUSTUS DADDI
523	LANGDON ASSOC
	WILLIAM LANGDON
524	EUGENIA VERGARA
	TERRAMEX INC
525	BRUCE SPECTOR
538	ROSALIE OHRE
544	PORTABLE MEDICAL LAB
	WARREN SANBORN
545	RICHARD MOORE
550	JEROME HREN
558	ALBERT WASSEL
606	OCCUPANT UNKNOWN
612	FREDERICK NORWICH
614	MABLE GUTSHALL
622	LOWELL HULBIRT
623	OCCUPANT UNKNOWN
	ST JAMES ACADEMY
625	MARK MAXWELL
	ST JAMES CATHOLIC CHURCH
	ST JAMES MISSION CIRCLE
630	LORI ANDERSON
638	MARTIN SNYDERMAN
	MARTY SNYDERMAN PRODUCTIONS
654	JOHN WILSON
661	ALICIA ORDUNA
	ANDREA KRIEGLER
	ANDREA KRIEGLER-ROBERTSON
	CAROL SIMKIN
	DENNIS BURNHOUSE
	HAROLD KREEGER
	J LARRAGA

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 2003 (Cont'd)

661	JUSTIN HIERSCHE
	KELLY NELS
	KREEGER LEASING
	MAKEUP MAGIC
	MICHAEL FORMAN
	NESTOR ALBAY
	REBECCA MANRY
	THOMAS ALAN
	VICTORIA MCLAUGHLIN
	VIRGINIA GAMBLE
662	MARK WELLS
665	KATHIE CRITTENDEN
669	A BENNETT
	CHRIS DEVLIN
	DARREN PERESS
	JOHN LEFFLER
	JULIE ROSSKOPF
	KEN CORNWELL
	Q VORK
	ROBERT WOODS
	ROD SLAGLE
	TIM HEWITT
679	ADAM WOLFE
	BRYAN IVERSON
	CAROLINE BRILL
	CHARLES MILLER
	CHRISTINE ANDERSON
	CYNTHIA NORMAN
	DAYIN LIN
	E NELSON
	EDWARD BOWES
	GREGORY GRAND
	JAROD WINTERS
	JOSHUA RODGERS
	JUNKO TAKASU
	KATHLEEN KRULIK
	MICHELE ERVIN
	NAT SMITOBOL
	NORA LEFEVRE
	PAULA ZAMARO
	ROXANNA DIBAI
	SAM ROBERTSON
	SWELL DESIGN GROUP
	VINCENT MASTRANGELO
683	BARRY GRAZIANO
	ERIKA BATARAN
	JACOB KANDATHIL
	KANDATHIL JACOB
	KIMBERLY PETERSON
	LEE STORCH

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 2003 (Cont'd)

683	PARKER MOODY
687	ALIK NAGEL
	ALON LEIBLER
	BRUCE WILCOX
	JOYCELYN KENNEDY
	VICTORIA REINA
691	ALICIA UTHOFF
	DEBBIE CANNING
	DIANCA DALY
	HEATHER BROOKE
	JORGE GONZALEZ
	LAUREL NICHOLS
	MARSI KEARNS
	N PAUL
	NITA GOMEZ
	SARAH WILEY
695	ALLIANCE ENTERPRISES
	CRAIG BECK
	ERIC COX
	JOHN BURKE
	KAARE OLSEN
	LESLIE CASH
	MARY PELLEGRINO
697	DAVID WALLS
	MELODIE NOETZLI
	MITRA FATTAHIPOUR
	WILLIAM HOLMES
701	DENNIS BRAUN
	HALEY ARUNDALE
	SOLANA HIGHLANDS
702	KATHLEEN BRUUN
709	BEN INSTONE
	EDWARD CHAVEZ
	ERIN CHAMBERLAIN
	GIL CLARK
	ROSA SALGADO
	SHAWN CASTLEBERRY
	TERESA MARCOUX
	TOM VOSHELL
710	PAUL KRYSINSKI
717	E ROYBAL
	ELBA ISMAILOGLU
	LAWRENCE WALSH
	MICHAEL TRACY
	TRAVIS DOWNING
	TWYLA SVALSTAD
718	RAYMOND WOO
725	CAROLYN EADIE
	DAVID GORDON
	JAMES SCOTT

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 2003 (Cont'd)

725	L JOHNSTON
	NICOLE PETERSON
726	WILLIAM EVANS
730	PETER DOODY
740	TERRANCE HART
757	JOHN BARR
	KEVIN OLSON
	MARIA ARREGUIN
	MARK TOOMEY
	MELANIE SIDERS
	MICHELLE BARTH
765	ANNA HAGAN
	DENNY BRAUN
	DWIGHT WEEVIE
	FERNANDO CHAVEZ
	JOHN ORD
	JOHN WILKE
	JUNKO MINE
	KELLY DENEUI
	KEVIN JOYCE
	LAEH MANSFIELD
	MARYA NORDENHOK
	MELODIE NOETZLI
	ROSANNA VERNINI
	SARAH HUGHES
	SHANNON KIMBERLEY
	STEVE CLAYTON
	STEWART SCHWERTOK
766	A DURKIN
	AMELIA YORDI
	BARBARA TURNER
	BETH MARLOWE
	BETTY BROWN
	CHRIS SANTOS
	J MORSE
	JENNIFER SNEDDON
	JOHN GILLICK
	KATIE EMBICK
	KRISTEN ANDERSON
	LINDA POINTER
	LISA HESLER
	LOUIS SOSA
	LYNDI PARRETT
	MARY PYLAND
	MATTHEW READE
	MICHAEL MILLER
	MIKE CULVER
	PHILIP POTTIER
	ROBERT CANAAN
	SADDLERIDGE DEL MAR APARTMENTS

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 2003 (Cont'd)

766	SCOTT FRANKLIN
	STEVE WILSON
	TERRY WARDELL
	TRACEY NORDOST
	WILLIAM KOSIK
773	JOSUE ROMAN
	MODESTO SANTIAGO
	SILVINA VAZQUEZ
	TAM NOLAN
	THOMAS SACCO
781	AMANDA YOUNG
	BRETT MIDDLETON
	BRIAN GOMPF
	DANIEL SARNER
	DELORES DILLY
	DEREK BROWN
	E MILLER
	GABRIELA TOBAL
	HAROLD KREEGER
	JANICE PALAGANAS
	JENNIFER SWITZER
	JOHN HARTEN
	JOHN LATTIG
	KATHRYN BURG
	LISA KUES
	LUIS VILLAVICENCIO
	MARK PIERSON
	MAUREEN BLAND
	PATRICIA BUMPASS
	RACHEL BRADLEY
	RANDY STAAB
	RILEY CINDI
	ROBERT KELLEY
	RUSSEL NEWMAN
	SHANNON KEITHLEY
	SHARON MULLIGAN
	WALTER TRAVIS
	WILL REGAN

Target Street	Cross Street	Source
✓	-	Cole Information Services

STEVENS AVE 2003

720	JIM SARENANA
722	ALEJANDRO MARTINEZ
724	JOSE BELTRAN
728	CRUZ SALDIVAR
730	OCCUPANT UNKNOWN
732	OCCUPANT UNKNOWN
736	ABRAHAM DELEON
	OCCUPANT UNKNOWN
738	OCCUPANT UNKNOWN
740	LAWRENCE CANINO
	OCCUPANT UNKNOWN
	ROLF LAAKSONEN
	SHELBY HARVEY
742	JOSEPHINE PEREYRA
	RANJAN LAHIRI
744	OCCUPANT UNKNOWN
746	WANDA BOWLBY
750	FRANCIS FIHN
752	OCCUPANT UNKNOWN
802	PAUL NEWMAN
804	CASTELLO INC
	FRANK CORRALES
807	ALICE GRANADOS
818	GEORGE MARCINKIEWICZ
820	OCCUPANT UNKNOWN
821	TERRY SITTINGER
	W SEELEY
822	MILES KAN
824	JENNIFER BOYD
828	OCCUPANT UNKNOWN
830	OCCUPANT UNKNOWN
832	YORK MONTANEZ
834	KRISTEN FILLAT
835	DANIEL LOFTUS
836	JAMES ROBERTS
838	MURIEL SANDERSON
840	GREGORY ADAMS
841	FRANCISCO FLORES
842	ELEANOR DESARACHO
847	LANCE YOUNG
855	KATE HOOVER
	ROSALIE KLUGMAN
	WILL DENDY
857	OCCUPANT UNKNOWN
863	ANGEL CONSTRUCTION
871	ALICIA FORBES
	BRIGITTE YVON
	C CABALLIDO
	CESAR CASTILLO
	CLEMENT SALDIVASVASQUEZ

Target Street	Cross Street	Source
✓	-	Cole Information Services

STEVENS AVE 2003 (Cont'd)

871	DANIEL LITZ
	DAVID GALE
	DOUGLAS HANES
	ERIC WEBB
	ERNESTINA PEREZ
	GLEN FELKER
	GUADALUPE SAUCEDO
	JACQUES JOURDAIN
	JANE BENNETT
	JEREMY SCHMUTZ
	JOHN PIHL
	JUAN LARA
	JULIE HARRIS
	JULIE THOMAS
	KERRY PLAUGHER
	KIM HELLMAN
	LEONARD KOLINSKY
	LISA BRYANT
	LORI EHMER
	LUCAS STAMES
	MIGUEL RODRIGUEZ
	NADIA VALDOVINOIS
	PORFIERO AXOMULCO
	ROBERT PICKARD
	ROSA BERNAL
	SCOTT OKELBERRY
	SHEENA MARVIN

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 1999

122	ZAHRA PANAHI
126	DOUG NGUYEN
129	MARK SOLOMON
	OCCUPANT UNKNOWN
135	COURTNEY NEWMAN
136	MICHAEL MORRA
139	CHRISTOPHER HENDERSON
	OCCUPANT UNKNOWN
142	HOWARD HAMILTON
148	JOHN CARADINE
151	CHARLES ZIMMERMAN
154	OCCUPANT UNKNOWN
167	PETER MCARTHUR
170	LOREN BATCHMAN
173	SCOTT HELD
176	AMY YATES
181	BYRON DISSELHORST
182	MICHAEL BAKER
187	RANDY ULLRICH
204	DORUAN LYTLE
	KRC TECHNOLOGIES
	OCCUPANT UNKNOWN
208	OCCUPANT UNKNOWN
	VOLEY RENNER
209	JOSEPH COOKE
210	O DAVIS
212	CRAIG HUNSAKER
214	OCCUPANT UNKNOWN
215	MICHELE GORCEY
	STANGER NEVILLE MAI
221	RONALD SILVEIRA
226	OCCUPANT UNKNOWN
231	EDWARD AMMER
247	OCCUPANT UNKNOWN
	TERRI FRANKLIN
250	JENS VELKEN
255	JAMES TEMPLES
258	OCCUPANT UNKNOWN
302	FRANK NALIBOFF
314	BILL KOFFLER
	OCCUPANT UNKNOWN
318	PAUL HOCK
326	ERICK GUITTARD
328	WILLIAM CANEPA
330	MARTIN GRIGLAK
336	OCCUPANT UNKNOWN
355	WOLFGANG DILLMAN
356	CARY COLBERT
410	ROBERT MAXWELL
422	HEATHER SWORTWOOD

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 1999 (Cont'd)

430	MARTIN BUSER
436	RUSSELL HUNT
438	ERIK JOHNSON
	OCCUPANT UNKNOWN
440	DEANNA FARRELL
442	MIKEL WEINBERG
444	RAYMOND ZENICK
454	O GJERDE
502	MICHAEL BAUER
508	THOMAS FERRIS
510	DAVID CHECKLEY
512	OCCUPANT UNKNOWN
515	ARNOLD MAGEE
516	ISMAEL SANCHEZ
519	NORMA HASSELMANN
521	AUGUSTUS DADDI
523	WILLIAM LANGDON
538	OCCUPANT UNKNOWN
544	WARREN SANBORN
545	RICHARD MOORE
558	O WASSEL
606	OCCUPANT UNKNOWN
614	JOSE RAMIREZ
622	NANCY HULBIRT
623	ST JAMES CATHOLIC CHURCH 625 S NARDO AVENUE
625	ST JAMES CATHOLIC CHURCH PARISH OFFICE
	ST JAMES MISSION CIRCLE
630	LORI ANDERSON
638	MARTIN SNYDERMAN
654	JOHN WILSON
661	ADAM ROSALES
	ALICIA ORDUNA
	AYME GARCIA
	BETTY REDMON
	FRANCISCO ANDRADE
	JAMES SHOBLOCK
	MONICA AVENA
	NATASHA PEREZ
	NOE OLVERA
	OTILIO SANTIAGO
	SARAH DRUBIG
662	MARK WELLS
665	KATHIE CRITTENDEN
	KELLI KUHEN
	SHIRLEY MEIER
669	BARBARA HEALEY
	EDDIE DEMEUSE
	FRITTS BOLOVAN
	JACQUELINE BRUCHEZ
	KEITH KIRK

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 1999 (Cont'd)

669	KEVIN KREEGER
	LEO LEE
	MARK BERNARD
	WARREN MURPHY
679	ALBERT AGHAZARIAN
	CYNTHIA NORMAN
	JOSE HUERTA
	JULIA PIALA
	PAUL DILEO
	SAM ROBERTSON
	SKVORC JESSIE
	TIMOTHY MELTON
	V MASTRANGELO
	VINCENT MASTRANGELO
683	ANSELMO ARIAS
	C PAULA
	CRESPO RAMIREZ
	EMILIO ROSAS
	FRANK MYERS
	MAHRIAH HUFT
	PABLO DELAO
	PAULA SHAW
687	ERIC VANDOREN
	KREEGER LEASING
	LUIS ALVAREZ
	RIGOBERTO GARCIA
	TORRES ESPINOZA
691	ANGELA VELARDE
	COLIN GREENALW
	JOHN CHAVEZ
	RICHARD OCONNELL
	RUSS BRUNER
	SHAWNA SPENCER
695	ANGELA MENDOZA
	ANGIE SANCHEZ
	DARREN FLINT
	DENNIS ANASTASI
	GEORGE HIERSCHE
	JENNIFER BIBAY
	JODIE SCHUETZ
	LISA KAMINSKY
	RICHARD MARX
	SEAN MCPARLAND
697	DANIEL FRANKLIN
	DENELLE SMALLEY
	JANEL RIDDLE
	ROBERT ENNIS
701	SOLANA HIGHLANDS APARTMENTS
702	ROBERT BRUUN
709	DAVID SOKOLOWSKI

S NARDO AVE 1999 (Cont'd)

709	LOPEZ CORONA
710	ERICK ABNEY
717	ALMA HERNANDEZ
	AMIT SRIVASTAVA
	B REEVE
	JOSE REYES
	JULIO RAMIREZ
718	JILL MAVROMATIS
	OCCUPANT UNKNOWN
725	BRISA ESPANA
	EDILFONSA CORTEZ
	EMILIANO VILLA
	ISAIAS SANTIGO
	MORGAN LESUER
	RYAN FETTERLY
726	WILLIAM EVANS
730	PETER DOODY
740	HART TERRY
757	AZUCENA CRUZ
	P GOMEZ
764	L SADDLERIDGE
765	HELEN MATHEWS
	KEVIN LYSTER
	L MARUYAMA
	MATTHEW MENNER
	MIKE STEWART
	PAMELA BOYSE
	RENE LOPEZ
	RITA SPARKS
	RUTH KNITTLE
	SCOTT SEWING
	YVONNE FORTIN
766	ALBERT MACKENIZE
	ALVARO VILLALOBOS
	DENNIS PAULSEN
	ENEDINA SANCHEZ
	ESTRELLA RAMOS
	GUADALUPE ESCOBAR
	JADE UPDEGRAFF
	JEREMY ULLMANN
	JORGE ROSAS
	JOSEPH MCGINNIS
	JUAN LANDA
	KIM LUNZER
	KRISTINA KNIGHTS
	LAZARO ESPANA
	LEONOR ROJAS
	LINDSAY BJORNSON
	MARIA LEDESMA
	MATTHEW BIGOS

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 1999 (Cont'd)

766	MICHAEL MILLER
	OSCAR PEREZ
	PAULA MENDOZA
	PORFIRIO OXOMULCO
	R GUTIERREZ
	RAUL ASUMULCO
	ROCIO MERIDA
	SADA SHELDON
	SADDLERIDGE DEL MAR APARTMENTS
	SAMUEL ARROYO
	SOFIA GARCIA
773	CRUZ MARTINEZ
	JUANA TORIVIO
	KELLY AKK
	MARIO BACA
	RENEE CARTER
	ROSA SALGADO
	SILVINA VAZQUEZ
	ULRICH LUDWIG
	VICENTE SOTELO
781	ANNE AMANTEA
	BRETT BEUCKMAN
	CANDICE RICKER
	CAROLE COBURN
	CRISTINA NIETO
	DOUG MULLER
	ERIN GRAYCE
	HEIDI STRUGAZOW
	LESLIE HALPER
	MARCELA ALVA
	MARCO RANGEL
	ROBERT BIRD
	ROBERT SCOTT
	SARAH CHRUSH
	WADE THOMPSON
	YUANMINY ZHANG

Target Street	Cross Street	Source
✓	-	Cole Information Services

STEVENS AVE 1999

720	STELLA LILEY
722	ARTHUR SENTENO
724	PORFIRIO AGUILAR
726	FELIPE LOPEZ
728	LUCIANO ZEPEDA
	OCCUPANT UNKNOWN
730	DEBRA LANGHOLFF
	OCCUPANT UNKNOWN
732	OCCUPANT UNKNOWN
736	ABRAHAM DELEON
	CARLOS GONZALEZ
	OCCUPANT UNKNOWN
740	JASON THOM
742	BRIAN LAMERE
	OCCUPANT UNKNOWN
746	ALFRED GUYER
750	OCCUPANT UNKNOWN
752	PAIGE RUBENBAUER
	TIM MAYALL
802	DANIEL MEDINA
	SANDRA VALDES
804	FRANK CORRALES
807	GABRIEL GRANADOS
818	GEORGE MARCINKIEWICZ
820	GREG ANGLEA
	OCCUPANT UNKNOWN
821	TERRY SITTINGER
822	ELLEN KOLLER
	OCCUPANT UNKNOWN
828	MARY KOVALESKI
	OCCUPANT UNKNOWN
830	LAURA TOURIN
	OCCUPANT UNKNOWN
832	MICHAEL WALL
834	JENNIFER JENKINS
	OCCUPANT UNKNOWN
835	DANIEL LOFTUS
	OCCUPANT UNKNOWN
836	ANDRE OLIVEIRA
837	OCCUPANT UNKNOWN
840	GREGORY ADAMS
	OCCUPANT UNKNOWN
841	FRANCISCO FLORES
842	EDUARDO MORALES
847	S RODGERS
	VENKATA CHEMBROLU
855	LAURA EGENDORF
	ROBERT REYES
	WILLIAM DOBBS
857	OCCUPANT UNKNOWN

Target Street	Cross Street	Source
✓	-	Cole Information Services

STEVENS AVE 1999 (Cont'd)

863	DIRK ANGEL
865	GALE GALE
871	ALLISON FLEMING
	ALYSSA LILLY
	ANGEL BELTRAN
	ARMANDO GUTIERREZ
	BENJAMIN HERRERA
	BLYTHE WILSON
	CRAIG WENDLAND
	ELIZABETH CARMEN
	HOLLY BOYTIM
	JAMES JOHNSON
	JASON STEPHENSON
	JEREMY TOWNSEND
	JIM ELLER
	JOAN ALLMARAS
	JOSE CUAUTLE
	LINDA BOOKOUT
	MARIO GARCIA
	MARTINE TURLEY
	MARTY MATHIESEN
	MIGUEL MONROY
	NADIA VALDOVINOS
	NICOLE KRANZBERG
	SHAUNA BANHAGEL
	TOM CHEK

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 1995

109	MINEMIER, ROBERT H
115	PERRICONE, G S
122	DELUCCHI, C
126	VOGT, ERIK
129	OCCUPANT UNKNOWNN
135	OCCUPANT UNKNOWNN
136	JAMES, NANCY A
	MCDONALD, BRIAN
	MORRA, MICHAEL P
139	MORRISSEY, LINDA L
142	PERSON, BRUCE L
144	CARROZZO, JOE F
148	HANSSON, C
151	ZIMMERMAN, CHARLES
154	MARTIN, HUGH B III
155	MCLEOD, FRANK
166	OCCUPANT UNKNOWNN
170	BATCHMAN, LOREN E
173	OCCUPANT UNKNOWNN
176	SENN, I D
181	DISSELHORST, BYRON F
182	LAND & WATER RESOURCES INTL
	OCCUPANT UNKNOWNN
187	MCFARLAND, BRUCE
204	KRC TECHNOLOGIES
	RIETMAN, MIKE
	TEAGUE, SUSAN
208	RENNER, VOLEY
209	OCCUPANT UNKNOWNN
210	DAVIS, ROGER A
212	OCCUPANT UNKNOWNN
214	WARYAS, RICHARD
215	TUROSAK, DAVID L
221	SILVEIRA, RONALD L
226	ALVAREZPULIDO, R
	QUINTERO, M
231	AMMER, LOIS G
247	HAMILTON, JAMES
250	VELKEN, JENS
255	TEMPLES, JAMES M
258	KOPISCHIANSKY, FRANK
313	OCCUPANT UNKNOWNN
314	OCCUPANT UNKNOWNN
319	JUNG, RAYMOND A II
326	WALDEN, LEONARD J
335	WILKENS, VIOLET C
336	OCCUPANT UNKNOWNN
345	LAPHAM, DONALD C
354	OCCUPANT UNKNOWNN
355	DILLMAN, W

Target Street	Cross Street	Source
-	✓	Cole Information Services

S NARDO AVE 1995 (Cont'd)

356	COLBERT, CARY
405	GAY, EARL H
410	OCCUPANT UNKNOWNN
415	OCCUPANT UNKNOWNN
436	HUNT, RUSSELL E
438	DOWNS, MICHAEL
440	GRUBER, DUANE
444	ZENICK, RAYMOND G
454	GJERDE, T
502	BAUER, MICHAEL M
508	BURDICK, JAMES R
510	CHECKLEY, DAVID M JR
	LEVIN, L
512	OCCUPANT UNKNOWNN
519	HASSELMANN, DETLEV E
521	DADDI, A B
523	LANGDON, WILLIAM D
524	EDWARDS, FRANK O
525	SPECTOR, BRUCE
538	OCCUPANT UNKNOWNN
544	SANBORN, WARREN R
545	DECASTONGRENE, MARTIN
550	HREN, JEROME L
558	OCCUPANT UNKNOWNN
606	MCCULLOUGH, DONALD
614	KELLENBARGER, CHARLES F
622	HULBIRT, LOWELL H
623	ST JAMES ACADEMY
625	ST JAMES CATHOLIC CHURCH
	ST JAMES MISSION CIRCLE
638	OCCUPANT UNKNOWNN
646	OCCUPANT UNKNOWNN
654	WILSON, JOHN A III
655	OCCUPANT UNKNOWNN
657	OCCUPANT UNKNOWNN
661	MCKENNEY, RHONDA L
	MORGAN, M
662	OCCUPANT UNKNOWNN
665	AARON, BETTY M
	LEE, MAE
	RAMSEY, TIM
669	BLEIL, JEFF
	GERKIN, M A
	LEFFLER, JOHN S
	ROBERTS, SUSAN
	SERVEN, RENEE
	TOTH, THERESA
679	BELLIN, EDWARD H
	BENDIK, IGOR
	CONAWAY, G A

Target Street	Cross Street	Source
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S NARDO AVE 1995 (Cont'd)

679	DALY, JOSEPH T
	ELBERT, DOUGLAS
	FELLNER, C
	HEATH, CHARLES
	MASTRANGELO, V J
	MCFARLAND, DANIEL P
	MORTON, HOUSTON S
	ROBERTSON, SAM
	ROBINSON, ARLENE
	SALBERT, GILLES
	SCHMIDT, DAVID
683	BENAVENTE, KEN R
	FERREIRA, L E
	GALINDO, LOUIS
	OBRIEN, ROBERT
	WARD, JOHN
687	DIGILDO, GINA
	KHALIL, BEVERLY
	ROSEN, SUZANNE
695	BROOKES, DAVID
	FLOWER, MICHAEL
	FRIESEN, M
	KILDUFF, J
	SWAYZE, C
697	DUTTON, TOM
	GOTO, M K
	WOODS, FRANK
701	DEL MAR TURF CLUB APARTMENTS
702	BRUUN, ROBERT F
709	BAUER, EMIL
	CORBIN, JOHN R
	KAPLAN, COREEN
	KEE, AUGUST
	MERTZ, DOUG
	MINEMIER, ROBERT
	MORIOKA, K
710	STEEGER, E J
717	CHOI, BYUNG
	MCGEE, JENNIE
	SAVA, K
	SEDOR, GARY D
	WOLFE, C
718	NAKATANI, COREY
725	HARKINS, S
	ISHIOKA, GLENN Y
	SHATTUCK, JANET A
726	EVANS, WILLIAM A
730	ANGEL, TAMBER
740	HART, TERRY D
756	OCCUPANT UNKNOWNN

S NARDO AVE 1995 (Cont'd)

757	FULKERSON, ROBERT P
	KLETT, C
	TUMBEL, B
	WANG, B
765	BUDDEN, STEVEN M
	COLEMAN, GRACE
	DERIEG, TRACI
	DOLLOPH, JASON
	KALLIS, LAURIE L
	MASON, MARK S
	NELSON, MELISSA
	NOWICKI, VINCENT R
	WILLIAMS, R D
766	CROSTHWAIT, BRENDA
	FEIN, JOHN A
	HAGUE, KELLI
	HARMON, FLOYD
	KLEMKE, RICHARD
	KONOPACKY, DAVID A
	MACKENZIE, ALBERT F
	PASTOR, CLAUDE
	RUSSO, JOSEPH
	SADDLERIDGE DEL MAR APTS
773	ALIA, DANIA
	APFEL, R
	CARPENTER, J
	GIANCHINO, ALFREDO O
	SACCO, THOMAS D
	WHITING, JIM
	WISE, RALPH E
	YAMPOLSKY, JAMES
781	BROWNSON, E
	CLANCY, JOSEPH
	DILLY, DELORES
	MERZ, PETER
	NUECHTERLEIN, MARC A
	SHANE, RYE
	STROHAUER, MIKE
	WELSH, D
	WELSH, DANIEL
	WILLIAMS, DOREEN J

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STEVENS AVE 1995

720	COBB, E C
722	OCCUPANT UNKNOWNN
724	OCCUPANT UNKNOWNN
726	OCCUPANT UNKNOWNN
728	OCCUPANT UNKNOWNN
732	OCCUPANT UNKNOWNN
736	OCCUPANT UNKNOWNN
738	HERRICK, GAYLE
740	GRICE, BARBARA
742	BLAKE, GLORIA
744	OCCUPANT UNKNOWNN
746	OCCUPANT UNKNOWNN
750	MORGAN, PATRICK M
807	GRANADOS, GABRIEL J
818	OCCUPANT UNKNOWNN
820	OCCUPANT UNKNOWNN
822	MARIE, EILEEN
824	WEBER, EDWARD
828	DAHLMAN, CLARK
830	OCCUPANT UNKNOWNN
832	VAIL, CLAUDIA A
834	OCCUPANT UNKNOWNN
835	HERNANDEZ, F
836	OCCUPANT UNKNOWNN
838	MORTLAND, BARBARA J
840	OCCUPANT UNKNOWNN
842	OCCUPANT UNKNOWNN
847	HOOVER, J C
855	OCCUPANT UNKNOWNN
857	MONROE, JOAN
863	ANGEL, DIRK
871	BERTIZ, DONNA M
	DEMOSEY, JOHN
	FLORES, F
	GILMORE, KEITH
	MOHAN, JOSH
	PLOURDE, ROBERT JR
	STEVENSON, SCOTT
	THOMPSON, LISA
	TWOMEY, WEST
	WRIGHT, GERALD JR

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-	✓	Cole Information Services

S NARDO AVE 1992

122	DELUCCHI, C
126	VOGT, ERIK
135	BOEHLERT, WILLIAM
142	PERSON, BRUCE L
144	CARROZZO, JOE F
148	CARADINE, CLYDE R
151	WILLIAMS, ANDREW J
154	MARTIN, HUGH B III
155	MCLEOD, FRANK
167	PEPPLER, DONALD A
170	BATCHMAN, LOREN E
181	DISSELHORST, BYRON F
182	BAKER, MICHAEL E
187	MCFARLAND, BRUCE
204	TEAGUE, SUSAN
208	RENNER, VOLEY
221	SILVEIRA, RONALD L
226	MCELROY, CHIP
247	BOOTH, CHRISTA
255	TEMPLES, JAMES M
302	HASTINGS FUCHSA GDN
319	JUNG, RAYMOND A II
326	WALDEN, LEONARD J
335	WILKENS, GEORGE C
354	ANDERSON, C
355	DILLMAN, W
405	GAY, EARL H
436	HAYES, ROBERTA
	HUNT, RUSSELL E
438	DOWNS, MICHAEL
440	GRUBER, DUANE
454	GJERDE, T
502	BAUER, MICHAEL M
512	SANCHEZ, FELIX
516	GARNER, LEO R
519	HASSELMANN, DETLEV E
521	DADDI, A B
523	LANGDON, WILLIAM D
525	SPECTOR, BRUCE
538	OHRE, OSCAR C
544	SANBORN, WARREN R
550	HREN, JEROME L
606	MCCULLOUGH, DONALD
614	KELLENBARGER, CHARLES F
622	HULBIRT, LOWELL H
623	ST JAMES ACADEMY
625	ST JAMES CATH CH
638	WONG, RICHARD G
654	WILSON, JOHN A III
661	FORKER, JAMES

S NARDO AVE 1992 (Cont'd)

661	GARCIA, JAVIER
	PACCIONE, RICHARD
	WARREN, ERIK J
669	BENNETT, LEGRAND
	BONATO, JEAN
	GERKIN, MARY A
	KORNEITCHOUK, IGOR
	MAJOR APPLNC RPR SV
	SEMLER, JOAN M
	WAY, WILLIAM
679	AUERBACK, JOE
	BLOCK, WALT
	CONAWAY, G A
	CONLON, J R
	LEFFLER, JOHN S
	MASTRANGELO, V J
	PFALLER, RUPART
683	ALLEN, JEAN F
	FERREIRA, L E
	ROSS, JULIA
691	BATA, ANTHONY
695	BOIKE, SHAWN P
	BROOKES, DAVID
	COLLIE, JOAN M
697	CHENE, B
	DUTTON, TOM
701	DEL MAR TRF CLB APT
709	BACH, L W
	SALVADOR, F
	SEARS, JOHN R
710	STEEGER, E J
717	HOPPER, DAVID
	KAHNSHAGHAGI, M
	MORFITT, WILLIAM C
	SPROWELL, ROBERT C
725	NAKAMURA, ALAN
726	EVANS, WILLIAM A
740	HART, TERRY D
757	DUGAN, TODD
	STROHAUER, MIKE
	VILLANOS, JIJI JR
765	ARBALLO, L
	MACDONALD, NEIL F
	VONDOORNE, EDWARD
	ZIMMAN, JOHN C
766	APPELMAN, BRUCE
	GLASS, JIM
	HAY, RON
	KANG, KENNETH
	MACKENZIE, ALBERT F

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S NARDO AVE 1992 (Cont'd)

766	SADDLERIDGE APTS
	SELDEN, W
	WONG, KWONG K
773	BASSETT, JEFFERY A
	GARCIA, CELIA
	JUERGEN, LEHMANN
	JUVEZ, S
	NAGANUMA, M
	SACCO, THOMAS D
	WHITING, JIM
781	DEMIS, VAN A
	MURET, ROBERT B
	WILLIAMSON, MINNIE H

Target Street	Cross Street	Source
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STEVENS AVE 1992

720	CASTILLO, JUAN
736	HANSEN, LARRY
742	BLAKE, GLORIA
744	JIMENEZ, DREW
750	MORGAN, PATRICK M
802	HOLGUIN, J
807	GRANADOS, GABRIEL J
818	SWEET, DIANE L
824	WEBER, EDWARD
832	COLLINS, BILL
835	HERNANDEZ, F
838	MORTLAND, BARBARA J
871	FLORES, F
	GILMORE, KEITH
	HAFNER, MICHEAL A
	MULLEN, JAMES F
	THOMES, CHARLES

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S NARDO AVE 1985

605	XXXX	00	
606	MCCULLOUGH D DR	755-2740	2
607	XXXX	00	
609	XXXX	00	
614	KELLENBARGER LT COL	755-6856	8
622	HUTCHINSON JAS W	481-2335	2
623	**ST JAMES ACADEMY**	**755-1777**	0
625	**ST JAMES CATH CH**	**755-2545**	0
630	XXXX	00	
638	CHAPMAN DAVID R	481-2343	
	CHAPMAN TAT	481-2343	
640	XXXX	00	
646	DRABIK TIMOTHY J	259-8345	+5
654	STRAUSE G RANDY	755-4800	
	STRAUSE LINDA G PHD	755-4800	
655	XXXX	00	
661.....	DL MAR TRF CLB APTS		
	ADAM RICARDO	481-6287	4
	BARTON RICHARD H	481-0530	4
	IRWIN RICK	755-3251	+5
	JOHNSON ERIC ALAN	481-0530	4
	JOHNSON SCOTT	481-5295	+5
	MCLELLAN SALLY	259-8390	+5
	NEUMANN MARK A	259-8215	+5
	ROWLAND MARK A	481-9902	+5
	SORENSON TYLER	755-5946	4
	WAGNER FRANK W	481-9902	+5
661.....			
665.....	DL MAR TRF CLB APTS		
	BLOY PETER	481-6621	+5
	BUSCH M L	755-5840	
	BUSCH S J	755-5840	4
2S	CULPEPPER M A	755-9295	1
	MANCARTI BRIAN	481-6048	+5
665.....			
667	XXXX	00	
669.....	DL MAR TRF CLB APTS		
	BRUSS ERNEST	259-8443	+5
	CAMPOS CARLOS	755-7539	3
	GARLOCK MATT	259-0456	+5
	GERKIN M A	481-3783	3
	GILBERT G H	481-6008	+5
	HARRYS SV	**755-1400**	3
	PAC AUTO	**235-6400**	+5
	PITTS EDW H	481-2832	+5
12T	SEMLER J M	755-3840	0
669.....			
675	XXXX	00	
679.....	DL MAR TRF CLB APTS		
	AIRNSWORTH MICHAEL	755-6537	+5
	BLAKE BARRETT	755-4339	+5

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S NARDO AVE 1985

NARDO AV S 92075 CONT

	BROLASKI ELIZ	755-4424 +5
	CARNOHAN KILLANEY	755-2555 +5
	CONAWAY G A	755-2623 7
	DAILY SCOTT	481-2448 +5
6A	FOX JULES	755-2349 1
	GONZALEZ HILDA D	481-6465 +5
	HOLLADAY MARY	755-6346 +5
	LARSON EDW J	755-2682 4
	OMANN G M	481-5625 +5
	SAWAN ANISE S	259-8308 +5
	SMITH E J	755-7391 4
	SORENSON WHITNEY	755-4339 +5
	WHITE K	481-3058 +5
679		
683	DL MAR TRF CLB APTS	
	ALLEN J F	755-7048 2
	ENRIGHT STEVE	481-7286 4
	GIBBS C J	481-1791 +5
12D	HAMPSON RONALD H	755-8329 1
11D	KIXMOELLER MARSHALL	755-9127 9
11D	KIXMOELLER ROBT H	755-4608 6
7D	OCONNOR PERRY	481-8706 0
	QUALLS C	259-0705 +5
	RYAN DAN R	259-8822 +5
4D	SIMACEK L	755-2858 1
	TRACY J	481-7531 +5
683		
687	DL MAR TRF CLB APTS	
	IRWIN D	481-0923 +5
	MISSION G BUD	259-8164 +5
	PULCINI JEFF	481-0761 +5
	ROBERTSOM SAM	481-2733 +5
	WARWICK T J	481-3074 +5
687		
691	DL MAR TRF CLB APTS	
	CRAIG WILLIAM J	755-6983 3
	MATULA MIKE	259-8053 +5
	MCMILLIN S P	259-8259 +5
	STROBA M	755-5005 +5
	TOTH B	755-1397 4
	TREMBLAY J	755-1397
691		
693	XXXX	00
695	DL MAR TRF CLB APTS	
	BOWEN R W	755-7262 +5
	BULLOCK P A	259-8148 +5
	COLLIE J M	481-5158 1
	HIGASHI CRAGI	481-9182 +5
3G	LENAHAN E B	755-7640
	MATLOCK J	755-8957 4
	SAYRE PATRICIA	481-7061 2
1G	SMOLENSKI JIM	481-8361 1
695		
697	FOX RICHARD W	481-1583 2
	HOOK NIGEL A	755-0819 +5
	MORRIS G	481-6938 +5
	WOODS FRANK	755-8729 9
699	GARLOCK MATT	259-0456 +5
701	CAMPANA JOHN	259-8033 +5
	DEL MAR TRF CLB APT	**755-7755**
	PACCIONE JOHN	755-0318 4
	SHINN CLIFFORD A	481-1853 3
702	BRUUN ROBT F	755-3702
709	DL MAR TRF CLB APTS	
	BRODSKYU MARK	481-9811 +5
	GALLAGHER JOHN C	259-8828 +5
	KENNEY MARK	481-9811 +5
	LAUBACHER ROGER	481-9811 +5
	MILTON L	259-8621 +5
	ROBINSON DAVID C	755-2017 +5
709		
710	STEEGER E J	755-2830
717	DL MAR TRF CLB APTS	
	CRAVENS KAY	481-6716 4
	GERZA GEO H	481-2629 +5
	MORFITT WILLIAM C	481-7053 4
	SPROWELL ROBT C	481-7053 4
717		
718	MCSPARRAN HAROLD E	481-9037 8
724	XXXX	00
725	DL MAR TRF CLB APTS	
	BALDWIN S	259-0094 +5
	HECHLER KIMM	481-6803 +5
	HOPKINS TIM	481-2378 +5
	KNOX JOHN P	259-8991 +5
	KNOX JOHN PAUL	259-8991 +5
	MITCHELL STEVEN H	481-7541 +5
	ROBINSON LESLIE	481-6803 +5
	SCHRADER ROBT	481-7483 +5
	YOUNG FRED R	481-0759 +5
725		
726	XXXX	00
730	**LIMBURG TRAD PROMOT**	**481-4066** +5
740	HART TERRY D	481-9216 7
	HARTS CARPET CARE	**481-2846** 0
744	XXXX	00
757	DL MAR TRF CLB APTS	
	BROWN RANDY	259-8499 +5
	FORSYTH GENE	481-2480 4
	GWILLIAM DEBBIE	481-5104 +5
	JAQUINT JACKIE	259-8843 +5
	PAISLEY J SCOTT	481-2997 +5
	RUSSELL LINDA	481-5147 4
757		
765	DL MAR TRF CLB APTS	
	BAUMANN LARRY	481-8921 +5
	BROOK ADAM S	481-0412 +5
	CURTIS B	259-8651 +5
	ELLIOTT P C	755-4589 4
	FONSECA R	755-3256 +5
	HASSETT BRIDGETT	481-7723 4
	LEEPER SHANNON	481-9458 4
	SCAUZZO VINCENT	755-6559 +5
	SCHIEMAN GREG	755-6924 +5
	SHADE ROBT JR	481-5863 +5
19L	SIMPSON JIM	755-3352 1
	SKELLEY B L	755-8692 +5
	SWARTZ NEIL	755-5717 4
	WHITE DONALD DR	481-6664 +5
765		
766	SADDLERIDGE APTS	
	CADDEN TRISHA	755-8357 4
	CADDENFINK JOYCE	755-8357
	DAUBER AL	755-6600 +5
6A	DONNELL M C	481-1658 0
	DOSS B	481-9208 4
5B	DOYLE ROBT J	481-9494 1
	GREZAUD GEO	259-8502 +5
	GROSZKRUGER DAN	755-6319 3
	HEARNE STEVEN	259-0071 +5
	HECK MIKE	755-5478 4
	HUNTER WM G	481-5948 +5
	LAWRENCE ROGER	481-8363 +5
	LOWE GRANT	481-8363 +5
	MEYERS MARK	481-5948 +5
	MORAHAN GRANT	755-2118 4
3A	MURPHY M RICHARDSON	755-0640 1
	NUSCHY J	755-5413 4
3B	**SADDLERDG DL MR AP**	**755-0533**
	WHITING JAS	755-7449 +5
	WILLIAMS M	755-7743 4
	WOLF DONALD	755-2743 3
	YAMASAKI STEVE	481-1463 +5
766		
773	DL MAR TRF CLB APTS	
	DEUGENIO SERRUCCIO	481-1665 +5
	DIXON RHONDA K	481-5798 4
	JAMES EDW G	259-8554 +5
	PEEBLES C L	755-3723 3
	RADZIEWICZ JOHN	481-5123 +5
3M	SACCO THOS D	481-0871 8
	SARASOHN L	755-0720 +5
	TRYGSTAD DAVID	481-3128 +5
	VENDLER ZENO	481-6687 +5
	WILINSKY GERALD	481-7452 3
773		

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S NARDO AVE 1985

..NARDO AV S 92075 CONT..

781..... DL MAR TRF CLB APTS

ANDERSON JOHANNA	481-5357	3
CHAPMAN S	259-8068	+5
GILROY JOHN W	259-8068	+5
HAEHL J H	755-5659	+5
KERNS J	481-0712	+5
LINDLEY RON	481-6929	+5
ODONNELL JOHN F	481-1870	+5
POULOS SAM	755-6378	4
SCHUMACK S S	481-1026	3
WILLETT CHIP	755-6535	+5

781.....

★ 13 BUS 259 RES 105 NEW

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STEVENS AVE 1985

740	BROWN DALE	481-5198	+5
740½	WOELFEL ELLEN	755-1742	4
742	PETERSON KENNETH M	481-2192	2
744	MCGUIRE M	755-2397	1
744½	BOUTCHER T	481-3533	4
746	KLICH CHRISTOPHER	481-6846	1
746½	CHINN RAYMOND S	755-6396	4
750	TAYLOR WM	259-0083	+5
802½	HOLGUIN J	481-5176	2
807	GRANADOS GABRIEL J	755-1382	
818	SWEET D L	481-7820	3
820	XXXX	00	
821	ACOSTA JOSEPHINE	755-8069	8
	MARTINEZ JUAN	755-1432	+5
822	XXXX	00	
824	ROICK JIM	259-8758	+5
	ROICK TOM	259-8758	+5
828	CARLSON KURT	259-8419	+5
830	XXXX	00	
832	HARELSON TED J	481-5806	3
834	YOKOMOTO KEITH	259-0437	+5

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STEVENS AVE 1985

..STEVENS AV 92075 CONT..

835	HERNANDEZ FRANCISCO	481-9619	
836	XXXX	00	
838	MORTLAND B J	481-9952	8
841	FLORES FRANCISCO	481-2184	0
842	LEONARD J L	755-7292	+5
847	BROOKS STEVEN	481-5186	+5
	DINARDO MICHAEL A	481-7154	+5
855	KENNEDY CHRIS	755-2416	+5
857	XXXX	00	
863	XXXX	00	
865	FERGUSN JENNIFER	481-1913	+5
880	CASTANEDA J	755-8598	+5
908	XXXX	00	
910	KEENEY CHERYL	481-9717	4
914	XXXX	00	
916	ROBERTS ELEANOR G	755-4834	
924	GONZALES ARTHUR	755-2490	
	GONZALES ELDE	755-1634	
	GONZALES PHIL	481-5913	4
934	XXXX	00	
949	XXXX	00	

★ 113 BUS 77 RES 50 NEW

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S NARDO AVE 1980

NARDO AV S 92075 CONT

630 RINGWOOD P 755-0966 9
638 CHAPMAN DAVID R 481-2343 +0
CHAPMAN TAT 481-2343 +0
640 XXXX 00
646 VROMAN DARRYL C 481-9240 9
654 XXXX 00
655 XXXX 00
661 DL MAR TRF CLB APTS
1R BERLAND B I 481-7980 9
BETTS JAMES B 481-7497 9
BREEDLOVE M P 481-9900 +0
BULLOCK ROBT 481-0757 +0
CARSON KATIE L 755-0985 +0
12B HIPP THOMAS J 481-7497 9
MC TAGGART PHYLLIS 481-9900 +0
14R MURRAY MYRNA 481-7876 9
NEHER ROBIN 481-0930 +0
12R PANGBURN MICHAEL 481-0756 9
4R ROBERTS C L 755-4913 9
SCARMINACH MICHAEL 481-6187 9
SPAVENTA JORGE 481-8594 +0
WONS B 481-7680 +0
661
665 DL MAR TRF CLB APTS
1S LIVINGSTON ANN 755-8367 9
STOKES DAVID B 481-0581 +0
VLAHOS A G 481-6435 9
ZEHNER ANGELA 481-7814 +0
665
669 DL MAR TRF CLB APTS
CASEY PAIGE 481-0484 +0
3T CHILDRESS M G 481-0419 9
CORIA H 481-2605 +0
FRANK JAS M 481-6701 +0
HO STEPHEN 481-6220 +0
7T HODGE DOROTHY 755-0522 6
SEMLER J M 755-3840 +0
TIMMINS PATRICK 481-2559 +0
669
679 DL MAR TRF CLB APTS
2A ACEBEDO LUPE 481-6571 9
7A ALLEN ROSCOE R 755-5259 5
COAN DAVID 481-0938 +0
1A CONAWAY DANL A 755-2623 7
DALZELL CHUCK 481-9758 +0
EDWARDS J 481-2402 +0
JOHNSON ROBERT G JR 481-0889 9
3A JOSEPHER E 481-9042 6
16A KAHANEY REGINA 481-0327 9
24A KENNEDY RICHARD 755-9691 7
MCALLISTER ROBT J 481-1735 +0
11A MILLER D 755-5618 9
OLDAKER CYNTHIA A 481-2801 +0
8A PECCIA JEAN 755-3461 3
19A PEOPLES G E 755-0446 8
23A TACKNEY JOHN P 481-6527 9
17A VAVUL S 481-1620 9
VOSS BARBAR 481-2821 +0
679
683 DL MAR TRF CLB APTS
8D BLUE CATHY 755-7542 4
1D COOKE BETTY I 755-5202 8
COWAN W 755-1090 +0
5D DENTON E L 481-9083 7
12D HEWITT LORIN L 755-6416 2
3D HORN TERRY L 755-7333 7
11D KIXMOELLER MARSHAL 755-9127 9
11D KIXMOELLER ROBT H 755-4608 6
LORRAINE ESTHER B 755-2213 +0
OCONNOR PERRY 481-8708 +0
WESTON BERNIE 755-5202 9
683
687 DL MAR TRF CLB APTS
FISHER H L 481-0150 +0
6F MANSELL STEPHEN M 755-4455 8
8F MILLIMAN DIANE 481-7229 8
2F NEELEY GLENDA M 755-0344 7
PTOLEMY MARY C 481-5650 +0
687
691 DL MAR TRF CLB APTS
3E CULPEPPER MARY A 755-9295 8
DAVIS EDW 481-6344 +0
6E GORRELL JEFF 481-9196 6
JOHNSTON CRAIG 481-2982 +0
5E MICHEL HENRY H 755-6858 8
2E MORAN EDWINA L 755-3198 4
7E SANCHEZ H E 481-0324 5
691
695 DL MAR TRF CLB APTS
7G BOSS EDW 755-6929 8
5G BOTTOMLEY JAS C 755-5904 8
8G CLARK WILLIAM S JR 481-8645 9
1G ELKIN ARTHUR V JR 755-3117 4
4G KOPLEY KATHY 481-6394 9
3G LENAHAN E B 755-7640 5
6G MORRIS WM W 481-8615 7
SEITCHIK LOUIS 755-6929 +0
9G SULLIVAN M 481-6877 9
695
697 DUNBAR JERRY L 755-0918 7
HULL B 481-1781 +0
WOODS FRANK 755-8729 9
701
* **DELMAR TURF CLB APT 755-7755** 4
NORENBERG HAROLD A 755-6422 7

702 BRUUN ROBT F 755-3702 7
709 DL MAR TRF CLB APTS
1B AGSTEN DEBBIE 481-9916
5B CONLEY DEBRA 755-2147
1B GARROW CHAS D SR 755-4402
4B GUNN NEIL F 481-0743 6
HYMAN FREEMAN 755-4732 +0
NOWAK L 481-2045 +0
SERENO TOM 481-2681 +0
7B SPENCER HAROLD L 755-7297 7
709
710 STEEGER E J 755-2830
717 DL MAR TRF CLB APTS
MATHEWS EDWIN 481-1757 +0
1H RAEDY EARL J 755-2128 7
REID KELLY 481-2079 +0
6H WINSKI S 755-8324 7
717
718 MCSPARRAN HAROLD E 481-9037 8
724 LEAHY BOB 481-7924 +0
725 DL MAR TRF CLB APTS
BLACKSTONE LORRANCE 755-1619 +0
2J CHOYKE JOS 755-8637 5
LAORRANCE RICHARD 481-2331 +0
LAPISHKA MICHALE A 481-5846 +0
LEX EDW 481-0859 +0
SORRELS J F 481-8239 +0
725
726 CLARK CATHERINE J 755-7491 3
730 CAREW THOMAS E 481-6302 9
740 HART TERRY D 481-9216 7
* **HARTS CARPET CARE 481-2046** +0
744 XXXX 00
757 DL MAR TRF CLB APTS
GOODEN JANA D 481-8956 8
6K HUSAIN M 755-7568 6
1K MEACHAM MICHAEL 481-0513 9
8K NYGREN LINDA L 481-8956 9
SHAW TED 755-4950 +0

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NARDO AV S 92075 CONT

SOWELL EDDIE A 481-5852 +0
2K TOZER MARK A 755-8515 8
2K TOZER WM H 755-8515 8
4K WIESE RICHARD 755-3886 9
757
765 DL MAR TRF CLB APTS
13L AUSTIN MELISSA 481-9936 9
16L BROWN BERYL 755-8117 8
COMBE DANIEL 481-5756 +0
1L ENGLAND D 481-9753 9
24L FIELDER SUSAN 755-8899 8
FISHBURNE MARGIE 481-9602 +0
FLORES MARICELA 481-1079 +0
FRANKLIN FREDRIC 481-2399 +0
KERSHNER DAN 481-2026 +0
KOZLOWSKI R K 481-2308 +0
MEZA JOSE Z 755-6982 +0
23L ONEILL N 481-8456 7
PAVONE D A 481-2164 +0
20L PETERSON JAMES 481-7322 9
PHILLIPS BRYANT 481-2403 +0
PLUTA M 481-6679 9
30B POLIN A 755-7005 9
RAVAZZOLO KEN 481-0727 +0
ROSS SCOTT 481-2013 +0
7L WEBB THOS S JR 481-9357 9
WOOD B D 481-5686 +0
765
766 SADDLERIDGE APTS
BENDER R K 481-2615 +0
7A BENTLEY KENNETH D 755-6958 4
BURT WAYNE F JR 755-6889 +0
CAVANAUGH KEVIN 481-2359 +0
COOPER BECKY 481-2822 +0
DONNELL MC 481-1658 +0
DONOHUE B 755-4251 8
1D ESTRADA DANL 755-2504 9
FALK D H 755-0573 8
FAVREAU J I 481-6587 +0
6B FLOCK MAXINE 481-6268 9
HAMILTON MARVEL 481-2822 +0
HEADKE S 481-5931 +0
9 HEROLD HELENE C 481-6375 9
1C HUGHES SCOTT E 481-0592 9
MALAFA RAYMOND M 481-1033 +0
MARTIN MOLLY 481-9566 +0
4C NEMMERS JOHN E 481-6500 9
8A OLKOWSKI THOS 755-8539 6
3D RAMAGE F E 755-7015 9
2C RIEDER LAWRENCE S 481-9423 7
3B * **SADDLERIDGE DLMR AP 755-0533** 5
4A SEENEY L V 755-7228 6
5B SHANNON M J 755-8035 9
SMITH CORRINE 481-5832 +0
5C SPANOPOULOS M L 755-9118 7
STINE REBECCA 481-1064 9
2B TOORANS S 481-9717 8
VONDRAK RICK 481-6797 9
WAGNER GENE 481-8023 +0
WALSH MARY K 481-6567 +0
WHTE LALEN 755-2717 +0
766
773 DL MAR TRF CLB APTS
4M BONAQUIRA VIRGINIA 755-0865 3
GOODMAN Y 481-1048 +0
PETERS LISA 481-2617 +0
RICHARDS WAYNE 481-2531 +0
ROSE JOHN K 481-9074 +0
3M SACCO THOS D 481-0871 8
14T SPECK JAS B 481-1977 +0
TENCER LESLIE 481-1048 +0
6M WATKINS KIT 755-3013 9
773
781 DL MAR TRF CLB APTS
ALCAROI CHAS 481-0739 +0
ANDERSON GLEN 481-9190 +0
CARLSON LANCE 481-8415 9
CLOER R 481-7089 +0
GODFREY SANDRA 755-7749 +0
10O HALTON KEITH 755-5309 9
HANCOCK LOUISA 481-1664 +0
1O HESS MARTIN S 755-5366 6
22O HOFFMAN CHARLES P 755-3326 9
23O JARRET PAUL 755-5991 8
LANTZ JOHN R 755-3641 9
LEACH MARTHA M 755-7603 +0
PFEFFER CHAS 481-7494 +0
SCHARFENBERG JOHN 481-7246 +0
3O SEIBEL RICHARD K 755-2489 7
7O SIEGEL JEFFREY C 481-1763 9
SISSON DONALD W 481-0679 +0
5O SUQUILANDA CECILIA 481-8721 9
13O THOMAS L D 481-0903 9
11O VOGEL C L 755-3641 9
781
* 7 BUS 293 RES 101 NEW

Target Street	Cross Street	Source
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STEVENS AVE 1980

722	CALDWELL S	481-8697	9
726	XXXX	00	
728	DESISTO ROBT	481-6810	+0
730	HILL JEFF	755-2573	7
732	POWELL MICHAEL	755-7414	9
736	BENNINGTON RICHARD	481-8420	7
	SHEPHARD DUNCAN	755-0549	6
	SIMPSON CHRIS	481-8420	+0
738	MORENO PEDRO	481-1028	9
740	NAVARRO A	481-7822	+0
742	BARRERA FERNANDO	481-9841	9
	RESENDIZ BITALIANO	481-9841	9
	RESENDIZ SANTIAGO	481-9841	9
744	DOWNING PATRICIA	755-4091	9
746	GEORGE RON	755-6285	+0
746½	KLICH CHRISTOPHER	481-6846	+0
750	BERGO LARRY A	755-5501	6
802	HOLGUIN JOANNE	755-7332	9
	HOLGUIN MANUEL SR	755-7332	9
802½	BERGO M	755-7999	8
807	GRANADOS GABRIEL J	755-1382	5
818	CATO RICHARD	481-1979	9
820	XXXX	00	
821	ACOSTA JOSEPHINE	755-8069	8
	CURIEL FELIPE	755-5338	8
	PUENTES MARTIN D	481-2187	+0
824	CULLEN DANL J	481-2238	+0
828	BELASCO LOUIS	481-7384	+0
830	SHAH ASHWIN	481-8419	9
832	CHRISTIANSEN PAM	481-6387	+0
834	KAISER RACHAEL	481-1002	9
835	HERNANDEZ F	481-9619	5
836	KNORR SHIRLEY	755-3507	9
838	MORTLAND B J	481-9952	8
841	FLORES FRANCISCO	481-2184	+0
842	XXXX	00	
847	MATZINGER POLLY	755-2519	9
855	FAULKNER JACKIE	481-6874	9
	PAINCHAUD B	481-6874	9
857	ZUNIGA REFUGIO	481-9945	9
863	BELL MUFRIDA	481-9655	+0
	SACHDEVA LYNN	481-9655	+0
	SCHUBERT LYNN	481-9655	+0
865	XXXX	00	
880	CASTANEDA JOSEPHINE	755-4267	+0
908	LAMBERT RICHARD	755-8949	9
910	XXXX	00	
914	ALVARADO JOSE	481-2119	+0
916	ROBERTS ELEANOR G	755-4834	3
924	GONZALES ARTHUR	755-2490	3
	GONZALES ELDE	755-1634	3
934	XXXX	00	
949★	**DELMAR DRIVE IN**	**755-8757**	3
★	59 BUS 63 RES	32 NEW	

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S NARDO AVE 1976

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687....APARTMENTS
 1F   BYRNES ROBT MRS      755-3977 4
 8F   HAMILTON RICHARD T   755-8248 4
      KIMBALL DENTON L     481-9324+6
      POWELSON TAYLOR      755-3879+6
      WICHERT MARY K       755-6009 5
687.......................
691....APARTMENTS
      GORRELL JEFF         481-9196+6
      GRAVES ERIC A        755-1679+6
      HARRISON KATHLEEN    755-5630+6
      KIRKHAM PATRICIA A   755-7689+6
      LYNOTT WM P          755-8055+6
 2E   MORAN EDWINA L       755-3198 4
      RICHTER KARALEE      755-0892+6
 7E   SANCHEZ H E          481-0324 5
691.......................
695....APARTMENTS
 7G   BYRD MARTHA          481-0139 5
 1G   ELKIN ARTHUR V JR    755-3117 4
 5G   HANSEN DONALD M      755-3656 5
      LACERT WM H          755-8461+6
 3G   LENAHAN E B          755-7640 5
 4G   ROSI DOROTHY         755-2920 4
      SHIELDS MICHAEL      481-9967+6
      SPRITZ ABRAHAM       755-5559+6
      WHITE B              755-2242+6
695.......................
 697  BRUMMETT I           755-6895+6
      DOWNEY JEROLENE      755-0676 4
      SEXTON KEITH         755-6037 5
      SIMS JULIUS R JR     755-1205+6
 701*DELMAR TURF CLB APT755-7755 4
      PEOPLES G E          755-0446 3
      ROWE B               755-7728 2
 702  BRUUN ROBT F         755-3702 5
709....DL MAR TRF CLB APTS
      BURTON HERB R        755-3605+6
 3B   CULPEPPER MARY ANN   755-9295 5
      GARROW CHAS D SR     755-4402+6
      MIRANDON MARGOT      755-0785+6
 4B   POINTON NORMAN A     755-3660 5
      RYAN B J             481-8517+6
709.......................
 710  STEEGER E J          755-2830
717....APARTMENTS
 8H   DRAISS VINCENT M     755-8454 5
 2H   HOLLAND ROBT J       755-3914 4
      ISENBERG BOBBI       755-7386+6
      ISENBERG ROBT M      755-7754+6
      MORROW THOS J        481-0916+6
 4H   WALKER JOS J         755-5821 5
      WESTBROOK KATE       755-6377+6
 1H   WILLS LILLIAN        755-7397 4
717.......................
 718   XXXX                00
725....APARTMENTS
      BOSSE PAUL E         755-5446+6
 2J   CHOYKE JOS           755-8637 5
      HOLT M C             755-7815+6
      KIRK WM C            755-2231+6
      KRYMER E L           481-0904+6
 1J   LORRANCE RICHARD     755-1619 5
725.......................
 726  CLARK CATHERINE J    755-7491 3
 730   XXXX                00
 740  CHAWLA M S           755-1779 4
 744   XXXX                00
757....APARTMENTS
 3K   BRUUN HANS           755-1963 3
      DORSCH A             755-8551+6
      HAUSNER ERICH        755-0070+6
      HEMPING STEVEN E     481-8235+6
      HUSAIN M             755-7568+6
 1K   KING L D             755-4191 4
      STEPHENS GRETCHEN    755-4217 4
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Target Street	Cross Street	Source
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S NARDO AVE 1976

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..NARDO AV S            92075 CONT..
 765....APARTMENTS
       BARNES CAROL        755-6275+6
       BEECHER CAROL       481-9082+6
       BRUNNER GARY        755-4886+6
       BUSSE CAROL         755-0955+6
       CORLEY ARNOLD       755-3054+6
  4L   DEMOSS JAS B        481-9019 5
 13L   GOFF JAS R          481-9376 5
       GRIGSBY JOHN D      755-1451+6
       HALL P              755-8479+6
       KENNEDY RICHARD     755-9691+6
       MCCLAIN FRED        755-3325+6
       MOTTL DONALD        481-8566+6
       MOTTL LINDA         481-8566+6
       RUSSELL LOREN       481-9094+6
       SMITH BARRY         755-5018+6
       STANTON DAVID M     755-3711 5
       WADE CHAS R         755-5354+6
       WELLMAN JAS H       481-9030+6
 14L   WIESE RICHARD       755-3886 5
  1L   WOODS FRANK         755-8729 5
 765.......................
 766....SADDLERIDGE APTS
       BARTHOLOMEW VIC     481-9488+6
  7A   BENTLEY KENNETH D   755-6958 4
       BHAT S K DR         755-8314+6
       CELMER DENNIS R     481-8348+6
  3B   CORNELIUS LOUIS E   755-7171 5
       DINNEEN BILL        755-9748+6
  3D   GLENN MARTIN        755-4965 4
  1C   GORING BRUCE L      755-5881 5
       LEIMKUEHLER JEWEL   481-9572+6
       MACALLISTER D S     755-5424+6
       MASON IVY           755-4564+6
  3A   MAXWELL V           755-9488 5
       MCCULLOCK BARBARA   755-6184+6
       MCCULLOCK JEAN      755-6184+6
       NELSON DENNIS T     755-3679+6
       OLKOWSKI THOS       755-8539+6
       PERKINS ROGER G     481-9672+6
       RITTER C MD         481-8542+6
  1A   ROCKWELL L          755-1987 5
  8B *SADDLERIDGE DLMR AP755-0533 5
       SALYER JARED        755-9472+6
  7B   SCHARFF EDWIN J     755-6944 5
       SEALS LAWRENCE C    755-0938 5
       SEENEY L V          755-7228+6
       SUNDLUN TRACY       755-9747+6
       TREVINO HERBERT SR  755-0533 5
  5A   VISSER STEVEN G     755-4907 5
       WAYDA ANTHONY M     755-8746+6
 766.......................
 773....APARTMENTS
  4M   BONAGURA VIRGINIA   755-0865 3
       BOTELER S           481-0635+6
       BURROWS STEVE       755-7013+6
       DRIGGS CHRISSY      755-5015+6
       GARMAN JENNIFER     755-5015+6
  2M   GATES M J           481-0643 5
       MANDELIK L          481-0635+6
       MCFARLANE DON K     481-0933+6
       OSA MONICA          755-5015+6
       PHILLIPS CAROL      755-6460+6
  9M   RITCHIE RONALD J    755-5486 5
       SMITH MARK W        755-7013+6
  3M   SNOW FRED J         481-0179 5
       TYRRELL E P         481-0196+6
 773.......................
 781....APARTMENTS
       ALBREKTSEN NEAL E   481-0648+6
       ALLEN B L           755-2982+6
 023   ALLEN MARK B        755-4076 5
  08   BROOKS ROBT F       755-7531 5
       CAMPBELL JOHN C     481-0793+6
       CASSADY G S         481-0318+6
  04   FANDINO CARLOS W    755-5742 5
       FLINT CRISTY        755-8452+6
       GOLDSTEIN JEFF      481-8538+6
       HESS MARTIN S       755-5366+6
       JACKSON KIRK A      755-3467+6
       KOSKO THOS          755-4341+6
       RENNER EDW          481-9439+6
       RIFE K J            755-7366+6
       SIMONDES LARRY      755-1803+6
       SMITH STEPHEN A     755-5872+6
 781.......................
     *   7 BUS  282 RES  142 NEW
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Target Street	Cross Street	Source
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STEVENS AVE 1976

700	ESCOBEDO MATILDA	481-8521+6
718	XXXX	00
719	XXXX	00
720	EHRENFELD RICHARD	481-9052+6
	PIPPEL BILL	481-9052+6
722	HOPKINS RICHARD G	755-8223 4
724	BIRKBECK D H	755-8930 5
726	RYAN JAS	481-9984+6
728	MCELHINNEY LLOYD C	755-7645+6
730	KAPOS NICHOLAS	755-5429+6
732	ETHERTON ROBT L	481-0829+6
736	SHEPHARD DUNCAN	755-0549+6
	TSONG RICHARD N	481-9546+6
738	ROTTMAN JAS	755-5249+6
740½	JEFFERY CHAS	481-8210+6
742	ARMSTRONG V	481-9628+6
744	MCKNIGHT KEN	755-4091 5
746	GEORGE RONALD	755-6285 5

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STEVENS AVE 1976

..STEVENS AV 92075 CONT..

746½	CULOTTA SARAH	481-9363+6
750	BERGO LARRY A	755-5501+6
802½	WESTON CANDY	755-6595 5
	WITHOLT ALBERT	755-6595 5
807	GRANADOS GABRIEL J	755-1382 5
821	GONZALEZ MIKE	755-8309+6
	HUFF DIANE	481-9846+6
835	HERNANDEZ F	481-9619 5
838*	STEVENS MANOR	755-5225+6
880	CASTANEDA J	755-4267 5
908	XXXX	00
910	HARTLINE DANL K	755-7783 2
914	LAMBERT RICHARD	755-8949 5
916	ROBERTS ELEANOR G	755-4834 3
924	GONZALES ADOLPH M	755-5538 5
	GONZALES ARTHUR	755-2490 3
	GONZALES ELDE	755-1634 3
934	XXXX	00
949*	DEL MAR DRIVE IN	755-8757 3

* 34 BUS 41 RES 31 NEW

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S NARDO AVE 1970

NARDO S 92075 SOLANA BEACH

136	DAVIS CHAS L	755-2304
139	FLINT DONALD L	755-1441
142	HINZ RONALD F	755-9542
144	CARROZZO JOE F	755-1074
148	CARADINE CLYDE R	755-1738
151	WILLIAMS ANDREW J	755-3866
166*	PETRIES EGG RANCH	755-9010
167	PEPPLER DONALD A	755-9419
176	CLARK DAVID N	755-4415
181	DISSELHORST BYRON F	755-1654
182	GAUL ROY D	755-4445
187	KOONS V D	755-1962
202	WOLFE STANLEY C	755-2843
208	DVORAK EMIL	755-4818
214	JACOBS MARTIN R	755-4249
215	BRUE ROBT	755-9413
221	SILVEIRA KATHARINE	755-3215
	SILVEIRA RONALD L	755-3215
226	CATON WM C	755-1626
	GOOLD MAUDE C	755-1626
231	DILLS DENNIS A	755-8464+0
232	MORRIS C MARTIN	755-9426
239	HABUSH ALFRED L	755-1921
247	BERGER FRANK M LCDR	755-2927
248	CASTILLO GERILYN G	755-3586
250	VELKEN JENS	755-1624
258	KAY ALLAN M	755-8219+0
	KOPISHANSKY FRANK	755-8219+0
267	RUSSELL DOROTHY C	755-4443
302*	HASTINGS FUCHSA GDN	755-1758
313	SCHLITZ PHILIP	755-2748
325	MAAGOE STEFFEN	755-8135
326	REA DOMENIC MRS	755-1310
335	WILKENS GEO C	755-2318
336	MEARS A C	755-8198
345	LAPHAM DON C	755-2864
355	FLYNN J L	755-4122
356	HENDERSON GEO W	755-1328
	PIERSON LORNA	755-1328
	SPORMAN ELFRIEDA	755-1328
405	GAY E H	755-4452
410	NIELSEN HAROLD B	755-4594
415	BLAIR WM L	755-1881
436	KAMMERER CLIFFORD	755-4186+0
440	MEISTER GUY L	755-2235
444	MASON JAMES H	755-8555+0
454	GJERDE TORBJORN	755-9513
512	GARNER LEO R	755-1730
516	NELSON WM	755-3533+0
538	BLACK DUDLEY F JR	755-2746
545	MOORE RICHARD A	755-4200
550	COUGHLIN IRENE	755-1349+0
	COUGHLIN KERRY	755-1736
	LEDESMA VICENTE	755-1630
607	KRAUS OLGA	755-1743+0
609	BUZAN ALLAN	755-4264
702	NELSON GERALD E MD	755-8308+0
710	STEEGER E J	755-2830
718	KIBBY GEO M	755-3004
726	JENSEN C J	755-3194+0
730	DECAVITICH VICTOR	755-3726+0
740	ROSS WM H CAPT USN	755-3913

* 2 BUS 60 RES 11 NEW

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STEVENS AVE 1970

STEVENS AV 92075 SOLANA BEACH

120	*DIAL A PRAYER	755-1061
	*UNITED PRESBY CH	755-1061
	*UNITED PRESBY CH	755-9735+0
155	*EARL W JR HI SCH	755-1558+0
531	*WESTRN OPTICS	755-9711
533	*KAY A NON LINR SYST	755-1134
	*KAY ANDREW F	755-1134+0
	*NON LINEAR SYSTEMS	755-1134
634	HERNANDEZ DANL C	755-4742+0
730	CASTELLANOS ALFRED	755-1648
750	MARTINEZ PATRICIA M	755-1439
802	HOLGUIN LUPE	755-4566
	OROZCO ROBT D	755-4298+0
821	SANTIAGO JOSAFINA	755-8657+0
	* 8 BUS 6 RES	6 NEW

Solana Beach Residential Land
821 Stevens Avenue
Solana Beach, CA 92075

Inquiry Number: 4289823.3
May 08, 2015

Certified Sanborn® Map Report

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

5/08/15

Site Name:	**Client Name:**
Solana Beach Residential Land	Enviroapplications Inc.
821 Stevens Avenue	2831 Camino Del Rio South
Solana Beach, CA 92075	San Diego, CA 92108
EDR Inquiry # 4289823.3	Contact: Fred Allee

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Certified Sanborn Results:

Site Name:	Solana Beach Residential Land
Address:	821 Stevens Avenue
City, State, Zip:	Solana Beach, CA 92075
Cross Street:	
P.O. #	01.HGFC001.15.01.0
Project:	Solana Beach Residential Props
Certification #	94A3-4D29-8B76

UNMAPPED PROPERTY

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Sanborn® Library search results
Certification # 94A3-4D29-8B76

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- ✔ Library of Congress
- ✔ University Publications of America
- ✔ EDR Private Collection

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ATTACHMENT 7
ENVIRONMENTAL PROFESSIONALS' QUALIFICATIONS

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

4 Residential Apartments and a Storage Shed Property
821 Stevens Avenue
Solana Beach, CA 92075-4401

June 25, 2015
EAI Project No.: 01.HGFC001.15
APNs: 298-281-10-00 and 298-164-22-000

CRAIG M. SKIERA, P.E.
Principal Engineer

B.S. Engineering Arts, 1989, Michigan State University

Expertise: Industrial Wastewater Treatment Design and Construction, Remedial Investigation Design and Engineering, Due Diligence, Phase I and II Environmental Assessments, Remedial System Construction, Brownfields, Superfund, SPCC Plans, O&M Plans, and QA/QC

Mr. Skiera has over twenty years of professional experience as an Engineer in the environmental consulting field. This experience involves working on a variety of environmental and engineering projects, including senior review, technical coordination, and project management duties. His expertise includes industrial wastewater treatment design and construction, remedial investigation design and engineering, remedial system construction, brownfield sites, Superfund, due diligence, Phase I and II environmental assessments, and quality assurance/quality control on project deliverables.

Mr. Skiera has produced written technical documents, such as Spill Prevention Control and Countermeasures (SPCC) plans, storm water pollution prevention plans (SWPPP), Remedial Action Plans (RAPs), Remedial Investigation/Feasibility Studies (RI/FS), Statements of Work (SOW), Operation and Maintenance (O&M) plans, basis of design documents, Quality Assurance Project Plans (QAPP), work plans, Phase I and Phase II environmental assessment reports, documentation reports, permits, bid packages, specifications, and a variety of sampling plans.

Mr. Skiera has also conducted project oversight during environmental construction projects that involved observation, documentation, sampling, and coordination between client, contractors, regulators, and analytical laboratories. He has strong technical abilities in the production and review of engineering drawings, schematics, and details via AutoCAD and other software. He also has a diverse sampling background, having collected soil, groundwater, sediment, soil gas, sludge, storm water, wastewater, waste stream, and surface water samples. His project experience is presented below:

Project Experience

- Served as Project Manager and Lead Engineer for a plating process decommissioning project at an electroplating facility in San Diego, California. A 2,000-square foot production room was designated for another use and existing process equipment and infrastructure was required to be removed. Approximately 30 parts baths, two below-grade rinse water sumps, a floor trench drainage system, roof-mounted ventilation system, a 14-inch thick raised concrete floor, and other manufacturing equipment were removed from the room. Sampling was conducted to confirm no residual materials remained prior to recycling and disposal. Nearly 100 percent of all materials removed were recycled or repurposed. Supervised decommissioning contractors during the five-week project and prepared documentation report.

- Served as Project Manager, Technical Coordinator, and Project Engineer for an industrial wastewater treatment plant upgrade at an electroplating facility in Tijuana, Baja California, Mexico. The project involved designing and constructing an expansion to the facility's wastewater treatment plant to accommodate production increases that would triple wastewater flow. The project included work plan and engineering drawing production, concrete design, reverse-osmosis system design, international shipping coordination, bench-scale treatability testing, and programmable logic controller (PLC) modifications. Project construction components included expansion of existing concrete pads; installation of an elevated filter press, a multi-

media filter, 10 tanks, 9 mixers, 12 pumps, and associated plumbing; and electrical connections for new equipment and instrumentation. In addition, water recycling modifications saved the facility over $70,000 a year in city water usage.

- Served as Project Manager, Technical Coordinator, and Oversight Engineer for a secondary containment project at a California electroplating facility. The project involved the design and construction of a retrofit system to comply with California's Title 22 regulations. New secondary containment structures were designed and installed inside existing floor sumps and trenches. The project also included rerouting roof piping and constructing a steel walkway and pipe bridge spanning the facility and the wastewater treatment plant.

- Participated in a group storm water permit application process for a national foundry organization. Conducted preliminary site visits and automated sampling device installation at five foundries in Michigan, New York, Ohio, and West Virginia. Coordinated sample collection and analysis and produced permit applications for these sites. Evaluated existing Best Management Practices at these facilities and recommended upgrades to facility practices to meet compliance.

- Served as the lead remedial engineer for a major oil company's former gas plant with hexavalent chromium impacts regulated by The Railroad Commission of Texas. Coordinated and assisted in evaluation and design of an on-site ex-situ extracted groundwater treatment system to reduce hexavalent chromium to trivalent chromium. Designed, installed, and completed an ex-situ groundwater treatment pilot-scale test. Converted the pilot-scale system into a full-scale system. The cost of designing, installing, and operating the system provided payback in less than six months by eliminating off-site disposal of extracted groundwater.

- Served as Project Manager and Technical Coordinator for a seven-phase soil, sediment, and groundwater investigation at a 226-acre former Ohio oil refinery under the Ohio Voluntary Action Program. Included producing work plans and documentation reports for each phase of work. Coordinated a field TOC screening laboratory, field staff, and complex utility clearance, as well as Geoprobe, drilling, and surveying subcontractors, and multiple analytical laboratories. Coordinated right-of-way agreements with the adjacent railroad for temporary piezometer installation within an active railway. Maintained a database of analytical results used for the risk assessment evaluation of over 1,000 samples analyzed during the project. Developed seven technical documents summarizing the soil, sediment, SPLP extraction, ground water, and field TOC analytical data obtained from the investigations. Also included interfacing with geochemistry and risk assessment experts, as well as serving as the primary client contact for the duration of the project.

- Served as technical and engineering support for a major oil company's California Superfund site adjacent to an active railway. Provided senior review on project deliverables, including monthly summary reports and quarterly groundwater monitoring reports submitted to USEPA. Developed a pilot-scale neutralization work plan, a remedial action work plan for full-scale neutralization and capping, and a strategic plan for monitored natural attenuation (MNA).

- Assisted in the design and installation of a wastewater treatment plant upgrade at a San Diego, California electroplating facility. The upgrade was designed and constructed to alleviate the facility's compliance issues. Project involvement included the production of engineering drawings, building permit coordination, pilot-scale treatability testing, system wastewater sampling, and programmable logic controller (PLC) modifications. Served as the on-site Engineer during steel, concrete, plumbing, and electrical construction, as well as during system start-up.

- Served as Project Engineer at a former gasoline service station in Chula Vista, California that had a release of gasoline to soil and groundwater, with liquid-phase hydrocarbons (LPH) present at thicknesses of over 10 feet at off-site wells over 100 feet from the source area. Implemented interim remedial action consisting of a multi-phase (groundwater, LPH, and soil vapor) extraction system and seven extraction wells. The project includes characterization of site soil and groundwater impacts, product removal, feasibility studies, pilot testing, and coordination with seven different property owners.

- Worked as part of the engineering design team for the installation of a permeable reactive barrier (PRB) groundwater remedy at a Superfund site in Michigan. The remedy consisted of two PRBs in sequence installed to a depth of 17 feet below ground surface. The PRBs were designed to treat shallow groundwater contaminated with chlorinated volatile organic compounds as it migrates through the treatment walls, which are filled with a patented iron-impregnated, carbon-coated, silica sand (ICS).

- Served as technical coordinator and senior review for an investigation and remediation at a Michigan manufacturing facility. Completed a Phase II investigation which identified trichloroethene (TCE) above cleanup criteria. Successfully implemented in-situ oxidation and treatment of TCE using potassium permanganate injection.

- Served as Technical Coordinator for a process pipeline removal project at a 226-acre former Ohio refinery conducted under the Ohio Voluntary Action Program. Included coordinating with engineering oversight and construction workers during removal and recycling of over 50,000 linear feet of abandoned underground petroleum pipelines. Coordinated with neighboring railroads for pipelines adjacent to active railways and within easements.

- Served as Technical Coordinator for the environmental portion of a 30-acre brownfields property transaction project, which included building demolition and soil remediation at a former Michigan manufacturing site. The scope of work included sampling, excavation, disposal, and well abandonment. Coordinated a field TOC screening laboratory, field staff, utility clearance, Geoprobe sampling, analytical laboratory, excavation subcontractors, as well as coordinating site work with the purchaser's environmental consultants. Developed a documentation report summarizing all site work and data, culminating in the eventual sale and redevelopment of the property.

- Developed a Basis of Design and Work Plan for remediation of an impacted utility corridor containing 14 active underground petroleum pipelines adjacent to a creek and an active railroad at a 226-acre former Ohio refinery under the Ohio Voluntary Action Program. The design document compiled the soil, SPLP extraction, ground water and surface water analytical data obtained from site investigations. This data was evaluated in relation to site geology, direct contact exposure pathways, and the potential for contaminants in soil to impact groundwater, and surface water. The work plan detailed excavation procedures to remove the impacted material while maintaining the integrity of the active utilities. Acted as Project Manager for the successful remediation of the impacted area, which included coordinating with active utility owners, contractors, and oversight engineers.

- Served as Technical Coordinator for a waste pile characterization and sampling project at a former coke plant in Ohio. Characterized, mapped, screened, and sampled over 250 waste piles constituting over 8,000 cubic yards of material on the 40-acre site. The project included coordinating surveying, GPS recording, GeoProbe

sampling, and an on-site X-ray fluorescence (XRF) laboratory. Coordinated activities with the Ohio Environmental Protection Agency.

- Worked as part of the engineering design and oversight team for the installation of a 2,000-foot long bentonite/sand slurry wall at a 226-acre former Ohio refinery. The slurry wall was designed to extend down into very tight soils to stop impacted groundwater from moving toward the Maumee River, and was installed in conjunction with a collection system designed to treat the impacted groundwater captured by the slurry wall.

- Assisted in the design of a wastewater treatment system for a Michigan foundry. Assisted in calculations for system flow and mass balances. Conducted bench-scale field trials of treatment methods using two pilot-scale filter presses. Administered waste stream sampling and settling and thickening tests for characterization of existing waste streams.

- Served as Technical Coordinator for a site investigation at an aluminum-impacted facility in Michigan. The investigation included the facility's subsurface, wastewater lagoons, and an adjacent stream and ditch. Included the development of a Quality Assurance Project Plan (QAPP) and a Sampling Work Plan.

- Produced a whole-effluent toxicity test sampling plan for a Michigan foundry. The sampling plan for acute and chronic toxicity testing of daphnia magna and fathead minnow was approved by the Michigan Department of Natural Resources. Implemented the seven-day sampling program using an automated sampler. Conducted installation and programming of automated sampling device.

- Assisted in producing a Part B permit and a hazardous waste surface impoundment closure plan for a Michigan foundry. Conducted a pre-closure investigation at the site to determine existing soil conditions. Provided on-site coordination, observation, documentation, and sampling as a resident project representative during the implementation of closure activities, which involved excavation, on-site liquid treatment for lead, and off-site disposal. Produced a clean closure documentation report that was approved by the U.S. EPA, Region V.

- Conducted a soil boring investigation at an Indiana manufacturing facility to define the horizontal and vertical extent of chlorinated solvent contamination in the soil underlying a de-greasing unit. Placed investigative borings inside and outside of the facility using both portable and truck-mounted drill rigs. Provided a work plan for the removal and disposal of the degreaser, and an RAP to address the residual soil contamination.

- Assisted in the design of soil vapor extraction (SVE) and groundwater pump-and-treat systems for two service stations in Illinois and Wisconsin. Prepared basis of design reports, engineering drawings, and specifications for these projects.

- Assisted in performance modifications to a wastewater treatment system at a Michigan foundry. Developed a basis of design from existing conditions. Conducted waste stream sampling and settling and thickening tests for characterization of existing waste streams.

Publications

C. Skiera and J. Rasmussen, *Multi-Phase Extraction Float™ Case Study,* Proceedings of the Remediation of Chlorinated and Recalcitrant Compounds, Fourth International Conference, Monterey, California (2004).

Continuing Education and Training

- Presented at the *Remediation of Chlorinated and Recalcitrant Compounds, Fourth International Conference,* 2004
- Part 201 Cleanup Criteria Training, Michigan Department of Environmental Quality, 1998
- Resident Project Representative/Construction Management Course, RMT Inc., 1992
- Lessons in Professional Liability Course, RMT Inc., 1991

Professional Certifications and Registrations

- Registered Professional Engineer, California (No. C 73383), 2008
- Registered Professional Engineer, Wisconsin (No. 31885), 1996
- 40-Hour OSHA Health & Safety Certification (29 CFR 1910.120), 1990
- 8-Hour OSHA Health & Safety Annual Update Certification, 2011
- 8-Hour OSHA Confined Space Entry Course, Entrant and Attendant
- 8-Hour OSHA Supervisor's Certification, 1996

FREDERIC A. ALLEE, E.I.T.
Senior Chemical/Environmental Engineer

B.S. Chemical Engineering (Minors: Musical Performance and Numerical Analysis), 1984
University of California, San Diego (UCSD)

Overall Expertise

Mr. Allee has more than 30 years of professional experience primarily in environmental consulting, vapor intrusion and human health risk assessment, hazardous materials and waste management; and, due diligence. This experience has included all aspects of projects dealing with the application of technologies to the assessment and mitigation of contaminated sites.

Early work following college included geotechnical consulting, landfill gas management and construction materials testing and inspection. As an Environmental Regulator/Project Manager with the County of San Diego, he conducted compliance inspections of industries using hazardous materials and generating hazardous wastes; participated on interagency enforcement action teams; reviewed and evaluated technical reports relating to the discovery, assessment, and remediation of sites contaminated with hazardous materials/wastes; and directed the investigation and remediation of sites contaminated with petroleum, solvents, pesticides, heavy metals, asbestos, and other hazardous wastes. He provided regulatory oversight during the assessment and cleanup of over 350 contaminated sites worth more than $350 million, and was responsible for the regulatory closure of more than 200 contaminated sites.

Later, as a Project Engineer he provided technical support for the Navy's Site Characterization and Analysis Penetrometer System (SCAPS), the EPA's Hazardous Waste Compliance Monitoring for Mexican/U.S. Customs and environmental inspectors' training program, the Navy's Comprehensive Long-term Environmental Action for Navy (CLEAN) program, the DOD's Unexploded Ordnance (UXO) contaminated land Advanced Technology Demonstration (ATD) program, the Naval Environmental Leadership Program (NELP), the EPA's Superfund Innovative Technologies Evaluation (SITE) program, and several U.S.-to-Mexico technology transfer projects under the EPA's RCRA Enforcement and Permitting Assistance (REPA) program including the start of Border XXI. Mr. Allee remains active along the border as a reviewer for Border 2012 (the next milestone of border XXI). A variety of projects for private-sector clients have included contaminated site closures for major oil companies, cities, municipal water districts, and several different types of commercial companies. He additionally served as the Site Safety Officer responsible for health and safety issues during approximately 25 projects. Mr. Allee has participated in projects involving asbestos assessment and abatement, where he supervised sampling and disposal activities. He assisted the County of San Diego U.S./Mexico Border Environmental Health Specialist during the period from 1989 to 1992 in his efforts to train local health department, customs, and environmental agency inspectors on both sides of the border. Because of his interest in trans-border affairs, Mr. Allee utilized off-work hours to assist the Chief Technical Advisor to (and Hazardous Material Instructor for) the Tijuana Mayor's Office of Disaster Preparedness, the Tijuana Fire and Police Departments, the Baja California Department of Ecology, the Baja California Secretariat of Environmental Health Services, and the Federal Secretariat of Environmental Affairs. Mr. Allee has guest lectured for environmental science classes offered through both the University of California, San Diego and Riverside, Southwestern College, has instructed courses at NAS North Island; and, has been an instructor for the Certified Hazardous Materials Manager (CHMM) exam review. A sampling of his project experience is presented on the following pages.

Project Experience

Management

- Currently providing technical assistance and management for due diligence, contaminant vapor intrusion risk assessment, litigation support, and closure of multiple projects involving release sites for major petroleum companies, other companies and municipalities.

- Lead technical teams in laboratory, office, and field settings ranging from management of 12 staff members supporting a full-service construction materials testing laboratory to management of support staff in report preparation while working in the geotechnical and environmental consulting industries. Performed management of site assessment and mitigation efforts simultaneously at as many as 140 contaminated sites, including review and comment on Work Plans, Sampling and Analysis Plans (SAPs), and a wide variety of Technical Reports. Also managed budgeting, regulatory permitting, multiple subcontractors, and sub-consultant, client and community relations and technology vendors, on a variety of both Federal government and private-sector client projects.

- Provided management, as well as regulatory, technical, and field support efforts as needed, for projects conducted at several military facilities under the Navy's CLEAN I and II with Engineering Field Activity West. Included preparation of cost estimates, work plans, sampling plans, quality assurance project plans, health and safety plans, monthly status reports, and technical memorandums and reports. Performed all work on these projects with the goal of mitigating human health and environmental impact concerns leading to closure of the sites by Records of Decision with the oversight agencies.

Engineering and Technology

- Provided project engineering services for the UXO ATDs that took place at the Yuma Proving Ground in Arizona during mid to late 1995. Performed work under contract to the Naval Explosive Ordnance Disposal Technology Division. Also conducted planning and preparation meetings with Yuma Proving Ground representatives, and arranged procurement of equipment and supplies necessary for the demonstration. Included airborne and portable earth-based innovative technologies utilizing combinations of new ground penetrating radar and magnetometer systems.

- Provided engineering support to SITE that included technical and regulatory expertise as needed for a contract to support the EPA's SITE program. Reviewed laboratory sample analysis data for the wastes generated during a SITE demonstration for the Fiery Marsh site at NAS North Island (IR Site 9); completed the necessary Navy, regulatory agency, and civilian disposal company paperwork regarding the wastes; then coordinated the proper recycling, treatment, and disposal of the wastes.

- Provided technical support on an as-needed basis for the U.S. Navy's SCAPS contract. Projects included dense data assessment of several Southwest Division CLEAN underground storage tank (UST) petroleum release sites. Also assisted with the development and testing of SCAPS (a laser-induced fluorescent detector integrated with a cone penetrometer capable of providing real time, in-situ measurement of petroleum contaminant concentrations). Assisted in the field deployment and testing of new SCAPS sensors that were to be used to detect chlorinated solvents, saturated zone interface and hydrogeologic parameters, and heavy metals.

Emergency Response

- Responded to approximately 20 emergency response incidents involving abandoned and spilled chemicals from illegal methamphetamine drug labs, fires at industrial facilities (including plating facilities), radioactive sources at landfills, and pesticide spills. Included selection and use of appropriate personal protective equipment (Levels A-C), selection and use of monitoring equipment (CGI/HNu/Draeger tubes and radiation meters), establishment of work zones, containment of spills, identification and categorization of known and unknown chemicals (HAZCAT) with supervision and documentation of cleanup actions.

- Responded to a public emergency incident that involved gasoline released to storm drain systems. Monitored areas for explosive conditions and potential ignition sources. Supervised and documented the cleanup actions taken by a contractor.

- Served on a team that investigated asbestos-contaminated soils that had been placed as fill during construction of a residential area in Paradise Hills, California. Included research of Potentially Responsible Parties (PRPs) who may have disposed of waste asbestos. Provided technical support of the U.S. EPA cleanup that was conducted based on the team's site assessment data.

- Served as the local Regulatory Oversight Specialist for a diesel and gasoline release to Rattlesnake Creek in Poway, California. Performed environmental engineering evaluations and cost analysis related to mitigating further releases to the creek. Began enforcement on PRP when they refused to abate situation as required by law. Provided all technical data to U.S. EPA Region IX when they assumed management and cleanup of the site as an emergency response in conjunction with the U.S. Coast Guard.

Preparedness and Prevention

- Inspected more than 150 businesses that were handling enough hazardous materials to necessitate creation of Chemical Emergency Contingency Plans. Assisted these businesses (including aerospace, plating, equipment manufacturing, furniture building, wastewater treatment related to coating operations, and auto painting) in the preparation of these plans. Facilitated contact between operators of similar industries in order to foster information exchange regarding process safety improvements.

- Served as Site Safety Officer and as a technology observer for the demonstration team during the UXO Detection, Identification, and Remediation Advanced Technology Demonstration at the Yuma Proving Ground in Arizona.

Spill Prevention Control and Countermeasures (SPCC) Plans

- Helped businesses to identify storm drain openings and other pathways by which accidental chemical releases might leave their control. Suggested methods (still) successfully being used to control access to pathways. Conducted re-inspections when warranted.

- Participated as a member of the San Diego Hazardous Waste Task Force (a multi-agency environmental crimes enforcement team) inspection of an aerospace company. Inspection verified and documented the complete lack of a SPCC Plan at the facility and indicated that several serious releases to the environment had occurred as a result. Involved environmental releases of post-

process sludges containing heavy metals from metals finishing, plating, and production lines as well as improper handling and releases of both hydrocarbon-based and halogenated solvents.

Technical Support

- Instructed over 15 courses on emergency response, site assessment, remediation, and public relations for the University of California at San Diego, University of California at Riverside and Southwestern Community College Extensions.

- Assisted the Border Environmental Health Specialist to train County of San Diego Environmental Health Department, U.S. Customs, Environmental, Disaster Preparedness, Fire Department, and local law enforcement inspectors on both sides of the U.S./Mexico border. Regularly interacted with the EPA's REPA program staff to achieve technology transfer objectives.

- Trained U.S. and Mexican Customs and Environmental Inspectors in hazardous waste compliance monitoring. Assisted with the development of course materials for ongoing training, assembled actual contraband hazardous waste case studies, facilitated classes, and participated in the first train-the-trainers session to turn the technology transfer effort over to state and local agency experts in Arizona, California, New Mexico, and Texas.

- Worked through a REPA contract supporting EPA's Border XXI Program aimed at defining a shared vision between governments and communities along the U.S./Mexico border committed to environmental protection and sustainable development. Assisted in authoring guidance documents for Border XXI serving as both Facilitator and Note Taker during Border XXI community meetings along the Arizona/California border. Served as coauthor of the summary document for the meetings, while coordinating the delivery of court reporter transcripts from the meetings held in Arizona, California, New Mexico, and Texas to the EPA. Personal involvement continues with Border XXI as a Citizen Expert.

- Served as a Consultant to EPA officials who participated in the Border XXI binational meeting in Tijuana, Mexico that was held following the domestic community meetings. Also took notes for the public health and safety, emergency response, and solid waste management binational task group sub-meetings.

- Served as co-chairman of the County of San Diego Site Assessment and Mitigation Division's technical work group that developed guidelines for preparation of Community Health and Safety Plans prior to performing environmental assessment and cleanup work at contaminated sites in San Diego County.

- Provided technical and administrative support to the EPA during a long-term release of diesel and gasoline to Rattlesnake Creek in Poway, California.

Project Work Plans

- Prepared more than 250 assessment and remediation work plans for all types and sizes of public, municipal, private and U.S. Navy contaminated sites.

- Provided technical review and comment on more than 200 assessment and remediation work plans while working as a regulator.

- Prepared the technology demonstration plan for the U.S. Navy Site Characterization and Analysis Penetrometer System, which led to Cal-EPA and U.S. EPA certification of the technology.

Enforcement

- Provided documentation and information to the County of San Diego District Attorney's Office for an enforcement case on a Clean Water Act (CWA) violation regarding a release of petroleum to a waterway at a gas station release site.

- Provided expert testimony in court for the County of San Diego District Attorney's Office on an enforcement case regarding illegal abandonment and disposal of hazardous materials to the ground. Collected samples of hazardous materials, hazardous wastes, soil, and water to help provide evidence to prove the case.

- Assisted in planning and conducting a field investigation for the County of San Diego's Hazardous Material Task Force on an illegal hazardous waste dumping case.

International

- Provided environmental engineering services on a voluntary basis as a consultant for hazardous materials and public health and safety affairs. Involvement included subterranean explosive gas migration assessment and control, explosive sewer-storm drain conditions abatement, chemical emergency response drills, and air monitoring equipment training and procurement for municipalities and clients in the Republic of Mexico.

- Provided waste sampling and characterization services to Mexican manufacturing companies to characterize waste streams for recycling, treatment, and disposal under Mexican environmental agency scrutiny.

- Provided RCRA enforcement, permitting, and assistance (REPA) for a contract to support the EPA's REPA program, which consisted primarily of technology transfer regarding the management of hazardous materials and wastes to officials of the Republic of Mexico.

Other Related Experience

- Proposed, designed, budgeted, and coordinated groundwater and soil exploration and remediation projects. Performed projects involving air pollution control and air resources management. Also provided client support and engineering services, including quality assurance/quality control (QA/QC), during projects. Assisted staff-level engineers and geologists, and provided support for all projects involving regulatory compliance and/or permitting.

- Served as a Hazardous Materials Specialist for the County of San Diego's Department of Environmental Health. Provided consultation and education related to hazardous material and waste management to industry. Inspected hazardous waste generators assisting them in complying with applicable environmental regulations. Educated generators regarding resource recovery methods for hazardous liquids (e.g., used oil and solvents). Conducted special projects as assigned for both industry compliance and site assessment and mitigation.

- Served as Staff Engineer performing various duties to help operate a full-service construction materials testing laboratory. Supervised and scheduled lab and field activities for 4 to 12

engineering and geologic technicians. Assisted environmental engineering group as Staff Chemical/Environmental Engineer on environmental projects, as necessary.

- Served as a Student Engineer at a San Diego utility performing air quality control inspections that involved power plant exhaust stack emissions monitoring and sampling, and conducted laboratory chemical analyses of the air samples. Summarized the inspections for use by the company's management in documenting compliance with local, state, and federal air pollution control regulations. Conducted boiler efficiency testing procedures for two power plants.

Professional Certifications and Registrations

Engineer-in-Training, California (No. XE065066), 1986
Certificate in Hazardous Materials Management, UCSD, 1990
Colorado Listed Environmental Consultant 2000 - 2010
Equivalent 40-Hour OSHA Health & Safety Training (Agency-Grandfathered), 1989
8-Hour OSHA Site Supervisor's Certification, 1992
8-Hour OSHA Health & Safety Annual Update Certification, 1990 - 2014

Continuing Education and Training

Petroleum Vapor Intrusion Webinar - USEPA/OSWER/OUST, 2010
Mold Consulting Seminar, SECOR International Inc. - P.A. Platcow, CIH, 2003
8 Hour CPR and First Aid Courses, 1987 – 2011
Chevron Loss Prevention Training, SECOR International Inc. – P.A. Platcow, CIH, 2001
Top Quality Management and Streamlining Principles in Government, MRI, 1992
Incinerable Hazardous Waste Minimization Workshop, Cal-EPA, 1991
Waste Classification and the Land Ban, U.S. EPA, 1990
Hazardous Waste Element of the San Diego Regional Solid Waste Management Plan, UCSD, 1990
Bioremediation of Contaminated Groundwater, Dr. Michael Piotrowski, 1990
Introduction to Environmental/Human Toxicology, UCSD, 1990
Update on Environmental Bioremediation, CDOHS, 1990
How to be a More Effective Supervisor, Career Track, 1990
Environmental Health Services Cross Orientation, County of San Diego, 1990
Hazardous Incident Response Team Annual Level A Emergency Response Exercise, County of San Diego, 1990
Court Case Preparation, San Diego County District Attorney's Office, 1990
Regulatory Framework for Toxic Substances, UCSD, 1989
Aquifer Testing Methods, CDOHS, 1989
AB3777 Risk Management and Prevention Planning, UCSD, 1989
Assessment and Remediation of Chemicals in the Environment, UCSD, 1989
Permit Variances, Permit-by-Rule, Transportable Treatment Units, CDOHS, 1989
AB2588 Air Toxic Hot Spots, UCSD, 1989
Quality Assurance/Quality Control for Analytical Methods, Analytical Technologies Inc., 1989
Vector Control and Environmental Health, County of San Diego Vector Control Division, 1989
Hazardous Incident Response Team Contaminated Site Sampling Safety, County of San Diego, 1989
Emergency Preparedness, Response, and Planning, UCSD, 1989
Hazardous Incident Response Team (HIRT) Annual Level A Emergency Response Exercise and Drug Lab Waste Training, County of San Diego, 1989
HIRT Hazardous Materials Field Instruments Trials, County of San Diego, 1989
Leaking Underground Storage Tank Tech and Environmental Compliance, California SWRCB, 1988

Hazardous Incident Response Team SCBA Level A and B, County of San Diego, 1988
Management of Chemical Releases, CSTI, 1988
Site Assessment and Mitigation Technology Update Conference, UCSD, 1988
Principles of Industrial Hygiene, UCSD, 1988

Current Status of the Leaking Underground Fuel Tank (LUFT) Document, CDOHS/DTSC, 1988

Groundwater Hydrogeology Course, Paul Hargis, UCSD Extension, 1988

Risk Assessment at Chemically Contaminated Sites, California RWQCB/San Diego Region, 1988
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EnviroApplications, Inc.
Engineering & Consulting

PHASE I ENVIRONMENTAL SITE ASSESSMENT FOR

UNION BANK, N.A.

Solana Highlands Apartments
701 South Nardo Avenue
Solana Beach, San Diego County, CA 92075-2309
APN: 298-260-33-00

July 16, 2010
EAI Project No.: 01.UNBNK13.10
UBNA RIMS No.: 10-1089

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1.0 PROJECT SUMMARY

EnviroApplications, Inc. (*EAI*), at the request of Union Bank, N.A. Environmental Risk Management/R.E. Services (Union Bank), conducted a Phase I Environmental Site Assessment (ESA) of the Solana Highlands Apartments complex property located at 701 South Nardo Avenue in the city of Solana Beach, San Diego County, California (Figure 1). The subject property consists of a fully-developed land parcel that comprises an irregularly-shaped 13-acre lot (Figure 2). The subject property is improved with 16, 2-story apartment buildings. In addition to the apartment buildings, two L-shaped maintenance and tenant storage room buildings are located in the southwest corner of the subject property. A multipurpose building (that includes administrative offices, a business center, recreational and meeting spaces, a fitness room, sun deck and swimming pool) is located off the main driveway in the approximate center of the apartment complex. A lawn area, open air park, is located to the southwest of the 683 Building (Figure 2). There are four driveways from South Nardo Avenue in to the subject property apartment complex. Numerous cement block slope-retaining walls are located throughout the subject property. There are no vehicle garages. Tenants park their vehicles in either uncovered designated spaces or beneath metal carports. The subject property is built on the slope of a hill and has an extensive stormwater drainage system to prevent water from pooling in areas next to the structures. Based on a review of historical aerial photographs, the subject property was open, undeveloped, hillside land prior to 1972, when (according to a statement by the Solana Beach Building Department) it was developed with the Del Mar Turf Club Apartments (later renamed Solana Highlands).

The results presented in this ESA Report indicate that:

- No evidence of any potential adverse environmental conditions per the Scope of Work Required by Union Bank For a Phase I Environmental Site Assessment (SOW; Union Bank, 06-05-2009), including recognized environmental conditions (RECs) per American Society for Testing and Materials (ASTM International) Standard E1527-05, was found to exist in association with the subject property.

No known environmental release sites located either hydrogeologically up or immediately cross-gradient of the subject property that qualify as a potential adverse environmental contaminant impact source condition to the subject property were identified in the Environmental Data Resources Inc. (EDR) Report that was obtained and reviewed during the preparation of this ESA. No issues associated with the possible presence of lead based paint (LBP) and asbestos containing material (ACM) were identified. Building materials that were observed appeared to be in excellent condition.

No additional environmental assessment is recommended.

2.0 PROJECT METHODOLOGY

2.1 INTRODUCTION

EnviroApplications, Inc. (*EAI*) has completed a Phase I ESA of the subject property. This Phase I ESA Report was prepared for Union Bank for property transaction due diligence purposes. Photographs of the subject property are presented as Attachment 1.

2.2 SCOPE AND DECLARATIONS

The objective of this ESA was to perform appropriate inquiry into the past ownership and uses of the subject property consistent with good commercial or customary practice as outlined by the ASTM in Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E1527-05 and in accordance with the Union Bank Phase I ESA SOW dated 06-05-2009. The purpose of this ESA work was to identify, to the extent feasible, adverse environmental conditions (including RECs) of the subject property that potentially have and/or may cause an adverse environmental impact to the subject property.

Frederic A. Allee and Craig A. Smith of *EAI* declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 40 Code of Federal Regulations (CFR) Part 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries (AAI) in conformance with the standards and practices set forth in 40 CFR Part 312.

The term recognized environmental condition (REC) is defined by ASTM E 1527-05 as:

"The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum product into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws."

The term does not include *de minimis* conditions, which generally do not present a material risk to human health and would not likely be subject to enforcement action if brought to the attention of governmental agencies. An example of such a *de minimis* condition would be the engine oil stains typically present on the pavement surfaces of parking spaces due to various types of minor leaks from parked vehicles.

This ESA was conducted in accordance with the Master Environmental Services Agreement (MESA) between Union Bank and *EAI* dated July 18, 2007, and an electronic Bid Award dated June 15, 2010. The SOW consisted of a visual reconnaissance of the subject property, collection of a current set of photographs; review of historical aerial photographs, maps and city directories, interviews, obtaining and reviewing available agency records and review of a current Environmental Data Resources, Inc. Radius Map Report (EDR Report). The scope of work did not include an assessment for historical overall environmental regulatory compliance of every facility or entity that ever

operated at the subject property or sampling and analyzing of environmental media. *EAI* was not contracted to perform any independent evaluation of the purchase or lease price of the subject property and its relationship to current fair market value. No information relative to this matter was provided to *EAI* by Union Bank (the Users of this ESA Report according to ASTM E 1527-05). The conclusions presented in this ESA Report are professional opinions based on data described herein. The opinions are subject to the limitations described in Section 7.0.

Data Gaps From Historical Records Review:	1) No Sanborn fire insurance industry maps were found for the subject property and surrounding area. 2) No building department records were found for the subject property. This is not considered to have the potential to substantially alter the conclusions of this report.
Data Gaps From Interviews:	1) A completed User Questionnaire was not provided by Union Bank to *EAI.* This is not considered to have the potential to substantially alter the conclusions of this report.
Other Data Gaps:	1) An environmental cleanup lien search report was not provided by Union Bank for review by *EAI*. This is not considered to have the potential to substantially alter the conclusions of this report.

2.3 PREVIOUS ENVIRONMENTAL WORK

Union Bank provided a copy of a Phase I ESA Report dated July 31, 1998, for the subject property that was submitted to Prowswood Management, Inc. by Commercial Inspectors, Inc. (CII; 1998 Phase I ESA Report). The 1998 Phase I ESA Report concluded that no evidence was revealed of any RECs of the subject property. No additional environmental assessment work was recommended by CII. Based on the results of their in-field screening tests conducted in 1998 (Attachment 2 – Section 4.9) CII concluded that (lead based paint) LBP did not appear to be present. CII recommended preparation of an asbestos containing material (ACM) Operations and Maintenance (O&M) Plan for the subject property apartment complex. They observed sprayed-on acoustical ceiling texture and other potential ACMs.

A copy of the previous Phase I ESA Report is presented as Attachment 2. No other documents describing previous environmental work at the subject property were provided by Union Bank or found by *EAI* during this ESA.

3.0 ENVIRONMENTAL ASSESSMENT FINDINGS

3.1 SITE LOCATION

The subject property is located along the southern side of South Nardo Avenue, adjacent to its intersections with both Stevens Avenue and Fresca Street, at 701 South Nardo Avenue in Solana Beach, San Diego County, California (Figure 1). No other addresses were found to have been historically associated with the subject property. As previously indicated, current photographs of the subject and surrounding properties are provided in Attachment 1.

3.2 SITE DESCRIPTION

The subject property consists of a fully-developed land parcel that comprises an irregularly-shaped lot, which according to information provided by Union Bank and on the assessor's parcel map, has approximately 13-acres (566,280 square feet) of surface area (Figures 2 and 5). The subject property is improved with 16, 2-story apartment buildings. Available apartment configurations in the buildings consist of:

- Torrey: 1-Bedroom, 1-Bathroom;
- Foxtail: 1-Bedroom, 1-Bathroom;
- Cypress: 2-Bedrooms, 1-Bathroom;
- Monterey: 2-Bedroom, 2-Bathrooms; and
- Ponderosa: 3-Bedrooms, 2-Bathrooms.

Two L-shaped maintenance and tenant storage room buildings are located to the north and south of the 669 Building in the southwest corner of the subject property (Figure 2). Tennis courts are located immediately south of the 695 Building. The clubhouse (multipurpose) building is located between the 691 and 773 Buildings in the approximate center of the apartment complex. The clubhouse includes administrative offices, a business center, recreational and meeting spaces, a fitness room, sun deck and swimming pool. Coin-operated laundry rooms for the tenants are located on the first floors of the 665 and 697 Buildings. A lawn area, open air park, is located to the southwest of the 683 Building (Figure 2). The southern and western boundaries of the subject property apartment complex are security-fenced. The northern and eastern boundaries along South Nardo Avenue are not fenced and the complex is not gated. There are four driveways from South Nardo Avenue in to the subject property apartment complex. Numerous cement block slope-retaining walls are located throughout the subject property. The driveways and parking spaces are paved with asphaltic concrete that is cracked in some areas. There are no vehicle garages. Tenants park their vehicles in either uncovered designated spaces or beneath metal carports. The subject property is built on the slope of a hill and has an extensive stormwater drainage system to prevent water from pooling in areas next to the structures. The buildings appear to be wood framed with stucco walls on concrete slab on grade foundations. The structures appeared to have flat built-up composition roofs. It should be noted that the owners recently changed from denoting the apartment buildings by letters (as was the case at the time the 1998 Phase I ESA Report was prepared) to numbers. Both are depicted on Figure 2, the Site Plan.

3.3 ADJACENT AND SURROUNDING LAND USE

Residential neighborhoods are located to the northwest and north of the subject property. The Solana Pointe apartment complex is located across South Nardo Avenue to the northeast. Homes, followed by the Stevens Avenue roadway, then more homes and commercial buildings are located to the east and southeast of the subject property. Condominiums and homes are located down a steep sloped hillside to the south. The St. James Catholic Church campus is located to the west of the subject property. The surrounding residential and church campus operations did not appear to pose an environmental impact risk to the subject property and are shown on Figure 3. Photographs of the adjacent properties are included in Attachment 1.

3.4 SITE OPERATIONS

Solana Highlands is operated as an apartment complex with amenities including a small open space park, coin-operated laundry room, tennis courts, clubhouse with administrative offices, fitness room and business center and a swimming pool and whirlpool spa. No business operations requiring an environmental permit were observed.

3.5 HISTORY

EAI reviewed historical aerial photographs, city telephone directories, a previous Phase I Report prepared in 1998, a U.S. Geological Survey (USGS) topographical map (Figure 3) an EDR Report and conducted interviews to gather information regarding the history of the subject and adjacent properties. The following tables present summaries of the historical research findings for the subject and adjacent properties:

Subject Property:

Year(s)	Use	Source(s)
1939 – circa 1971	Open, undeveloped, hillside land with the South Nardo Avenue roadway always present. Some dirt paths across surface.	Aerial Photos 1998 Phase I Report
1972 - 2010	Occupied by existing apartment complex: originally called Del Mar Turf Club Apartments and later renamed Solana Highlands Apartments.	Aerial Photos Directories Interview Reconnaissance Visit

Adjacent Properties:

Direction	Year(s)	Use(s)	Source(s)
North	1939 – circa 1973	Mixed open, undeveloped, hillside and fruit tree orchard land.	Aerial Photos 1998 Phase I Report
	1974 – 2010	Occupied by residential neighborhoods and Solana Pointe Apartments (to northeast).	Aerial Photos 1998 Phase I Report Reconnaissance Visit

Adjacent Properties (Continued):

Direction	Year(s)	Use(s)	Source(s)
East	1939 – circa 1962	Open, undeveloped, hillside land.	Aerial Photos
	1963 – circa 1973	Undeveloped, hillside land with sparse residences.	Aerial Photos 1998 Phase I Report
	1974 - 2010	Occupied by existing residences with increasing number of commercial buildings beyond.	Aerial Photos 1998 Phase I Report Reconnaissance Visit
South	1939 – circa 1962	Open, undeveloped, hillside land.	Aerial Photos
	1963 – circa 1973	Undeveloped, graded land with sparse residences.	Aerial Photos 1998 Phase I Report
	1974 - 2010	Occupied by existing condominiums.	Aerial Photos 1998 Phase I Report Reconnaissance Visit
West	1939 – circa 1973	Mixed open, undeveloped, hillside and fruit tree orchard land.	Aerial Photos 1998 Phase I Report
	1974 – 2010	Occupied by existing St. James Catholic Church campus with increasing residential neighborhoods beyond.	Aerial Photos 1998 Phase I Report Reconnaissance Visit

3.5.1 Aerial Photographs

EAI reviewed historical aerial photographs that included the subject property area. The general type of activity on a property and land use changes can often be discerned from the type and layout of structures visible in the photographs. However, specific elements of a facility's operation cannot normally be determined from aerial photographs alone.

The following photographs of the subject property and surrounding areas were examined:

1. Photograph by Fairchild, dated 1939, Approximate Scale 1”=555’;
2. Photograph by Park, dated 1953, Approximate Scale 1”=555’;
3. Photograph by Cartwright, dated 1963, Approximate Scale 1”=555’;
4. Photograph by AMI, dated 1974, Approximate Scale 1”=600’;
5. Photograph by USGS, dated 1990, Approximate Scale 1”=666’;

6. Photograph by USGS, dated 1994, Approximate Scale 1"=666';
7. Photograph by USGS, dated 2002, Approximate Scale 1"=666';
8. Photograph by EDR, dated 2005, Approximate Scale 1" = 604' and
9. Photograph by MapQuest, dated 2010 (Figure 3), Approximate Scale 1"=330'.

By reviewing the nine photographs supplied by EDR, *EAI* was able to form the following inferences about the subject property and surrounding areas:

1935, 1953 and 1963 Aerial Photographs

The subject and surrounding properties appear to be mixed open, undeveloped hillside and fruit tree orchard land. There appear to be an increasing number of residences in the vicinity. The South Nardo Avenue roadway is already present in more or less its present configuration, beginning with the 1935 photo.

1974, 1990, and 1994 Aerial Photographs

The subject property has been developed with the existing apartment complex (with the two L-shaped storage buildings adjacent to the 669 Building not present until the 1990 photo). The orchards on some of the surrounding properties are gone. Properties to the north and east have been developed for residential uses. The properties to the south are graded in the 1974 photo, and then developed with the existing residential buildings in the 1990 and 1994 photos. The property to the west has been developed with the existing church campus (with the number of church and school buildings increasing over time).

2002, 2005 and 2010 Aerial Photographs

The subject property and immediate vicinity appear similar to the way they did during the reconnaissance visit for this Phase I ESA.

No direct indication of adverse environmental conditions potentially affecting the subject property was observed in the aerial photographs. Copies of the aerial photographs are included in Attachment 3.

3.5.2 City Directories

EAI reviewed directories in the California Room at the San Diego Main Library for the years 1955 through 2010 (Polks and Haines). The following table presents a summary of the listings based on *EAI*'s review of the reverse city directories.

701 South Nardo Avenue, Solana Beach, CA

First Year	Last Year	Occupant(s)	Business Type Listed
1955	1971	701 South Nardo Avenue not listed.	
1972	1997	Del Mar Turf Club	Apartments
1998	2010	Solana Highlands	Apartments

None of the directory listings reviewed for the subject or immediately adjacent properties appeared to be of any potential environmental impact significance to the subject property.

3.5.3 Fire Insurance Maps

Fire insurance maps were developed for use by insurance companies to depict facilities, properties, and their uses for many locations throughout the United States. These maps provide prior land use history and assist in assessing whether there may be potential environmental contamination on or near the subject site. These maps, which have been periodically updated since the late 19th Century, often provide valuable insight into historical site uses.

EAI contracted with EDR to provide copies of historical Sanborn® fire insurance maps covering the subject and immediately adjacent properties. No maps were found (Attachment 4).

3.5.4 Interviews

Interviews of persons who are knowledgeable about the subject property were sought during completion of this ESA. The objective of the interviews was to obtain information indicating the potential for RECs in connection with the subject property. According to ASTM E-1527-05 Subsection 3.2.43, interviews address questions to be asked of past and present owners, operators, and occupants of the property and questions to be asked of local government officials. The results of the non-governmental interviews are discussed in the text that follows.

Site Owner - According to ASTM E-1527-05 Section 3.2.59, the owner is defined generally as the fee owner of record of the site. Mr. Robert Gottlieb, representing the property owners H.G. Fenton Co. (who was identified by Union Bank as the contact for the subject property) indicated during his interview that he had not been made aware of any:

- Past or present chemical leaks or spills of reportable quantities on the subject or adjacent properties;
- Problems with sumps, clarifiers or other interior or exterior subterranean structures on the subject property that discharge to the public sewer or storm drain system;
- Pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property;
- Pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property; or,
- Pending, threatened, or past notices from a governmental entity regarding violations of environmental laws or liability relating to hazardous substances or petroleum products.

Mr. Burton additionally indicated that:

- The subject property buildings do not have emergency electrical power backup generators, elevators or subterranean structures; and

- In the 16 buildings there are 194 units; of those 84 units are 1-bedroom 1-bath, 44 units are 2-bedrooms 1-bath, 58 units are 2-bedroom 2-bath and 8 units are 3-bedroom 2-bath.
-

Key Site Managers – According to ASTM E-1527-05 Section 3.2.44, the key site manager is defined as the person identified by the owner or operator of the site as having good knowledge of the uses and physical characteristics of the site. *EAI* identified Ms. Kimberly Burton, Community Director at Solana Highlands as the key site manager. Ms. Burton confirmed the information provided by Mr. Gottlieb and additionally indicated that:

- No swimming pool chemicals are stored on the subject property. Pool care is handled by an outside vendor who supplies and uses the chemicals as needed;

- No landscape maintenance chemicals, fertilizers or equipment are stored on the subject property. Landscaping maintenance services are provided by an outside vendor;

- No pest control chemicals are stored on the subject property. Pest control services are provided by an outside vendor when needed; and

- A limited amount of latex touch up paints are stored at the subject property in Storage Room 13 along with basic apartment building maintenance equipment, gasoline in cans for tenants/employees who run out and janitorial cleaning supplies in Storage Room 3.

Site Occupants - According to ASTM E-1527-05 Section 3.2.56, occupants are defined as those tenants, subtenants, or other persons or entities using the site or a portion of the site. No apartment tenants were interviewed since they are not expected to be knowledgeable about the history or environmental condition of the subject property.

3.5.5 Title Information and Environmental Liens

Research and assembly of a Chain-Of-Title Report was not included in the SOW for this ESA. No environmental lien search report was provided to *EAI* for review. Information provided by Union Bank and records consulted at the San Diego County Tax Assessor's Office confirmed that the Assessor's Parcel Number (APN) assigned to the subject property is 298-260-33-00, that it consists of approximately 13-acres of land and is zoned for residential use. The records indicate that the subject property is owned by H.G. Fenton Property Co., 7577 Mission Valley Road, San Diego, CA 92108. A copy of the assessor's parcel map that includes the subject property is provided as Figure 4.

3.5.6 Other Historical Sources

EAI reviewed the historical USGS topographical map that includes the subject property and surrounding area. The map, dated 1979, depicts the subject property and surrounding area as fully-developed urban land located to the north of the Del Mar Racetrack complex (Figure 5).

3.6 GENERAL SITE OBSERVATIONS

EAI performed a reconnaissance of the subject property on July 1, 2010. Weather conditions during the visit to the subject property were cloudy (marine layer overcast) and dark with an ambient daytime air temperature of approximately 65 degrees Fahrenheit. There were no weather related property access restrictions encountered during the reconnaissance visit. The clubhouse, 10 apartments, the storage buildings and swimming pool pump house were all entered and observed during the visit. A description of the subject property was provided in Subsection 3.2. Ms. Kimberly Duggan of the H.G. Fenton Co. accompanied EAI during the interior portion of the visit and allowed access to all areas. No one accompanied *EAI* during the reconnaissance of the subject property exterior and surrounding properties. Other than exterior storm drain openings, no interior or exterior subterranean structures were observed.

3.7 HEATING AND COOLING

All 16 apartment buildings and the clubhouse on the subject property building appeared to be served by a central air-conditioning and gas-fired heating system with roof-mounted units. The two L-shaped storage buildings adjacent to the 669 Building in the southwest corner area of the subject property did not appear to be air-conditioned or heated.

3.8 PHYSIOGRAPHIC FEATURES

3.8.1 Regional Topography

The 1979 USGS 7.5-minute Encinitas Quadrangle Map was reviewed to identify physical features in the vicinity of the subject property (Figure 5). The subject property is depicted at an average elevation of approximately 100 feet above mean sea level (MSL) varying from approximately 110 feet above MSL in its northern portion to 90 feet MSL in its southern portion. Based on the review of the map, and confirmed with observations made during the reconnaissance visit, the terrain in the vicinity of the subject property has been significantly altered by grading, but is sloped overall to the southwest.

3.8.2 Regional Geology

The subject property lies within the Peninsular Ranges Geomorphic Province of California. This province is transverse by a group of northwest trending sub-parallel fault zones and encompasses an area that extends 125 miles from the Transverse Ranges and the Los Angeles Basin south to the Mexican Border (and beyond another 775 miles to the tip of Baja California, Cabo San Lucas). Rocks within the province were emplaced during Cretaceous-age orogenic events and uplifted into the present mountain ranges during the late Tertiary and Quaternary-ages. Igneous, metamorphic and sedimentary rock is all found within the Peninsular Ranges (CDC, 1975). The subject property area is underlain by Quaternary-age sedimentary deposits which include granitic tonalite and diorite and some clay layers that are Marine in origin (CDC, 1975).

3.8.3 Regional Hydrogeology

Based on a review of the California State GeoTracker Database, the expected depth-to-groundwater beneath the subject property is 2 approximately 50 feet below ground surface (bgs) and groundwater movement direction is to the southwest toward the Pacific Ocean. According to the San Diego Regional Water Quality Control Board (SDRWQCB), the subject property is located in the Rancho Santa Fe Hydrologic Subarea (HSA; 905.11) of the Solana Beach Hydrologic Area (HA; 905.10) within the San Dieguito Hydrologic Unit (HU; 905.00) a non-beneficial ground water use area (within the portion of the unit located to the west of Interstate 5) with beneficial surface water uses for industrial and recreational purposes (SDRWQCB, 2003). The subject property is not depicted on a Federal Emergency Management Agency (FEMA) Flood Plain Panel and is not located in either a 100 or 500-year Flood Zone (EDR Report, Attachment 5). The subject property is located in an urbanized area and not within, or nearby, any designated wetland area (COE, 1987).

3.9 ABOVEGROUND STORAGE TANKS (ASTs)

No ASTs were observed on the subject property. No emergency electrical power backup generator requiring a fuel AST was observed on the subject property.

3.10 UNDERGROUND STORAGE TANKS (USTs)

No evidence of existing USTs (e.g., fill pipes, vent pipes, dispensers, emergency generators, or fuel oil-powered heating systems) or the prior presence of USTs (e.g., surface excavation scars or abandoned vent pipes or clamps on the walls of the building) was observed at the subject property.

3.11 ELEVATORS AND ESCALATORS

The subject property buildings do not have any elevators or escalators. Handicap-equipped apartments are located on the ground floor in the buildings where they are located.

3.12 POLYCHLORINATED BIPHENYLS (PCBs)

Electrical transformers, hydraulic equipment, capacitors, fluorescent light fixture ballasts and similar equipment may contain polychlorinated biphenyls (PCBs) in hydraulic or dielectric insulating fluids contained within the units. The federal Toxic Substances Control Act (TSCA) generally prohibited the domestic manufacture of PCBs after 1979; however, there is a potential for the dielectric fluid in electrical and hydraulic equipment manufactured prior to that date to contain PCBs. Several concrete pad-mounted transformers were observed within and along the boundaries of the subject property. San Diego Gas & Electric Company (SDG&E) is responsible for the maintenance of their transformers located on and near the subject property. The transformers appeared to be in good condition with no staining from leakage or other visible signs of problems.

Ceiling-mounted fluorescent light fixtures were observed inside the apartments, laundry room, and storage rooms of the subject property buildings. It is likely that most of the fixtures (and their associated ballasts) were installed during construction of the buildings on the subject property in 1972 making unlikely that they contain PCBs; however, it was beyond the scope of this Phase I ESA

to dissemble the fixtures and inspect them for the presence of No PCB's labeling. The light fixtures observed appeared to be in good condition with no leakage observed.

3.13 HAZARDOUS MATERIALS

A limited number of hazardous materials were observed at the subject property during the reconnaissance visit for this ESA. Latex paints were observed being stored in Room 13 of the North Storage Building. The other hazardous materials were observed in storage Room 3 inside a yellow, steel flammables storage. They consisted of:

- 2-steel and 2-poly gasoline totes;
- 1-gallon poly container of Jasco water sealant;
- 1-gallon steel can of odorless mineral spirits;
- Several 2-gallon poly containers of house cleaner/mildew killer;
- 2, small, steel bottles of propane for torch use; and
- Approximately 30, small spray cans of cleaners, lubricants, protectants and adhesives.

No chemicals were observed being stored at the subject property in disclosure quantities (55-gallons or more for liquids, 500 pounds or more for solids and 200-cubic feet or more of compressed gases). No staining that might indicate careless handling of paint or chemicals was observed on the floor slabs or adjacent building wall surfaces of either of the two storage rooms.

3.14 HAZARDOUS WASTE

No operations generating hazardous wastes were reported to be occurring at the subject property. No hazardous wastes were observed being stored or generated during the reconnaissance visit for this ESA.

3.15 SOLID (NON-HAZARDOUS) WASTE

Trash and recyclables dumpsters serviced by Tayman Industries, Inc. were observed in compounds located off the parking areas adjacent to the apartment buildings (Figure 2). The bins were observed to contain typical office and domestic paper trash, food and beverage containers. No staining that might indicate improper past disposal of paint or waste oil into the dumpsters was observed.

3.16 EXISTING GROUNDWATER ISSUES

No groundwater monitoring well surface covers were observed on or near the subject property. Based on the EDR Report data, no existing groundwater issues are known to exist in the subject property area.

3.17 WATER, WASTEWATER, DRAINS, AND STORMWATER

Potable water is supplied to the subject property by the Santa Fe Irrigation District. No water supply wells were observed during the reconnaissance visit.

Other than from restroom and laundry facility use, no wastewater generation sources were observed at the subject property. Sanitary sewer services are provided to the site by the City of Solana Beach, Department of Public works. The subject property apartment complex has always been connected to the municipal sanitary sewer. No evidence of a septic tank and/or leach field was observed.

Several metal-grated storm drain openings were observed at low areas on the subject property (tennis courts, park lawn, and 757 Building parking lot). No unusual staining was observed on the pavement surrounding the drain openings. Cement gutters placed to direct stormwater away from the subject property buildings were observed on the slopes throughout the apartment complex. The gutters appeared to have been designed to deliver stormwater out to South Nardo Avenue where curbline storm main openings were observed. No indication of a discharge that would require a National Pollutant Discharge and Elimination System (NPDES) permit was observed.

3.18 ODORS, POOLS OF LIQUID, STAINS, AND CORROSION

No evidence of odors, pools of liquid, stains or corrosion was observed on or near the subject property.

3.19 PITS, PONDS, LAGOONS, AND STRESSED VEGETATION

No evidence of pits, ponds, lagoons or stressed vegetation was observed on or near the subject property.

4.0 REGULATORY AGENCY LIST REVIEW

EAI contracted with EDR to provide an EDR Report containing the results of a search and retrieval of information in databases maintained by various local, state and federal environmental agencies. The purpose of the search was to identify listings for the subject property or other properties in the vicinity. Databases reviewed included local, federal and state lists of known or suspected contaminated sites, known handlers or generators of hazardous wastes, known waste disposal facilities, and facilities with permitted underground storage tanks. The databases that were researched for the EDR Report include those briefly described as follows:

- U.S. Environmental Protection Agency (EPA): National Priority List (NPL), Sites designated for Superfund clean-up by the EPA;
- EPA: Resource Conservation and Recovery Act (RCRA) Corrective Actions (CORRACTS);
- EPA: Facility Index System (FINDS; Archaic);
- EPA: Comprehensive Environmental Response, Cleanup and Liability Information System (CERCLIS): Sites under review by the EPA;
- EPA: RCRA Permitted Treatment, Storage, Disposal Facilities (TSDF; RCRA-TSD) and TSDF subject to violations/enforcement corrective actions (RCRIS TSDC);
- California (State): (CAL CERCLIS): State Equivalent CERCLIS List (SCL)/ Cal Site (State Sites);
- ENVIROSTOR: Sites identified by the California State Department of Toxic Substances Control (DTSC) Site Mitigation and Brownfield Reuse Program; Sites with known contamination or sites with reason to believe that further investigation is necessary;
- State and San Diego (County): Leaking Underground Storage Tanks (LUST) listings: Sites with leaking underground storage tanks;
- State: Solid Waste Landfills/Waste Management Unit Database System (SWL/WMUDS) including Toxic Pits Clean-Up Facilities): Sites permitted as solid waste landfills, incinerators, or transfer stations;
- State: Properties With Hazardous Waste (CORTESE): Sites on State index of properties with hazardous waste. CORTESE sites are listed individually as SCL, LUST and SWL sites;
- State/County: Underground Storage Tanks/Aboveground Storage Tanks (USTs/ASTs): Sites with registered underground or aboveground storage tanks;
- EPA: Emergency Response Notification System (ERNS): Sites with previous hazardous materials spills;

- EPA: Large or Small Quantity Generators (RCRA LQG and SQG): Facilities that generate large or small quantities of hazardous waste; and

- Local and State: San Diego County (San Diego Co. HMMD and San Diego Co. SAM) and DTSC HAZNET: listings of facilities that handle hazardous materials; generate hazardous wastes, have had documented releases of chemicals to the environment, or have shipped hazardous wastes to recyclers or a disposal facility under manifest.

The complete EDR Report including maps showing the location of listed sites relative to the subject property is presented in Attachment 5. The term hydrogeological gradient is used in reference to the direction of groundwater movement (to the southwest). The subject property has the following listings in the EDR Report:

The Solana Highlands Apartments on the subject property appears in the DTSC HAZNET listings because approximately 0.84-tons of asbestos-containing waste was disposed of at some point in the past to a San Diego County landfill under the Uniform Hazardous Waste Manifesting system. No other listings associated with the subject property were found.

In addition to the EDR Report, *EAI* reviewed the California Department of Conservation, Division of Oil, Gas and Geothermal Resources database and confirmed that there were no existing or abandoned oil/gas wells or dry holes present on, or within a 1-mile radius of the subject property. The results of the complete listing review are summarized and discussed in the following sections.

4.1 NATIONAL PRIORITY LIST (NPL)

The National Priorities List (NPL) is a list of contaminated sites that have been assigned for cleanup under the Federal EPA Superfund program. Review of the NPL list identified no facilities within a 1-mile search radius of the subject property.

4.2 RCRA CORRECTIVE ACTION LIST (CORRACTS)

The EPA maintains this database of the Resource Conservation and Recovery Act (RCRA) facilities, which are undergoing corrective action. A corrective action order is issued pursuant to RCRA Section 3008 (h) when there has been a release of a hazardous waste or constituents into the environment from a RCRA facility. No CORRACTS listings were identified within a 1-mile search radius of the subject property.

4.3 EPA REVIEW LIST (CERCLIS)

The Comprehensive Environmental Response, Cleanup, and Liability Information System (CERCLIS) List is a historical data base list of contaminated sites which the EPA has or will evaluate to determine whether a particular site merits placement on the NPL. The review of the EPA CERCLIS list identified no facilities within a ½-mile search radius of the subject property.

4.4 EPA RCRA PERMITTED TREATMENT, STORAGE, DISPOSAL FACILITIES (TSD)

The EPA's RCRA Program identifies and tracks hazardous waste from the point of generation to the point of disposal. This list identifies facilities that treat, store, or dispose of hazardous waste. No RCRA TSD facilities were identified within a ½-mile search radius of the subject property.

4.5 STATE CERCLIS LIST (SCL)/HIST CAL SITES (STATE SITES)/ENVIROSTOR

The Cal-Sites database contains information on sites in California where hazardous substances have been released, or where the potential for such a release exists. These properties have been reviewed by the Department of Toxic Substances Control (DTSC) and are given a status as needing No Further Action (NFA) or are in various stages of review, assessment and remediation at the sites. DTSC provided an annual prioritization for SCL sites called the State Priority List (SPL). However, it is no longer updated and has been replaced by ENVIROSTOR. No HIST Cal-Sites were identified within a 1-mile radius of the subject property. The California Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfield's Reuse Program (SMBRP) ENVIROSTOR database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites; State Response, including Military Facilities and State Superfund sites; Voluntary Cleanup; and School sites. No SCL sites were identified within a 1-mile search radius of the subject property. One SMBRP ENVIROSTOR site was identified within a ½-mile search radius of the subject property:

- 124 Lomas Santa Fe Drive – Solana Beach Plaza (Site Screening Evaluation - No Known Environmental Releases) is located approximately 0.65-miles northwest, hydrogeologically up and cross-gradient, of the subject property.

The distance and relative location of Solana Beach Plaza makes it unlikely that the shopping center represents a potential environmental impact concern to the subject impact concern to the subject property.

4.6 CORTESE HAZARDOUS WASTE AND SUBSTANCE LIST (HIST CORTESE)

The sites for this list are designated by the State Water Resources Control Board (LUST) the Integrated Waste Board (SWF/LS) and the DTSC. This list is defunct and was last updated in 2001. No CORTESE/HIST CORTESE facilities are listed within a ½-mile search radius of the subject property.

4.7 LEAKING UNDERGROUND STORAGE TANK LIST (LUST)

The Cal-EPA (SWRCB and CRBRWQCB) and San Diego County DEH LUST list is a database of facilities that are known to have had a release of petroleum hydrocarbons to soil and/or groundwater. No LUST release sites located within a ½-mile search radius of the subject property are listed.

4.8 SOLID WASTE LANDFILLS (SWAT/WMUDS)

The Permitted SWAT/SWF list and the Waste Management Unit Database System (WMUDS) database track active and inactive landfills, incinerators and transfer stations. No SWAT/SWF/LF/WMUDS sites or State landfills were identified within a ½-mile search radius of the subject property.

4.9 UNDERGROUND AND ABOVEGROUND STORAGE TANK LIST (UST/AST)

The California State Water Resources Control Board (SWRCB) and (locally) DEH maintain an inventory of registered USTs and ASTs. No facilities with ASTs were identified within a ¼-mile search radius of the subject property. No facilities that have historically had ASTs or USTs (or currently have USTs) are listed in the EDR Report.

4.10 EMERGENCY RESPONSE NOTIFICATION SYSTEM (ERNS)

The Emergency Response Notification System (ERNS) is a national database system that collects information on reported releases of oil and hazardous substances. This database includes information reported to the EPA, the U.S. Coast Guard, the National Response Center and the Department of Transportation. No ERNS release was identified on the subject or nearby properties.

4.11 RCRA LARGE AND SMALL QUANTITY GENERATORS (RCRA LQG AND SQG)

The EPA's RCRA Large Quantity Generator (greater than 1000 Kilogram/month; LQG) and Small Quantity Generator (100-1,000 Kilogram/month; SQG) database identifies and tracks hazardous waste from the point of generation to the point of disposal. No RCRA LQG facilities are listed to be within a ⅛-mile search radius of the subject property. One RCRA SQG facility is listed:

- 533 Stevens Avenue – The Signature Group – Kaypro Inc. (now a Price Self-Storage Facility; SLIC - Environmental Release To Soil Only) is located approximately 0.23-miles north-northeast, hydrogeologically up-gradient, of the subject property.

The distance and soil only release at the former RCRA-SQG facility make it unlikely that the listing represents a potential environmental impact concern to the subject property.

4.12 CAL-EPA HAZNET

California (State): Cal-EPA: DTSC: (HAZNET) is a database of facilities that generate manifested hazardous or other classified waste. As previously indicated, the subject property is listed on the HAZNET database. No other facilities within a ⅛-mile search radius of the subject property are also listed on the HAZNET database.

4.13 CRBRWQCB SPILLS LEAKS INVESTIGATION AND CLEANUP (SLIC)

Sites with known contamination that is not the result of petroleum leakage from UST systems; or, sites that the agencies have reason to believe need further environmental investigation are

administered through the CRBRWQCB SLIC program. Two SLIC sites were identified to be located within a ½-mile search radius of the subject property:

- 533 Stevens Avenue – The Signature Group - Kaypro (RCRA-SQG - now a Price Self-Storage Facility; Environmental Release To Soil Only) is located approximately 0.23-miles north-northeast, hydrogeologically up-gradient, of the subject property; and

- 420 South Cedros Avenue – CBS Scientific Company Inc. (now Applied Chemical & Engineering Systems; Environmental Release To Soil Only) is located approximately 0.47-miles west-northwest, hydrogeologically cross-gradient of the subject property.

The distance and soil only release at the two listed SLIC sites make it unlikely that the listing represents a potential environmental impact concern to the subject property.

4.14 SAN DIEGO COUNTY DEH (San Diego Co. HMMD & SAM)

Facilities that store, handle and use hazardous materials; and/or, generate hazardous wastes are subject to permitting and regular inspection by the HMMD. Facilities (or other types of sites) that have had a suspected or known release of chemicals into the environment appear on the San Diego Co. SAM release site tracking database. The previously identified Kaypro and CBS facilities (Both SLIC - Environmental Releases To Soil Only) are also the only HMMD listings in the EDR Report.

The SAM Program oversees mitigation of sites that are suspected or known to be contaminated with released chemicals and tracks them in the San Diego Co. SAM database. The previously indicated and summarized Kaypro and CBS sites are the only two in the SAM database that were found to be located within a ½-mile search radius of the subject property.

5.0 REGULATORY AGENCY RECORDS REVIEW

During preparation of this Phase I ESA Report, the following regulatory agencies were queried to obtain copies of records associated with the subject property.

5.1 SOLANA BEACH FIRE DEPARTMENT (SBFD)

EAI visited the SBFD service counter on the first floor of Solana Beach City Hall and requested copies of all available records associated with the subject property address from Ms. Denise Olaguer of Management Services with the SBFD. Ms. Olaguer checked the SBFD file and indicated that there were no records available to copy for the public. Upon questioning she further indicated that Solana Highlands Apartments is in full compliance with all local and state fire & life-safety codes and that the SBFD file shows no non-medical emergency responses, hazardous material spill incidents or above ground or below ground tanks of flammable liquids or hazardous materials.

5.2 SOLANA BEACH BUILDING & PLANNING DEPARTMENT (SBBPD)

EAI visited the SBBPD service counter on the first floor of Solana Beach City Hall and requested copies of all available records associated with the subject property address. Mr. Roger Whipple of the SBBPD confirmed that the apartments on the subject property were constructed in 1972 before the City of Solana Beach was incorporated. He indicated that the building permit and inspection records for most of the developments in Solana Beach were discarded by the County of San Diego when Solana Beach incorporated in 1986. EAI queried Dave Andrews with the County of San Diego Department of Planning & Land Use (DPLU) via telephone regarding the status of the records for the subject property and asked him to search using the address, Solana Highlands name and original name of the apartments; Del Mar Turf Club. Additionally, *EAI* notified H.G. Fenton about the lack of building department records at the agencies and asked Mr. Robert Gottlieb of H.G. Fenton to initiate a search for records at his company. Ms. Kathleen Boitano of H.G. Fenton replied via electronic mail on July 7, 2010, that they were unable to find a Certificate of Occupancy or any other records associated with the subject property in the files at their offices (Attachment 6). On July 13, 2010, Ms. LeAnn Carmichael of the DPLU replied via electronic mail that all records had been transferred to the City of Solana Beach by the time it incorporated on July 1, 1986 (Attachment 6). As a result, no building department records were found for the subject property during this ESA.

5.3 SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL (DEH)

EAI requested copies of all available records associated with the subject property address from Ms. Joyce Ellman at the DEH who referred *EAI* to their *http://www2.sdcounty.ca.gov/deh/permits/estlist.asp*. No listing for the subject property address was found (Attachment 6).

5.4 SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT (APCD)

EAI requested copies of records associated with the subject property address from Ms. Cynthia Gould of the APCD. Ms. Gould replied via electronic mail that there were no APCD records associated with the subject property address (Attachment 6).

5.5 SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD (SDRWQCB)

EAI requested copies of all available records associated with the subject property address from Ms. Sylvia Wellnitz of the SDRWQCB. Mr. Troy Souther of the SDRWQCB responded by telephone that no records were found (Attachment 6).

5.6 SAN DIEGO OFFICE – DEPARTMENT OF TOXIC SUBSTANCES CONTROL (SD DTSC)

EAI requested copies of all available records associated with the subject property address from Ms. Cleo Navarette-Muñoz of the SD DTSC. Ms. Navarette-Muñoz responded by electronic mail that no records were found (Attachment 6).

6.0 OTHER ENVIRONMENTAL CONSIDERATIONS

6.1 LEAD-BASED PAINT (LBP)

The apartment complex structures on the subject property have no known LBP concerns. Based on the presence of latex painted building surfaces observed during the reconnaissance visit for this ESA and the results of in-field screening tests conducted in 1998 (Attachment 2 – Section 4.9) LBP does not appear to be present. The painted surfaces in the buildings that were observed appeared to be in excellent condition.

6.2 ASBESTOS

The apartment complex structures on the subject property have no known issues related to asbestos containing materials (ACMs). The construction materials that were observed in 1998 (Attachment 2 – Section 4.6) and again during this ESA appeared to be in excellent condition with no ACM exposure concerns. As previously indicated, the HAZNET listing associated with the subject property in the EDR Report indicates that ACM abatement and waste disposal by Fenton occurred at some point in the past. The 1998 Phase I ESA Report recommended preparation of an ACM Operations and Maintenance (O&M) Plan for the subject property apartment complex. It would appear that abatement of the acoustical sprayed on ceiling texture and other potential ACMs was selected by Fenton rather than preparation of an O&M Plan.

6.3 AIR EMISSIONS

As previously indicated *EAI* reviewed the EDR Report and contacted the APCD to confirm that they had no records associated with the subject property. No construction, business or manufacturing operations that might result in regulated air emissions were observed to be occurring at the subject property.

6.4 RADON

Radon is a colorless, tasteless radioactive gas with a United States Environmental Protection Agency (EPA) specified action level of 4.0 picocuries per liter (pCi/L) of air. Radon gas has a very short half-life of 3.8 days. The health risk potential of radon is associated with its rate of accumulation within confined areas, particularly confined areas near to the ground, where vapors can readily transfer to indoor air from the ground through foundation cracks or other pathways. Large, adequately ventilated rooms generally present limited risk for radon exposure. The radon concentrations in buildings and homes depend on many factors, including soil types, temperature, barometric pressure, and building construction (CDHS, 1990; EPA, 1993).

EAI reviewed the Department of Health Services Radon Database for California (last updated October 2002) and found that in the zip code 92075 area where the subject property is located, five (5) tests were taken as part of the survey. The test results indicated that zero (0; none) of the 5 locations (0%) were found to have radon levels greater than or equal to 4.0 pCi/L, the level beyond which EPA recommends action be taken to lower radon gas exposure.

Information regarding the presence of radon at the subject property relies on regional data and does not represent site-specific data. To determine site specific radon levels a radon survey would have to be conducted. Because regional radon levels do not appear to represent a REC of the subject property a radon survey was not performed as part of this scope of work. Based on the Federal EPA Radon Zone rating and DHS survey results, radon is not expected to represent an environmental risk at the subject property.

6.5 DRY CLEANING OPERATIONS

No dry cleaning operations were observed on or near the subject property. No historic or current dry cleaner was identified in the EDR Report within a ¼-mile search radius (Attachment 5)

6.6 PESTICIDES

Based on the historical research results (aerial photograph review and Figure 4) conducted during preparation of this Phase I ESA Report, the subject property was not used for agricultural purposes and therefore residual agricultural chemicals (e.g., pesticides, fungicides, insecticides, herbicides or fertilizers) are not a potential environmental impact issue for the subject property.

6.7 MOLD-LIKE SUBSTANCES

No mold-like substances were observed at the subject property. No areas of moisture accumulation or water damage were observed.

6.8 ELECTROMAGNETIC RADIATION

No overhead high voltage electrical power transmission lines or other obvious sources of significant levels of electromagnetic radiation emissions (e.g., cellular communication station antennae) were observed at or adjacent to the subject property.

7.0 CONCLUSIONS AND RECOMMENDATIONS

EAI, at the request of Union Bank, has conducted a Phase I ESA of the Solana Highlands Apartments complex property located at 701 South Nardo Avenue in the city of Solana Beach, San Diego County, California. The subject property consists of a fully-developed land parcel that comprises an irregularly-shaped 13-acre lot. The subject property is improved with 16, 2-story apartment buildings. In addition to the apartment buildings, two L-shaped maintenance and tenant storage room buildings are located in the southwest corner of the subject property. A multipurpose building (that includes administrative offices, a business center, recreational and meeting spaces, a fitness room, sun deck and swimming pool) is located off the main driveway in the approximate center of the apartment complex. A lawn area, open air park, is located to the southwest of the 683 Building. There are four driveways from South Nardo Avenue in to the subject property apartment complex. Numerous cement block slope-retaining walls are located throughout the subject property. There are no vehicle garages. Tenants park their vehicles in either uncovered designated spaces or beneath metal carports. The subject property is built on the slope of a hill and has an extensive stormwater drainage system to prevent water from pooling in areas next to the structures. Based on a review of historical aerial photographs, the subject property was open, undeveloped, hillside land prior to 1972, when (according to a statement by the Solana Beach Building Department) it was developed with the Del Mar Turf Club Apartments (later renamed Solana Highlands).

The results presented in this ESA Report indicate that:

- No evidence of any potential adverse environmental conditions per the Scope of Work Required by Union Bank For a Phase I Environmental Site Assessment (Union Bank, 06-05-2009), including RECs per ASTM International Standard E1527-05, was found to exist in association with the subject property.

No known environmental release sites located either hydrogeologically up or immediately cross-gradient of the subject property that qualify as a potential adverse environmental contaminant impact source condition to the subject property were identified in the Environmental Data Resources Inc. (EDR) Report that was obtained and reviewed during the preparation of this ESA. No issues associated with the possible presence of lead based paint (LBP) and asbestos containing material (ACM) were identified. Building materials that were observed appeared to be in excellent condition.

No additional environmental assessment is recommended.

8.0 STATEMENT OF LIMITATIONS

The conclusions presented in this report are professional opinions based on data described in this report. These opinions have been arrived at in accordance with currently accepted hydrogeologic and engineering standards and practices applicable to this location, and are subject to the following inherent limitations:

1. *EAI* derived the data in this report primarily from visual inspections, examination of records in the public domain, and interviews with individuals having information about the site. The passage of time, manifestation of latent conditions, or occurrence of future events may require further study at the site, analysis of the data, and reevaluation of the findings, observations, and conclusions in the report.

2. The data reported and the findings, observations, and conclusions expressed in the report are limited by the scope of work. The scope of work was agreed to by the client.

3. No warranty or guarantee, whether express or implied, is made with respect to the data reported of findings, observations, and conclusions that are based solely upon site conditions in existence at the time of the investigation.

4. *EAI* Phase I ESA reports present professional opinions and findings of a scientific and technical nature. The report shall not be construed to offer legal opinion or representations as to the requirements of, nor compliance with, environmental laws, rules, regulations, or policies of federal, state, or local governmental agencies. Any use of the Phase I ESA report constitutes acceptance of the limits of *EAI's* liability. *EAI's* liability extends only to its client and not to any other parties who may obtain the Phase I ESA report.

5. The conclusions presented in this report are professional opinions based on data described in this report. They are intended only for the purpose, site location, and project indicated. This report is not a definitive study of contamination at the site and should not be interpreted as such. A complete evaluation of subsurface soil and groundwater conditions was not performed as part of this investigation. No sampling or chemical analyses of structural materials or other media was completed as part of this study unless explicitly stated.

6. This report is based, in part, on unverified information supplied to *EAI* by third-party sources. While efforts have been made to substantiate this third-party information, *EAI* cannot guarantee its completeness or accuracy.

9.0 REFERENCES NOT ATTACHED

ASTM Designation E 1527-05, 2005, *Standard Practice for Environmental Site Assessments, Phase I Environmental Site Assessment Process*, June.

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City of Solana Beach Planning and Building Services Department.

City of Solana Beach Fire Department.

County of San Diego Property Tax Assessor's Office.

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U. S. Army Corps of Engineers (COE), 1987, Wetland Delineation Manual, Technical Report Y-87-1.

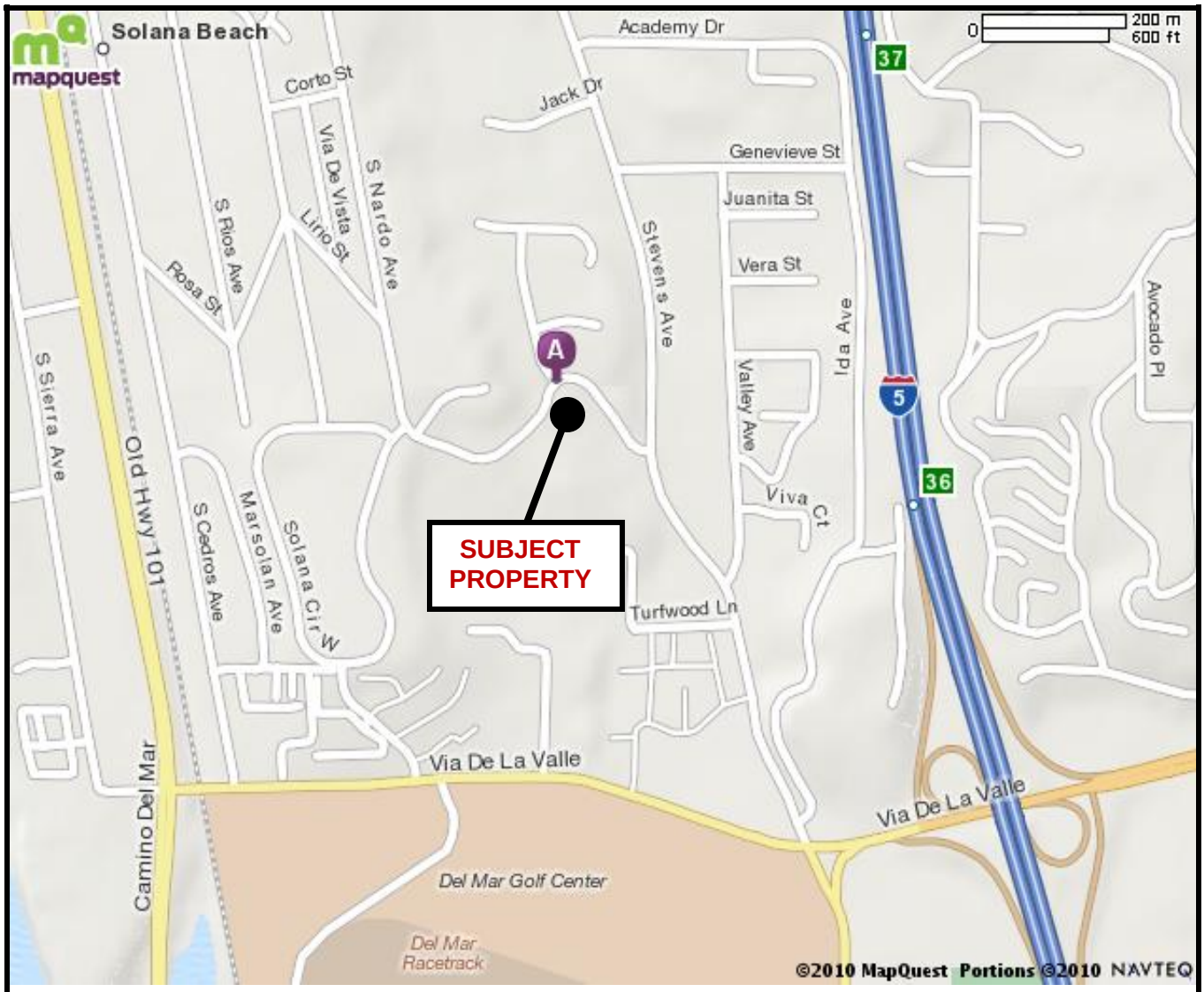
U. S. Environmental Protection Agency (EPA), 1993, *USEPA Map of Radon Zones Throughout United States,* Document No. EPA-402-R-93-071.

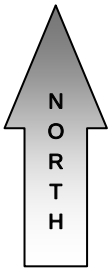
FIGURES

FIGURE 1 – SITE LOCATION MAP
FIGURE 2 – SITE PLAN
FIGURE 3 – SITE AERIAL PHOTO WITH ADJACENT PROPERTY USES
FIGURE 4 – ASSESSOR'S PARCEL MAP
FIGURE 5 – SITE PHYSIOGRAPHIC SETTING MAP

PHASE I ENVIRONMENTAL SITE ASSESSMENT FOR
Solana Highlands Apartments
701 South Nardo Avenue
Solana Beach, San Diego County, CA 92075-2309
APN: 298-260-33-00

July 16, 2010
EAI Project No.: 01.UNBNK13.10
UBNA RIMS No.: 10-1089





Relative Location in California

Project No.: 01.UNBNK13.10

SITE LOCATION MAP

Solana Highlands Apartments Property
701 South Nardo Avenue
Solana Beach, CA 92075-2309

EnviroApplications, Inc.
Engineering & Consulting
Rio Sur Office Complex
2831 Camino Del Rio South
Suite 214
San Diego, CA 92108-3828

Date: 07/01/2010	**Source:** MapQuest, Inc., 2010	**Scale:** Upper RHC	**Figure: 1**
Client: Union Bank RIMS #10-1089	**By:** Fred Allee **Checked:** Craig Smith		***Revision: 0***

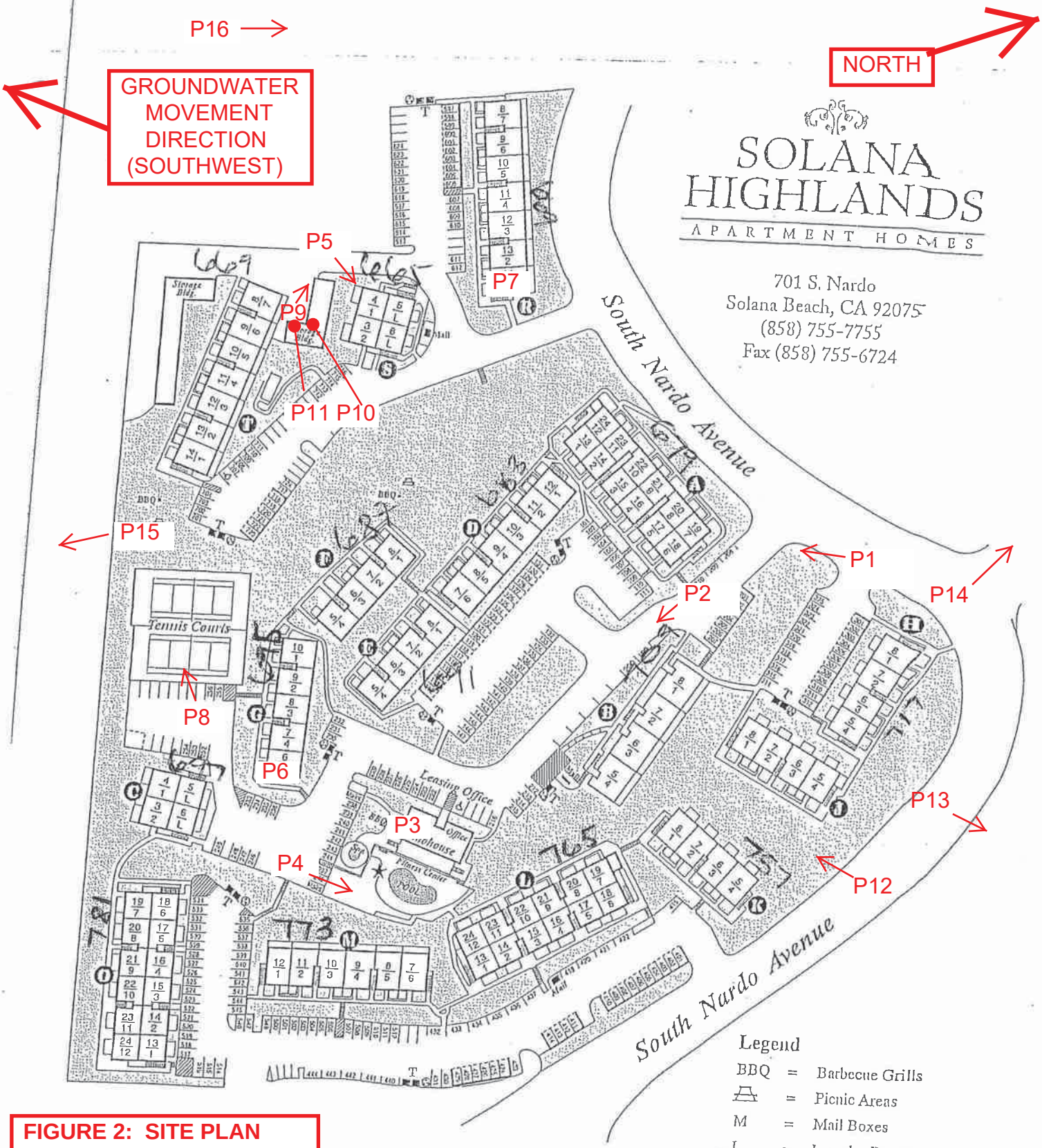


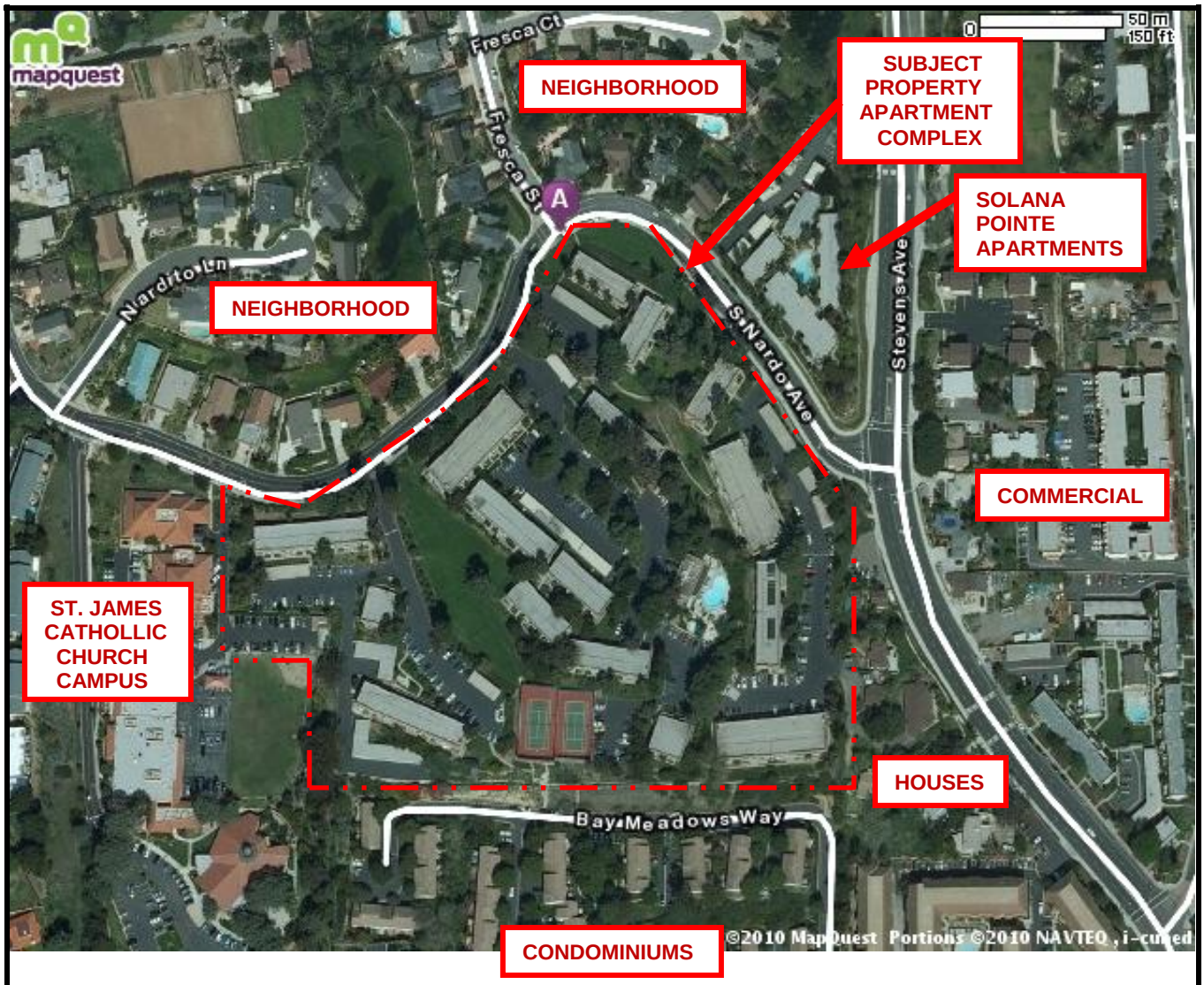
FIGURE 2: SITE PLAN

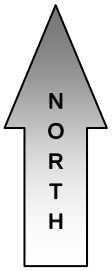
NOTES:

SEE PHOTOS IN ATTACHMENT 1.

P1 PHOTO NO. AND APPROX. DIRECTION/LOCATION TAKEN.

BUILDINGS ORIGINALLY DESIGNATED BY LETTERS, NOW NOS.





Relative Location in California

Project No.: 01.UNBNK13.10

SITE AERIAL PHOTO WITH ADJACENT PROPERTY USES

Solana Highlands Apartments Property
701 South Nardo Avenue
Solana Beach, CA 92075-2309

EnviroApplications, Inc.
Engineering & Consulting
Rio Sur Office Complex
2831 Camino Del Rio South
Suite 214
San Diego, CA 92108-3828

Date: 07-02-2010	**Source:** MapQuest, 2010	**Scale:** Upper RHC	**Figure: 3**
Client: UBOC RIMS #10-1089	**By:** Fred Allee **Checked:** Craig Smith		***Revision: 0***

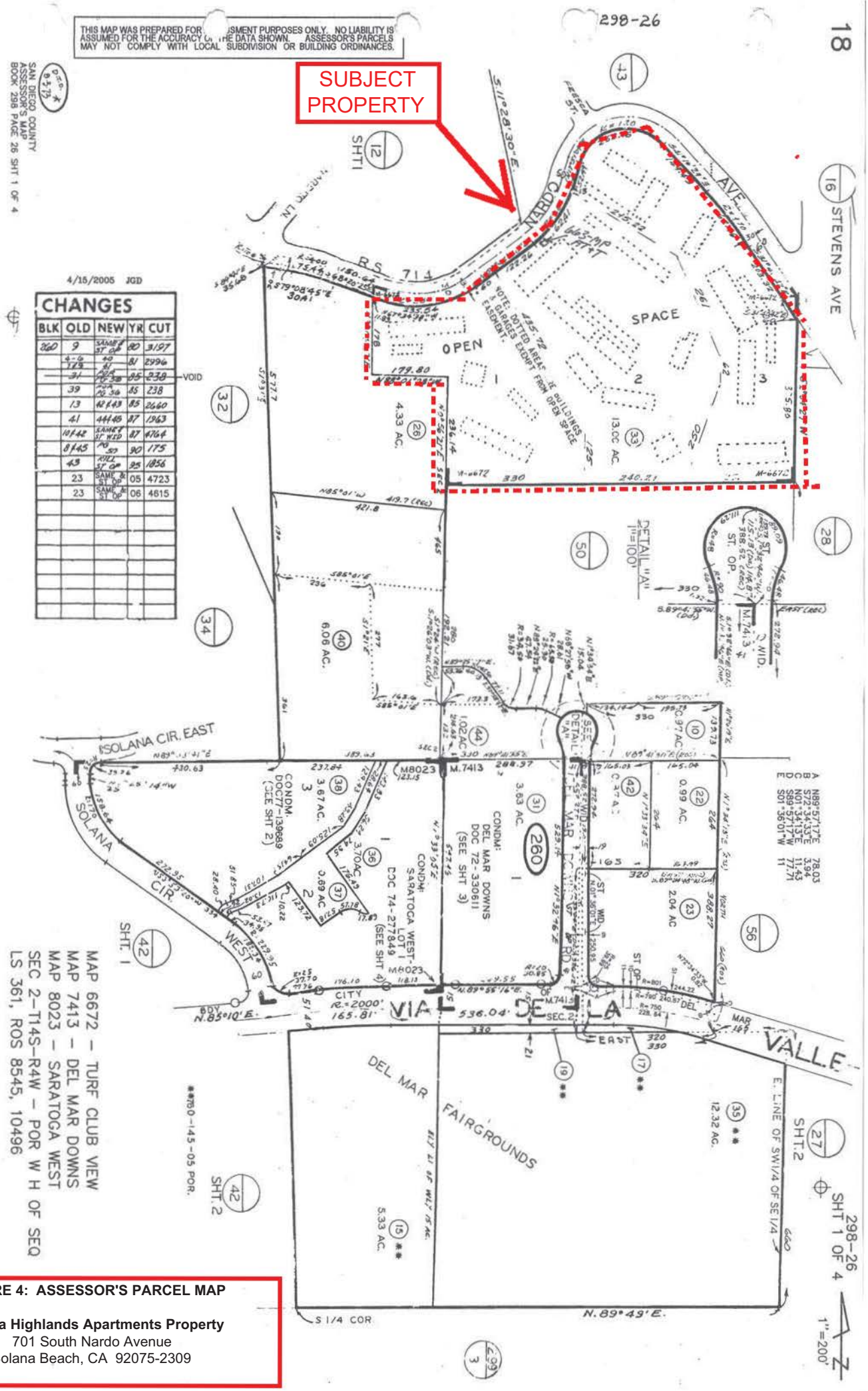
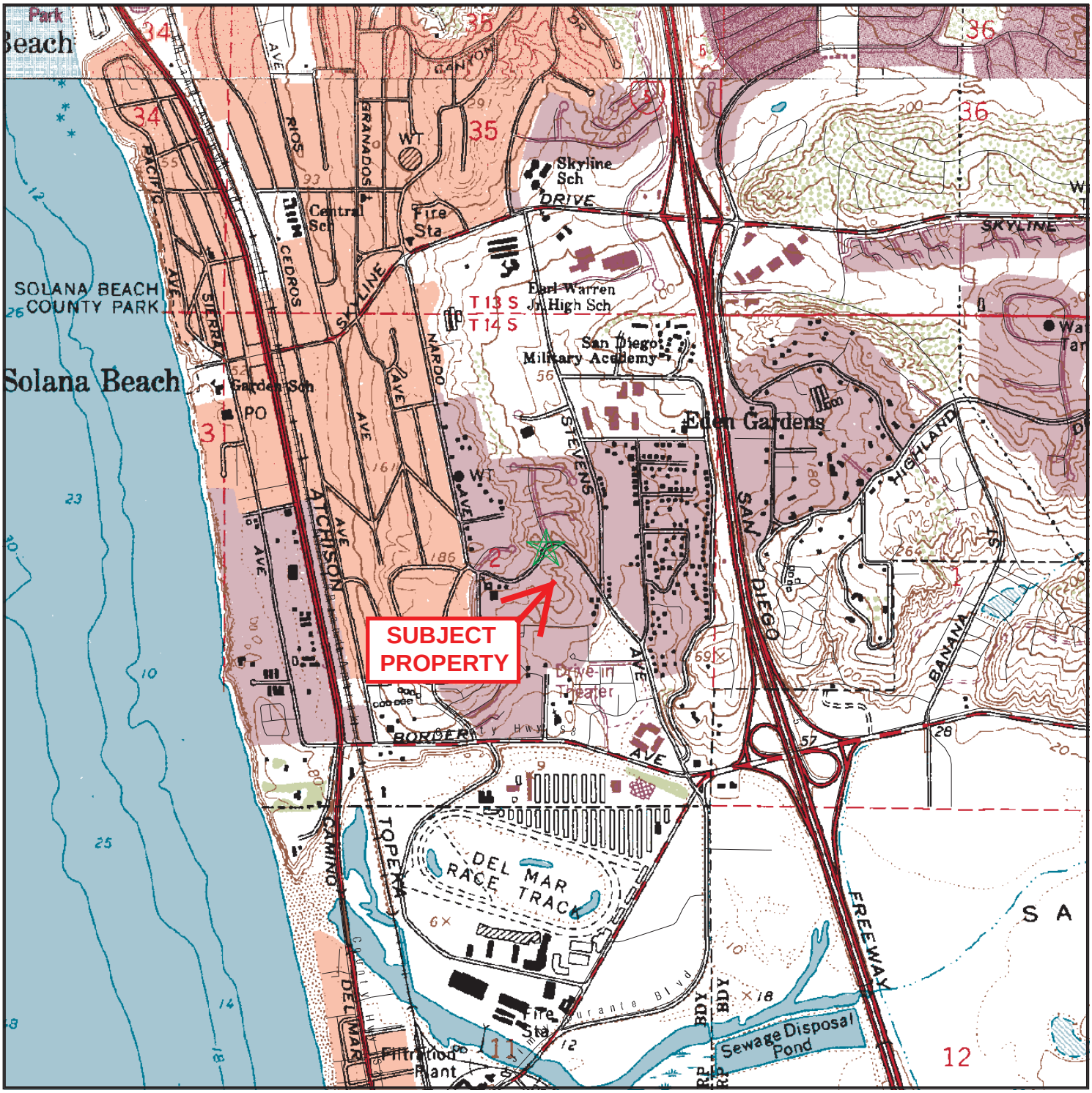


FIGURE 4: ASSESSOR'S PARCEL MAP

Solana Highlands Apartments Property
701 South Nardo Avenue
Solana Beach, CA 92075-2309



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

0 1/4 1/2 1 Miles

FIGURE 5: SITE PHYSIOGRAPHIC SETTING MAP

SOURCE: USGS TOPOGRAPHIC MAP, ENCINITAS QUADRANGLE, 1979

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Solana Highlands Apartments	CLIENT: Enviroapplications Inc.
ADDRESS: 701 South Nardo Avenue Solana Beach CA 92075	CONTACT: Fred Allee
LAT/LONG: 32.9861 / 117.2618	INQUIRY #: 2794855.2s
	DATE: June 16, 2010 11:45 am

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ATTACHMENT 1
PHOTOGRAPHS OF THE SUBJECT PROPERTY AND VICINITY

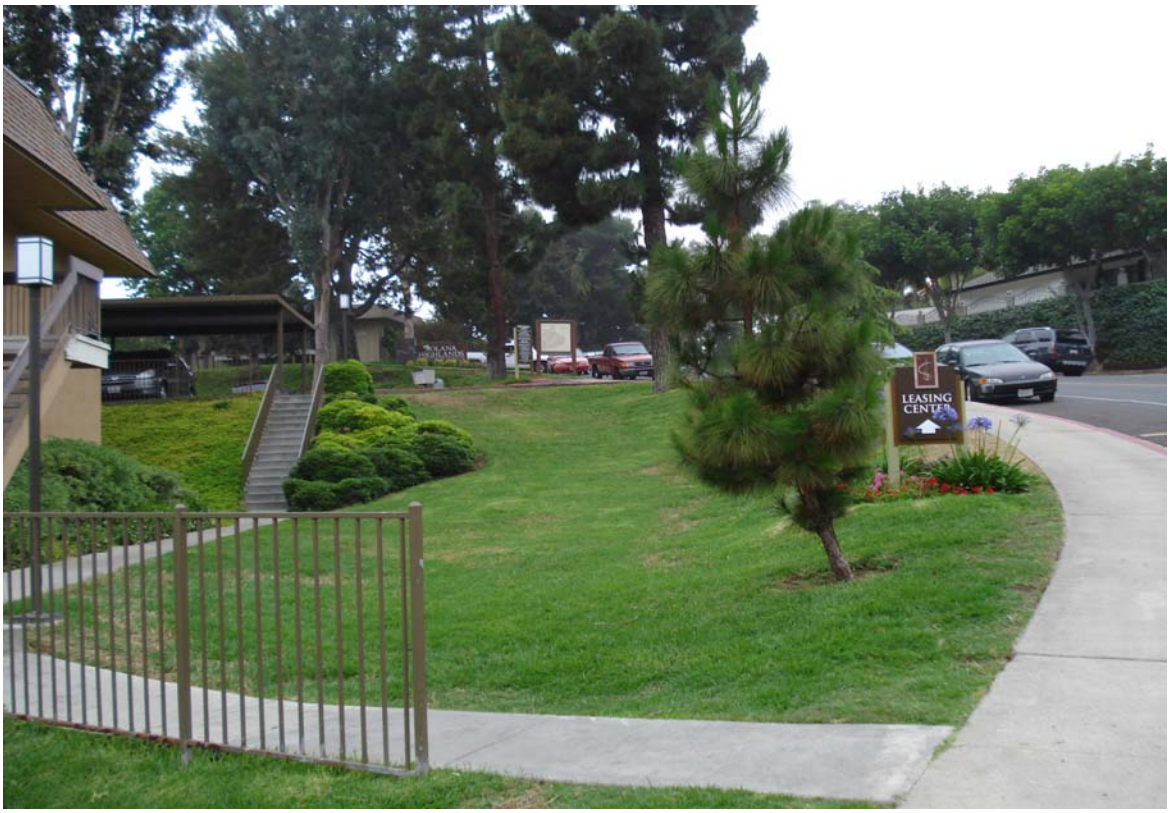
PHASE I ENVIRONMENTAL SITE ASSESSMENT FOR
Solana Highlands Apartments
701 South Nardo Avenue
Solana Beach, San Diego County, CA 92075-2309
APN: 298-260-33-00

July 16, 2010
EAI Project No.: 01.UNBNK13.10
UBNA RIMS No.: 10-1089

ENVIROAPPLICATIONS, INC.
PHOTOGRAPHIC RECORD

Client:	Union Bank N.A.	**Job Number:**	01.UNBNK13.10
Subject Name:	Solana Highlands Apartments RIMS #10-1089 APN: 298-260-33-00	**Location:**	701 South Nardo Avenue, Solana Beach, San Diego County, CA 92075-2309
Photographer:	Fred Allee	**Date:**	July 1, 2010

Photograph No. 1



View looking southwest towards the main entrance to the subject property apartments off of South Nardo Avenue.

Photograph No. 2

View southeast up driveway toward apartment leasing offices, business & fitness center, pool and clubhouse building.

ENVIROAPPLICATIONS, INC.
PHOTOGRAPHIC RECORD

Client:	Union Bank N.A.	**Job Number:**	01.UNBNK13.10
Subject Name:	Solana Highlands Apartments RIMS #10-1089 APN: 298-260-33-00	**Location:**	701 South Nardo Avenue, Solana Beach, San Diego County, CA 92075-2309
Photographer:	Fred Allee	**Date:**	July 1, 2010

Photograph No. 3

Interior of clubhouse portion of multipurpose building showing typical interior finishes and lighting.

Photograph No. 4

View of sundeck and swimming pool located to the southeast of the multipurpose building.

ENVIROAPPLICATIONS, INC.
PHOTOGRAPHIC RECORD

Client:	Union Bank N.A.	**Job Number:**	01.UNBNK13.10
Subject Name:	Solana Highlands Apartments RIMS #10-1089 APN: 298-260-33-00	**Location:**	701 South Nardo Avenue, Solana Beach, San Diego County, CA 92075-2309
Photographer:	Fred Allee	**Date:**	July 1, 2010

Photograph No. 5

Apartment Building 665 showing typical construction materials & steep slopes (also typical throughout subject property).

Photograph No. 6

Typical apartment kitchen showing interior finishes.

ENVIROAPPLICATIONS, INC.
PHOTOGRAPHIC RECORD

Client:	Union Bank N.A.	**Job Number:**	01.UNBNK13.10
Subject Name:	Solana Highlands Apartments RIMS #10-1089 APN: 298-260-33-00	**Location:**	701 South Nardo Avenue, Solana Beach, San Diego County, CA 92075-2309
Photographer:	Fred Allee	**Date:**	July 1, 2010

Photograph No. 7

Typical bedroom interior showing finishes and furnishings.

Photograph No. 8

Tennis courts located along the central area of the southern boundary of the subject property.

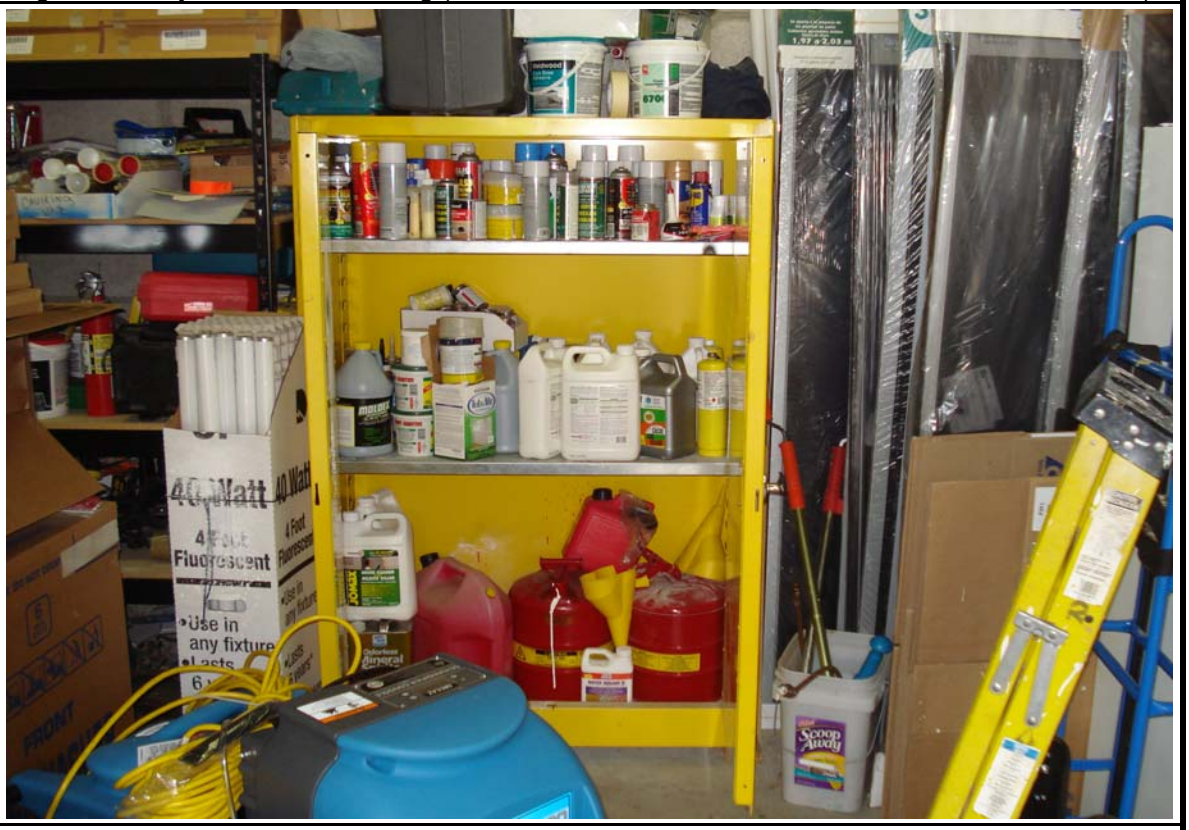
ENVIROAPPLICATIONS, INC.
PHOTOGRAPHIC RECORD

Client:	Union Bank N.A.	**Job Number:**	01.UNBNK13.10
Subject Name:	Solana Highlands Apartments RIMS #10-1089 APN: 298-260-33-00	**Location:**	701 South Nardo Avenue, Solana Beach, San Diego County, CA 92075-2309
Photographer:	Fred Allee	**Date:**	July 1, 2010

Photograph No. 9

North storage building located adjacent to 669 Building (hazardous materials for maintenance are stored in Room 3).

Photograph No. 10



View of gas cans and small containers of cleaners, lubricants, etc. stored in Room 3 flammables cabinet.

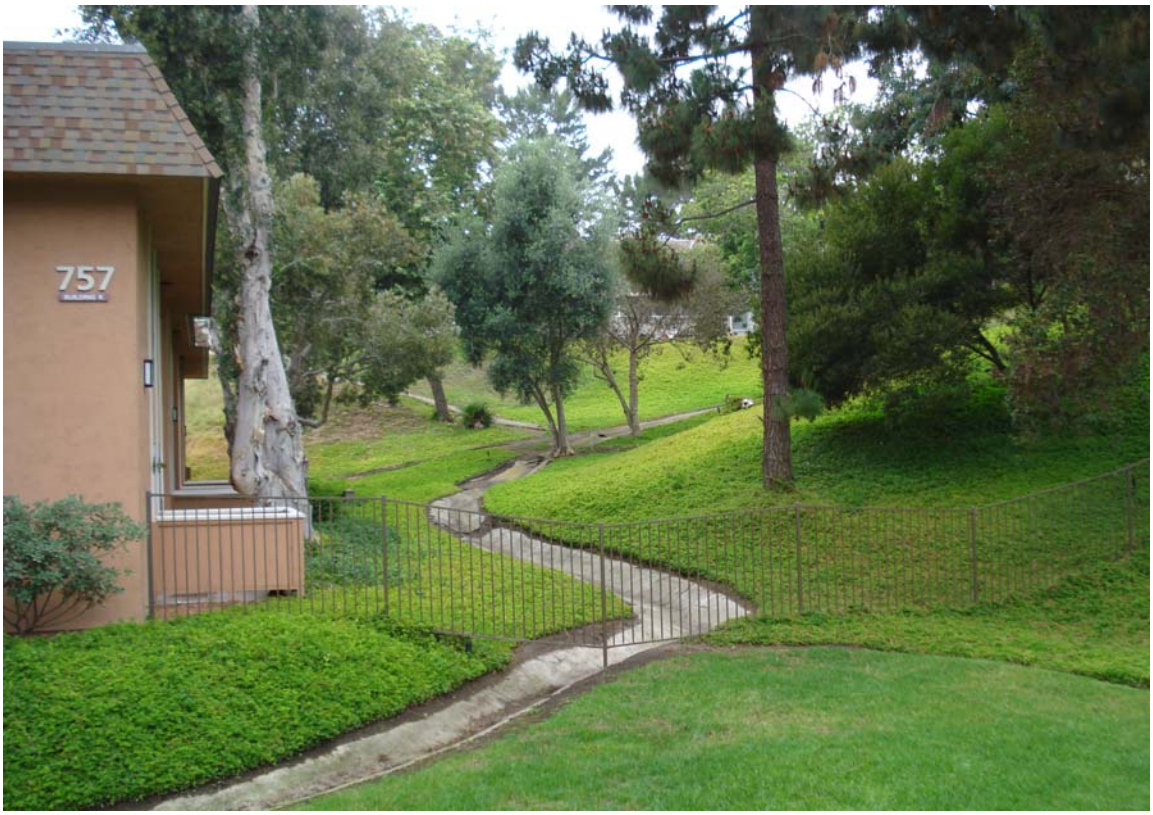
ENVIROAPPLICATIONS, INC.
PHOTOGRAPHIC RECORD

Client:	Union Bank N.A.	**Job Number:**	01.UNBNK13.10
Subject Name:	Solana Highlands Apartments RIMS #10-1089 APN: 298-260-33-00	**Location:**	701 South Nardo Avenue, Solana Beach, San Diego County, CA 92075-2309
Photographer:	Fred Allee	**Date:**	July 1, 2010

Photograph No. 11

Room 13 where latex paints are stored for subject property apartment buildings maintenance and touch-up.

Photograph No. 12



Looking SW past 757 Bldg., showing typical cement drainage gutter of extensive drainage system observed throughout.

ENVIROAPPLICATIONS, INC.
PHOTOGRAPHIC RECORD

Client:	Union Bank N.A.	**Job Number:**	01.UNBNK13.10
Subject Name:	Solana Highlands Apartments RIMS #10-1089 APN: 298-260-33-00	**Location:**	701 South Nardo Avenue, Solana Beach, San Diego County, CA 92075-2309
Photographer:	Fred Allee	**Date:**	July 1, 2010

Photograph No. 13

Solana Pointe apartment complex located across South Nardo Avenue to the northeast of the subject property.

Photograph No. 14

View of neighborhood to north, showing houses typical of those observed in all directions from the subject property.

ENVIROAPPLICATIONS, INC.
PHOTOGRAPHIC RECORD

Client:	Union Bank N.A.	**Job Number:**	01.UNBNK13.10
Subject Name:	Solana Highlands Apartments RIMS #10-1089 APN: 298-260-33-00	**Location:**	701 South Nardo Avenue, Solana Beach, San Diego County, CA 92075-2309
Photographer:	Fred Allee	**Date:**	July 1, 2010

Photograph No. 15

Typical residential/condominium building located to south of subject property down a relatively steep hillside.

Photograph No. 16

St. James Catholic Church sanctuary located in the center of their campus immediately west of the subject property.

ATTACHMENT 2
PREVIOUS PHASE I ESA REPORT - 1998

PHASE I ENVIRONMENTAL SITE ASSESSMENT FOR
Solana Highlands Apartments
701 South Nardo Avenue
Solana Beach, San Diego County, CA 92075-2309
APN: 298-260-33-00

July 16, 2010
EAI Project No.: 01.UNBNK13.10
UBNA RIMS No.: 10-1089

Commercial Inspectors, LLC

7000 N. 16th St., Suite #120
Phoenix, AZ 85020

Tele: 602-274-5400
Fax: 602-274-5417

Toll Free: 888-974-5400

Environmental Site Assessment

Solana Highland Apartments
701 South Nardo Avenue

Solana Beach, California 92075

CI Project No.: 0013-0017-Prows.
Date of Report: July 31, 1998

Prepared for: **Prowswood Management, Inc.**
4885 South 900 East
Salt Lake City, Utah 84117-5746
Mr. Richard Stayner

C. J., LLC

SITE SUMMARY

Solana Highland Apartments
701 South Nardo Avenue
Solana Beach, California 92075

CI Project No.: 0013-0017-Prows. **Date of Report: July 31, 1998**

Assessment Component	Acceptable	Routine Solution	Phase II	Estimated Cost §	Reference Section	Page
Operational Activities	✓				4.2	9
Surface Areas	✓				4.1.2	8
Hazardous Materials	✓				4.3	9
Waste Generation	✓				4.4	9
Storage Tanks/Pipelines	✓				4.5	9
Asbestos		(1)		$350.00	4.6	10
PCBs	✓				4.7	10
Radon Gas	✓				4.8	10
Lead-Based Paint	✓				4.9	11
Lead in Water	✓				4.10	11
Historical Review	✓				6	14
Regulatory Database Review	✓				7	17
Adjacent Properties	✓				8	20

§ *Costs depicted are for investigation/program development activities. Remediation costs, if required, will be identified as a result of the activities.*

(1) The development and implementation of an Asbestos Operations and Maintenance (O&M) Program.

C. J., LLC

CI#0013-0017-Prows.

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C. I., LLC

CI#0013-0017-Prows.

1. Certification

At the request of Prowswood Management, Inc. (Client), Commercial Inspectors, L.L.C. (CI) has completed a Phase I Environmental Site Assessment of the Solana Beach Apartments (the "Project"), located at 701 South Nardo, Solana Beach, California 92075, on July 23, 1998. The assessment utilized procedures consistent with acceptable industry standards. This report is prepared for the exclusive use of the Client. The independent conclusions represent CI's best professional judgment based on information and data available to us during the course of this assignment. Factual information regarding operations, conditions, and test data provided by the Client, owner, or their representative has been assumed to be correct and complete. Additionally, the conclusions presented are based on the conditions that existed and the information available at the time of the assessment.

Commercial Inspectors, L.L.C.

Michael S. Ryniak, C.E.I.

Director of Environmental Services

C. J., LLC

2. Summary

CI conducted a Phase I Environmental Site Assessment, on July 23, 1998. The Project is located at 701 South Nardo, in Solana Beach, California 92075 and totals (approximately) 13 acres of land. The Project is currently utilized as a residential apartment complex, built around 1975. Prior to the current development, the Project was undeveloped land. Land uses in the vicinity of the Project include commercial and residential properties.

The following summarizes the independent conclusions representing CI's best professional judgment based on information and data available to us during the course of this assignment. Information regarding site operations, conditions, and test data provided by the Client, owner, or their representative have been assumed to be accurate. The conclusions presented in this report are based on the conditions that existed at the time of the assessment.

2.1. Findings/Conclusions

Operational Activities

- CI observed no recognized environmental conditions associated with the activities at the Project (Section 4.2). No further action or investigation is recommended regarding operational activities at the Project.

Hazardous Materials

- The Project is involved in the use of hazardous materials in the form of routine janitorial and maintenance supplies (Section 4.3). The materials observed do not appear to pose a hazard to the Project, provided they continue to be used as designed, are properly handled, and all regulations regarding their use are followed. No further action or investigation is recommended regarding the use of hazardous materials.

Waste Generation

- The Project is not involved in the generation, treatment, storage, or disposal of hazardous, medical, or regulated wastes (Section 4.4). In addition, the non-regulated solid and liquid wastes generated at the Project appear to be disposed of properly. No further action or investigation is recommended regarding waste generation, treatment, storage, and disposal at the Project.

C. J., LLC

Storage Tanks/Pipelines

- No evidence of storage tanks or pipelines (above or below ground) was identified (Section 4.5). No further action or investigation is recommended with regard to tanks or pipelines at the Project.

Asbestos-Containing Materials (ACM)

- The identified asbestos-containing ceiling texture can be maintained in place if an Operations and Maintenance (O&M) Program is developed and implemented (Section 4.6). A properly designed O&M Program is sufficient to maintain the Project in accordance with current regulatory standards and sound business practice. ACM maintained with an O&M Program can remain in place, provided the ACM remain intact and undisturbed.
- Suspect ACM in the form of roofing materials, vinyl floor coverings, and drywall, were not sampled as part of the assessment. These materials are in good condition and should be sampled prior to repair, renovation, or demolition activities.

Polychlorinated Biphenyls (PCBs)

- CI identified utility-owned transformers which utilize dielectric fluid potentially containing levels of polychlorinated biphenyls (PCBs) of at least 50 ppm but less than 500 ppm (Section 4.7). These units are within current regulatory guidelines. No further action or investigation is recommended regarding the transformers at the Project.

Radon Gas

- The Project is located in an area of low radon gas levels (Section 4.8). No further action or investigation is recommended with regard to radon gas levels at the Project.

Lead-Based Paint (LBP)

- The in-field screening results are found to be negative for lead content (Section 4.9). No further action or investigation is recommended regarding lead-based paint at the Project.

Lead in Water

- Based on conversations with utility personnel, the water at the Project is not expected to contain elevated levels of lead (Section 4.10). No further action or investigation is recommended regarding lead in drinking water at the Project.

C. J., LLC

Surface Areas

- No issues associated with surface areas were identified (Section 4.1.2.). No further action or investigation is recommended regarding surface areas at the Project.

Historical Review

- The review of the historical data available for the Project revealed no evidence of any recognized adverse environmental conditions (Section 6). No additional action or investigation is recommended regarding historical use of the Project.

Regulatory Database Review

- The review of the regulatory agency data available for the Project and the general area of the Project indicates that the Project is not located on any of the databases evaluated, and none of the sites listed are anticipated to have an impact on the Project (Section 7).

Adjacent Properties

- CI identified no adjacent properties which are anticipated to have a negative impact on the environmental integrity of the Project (Section 8). No further action or investigation is recommended regarding adjacent properties at the Project.

2.2. Recommendations

No further investigation is recommended at this time.

The following additional actions is recommended:

➢ The development and implementation of an Asbestos Operations and Maintenance (O&M) Program. Costs indicated are for O&M Program Document development only. Comprehensive survey costs, if required, will be identified as a result of O&M Program implementation.

Associated cost estimate $350

C. I., LLC

3. Survey Approach/Purpose

CI conducted an on-site Environmental Site Assessment of the Project, which consisted of a walk-through observation of the accessible areas and interviews with facility personnel and local agency representatives. On-site activities were conducted by Mr. Michael S. Ryniak of CI.

Areas accessed included ten percent of the apartments, all common areas, all exterior areas, and the Project boundaries.

Weather conditions at the time of the Site assessment were partly cloudy, with temperatures in the low 80s (°F) and calm winds.

CI reviewed available federal, state, and local records in an effort to identify sites of known or suspected hazardous waste activity located at or near the Project, which could have an adverse impact on the Project. In an attempt to determine whether historical uses of the Project and adjacent properties have had an environmental impact on the Project, CI interviewed individuals knowledgeable about the Project and reviewed available pertinent records and documents. This assessment is based on the evaluation of the information gathered, laboratory analysis of samples collected (when required), and accessibility at the time of the assessment.

The purpose of this report is to provide the Client an assessment concerning environmental conditions (limited to those issues identified in the report) as they existed at the Project. The assessment was conducted utilizing generally accepted Phase I industry standards in accordance with ASTM Standard E 1527-97 and the Scope of Work provided by the Client. The scope of work included an evaluation of:

- The Project history in an attempt to identify any possible ownership(s) and/or uses that would suggest an impact to the environmental integrity of the Project as identified through review of reasonably ascertainable standard historical sources.
- Physical characteristics of the Project as identified through review of reasonably ascertainable topographic, wetlands, flood plain, soils, geology, and ground water data.
- Current Project conditions (as applicable), including compliance with appropriate regulations as they pertain to the presence or absence of:
    - Facility storage tanks, drums, containers (above or below ground), etc.
    - Transformers and other electrical equipment which utilize fluid which may potentially contain PCBs
    - The use of hazardous materials/chemicals, and/or the generation, treatment, storage, or disposal of hazardous, regulated, or medical wastes

C. J., LLC

- A screening approach for the potential existence of:
  - Asbestos, including the identification of all suspect materials in accessible areas (interior and exterior) and the collection and analysis of three bulk samples from each homogeneous area of friable and/or damaged suspect ACM. The remaining materials are considered suspect until tested and proven otherwise. Friable materials are those which can be easily crumbled or pulverized by hand pressure. This screening approach is not a comprehensive (i.e., AHERA-Style) asbestos survey, but is intended to identify the potential for an asbestos hazard in accessible areas.

    The basis for "suspect" determination is taken from the materials listed in Appendix G of the EPA publication *Managing Asbestos in Place* (the "Green Book"). Therefore, all materials listed in the Green Book which were installed prior to 1989 are considered suspect, with the exception of resilient floor tile, asbestos-cement board (transite), and roofing felt, which are considered suspect regardless of installation date (these materials continue to be manufactured and installed in the United States).

    The laboratory reports list the samples taken from the Project and their subsequent analytical results using polarized light microscopy with dispersion staining *(Interim Method for Determination of Asbestos in Bulk Insulation Sample — EPA 600/M4-82-020)* for asbestos.
  - Lead-based paint, using LeadCheck™ Swab colormetric on-site tests for all residential properties constructed prior to 1978. The basis for this determination is taken from the Lead Paint Poisoning Act passed by the Congress of the United States which banned the use of lead paint starting January 1, 1978. Therefore, all paint applied prior to 1978 is considered suspect.
  - Radon gas propensity, through the review of the EPA's Map of Radon Zones.
  - Lead in water, based on information provided by the municipal water provider.
- An evaluation of information contained in programs such as the NPL, CERCLIS, RCRIS, SWLF, LUST, and other governmental information systems within specific search distances of the Project. This evaluation was performed in order to identify any sites that would have the potential to impact the environmental integrity of the Project.

C. J., LLC

The regulatory agency report provided is based on an evaluation of the data collected and compiled by a contracted data research company. The report is based on a radius search which focuses on both the Project and neighboring sites which may impact the Project. Neighboring sites listed in governmental environmental records are identified within a specific search distance. The search distance varies depending upon the particular government record being checked. The search is designed to meet the requirements of the Scope of Work, current industry approach and the ASTM Standard E 1527-97. The information provided is assumed to be correct and complete.

- Visual observation of the adjacent properties to identify high-risk neighbors and the potential for contamination, if present or suspected, to migrate onto the Project.

C. J., LLC

4. Project Reconnaissance

4.1. Project Description

4.1.1. Improvements

Project improvements consist of sixteen, 2-story apartment buildings, a clubhouse/office building, two storage buildings, a swimming pool, tennis courts, metal carports, landscaping, and surface-level asphalt paved parking/drive areas. The Project is currently utilized as a residential apartment complex, and consists of 194 units. The Project consists of approximately 13 acres of land.

The Project is serviced by public water and sanitary sewer systems. The Project is supplied with water from Rancho Santa Fe Irrigation District. According to a representative of the Irrigation Districtt, the utility meets the requirements as established by the USEPA, state, county, and local authorities for water quality.

4.1.2. Surface Areas

General surface features of the Project consist of a relatively flat parcel of land graded to provide some slope to direct surface water away from the on-site buildings. Storm water from drive and parking surfaces is directed to the municipal storm water system via sheet flow to adjacent surface streets. Visual observation of the Project and adjacent properties did not identify any distressed vegetation, staining, or evidence of surface migration of petroleum releases or hazardous materials onto or off of the Project.

No visible evidence of on-site surface impoundment facilities, pits, drywells, or dumping of apparent hazardous substances was observed. Surface water features were not observed including no evidence of lagoons, ponds or other bodies of water.

Parking facilities consist of asphalt-paved surface parking. Minor oil discharges were observed on the parking area; however, the discharges are incidental in nature and corrective action is neither practical nor warranted.

C. J., LLC

4.2. Operational Activities/Noteworthy Tenants

The Project is currently utilized as a residential apartment complex. Based on the operations assessed at the Project, no environmental permits are required.

4.3. Hazardous Materials Storage and Handling

Visual observation for the use and/or storage of hazardous materials was performed. The Project or tenants store and/or use only routine janitorial and maintenance supplies. No spills or staining were observed in the area of material storage/usage.

4.4. Waste Generation, Storage, and Disposal

Visual observation for the generation, storage, and disposal of wastes was performed. Dumpsters are provided for incidental trash disposal. No spills or staining were observed in the area of waste generation or storage. No overflowing, excessive odors, or excessive ground trash were observed in the vicinity of the dumpsters. No hazardous or regulated wastes were noted in the dumpsters.

4.5. Facility Storage Tanks and Pipelines (above or below ground)

Visual observations for manways, vent pipes, fill connections, concrete pads, and saw cuts in paved areas did not identify any surface connections or disturbances which would indicate that the potential for an underground storage tank (UST) installation exists. The manways and caps observed were for site services (i.e., domestic water, storm water, and sanitary sewer system). Furthermore, review of currently installed mechanical equipment, and historical information concerning mechanical equipment, identified the use of alternate fuel sources (i.e., electric, natural gas) thereby eliminating the need for on-site fuel storage. The review of the state list of registered USTs indicated that no tanks are registered for the Project. Interviews with persons knowledgeable of the Project did not identify any evidence of current or historic storage tanks (above or below ground) at the Project.

No aboveground storage tanks (ASTs) were observed.

Visual observations did not identify any surface markings indicating the existence of subsurface product pipelines.

C. J., LLC

4.6. Asbestos-Containing Materials (ACM)

Suspect ACM in the form of ceiling texture, vinyl floor coverings, drywall, and roofing materials were identified.

Random samples of the accessible friable and/or damaged suspect ACM were collected (ceiling texture only). Laboratory analytical results indicated that all three of the samples collected tested positive for asbestos.

4.7. Polychlorinated Biphenyls (PCBs)

The Project is supplied with underground secondary electrical service from pad-mounted exterior electrical transformers. The transformers are designated as the property of San Diego Gas & Electric (SDG&E), the public utility. Contact with a utility representative indicated that the units is classified as potentially PCB-contaminated, defined as containing PCB concentrations of at least 50 but less than 500 ppm (parts per million). To date, PCB-contaminated transformers are not required to be removed from service. PCB-contaminated transformers, like most potential environmental concerns, can be maintained in place by use of a periodic monitoring program. The units should be periodically inspected for leakage. If leakage is visible, the Project owner/manager should contact the public utility, who will remediate the situation. Should the units have to be replaced, the utility is responsible, provided the cause is equipment failure, not customer misuse. No leakage of the transformers was observed at the time of the assessment.

No additional equipment with the potential to utilize dielectric or hydraulic fluid was observed during the site assessment.

4.8. Radon Gas

According to the USEPA's Radon Map for San Diego County, the Project is in an area of low radon propensity.

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4.9. Lead-Based Paint (LBP)

The buildings at the Project were originally constructed around 1975. The painted interior surfaces are in good condition, with no chipping, peeling, or cracking paint observed in individual tenant units and common areas. Random samples of the painted surfaces were obtained utilizing LeadCheck™ Swabs. Thirty locations were tested, including interior and exterior surfaces, and all of the areas tested negative for lead.

4.10. Lead in Water

According to the local water utility, the water supplied to the Project is within federal, state, and local water quality limits.

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5. Environmental Setting

5.1. Topography

Review of Project topography on the Del Mar, California Topographic Quadrangle, published by the U.S. Geological Survey (USGS) and dated 1967 (photorevised in 1975), indicated the following:

- The Project has an average elevation of approximately 100 feet above mean sea level.
- Elevations range from approximately 80 feet in the western portion of the Project to approximately 120 feet in the eastern portion of the Project. Slope in the general area of the Project is to the west-southwest.
- No site-specific features are shown on the map.
- The Pacific Ocean is shown approximately 0.75 miles west of the Project.

A copy of the topographic map is appended (Section 9).

Review of the Flood Insurance Rate Map, published by the Federal Emergency Management Agency (FEMA) and dated 1996 indicated the following:

- The Project is located within Zone X, defined as areas of minimal flooding.

5.2. Soils/Geology

Review of the Soil Survey of San Diego Area, California, published by the U.S. Department of Agriculture Soil Conservation Service (USDA SCS) and dated 1973, indicated the following:

- The Project is located in an area comprised of one soil type known as Loamy alluvial land-Huerhuero complex, with estimated slopes between nine and fifty percent.
- The Loamy alluvial land soil series is considered to be a somewhat poorly drained soil with a depth to approximately 60 inches.
- General soil characteristics of the Loamy alluvial land soil include rapid runoff and severe erosion.

Review of a Geological report of Southern California by Rogers, dated 1965, indicated the following:

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- The Project is located in the Coastal Plains Physiographic Province of San Diego California, and is underlain with Quaternary-age sedimentary deposits.
- The Project, more specifically, is located in an area of geologic substrate which includes Eocene Marine, Mesozoic granitic tonalite and diorite. Major areas of bluish clay occur in the lower portions in association with marine formations.

5.3. Ground Water Hydrology

The Project is located within the an area with estimated ground water levels from 10 to 50 feet below ground surface.

San Diego County does not utilize groundwater for drinking purposes.

Shallow groundwater flow is expected to follow the ground level slope of surface elevations towards the nearest open body of water or intermittent stream. The direction of this flow is generally to the southwest.

Estimated ground water levels and/or flow direction may vary due to seasonal fluctuations in precipitation, perched conditions, local usage demands, geology, underground structures, or dewatering operations

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6. Historical/Records Review

6.1. Aerial Photography

Review of the 1967 aerial photograph, available from the USDA SCS, indicated the following:

- The Project is undeveloped land.
- Vehicular access is available from a road north of the Project.
- Adjacent properties include residences under construction to the north, farmland to the south, residences and residences under construction to the east, and the current elementary school facilities to the west.

Review of the 1978 aerial photograph, available from the San Diego County Cartographic Services Department (SDCCSD), differs from the 1967 aerial photograph in that:

- The current Project improvements are shown.
- Adjacent properties include residences to the north, south, and east, and a school to the west.

Review of the 1984 and 1995 aerial photographs, available from the SDCCSD, does not differ significantly from the 1978 aerial photograph.

Copies of the SDCCSD aerial photographs were not available. A copy of the 1967 USDA SCS aerial photograph is appended (Section 9).

6.2. Historical Maps and City Directories

CI attempted to review historical maps of the Project and adjacent properties at the San Diego Public Library. No historical maps were identified for the area of the Project. As a general rule, the absence of historical maps for a given area tends to support evidence that the area was not significantly developed.

Historical city directories were reviewed for the Project at the San Diego Public Library. These directories have tenant listings, by address, for every year covered by the directory service. This review revealed the following information:

- **1997** — Solana Highlands
- **1986** — Del Mar Turf Club Apartments

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- **1973, 1963, 1953, 1943, 1933, 1923, 1913, 1901** — No listing for Project address

No older Historical City Directories were identified.

6.3. Local Government Agency Record Review

CI reviewed file information at the Solana Beach Fire Department. This review did not identify any environmentally significant information.

CI reviewed building permits for the Project at the Solana Beach Building Department. Original permits were not available for the Project address. General building permits for the Project were on file, but did not reveal any information or condition which could impact the environmental integrity of the Project. No permits for previous uses were found in the file for the Project address.

Review of the available zoning records from the Solana Beach Planning Department indicates that the Project is currently zoned HR, high residential. No historic zoning information was available.

6.4. Property Tax Files/Deeds

Review of information available from the San Diego County Assessor's Office indicated that the Project is shown on Map Book 298, Page 260, as Parcel 33.

The review of tax files and deed information included various transactions and ownerships of the land comprised in the Project. Review of the available deed records indicates that the Project has been owned by Solana Beach Partners, since 1995, when they obtained it from Truf Club View Ltd. Turf Club View Ltd. obtained the Project sometime prior to 1982.

Due to a lack of previous deed references and incomplete property descriptions, CI was unable to trace the Project's chain of title prior to 1982.

Review of available deed records did not identify any previous environmentally suspect ownership, easements, right of ways or other environmental entries/restrictions associated with the Project.

6.5. Previous Investigations/Assessments

CI was not provided with any previously conducted environmental assessment reports.

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6.6. Prior Use Interviews

Contact with the apartment manager, Katrina Gore, identified that the Project was developed around 1975 into the current use. She was not aware of any former uses of the Project.

6.7. Historical Summary

Based upon a review of chain of title information, interviews, and the review of city agency records, zoning records, city directories, and aerial photographs; the Project was undeveloped land (researched back to 1901) prior to the development of the current Project improvements around 1975.

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7. Regulatory Review

NPL, RCRA-TSD, CERCLIS, NFRAP, SCL, SPL, SWLF, LUST, UST, RCRIS-Generators, and ERNS listings were reviewed. By cross-referencing name, address, and zip code, we conclude that the Project is not a listed site. The area search of the Project for sites listed in these databases identified various sites individually outlined in the Regulatory Agency Data Report Findings included in the Appendices, Section 9. Information concerning listed sites is included in each of the database sections that follow.

CI also reviewed the unmappable sites in the database report, cross-referencing addresses and site names. Unmappable sites are environmental risk sites that cannot be plotted with confidence, but can be located by zip code or city name. In general, a site cannot be geocoded because of inaccurate or missing location information in the record provided by the agency. Any identified unmappable site is included in the corresponding database discussion that follows.

- **NPL Listing:** The National Priorities (Superfund) List is EPA's database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund Program.
  - No NPL sites were identified within 1.0 mile of the Project.
- **RCRA-TSD Facilities Listing:** The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA-TSD database is a compilation by the EPA of reporting facilities that transport, treat, store or dispose of hazardous waste.
  - No RCRA-TSD sites were identified within 1.0 mile of the Project.
- **SPL Listing:** This database is the State equivalent to the NPL.
  - No SPL sites were identified within 1.0 mile of the Project.
- **SCL Listing:** This database is the State equivalent to the CERCLIS list.
  - No SCL sites were identified within 1.0 mile of the Project.
- **CERCLIS/NFRAP Listing:** This database is a compilation of sites which the EPA has investigated or is currently investigating for a release or threatened release of hazardous substances.
  - No CERCLIS/NFRAP sites were identified within 0.5 mile of the Project.
- **SWLF Listing:** This database is a comprehensive listing of all State Permitted Solid Waste Landfills.
  - No SWLF sites were identified within 0.5 mile of the Project.

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- **Leaking Underground Storage Tanks (LUST)**

  - Six LUST sites were identified within 0.5 mile of the Project. Three of these sites are listed as "case closed" and are not anticipated to have impacted the Project. The remaining sites are as follows:

    - **Rancho Car Wash**
      2661 Via De La Valle
      Distance: 0.39 miles
      Direction: Southwest

      The above site is approximately 0.39 miles southwest of the Project. The expected direction of groundwater flow in the area is to the southwest, away from the Project. Based on the distance, direction, and estimated groundwater flow, this site is not anticipated to impact the Project.

    - **AM/PM Mini Market #704 (aka Prestige Stations Inc.)**
      660 Via De La Valle
      Distance: 0.49 miles
      Direction: Southeast

      This site is listed twice in the database. It is approximately 0.49 miles southeast of the Project. The expected direction of groundwater flow in the area is to the southwest, parallel to the Project. Based on the distance, direction, and estimated groundwater flow, this site is not anticipated to impact the Project.

- **Underground Storage Tanks (UST)**

  - Neither the Project nor any adjoining properties were identified on the UST inventory.

    The facilities listed in the UST section of the regulatory report are not listed on any database, such as the LUST inventory, which reports releases, spills or other incidents. The UST inventory is merely a listing of all facilities that are required to register their USTs for tracking purposes and are not necessarily those with reported contamination incidents. Based on the absence of reported releases, these facilities are not anticipated to have an adverse impact on the environmental integrity of the Project.

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- **RCRIS-Generator Listing:** The EPA's Resource Conservation and Recovery Information System identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRIS-Generators database is a compilation by the EPA of reporting facilities that generate hazardous waste.
  - Neither the Project nor any adjoining properties were identified on the RCRIS-Generator listing.

- **Emergency Response Notification System (ERNS):** The ERNS is a national database used to collect information on reported releases of oil or hazardous substances.
  - The Project was not identified on the ERNS database.

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8. Adjacent Properties

The general vicinity of the Project consists of commercial and residential land use. The following identifies specific adjacent property tenants and/or use:

North — South Nardo Avenue is located to the north, with residences beyond.

East — Residences are located to the east.

South — Residences are located to the south.

West — A church and school are located to the west.

The adjacent property use is not anticipated to impact the environmental integrity of the Project.

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9. Appendices

Appendix A — Photographic Documentation
Appendix B — Field Sketch
Appendix C — Maps and Aerial Photographs
Appendix D — Record of Communication/Interviews
Appendix E — Regulatory Agency Data Report Findings
Appendix F — Laboratory Analytical Results
Appendix G — Resumes

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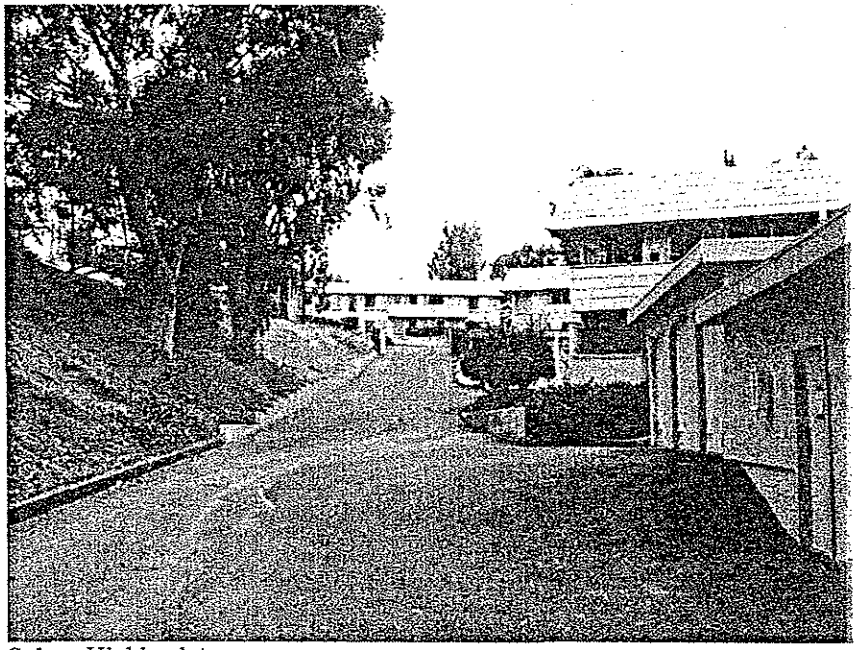
CI#0013-0017-Prows.

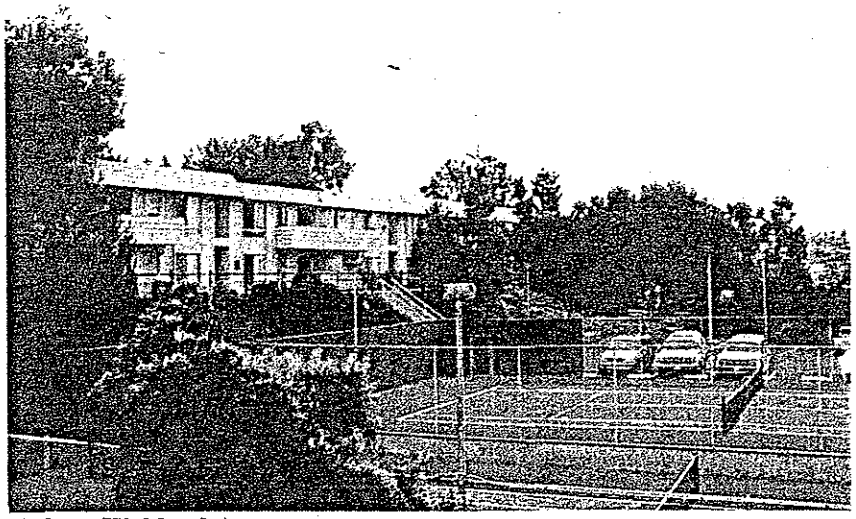
Appendix A

Photographic Documentation

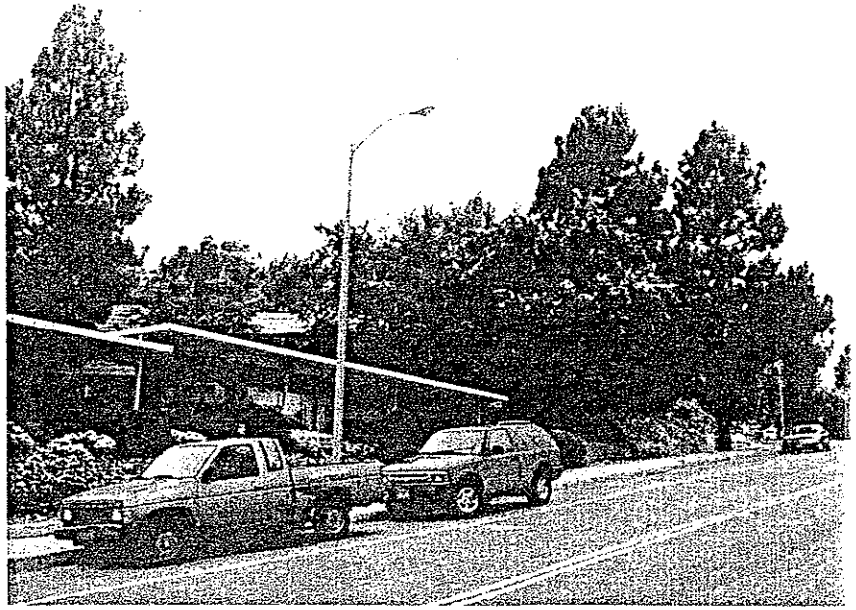
Solana Highland Apartments
Photo 1. East Side of Project



Solana Highland Apatments
Photo 2. West Side of Project

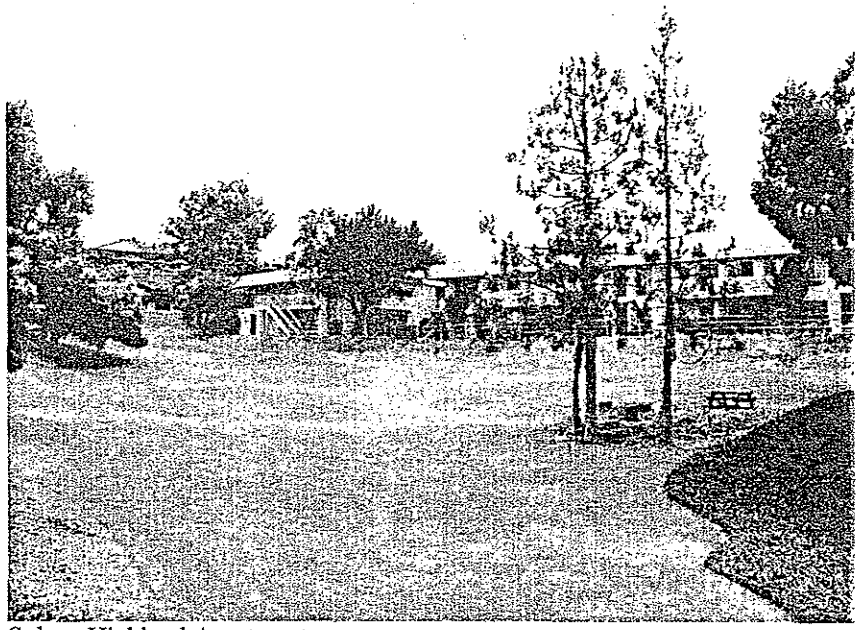


Solana Highland Apartments
Photo 3. South side of Project

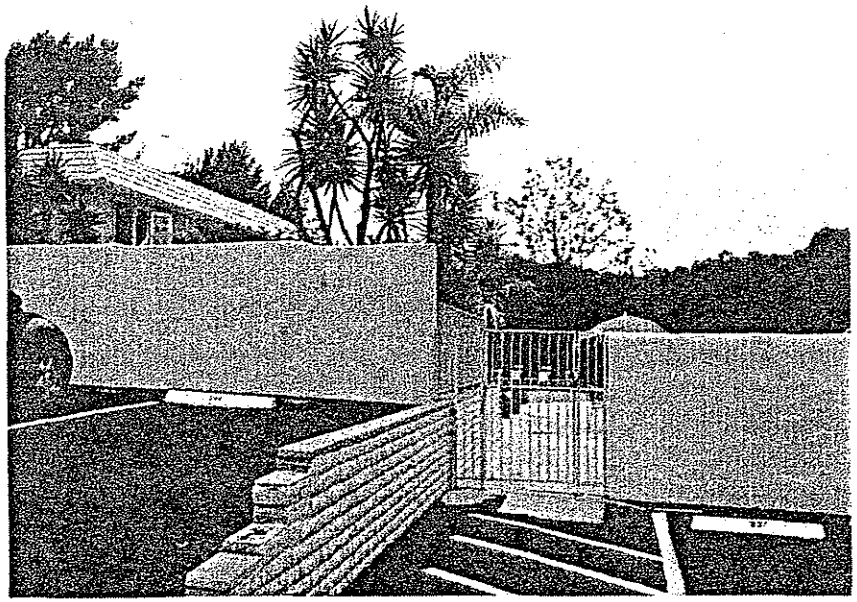


Solana Highland Apartments
Photo 4. Northeast Side of Project

Solana Highland Apartments
Photo 5. Northwest Side of Project



Solana Highland Apartments
Photo 6. Open Space in Eastern Section of Project

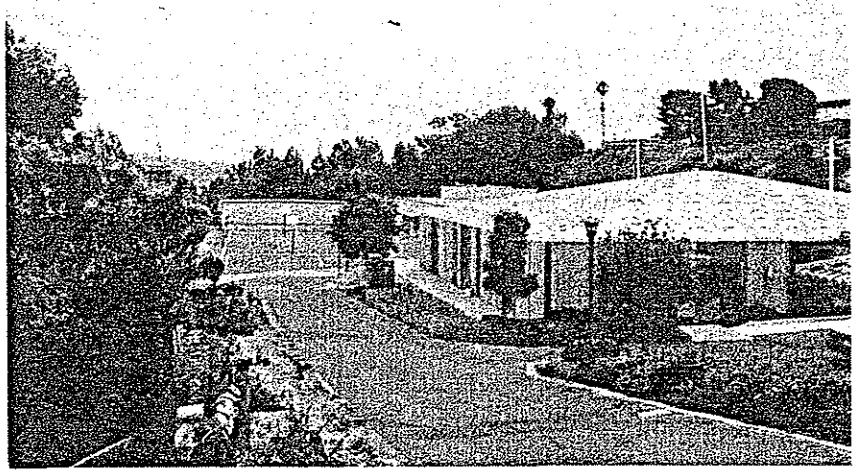


Solana Highland Apartments
Photo 7. Pool Area

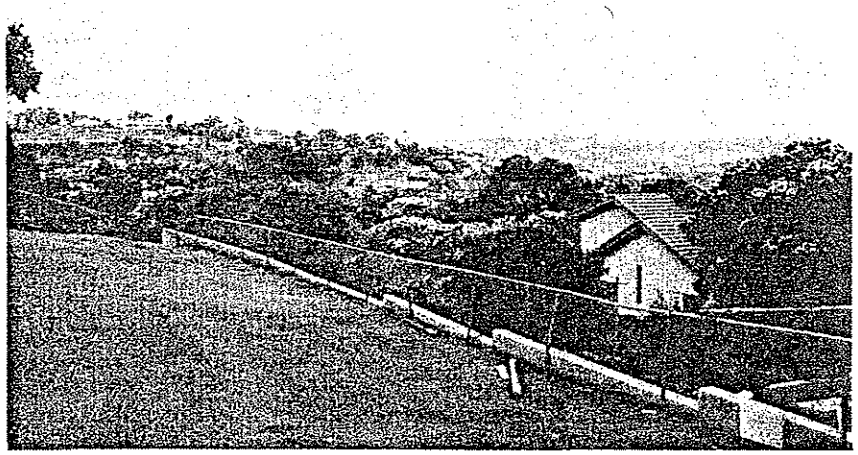
Solana Highland Apartments
Photo 8. Clubhouse/Office Building

Solana Highland Apartments
Photo 9. Adjacent Property Northeast

Solana Highland Apartments
Photo 10. Adjacent Property Northwest



Solana Highland Apartments
Photo 11. Adjacent Property West



Solana Highland Apartments
Photo 12. Adjacent Property South

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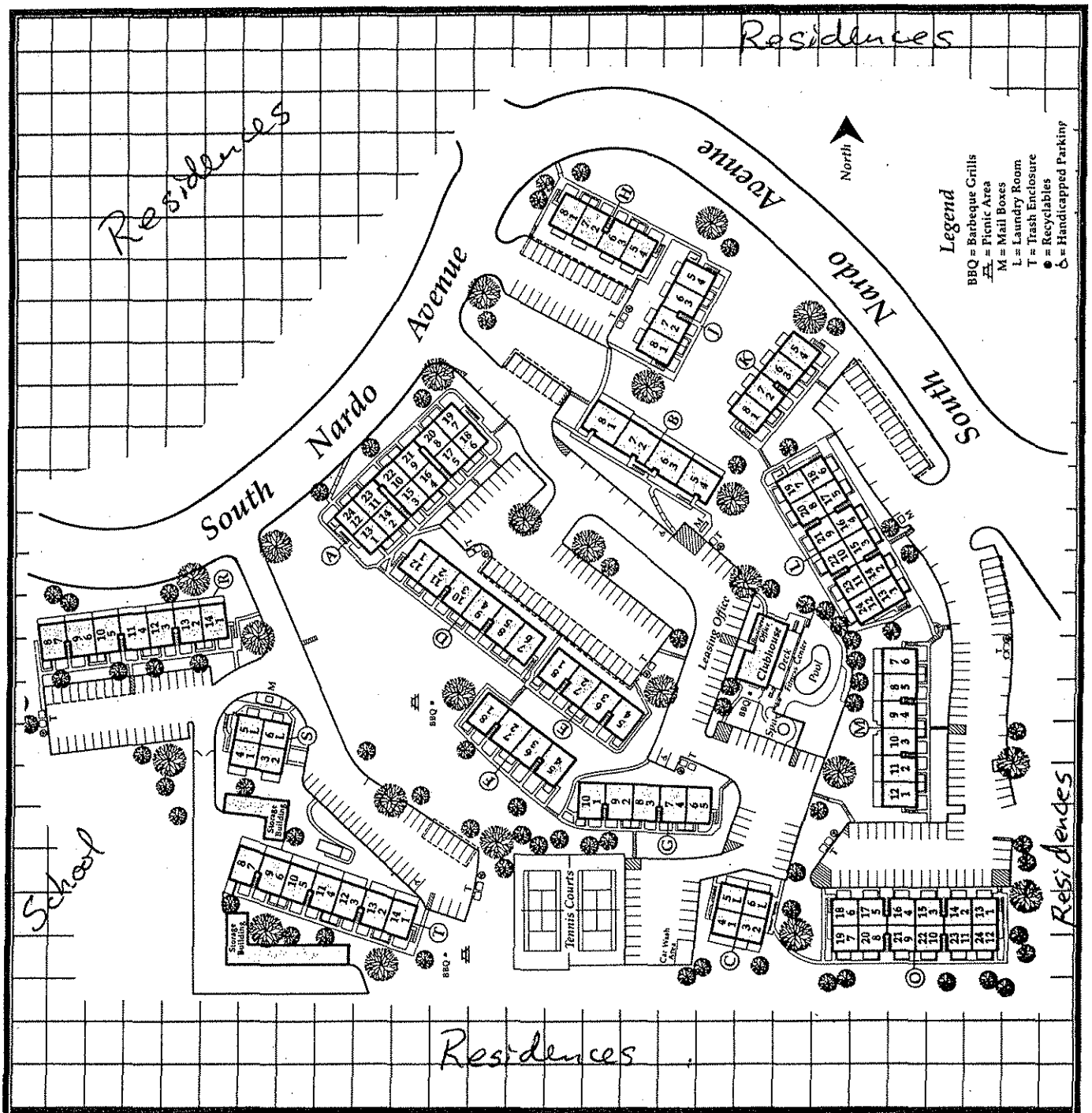
CI#0013-0017-Prows.

Appendix B

Field Sketch

Project Number: 0013-0017-Prows **Name:** Sdana Highland Apts. **Date:** 7-23-98



Key:

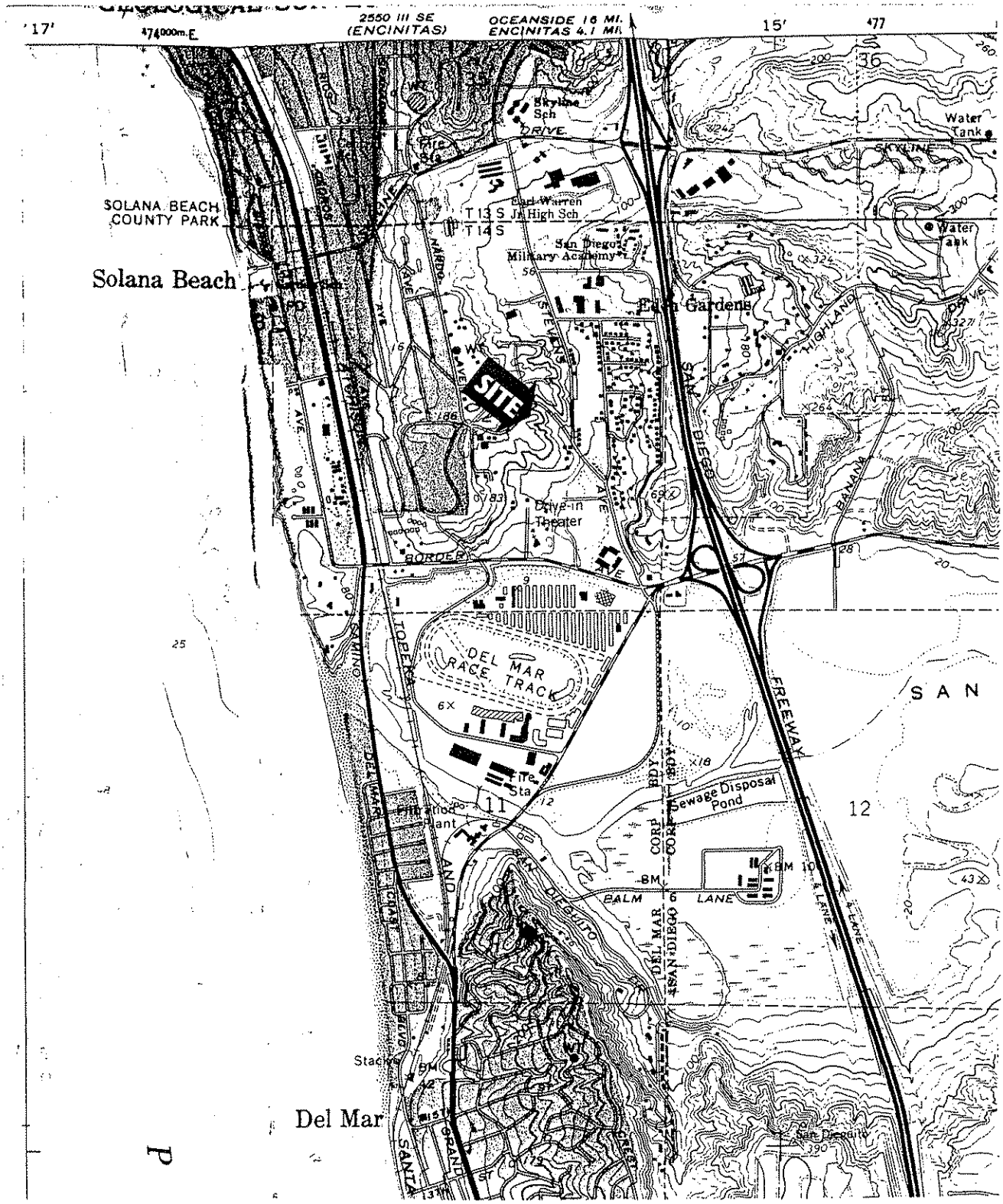
C. J., SSC

CI#0013-0017-Prows.

Appendix C

Maps and Aerial Photographs

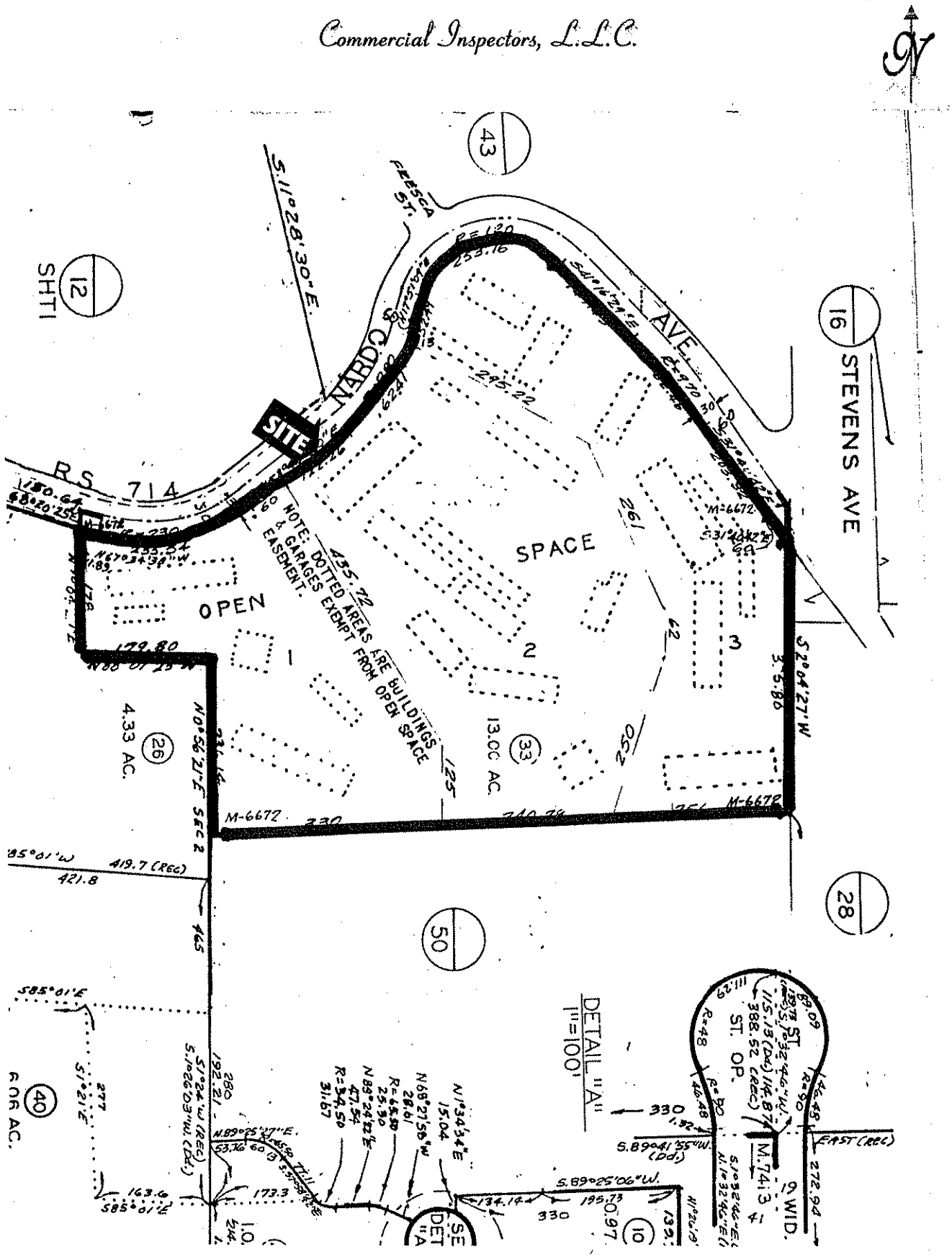
Commercial Inspectors, L.L.C.



CI Project Number: 0013-0017-Prows.

Map: Topographic Map

Commercial Inspectors, L.L.C.



CI Project Number: 0013-0017-Prows.

Map: Assessor's Map

Commercial Inspectors, L.L.C.

CI Project Number: 0013-0017-Prows.

Map: 1967 Aerial Photograph

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Appendix D

Record of Communication/Interviews

RECORD OF COMMUNICATION

Date: 7-30-98 Time: 11:00 Recorded By: MSR

Project Number: 0013-0017-Prows. Project Name: Solana Highland Apts

Communications With: SDG & E

Of:

Phone: ( )

Communications via: (X) Telephone Conversation

( ) Discussions During Site Inspection

( ) Office Visitation/Meeting at:

( ) Other:

Re: transformers

Summary of Communication:

not tested

assume 50-500 ppm

RECORD OF COMMUNICATION

Date: 7-30-98 Time: 11:30 Recorded By: MSR

Project Number: 0013-0017 Proms Project Name: Solana Highland Apts

Communications With: Rancho Santa Fe Irrig. Dist.

Of:

Phone: ( )

Communications via: (X) Telephone Conversation

( ) Discussions During Site Inspection

( ) Office Visitation/Meeting at:

( ) Other:

Re: water qual.

Summary of Communication:

meets all stds.

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CI#0013-0017-Prows.

Appendix E

Regulatory Agency Data Report Findings

SITE ASSESSMENT REPORT

PROPERTY INFORMATION	CLIENT INFORMATION
Project Name/Ref #: Not Provided Solana Highland Apartments 701 South Nardo Avenue Solana Beach, CA 92075 Cross Street: Fresca Street Latitude/Longitude: (32.986644, 117.261632)	Michael Ryniak Commercial Inspectors 465 Shadow Mountain Drive Prescott, AZ 86301

Site Distribution Summary Agency / Database - Type of Records			within 1/8 mile	1/8 to 1/4 mile	1/4 to 1/2 mile	1/2 to 1 mile
A) Databases searched to 1 mile:						
US EPA	NPL	National Priority List	0	0	0	0
US EPA	CORRACTS (TSD)	RCRA Corrective Actions and associated TSD	0	0	0	0
STATE	SPL	State equivalent priority list	0	0	0	0
B) Databases searched to 1/2 mile:						
STATE	SCL	State equivalent CERCLIS list	0	0	0	-
US EPA	CERCLIS / NFRAP	Sites currently or formerly under review by US EPA	0	0	0	-
US EPA	TSD	RCRA permitted treatment, storage, disposal facilities	0	0	0	-
STATE	LUST	Leaking Underground Storage Tanks	0	0	6	-
STATE	SWLF	Permitted as solid waste landfills, incinerators, or transfer stations	0	0	0	-
C) Databases searched to 1/4 mile:						
STATE	UST	Registered underground storage tanks	0	2	-	-
STATE	AST	Registered aboveground storage tanks	0	0	-	-
D) Databases searched to 1/8 mile:						
US EPA	ERNS	Emergency Response Notification System of spills	0	-	-	-
US EPA	LG GEN	RCRA registered large generators of hazardous waste	0	-	-	-
US EPA	SM GEN	RCRA registered small generators of hazardous waste	0	-	-	-
STATE	SPILLS	State spills list	0	-	-	-

This report meets the ASTM standard E-1527 for standard federal and state government database research in a Phase I environmental site assessment. A (-) indicates a distance not searched because it exceeds these ASTM search parameters.

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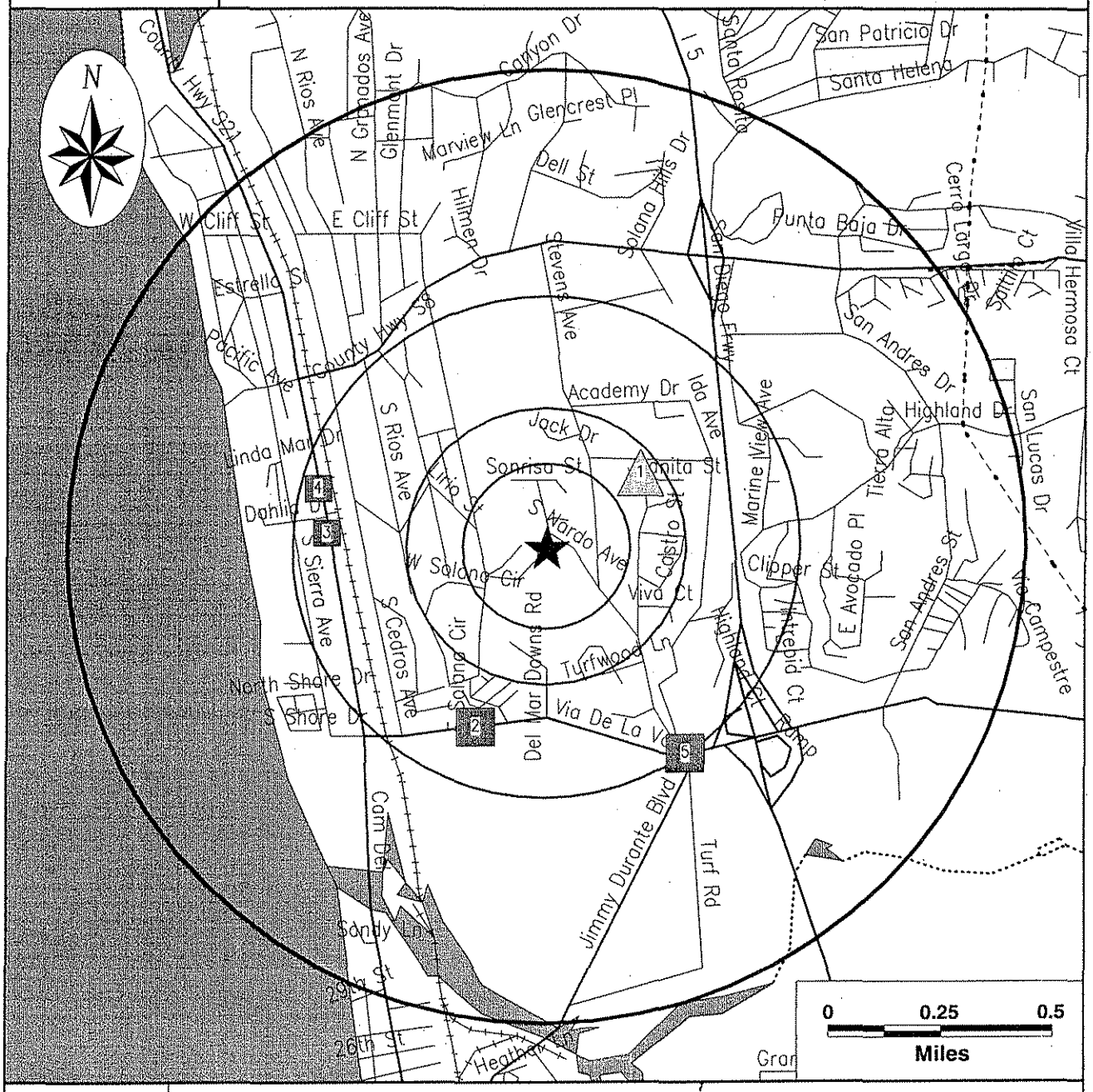
NOTES

SITE ASSESSMENT REPORT

Map of Sites within 1 Mile



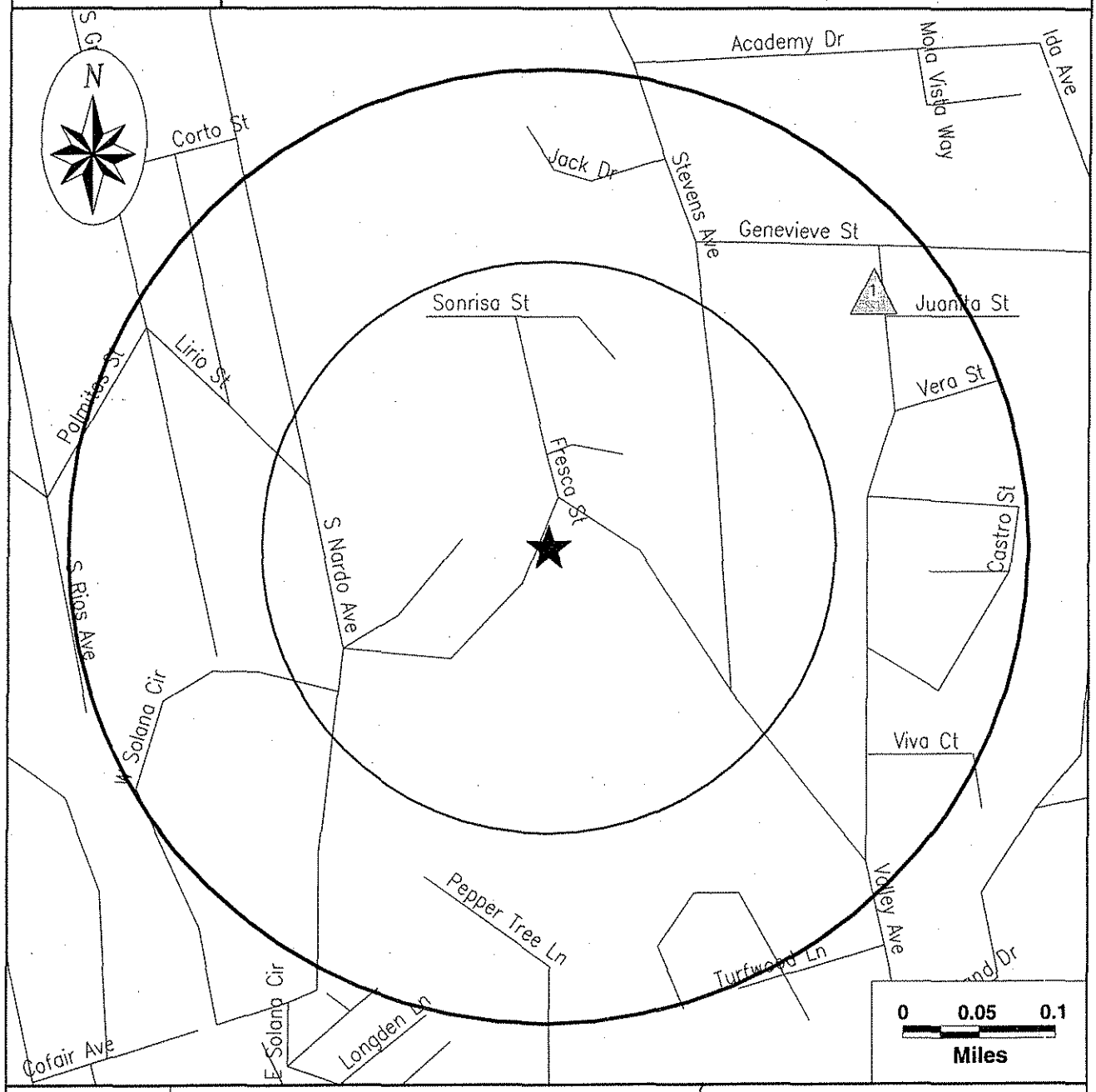
Subject Site	Category:	A	B	C	D
	Databases Searched to:	1 mi.	1/2 mi.	1/4 mi.	1/8 mi.
★	Single Sites	◆	■	△	○
	Multiple Sites	◆	■	△	○
		NPL, SPL, CORRACTS (TSD)	CERCLIS\ NFRAP, TSD, LUST, SWLF, SCL	UST	ERNS, GENERATORS

Highways and Major Roads
Roads
Railroads
Rivers or Water Bodies
Utilities

For More Information Call VISTA Information Solutions, Inc. at **1 - 800 - 767 - 0403**
Report ID: **262901001**
Date of Report: **July 30, 1998**

SITE ASSESSMENT REPORT

Map of Sites within 1/4 Mile



Subject Site	Category:	A	B	C	D
★	Databases Searched to:	1 mi.	1/2 mi.	1/4 mi.	1/8 mi.
	Single Sites	◆	■	△	○
	Multiple Sites	◆	■	△	○
		NPL, SPL, CORRACTS (TSD)	CERCLIS\ NFRAP, TSD, LUST, SWLF, SCL	UST	ERNS, GENERATORS

Highways and Major Roads
Roads
Railroads
Rivers or Water Bodies
Utilities

For More Information Call VISTA Information Solutions, Inc. at **1 - 800 - 767 - 0403**
Report ID: **262901001**
Date of Report: **July 30, 1998**

SITE ASSESSMENT REPORT

Street Map

Subject Site ★

Highways and Major Roads
Roads
Railroads
Rivers or Water Bodies
Utilities

SITE ASSESSMENT REPORT

SITE INVENTORY

MAP ID	PROPERTY AND THE ADJACENT AREA (within 1/8 mile)	A			B					C		D			
	VISTA ID / DISTANCE / DIRECTION	NPL	CORRACTS(TSD)	SPL	SCL	CERCLIS/NFRAP	TSD	LUST	SWLF	UST	AST	ERNS	LG GEN	SM GEN	SPILLS
No Records Found															

MAP ID	SITES IN THE SURROUNDING AREA (within 1/8 - 1/4 mile)	VISTA ID / DISTANCE / DIRECTION	NPL	CORRACTS(TSD)	SPL	SCL	CERCLIS/NFRAP	TSD	LUST	SWLF	UST	AST	ERNS	LG GEN	SM GEN	SPILLS
1	DANIEL MORGAN'S AUTOMOTIVE 637 VALLEY AV C SOLANA BEACH, CA 92075	7251858 0.20 MI NE									X					
1	MB SELECT SERVICE 637 VALLEY SOLANA BEACH, CA 92075	3500265 0.21 MI NE									X					

MAP ID	SITES IN THE SURROUNDING AREA (within 1/4 - 1/2 mile)	VISTA ID / DISTANCE / DIRECTION	NPL	CORRACTS(TSD)	SPL	SCL	CERCLIS/NFRAP	TSD	LUST	SWLF	UST	AST	ERNS	LG GEN	SM GEN	SPILLS
2	DEL MAR MOBIL 2750 VIA DE LA VALLE SOLANA BEACH, CA 92075	934610 0.36 MI S							X		•					
2	RANCHO CAR WASH 2661 VIA DE LA VALLE SOLANA BEACH, CA 92075	1229825 0.39 MI SW							X		•					
3	SOLANA BEACH PROP S JACOBY 437 S HIGHWAY 101 SOLANA BEACH, CA 92075	4040833 0.43 MI W							X		•					
4	DR. MILTON AND JUNE ULLMAN 343 HWY 101 S SOLANA BEACH, CA 92075	1183541 0.46 MI W							X							
5	AM/PM MINI MARKET #704 660 VIA DE LA VALLE SOLANA BEACH, CA 92075	4032580 0.49 MI SE							X		•					

MAP ID	SITES IN THE SURROUNDING AREA (within 1/4 - 1/2 mile)	VISTA ID / DISTANCE / DIRECTION	A			B					C		D			
			NPL	CORRACTS(TSD)	SPL	SCL	CERCLIS/NFRAP	TSD	LUST	SWLF	UST	AST	ERNS	LG GEN	SM GEN	SPILLS
5	PRESTIGE STATIONS, INC. 660 VIA DE LA VALLE SOLANA BEACH, CA 92075	1223969 0.50 MI SE							X							

MAP ID	SITES IN THE SURROUNDING AREA (within 1/2 - 1 mile)	VISTA ID / DISTANCE / DIRECTION	A			B					C		D			
			NPL	CORRACTS(TSD)	SPL	SCL	CERCLIS/NFRAP	TSD	LUST	SWLF	UST	AST	ERNS	LG GEN	SM GEN	SPILLS
No Records Found																

UNMAPPED SITES	VISTA ID	A			B					C		D			
		NPL	CORRACTS(TSD)	SPL	SCL	CERCLIS/NFRAP	TSD	LUST	SWLF	UST	AST	ERNS	LG GEN	SM GEN	SPILLS
PHILIP D. SCHOFIELD MARCIA S EL MONTEVIDE BETWEEN SOLANA BEACH, CA 92075	1251137									X					
DEL MAR DUMP NEAR FAIRGROUNDS DEL MAR, CA 92014	5813125								X						
CARLSBAD BURNSITE ELM AV CARLSBAD, CA 92008	5813095								X						

SITE ASSESSMENT REPORT

DETAILS

PROPERTY AND THE ADJACENT AREA (within 1/8 mile)

No Records Found

SITES IN THE SURROUNDING AREA (within 1/8 - 1/4 mile)

VISTA Address*:	DANIEL MORGAN'S AUTOMOTIVE 637 VALLEY AV C SOLANA BEACH, CA 92075	VISTA ID#:	7251858	Map ID
		Distance/Direction:	0.20 MI / NE	1
		Plotted as:	Point	
STATE UST - State Underground Storage Tank / SRC# 4444		Agency ID:	H27340	

Agency Address:	*SAME AS ABOVE*		
Underground Tanks:	*1*		
Aboveground Tanks:	*NOT REPORTED*		
Tanks Removed:	*NOT REPORTED*		
Tank ID:	*T001U*	**Tank Status:**	*CLOSED REMOVED*
Tank Contents:	*WASTE OIL*	**Leak Monitoring:**	*NOT AVAILABLE*
Tank Age:	*NOT REPORTED*	**Tank Piping:**	*UNKNOWN*
Tank Size (Units):	*500 (GALLONS)*	**Tank Material:**	*DOUBLE WALLED OR SINGLE WALLED*

VISTA Address*:	MB SELECT SERVICE 637 VALLEY SOLANA BEACH, CA 92075	VISTA ID#:	3500265	Map ID
		Distance/Direction:	0.21 MI / NE	1
		Plotted as:	Point	
STATE UST - State Underground Storage Tank / SRC# 1612		EPA/Agency ID:	N/A	

Agency Address:	*SAME AS ABOVE*		
Underground Tanks:	*1*		
Aboveground Tanks:	*NOT REPORTED*		
Tanks Removed:	*NOT REPORTED*		
Tank ID:	*1U*	**Tank Status:**	*CLOSED REMOVED*
Tank Contents:	*PETROLEUM*	**Leak Monitoring:**	*UNKNOWN*
Tank Age:	*NOT REPORTED*	**Tank Piping:**	*UNKNOWN*
Tank Size (Units):	*500 (GALLONS)*	**Tank Material:**	*OTHER DESCRIPTIONS*

SITES IN THE SURROUNDING AREA (within 1/4 - 1/2 mile)

VISTA Address*:	DEL MAR MOBIL 2750 VIA DE LA VALLE SOLANA BEACH, CA 92075	VISTA ID#:	934610	Map ID
		Distance/Direction:	0.36 MI / S	2
		Plotted as:	Point	

STATE LUST - State Leaking Underground Storage Tank / SRC# 4824	EPA/Agency ID:	N/A

Agency Address:	*MOBIL SERVICE STATION #18-490 2750 VIA DE LA VALLE DEL MAR, CA 92014*
Facility ID:	*9UT939*
Leak Date:	*03/11/1988*
Leak Report Date:	*03/22/1988*
Site Assessment Began:	*03/22/1988*
Case Closed Date:	*01/14/1991*
Leak Detection Method:	*TANK CLOSURE*
Leak Cause:	*SPILL*
Leak Source:	*UNKNOWN*
Substance:	*WASTE OIL*
Remediation Event:	*EXCAVATE AND DISPOSE*
Remediation Event:	*STOP DATE: 03/11/1988*
Remediation Event:	*HOW STOPPED: NEW TANK*
Remediation Event:	*ENFORCEMENT TYPE: NONE TAKEN*
Remediation Status:	*CASE CLOSED*
Media Affected:	*SOIL ONLY*
Description / Comment:	*LOCASENUM: H12665-001 NPDES NUM: WASTE DISCHARGE REQ NUM:*
Description / Comment:	*BASIN NUM: 905.11 BENEFICIAL USE:*
Description / Comment:	*FILE DISPOSITION: FILE DISCARDED*

STATE LUST - State Leaking Underground Storage Tank / SRC# 4824	EPA/Agency ID:	N/A

Agency Address:	*MOBIL OIL 2750 VIA DE LA VALLE DEL MAR, CA 92014*		
Facility ID:	*9UT1860*		
Leak Date:	*10/11/1990*		
Leak Report Date:	*10/11/1990*		
Site Assessment Plan Submitted:	*11/21/1990*		
Case Closed Date:	*03/06/1992*		
Leak Detection Method:	*OTHER MEANS*		
Leak Cause:	*UNKNOWN*		
Leak Source:	*UNKNOWN*		
Substance:	*GASOLINE*		
Quantity / Units:	*0*	**Units:**	*NOT REPORTED*
Remediation Event:	*EXCAVATE AND DISPOSE*		
Remediation Event:	*STOP DATE: 10/11/1990*		
Remediation Event:	*HOW STOPPED: OTHER MEANS*		
Remediation Event:	*ENFORCEMENT TYPE: NONE TAKEN*		
Remediation Status:	*CASE CLOSED*		
Media Affected:	*OTHER GROUND WATER*		
Description / Comment:	*LOCASENUM: H12665-002 NPDES NUM: WASTE DISCHARGE REQ NUM:*		
Description / Comment:	*BASIN NUM: 905.11 GW DEPTH: 15 BENEFICIAL USE: NO BENEFICIAL GROUNDWATER USE*		
Description / Comment:	*FILE DISPOSITION: FILE DISCARDED*		

SITES IN THE SURROUNDING AREA (within 1/4 - 1/2 mile) CONT.

STATE LUST - State Leaking Underground Storage Tank / SRC# 4828	EPA/Agency ID:	N/A
Agency Address:	*MOBIL SERVICE STATION #18-490 2750 VIA DE LA VALLE DEL MAR, CA 92014*	
Facility ID:	*9UT939*	
Leak Report Date:	*03/22/1988*	
Tank Inspection Date:	*03/24/1988*	
Site Assessment Began:	*03/22/1988*	
Case Closed Date:	*01/14/1991*	
Substance:	*WASTE OIL*	
Remediation Event:	*EXCAVATE AND DISPOSE*	
Remediation Status:	*CASE CLOSED*	
Media Affected:	*SOIL ONLY*	
Description / Comment:	*SAN DIEGO REGION*	
Description / Comment:	*REVIEW DATE: 06/22/1993*	

STATE LUST - State Leaking Underground Storage Tank / SRC# 4828	EPA/Agency ID:	N/A
Agency Address:	*MOBIL OIL 2750 VIA DE LA VALLE DEL MAR, CA 92014*	
Facility ID:	*9UT1860*	
Leak Report Date:	*10/11/1990*	
Tank Inspection Date:	*08/14/1990*	
Site Assessment Plan Submitted:	*11/21/1990*	
Case Closed Date:	*03/06/1992*	
Substance:	*GASOLINE*	
Quantity / Units: *0*	**Units:**	*NOT REPORTED*
Remediation Event:	*EXCAVATE AND DISPOSE*	
Remediation Status:	*CASE CLOSED*	
Media Affected:	*OTHER GROUND WATER*	
Description / Comment:	*SAN DIEGO REGION*	
Description / Comment:	*REVIEW DATE: 01/22/1996*	

VISTA Address*:	**RANCHO CAR WASH 2661 VIA DE LA VALLE SOLANA BEACH, CA 92075**	VISTA ID#:	1229825	Map ID
		Distance/Direction:	0.39 MI / SW	**2**
		Plotted as:	Point	

STATE LUST - State Leaking Underground Storage Tank / SRC# 4824	EPA/Agency ID:	N/A
Agency Address:	*RANCHO CAR WASH 2661 VIA DE LA VALLE DEL MAR, CA 920141903*	
Facility ID:	*9UT2889*	
Leak Date:	*07/14/1994*	
Leak Report Date:	*10/13/1994*	
Site Assessment Began:	*09/09/1994*	
Leak Detection Method:	*OTHER MEANS*	
Leak Cause:	*OVERFILL*	
Leak Source:	*OTHER MEANS*	
Substance:	*REGULR GASOL*	
Quantity / Units: *0*	**Units:**	*NOT REPORTED*
Remediation Event:	*STOP DATE: 07/14/1994*	
Remediation Event:	*HOW STOPPED: OTHER MEANS*	
Remediation Event:	*ENFORCEMENT TYPE: NONE TAKEN*	
Remediation Status:	*PRELIMINARY SITE ASSESSMENT UNDERWAY*	

SITES IN THE SURROUNDING AREA (within 1/4 - 1/2 mile) CONT.

Media Affected:	*AQUIFER (MUNICIPAL USE)*
Description / Comment:	*LOCASENUM: H03891-001 NPDES NUM: WASTE DISCHARGE REQ NUM:*
Description / Comment:	*BASIN NUM: 905.11 GW DEPTH: 13' BENEFICIAL USE: MUNICIPAL GROUNDWATER USE*

STATE LUST - State Leaking Underground Storage Tank / SRC# 4828 | EPA/Agency ID: N/A

Agency Address:	*RANCHO CAR WASH 2661 VIA DE LA VALLE DEL MAR, CA 920141903*
Facility ID:	*9UT2889*
Leak Report Date:	*10/13/1994*
Tank Inspection Date:	*09/09/1994*
Site Assessment Began:	*09/09/1994*
Substance:	*REGULAR GASOLINE*
Quantity / Units:	*0* **Units:** *NOT REPORTED*
Remediation Status:	*PRELIMINARY SITE ASSESSMENT UNDERWAY*
Media Affected:	*AQUIFER (MUNICIPAL USE)*
Description / Comment:	*SAN DIEGO REGION*
Description / Comment:	*REVIEW DATE: 01/22/1996*

VISTA Address*:	**SOLANA BEACH PROP S JACOBY 437 S HIGHWAY 101 SOLANA BEACH, CA 92075**	VISTA ID#: Distance/Direction: Plotted as:	4040833 0.43 MI / W Point	Map ID **3**

STATE LUST - State Leaking Underground Storage Tank / SRC# 4824 | EPA/Agency ID: N/A

Agency Address:	*SOLANA BEACH PROPERTY 437 HWY 101 S SOLANA BEACH, CA 92075*
Facility ID:	*9UT962*
Leak Date:	*04/28/1988*
Leak Report Date:	*05/10/1988*
Site Assessment Began:	*05/10/1988*
Case Closed Date:	*06/13/1988*
Leak Detection Method:	*TANK CLOSURE*
Leak Cause:	*UNKNOWN*
Leak Source:	*UNKNOWN*
Substance:	*GASOLINE*
Remediation Event:	*STOP DATE: 04/28/1988*
Remediation Event:	*HOW STOPPED: CLOSE TANK*
Remediation Event:	*ENFORCEMENT TYPE: NONE TAKEN*
Remediation Status:	*CASE CLOSED*
Media Affected:	*SOIL ONLY*
Description / Comment:	*LOCASENUM: H26485-001 NPDES NUM: WASTE DISCHARGE REQ NUM:*
Description / Comment:	*BASIN NUM: 904.61 BENEFICIAL USE:*
Description / Comment:	*FILE DISPOSITION: FILE DISCARDED*

STATE LUST - State Leaking Underground Storage Tank / SRC# 4828 | EPA/Agency ID: N/A

Agency Address:	*SOLANA BEACH PROPERTY 437 HWY 101 S SOLANA BEACH, CA 92075*
Facility ID:	*9UT962*
Leak Report Date:	*05/10/1988*
Tank Inspection Date:	*04/29/1988*
Site Assessment Began:	*05/10/1988*
Case Closed Date:	*06/13/1988*
Substance:	*GASOLINE*

Remediation Status:	*CASE CLOSED*
Media Affected:	*SOIL ONLY*
Description / Comment:	*SAN DIEGO REGION*
Description / Comment:	*REVIEW DATE: 05/10/1988*

VISTA Address*:	**DR. MILTON AND JUNE ULLMAN** **343 HWY 101 S** **SOLANA BEACH, CA 92075**	VISTA ID#:	1183541	Map ID
		Distance/Direction:	0.46 MI / W	**4**
		Plotted as:	Point	

STATE LUST - State Leaking Underground Storage Tank / SRC# 4824	EPA/Agency ID:	N/A

Agency Address:	*SAME AS ABOVE*
Facility ID:	*9UT911*
Leak Date:	*02/09/1988*
Leak Report Date:	*02/18/1988*
Site Assessment Began:	*02/18/1988*
Case Closed Date:	*08/26/1988*
Leak Detection Method:	*TANK CLOSURE*
Leak Cause:	*CORROSION*
Leak Source:	*TANK*
Substance:	*WASTE OIL*
Remediation Event:	*EXCAVATE AND DISPOSE*
Remediation Event:	*STOP DATE: 02/09/1988*
Remediation Event:	*HOW STOPPED: CLOSE TANK*
Remediation Status:	*CASE CLOSED*
Media Affected:	*SOIL ONLY*
Description / Comment:	*LOCASENUM: H26441-001 NPDES NUM: WASTE DISCHARGE REQ NUM:*
Description / Comment:	*BASIN NUM: GW DEPTH: >10 BENEFICIAL USE:*
Description / Comment:	*FILE DISPOSITION: FILE DISCARDED*

STATE LUST - State Leaking Underground Storage Tank / SRC# 4828	EPA/Agency ID:	N/A

Agency Address:	*SAME AS ABOVE*
Facility ID:	*9UT911*
Leak Report Date:	*02/18/1988*
Tank Inspection Date:	*02/09/1988*
Site Assessment Began:	*02/18/1988*
Case Closed Date:	*08/26/1988*
Substance:	*WASTE OIL*
Remediation Event:	*EXCAVATE AND DISPOSE*
Remediation Status:	*CASE CLOSED*
Media Affected:	*SOIL ONLY*
Description / Comment:	*SAN DIEGO REGION*
Description / Comment:	*REVIEW DATE: 08/26/1988*

VISTA Address*:	**AM/PM MINI MARKET #704** **660 VIA DE LA VALLE** **SOLANA BEACH, CA 92075**	VISTA ID#:	4032580	Map ID
		Distance/Direction:	0.49 MI / SE	**5**
		Plotted as:	Point	

STATE LUST - State Leaking Underground Storage Tank / SRC# 4824	EPA/Agency ID:	N/A

Agency Address:	*AM/PM MINI MARKET #704* *660 VIA DE LA VALLE* *SOLANA BEACH, CA 920752461*
Facility ID:	*9UT2826*
Leak Date:	*10/15/1993*
Leak Report Date:	*10/15/1993*

Site Assessment Began:	*10/15/1993*		
Remediation Plan Date:	*10/15/1993*		
Leak Detection Method:	*TANK CLOSURE*		
Leak Cause:	*UNKNOWN*		
Leak Source:	*UNKNOWN*		
Substance:	*UNLEAD GASOL*		
Quantity / Units:	*0*	**Units:**	*NOT REPORTED*
Remediation Event:	*STOP DATE: 10/15/1993*		
Remediation Event:	*HOW STOPPED: CLOSE TANK*		
Remediation Event:	*ENFORCEMENT TYPE: NONE TAKEN*		
Remediation Status:	*REMEDIATION PLAN SUBMITTED*		
Media Affected:	*OTHER GROUND WATER*		
Description / Comment:	*LOCASENUM: H05166-004 NPDES NUM: WASTE DISCHARGE REQ NUM:*		
Description / Comment:	*BASIN NUM: 905.11 GW DEPTH: 5.6' BENEFICIAL USE: NBNB/EOC*		
Description / Comment:	*FILE DISPOSITION: FILE DISCARDED*		

STATE LUST - State Leaking Underground Storage Tank / SRC# 4828		EPA/Agency ID:	N/A
Agency Address:	*AM/PM MINI MARKET #704* *660 VIA DE LA VALLE* *SOLANA BEACH, CA 920752461*		
Facility ID:	*9UT2826*		
Leak Report Date:	*10/15/1993*		
Tank Inspection Date:	*10/15/1993*		
Site Assessment Began:	*10/15/1993*		
Remediation Plan Date:	*10/15/1993*		
Substance:	*UNLEADED GASOLINE*		
Quantity / Units:	*0*	**Units:**	*NOT REPORTED*
Remediation Status:	*REMEDIATION PLAN SUBMITTED*		
Media Affected:	*OTHER GROUND WATER*		
Description / Comment:	*SAN DIEGO REGION*		
Description / Comment:	*REVIEW DATE: 09/07/1994*		

VISTA Address*:	**PRESTIGE STATIONS, INC.** **660 VIA DE LA VALLE** **SOLANA BEACH, CA 92075**	VISTA ID#: Distance/Direction: Plotted as:	1223969 0.50 MI / SE Point	Map ID **5**

STATE LUST - State Leaking Underground Storage Tank / SRC# 4824		EPA/Agency ID:	N/A
Agency Address:	*SAME AS ABOVE*		
Facility ID:	*9UT1864*		
Leak Date:	*11/20/1990*		
Leak Report Date:	*11/20/1990*		
Site Assessment Plan Submitted:	*12/17/1990*		
Site Assessment Began:	*12/18/1992*		
Remediation Plan Date:	*11/20/1990*		
Leak Detection Method:	*TANK CLOSURE*		
Leak Cause:	*UNKNOWN*		
Leak Source:	*UNKNOWN*		
Substance:	*REGULR GASOL*		
Quantity / Units:	*0*	**Units:**	*NOT REPORTED*
Remediation Event:	*STOP DATE: 11/20/1990*		
Remediation Event:	*HOW STOPPED: CLOSE TANK*		
Remediation Event:	*ENFORCEMENT TYPE: NONE TAKEN*		

SITES IN THE SURROUNDING AREA (within 1/4 - 1/2 mile) CONT.

Remediation Status:	*REMEDIATION PLAN SUBMITTED*
Media Affected:	*OTHER GROUND WATER*
Description / Comment:	*LOCASENUM: H05166-002 NPDES NUM: WASTE DISCHARGE REQ NUM:*
Description / Comment:	*BASIN NUM: 905.11 BENEFICIAL USE: NBNB/EOC*
Description / Comment:	*FILE DISPOSITION: FILE DISCARDED*

STATE LUST - State Leaking Underground Storage Tank / SRC# 4828	EPA/Agency ID:	N/A

Agency Address:	*SAME AS ABOVE*
Facility ID:	*9UT1864*
Leak Report Date:	*11/20/1990*
Tank Inspection Date:	*11/20/1990*
Site Assessment Plan Submitted:	*12/17/1990*
Site Assessment Began:	*12/18/1992*
Remediation Plan Date:	*11/20/1990*
Substance:	*REGULAR GASOLINE*
Quantity / Units: *0*	**Units:** *NOT REPORTED*
Remediation Status:	*REMEDIATION PLAN SUBMITTED*
Media Affected:	*OTHER GROUND WATER*
Description / Comment:	*CROSS STREET: STEVENS AVE*
Description / Comment:	*SAN DIEGO REGION*
Description / Comment:	*REVIEW DATE: 05/10/1994*

SITES IN THE SURROUNDING AREA (within 1/2 - 1 mile)

No Records Found

UNMAPPED SITES

VISTA Address*:	DEL MAR DUMP NEAR FAIRGROUNDS DEL MAR, CA 92014	VISTA ID#:	5813125
STATE SWLF - Solid Waste Landfill / SRC# 4816		Agency ID:	37-CR-0016

Agency Address:	*DEL MAR DUMP* *NEAR FAIRGROUNDS* *DEL MAR, CA*
Facility Type:	*SOLID WASTE DISPOSAL FACILITY*
Facility Status:	*OTHER*
Permit Status:	*UNDER REVIEW*

VISTA Address*:	CARLSBAD BURNSITE ELM AV CARLSBAD, CA 92008	VISTA ID#:	5813095
STATE SWLF - Solid Waste Landfill / SRC# 4816		Agency ID:	37-CR-0013

Agency Address:	*CARLSBAD BURNSITE* *ELM AVE* *CARLSBAD, CA*
Facility Type:	*SOLID WASTE DISPOSAL FACILITY*
Facility Status:	*CLOSED*
Permit Status:	*OTHER*

SITE ASSESSMENT REPORT

DESCRIPTION OF DATABASES SEARCHED

A) DATABASES SEARCHED TO 1 MILE

NPL
SRC#: 4726

VISTA conducts a database search to identify all sites within 1 mile of your property.
The agency release date for NPL was May, 1998.

The National Priorities List (NPL) is the EPA's database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund program. A site must meet or surpass a predetermined hazard ranking system score, be chosen as a state's top priority site, or meet three specific criteria set jointly by the US Dept of Health and Human Services and the US EPA in order to become an NPL site.

SPL
SRC#: 4808

VISTA conducts a database search to identify all sites within 1 mile of your property.
The agency release date for Calsites Database: Annual Workplan Sites was May, 1998.

This database is provided by the Cal. Environmental Protection Agency, Dept. of Toxic Substances Control. The agency may be contacted at: 916-323-3400.

CORRACTS
SRC#: 4467

VISTA conducts a database search to identify all sites within 1 mile of your property.
The agency release date for HWDMS/RCRIS was February, 1998.

The EPA maintains this database of RCRA facilities which are undergoing "corrective action". A "corrective action order" is issued pursuant to RCRA Section 3008 (h) when there has been a release of hazardous waste or constituents into the environment from a RCRA facility. Corrective actions may be required beyond the facility's boundary and can be required regardless of when the release occurred, even if it predates RCRA.

B) DATABASES SEARCHED TO 1/2 MILE

CERCLIS
SRC#: 4465

VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for CERCLIS was February, 1998.

The CERCLIS List contains sites which are either proposed to or on the National Priorities List(NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL. The information on each site includes a history of all pre-remedial, remedial, removal and community relations activiles or events at the site, financial funding information for the events, and unrestricted enforcement activities.

NFRAP
SRC#: 4466

VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for CERCLIS-NFRAP was February, 1998.

NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly, or the contamination was not serious enough to require Federal Superfund action or NPL consideration.

SCL
SRC#: 4807

VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for Calsites Database: All Sites except Annual Workplan Sites (incl. ASPIS) was May, 1998.

This database is provided by the Department of Toxic Substances Control. The agency may be contacted at: .

The CalSites database includes both known and potential sites. Two- thirds of these sites have been classified, based on available information, as needing "No Further Action" (NFA) by the Department of Toxic Substances Control. The remaining sites are in various stages of review and remediation to determine if a problem exists at the site. Several hundred sites have been remediated and are considered certified. Some of these sites may be in long term operation and maintenance.

RCRA-TSD
SRC#: 4467

VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for HWDMS/RCRIS was February, 1998.

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA TSDs are facilities which treat, store and/or dispose of hazardous waste.

SWLF
SRC#: 4816

VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for Ca Solid Waste Information System (SWIS) was May, 1998.

This database is provided by the Integrated Waste Management Board. The agency may be contacted at: 916-255-4021.

The California Solid Waste Information System (SWIS) database consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations pursuant to the Solid Waste Management and Resource Recovery Act of 1972, Government Code Section 2.66790(b). Generally, the California Integrated Waste Management Board learns of locations of disposal facilities through permit applications and from local enforcement agencies.

LUST
SRC#: 4828

VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for Lust Information System (LUSTIS) was April, 1998.

This database is provided by the California Environmental Protection Agency. The agency may be contacted at: 916-445-6532.

C) DATABASES SEARCHED TO 1/4 MILE

UST's
SRC#: 1612

VISTA conducts a database search to identify all sites within 1/4 mile of your property.
The agency release date for Underground Storage Tank Registrations Database was January, 1994.

This database is provided by the State Water Resources Control Board, Office of Underground Storage Tanks. The agency may be contacted at: 916-227-4337; Caution-Many states do not require registration of heating oil tanks, especially those used for residential purposes.

UST's
SRC#: 4444

VISTA conducts a database search to identify all sites within 1/4 mile of your property.
The agency release date for San Diego County Environmental Health Services Database-UST Sites was January, 1998.

This database is provided by the San Diego County Department of Health Services. The agency may be contacted at: 619-338-2268; Caution-Many states do not require registration of heating oil tanks, especially those used for residential purposes.

UST's
SRC#: 4814

VISTA conducts a database search to identify all sites within 1/4 mile of your property.
The agency release date for City of San Leandro UST Listing was May, 1998.

This database is provided by the San Leandro Fire Department. The agency may be contacted at: 510-577-3331; Caution-Many states do not require registration of heating oil tanks, especially those used for residential purposes.

UST's
SRC#: 4815

VISTA conducts a database search to identify all sites within 1/4 mile of your property.
The agency release date for City of Abaheim UST Listing was May, 1998.

This database is provided by the City of Anaheim. The agency may be contacted at: 714-765-4050; Caution-Many states do not require registration of heating oil tanks, especially those used for residential purposes.

UST's
SRC#: 4819

VISTA conducts a database search to identify all sites within 1/4 mile of your property.
The agency release date for Bakersfield City Tanks - In Compliance Out of Compliance was May, 1998.

This database is provided by the Bakersfield Fire Department Office of Environmental Services. The agency may be contacted at: 805-326-3979; Caution-Many states do not require registration of heating oil tanks, especially those used for residential purposes.

UST's
SRC#: 4821

VISTA conducts a database search to identify all sites within 1/4 mile of your property.
The agency release date for Sebastopol City Owner List of USTs was May, 1998.

This database is provided by the City of Sebastopol Fire Department. The agency may be contacted at: 707-823-8061; Caution-Many states do not require registration of heating oil tanks, especially those used for residential purposes.

AST's
SRC#: 4320

VISTA conducts a database search to identify all sites within 1/4 mile of your property.
The agency release date for Aboveground Storage Tank Database was December, 1997.

This database is provided by the State Water Resources Control Board. The agency may be contacted at: 916-227-4364.

D) DATABASES SEARCHED TO 1/8 MILE

ERNS
SRC#: 4583

VISTA conducts a database search to identify all sites within 1/8 mile of your property.
The agency release date for was January, 1998.

The Emergency Response Notification System (ERNS) is a national database used to collect information on reported releases of oil and hazardous substances. The database contains information from spill reports made to federal authorities including the EPA, the US Coast Guard, the National Response Center and the Department of transportation. A search of the database records for the period October 1986 through January 1998 revealed information regarding reported spills of oil or hazardous substances in the stated area.

RCRA-LgGen
SRC#: 4467

VISTA conducts a database search to identify all sites within 1/8 mile of your property.
The agency release date for HWDMS/RCRIS was February, 1998.

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA Large Generators are facilities which generate at least 1000 kg./month of non-acutely hazardous waste (or 1 kg./month of acutely hazardous waste).

RCRA-SmGen
SRC#: 4467

VISTA conducts a database search to identify all sites within 1/8 mile of your property.
The agency release date for HWDMS/RCRIS was February, 1998.

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA Small and Very Small generators are facilities which generate less than 1000 kg./month of non-acutely hazardous waste.

SPILL
SRC#: 161

VISTA conducts a database search to identify all sites within 1/8 mile of your property.
The agency release date for California Hazardous Materials Incident Report was December, 1990.

This database is provided by the Office of Emergency Services. The agency may be contacted at: .

SPILL
SRC#: 4444

VISTA conducts a database search to identify all sites within 1/8 mile of your property.
The agency release date for San Diego County Environmental Health Services Database-Spill Sites was January, 1998.

This database is provided by the San Diego County Department of Health Services. The agency may be contacted at: 619-338-2268.

SPILL
SRC#: 4642

VISTA conducts a database search to identify all sites within 1/8 mile of your property.
The agency release date for Region #1-Active Toxic Site Investigations-Spills was March, 1998.

This database is provided by the Regional Water Quality Control Board, Region #1 (North Coast Region). The agency may be contacted at: 707-576-2220.

End of Report

C. J., SPSC

CI#0013-0017-Prows.

Appendix F

Laboratory Analytical Results

ENVIRONMENTAL MANAGEMENT CONSULTANTS

BULK MATERIAL REPORT

LAB: 50059

REPORT Laboratory Analysis: BULK MATERIAL **Methodology:** EPA 600/M4-82-020

Client: COMMERCIAL INSPECTORS **P/O#:**

Reported to: MIKE RYNIAK **Proj:** 0013-0017-PROWS

Sampled from: SOLANA HIGHLAND APTS **By:** Client

Shipped via: FEDERAL EXPRESS **Received:** 7/29/98 **Reported:** 7/31/98

SAMPLE	IDENTIFICATION	PARAMETER	TEST RESULTS
01	01A ceiling texture white	Asbestos	Positive. This sample contains approx. 2% Chrysotile, 98% Quartz , CaCO , Mica , Binder
02	01B ceiling texture white	Asbestos	Positive. This sample contains approx. 2% Chrysotile, 98% Quartz , CaCO , Mica , Binder
03	01C ceiling texture white	Asbestos	Positive. This sample contains approx. 2% Chrysotile, 98% Quartz , CaCO , Mica , Binder

THE REPORT APPLIES TO THE STANDARDS OR PROCEDURES IDENTIFIED AND TO THE SAMPLE(S) TESTED. THE TEST RESULTS ARE NOT NECESSARILY INDICATIVE OR REPRESENTATIVE OF THE QUALITIES OF THE LOT FROM WHICH THE SAMPLE WAS TAKEN OR OF APPARENTLY IDENTICAL OR SIMILAR PRODUCTS, NOR DO THEY REPRESENT AN ONGOING QUALITY ASSURANCE PROGRAM UNLESS SO NOTED. THESE REPORTS ARE FOR THE EXCLUSIVE USE OF THE ADDRESSED CLIENT AND ARE RENDERED UPON THE CONDITION THAT THEY WILL NOT BE REPRODUCED WHOLLY OR IN PART FOR ADVERTISING OR OTHER PURPOSES OVER OUR SIGNATURE OR IN CONNECTION WITH OUR NAME WITHOUT SPECIAL WRITTEN PERMISSION. SAMPLES NOT DESTROYED IN TESTING ARE RETAINED A MAXIMUM OF THIRTY DAYS.

ACCREDITED BY THE NATIONAL INSTITUTE OF STANDARDS TECHNOLOGY. VOLUNTARY LABORATORY ACCREDITATION PROGRAM FOR SELECTED TEST METHOD FOR ASBESTOS. THE ACCREDITATION OR ANY REPORTS GENERATED BY THIS LABORATORY IN NO WAY CONSTITUTES OR IMPLIES PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY. ALL ANALYSES ARE DERIVED FROM CALIBRATED VISUAL ESTIMATE UNLESS OTHERWISE NOTED. POLARIZED-LIGHT IS NOT CONSISTENTLY RELIABLE IN DETECTING ASBESTOS IN FLOOR COVERINGS AND SIMILAR NON-FRIABLE ORGANICALLY BOUND MATERIALS. QUANTITATIVE TRANSMISSION ELECTRON MICROSCOPY IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO DETERMINE IF THIS MATERIAL CAN BE CONSIDERED OR TREATED AS NON-ASBESTOS-CONTAINING.

Analyst: Jason W. Sutter By: Kurt Kettler

NVLAP Accreditation #1926, CA ELAP #1913, TX DOH #30-0094

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

C. J., LLC

CI#0013-0017-Prows.

Appendix G

Resumes

MICHAEL S. RYNIAK

DIRECTOR OF ENVIRONMENTAL SERVICES

PROFESSIONAL RESUME

EXPERIENCE: (1989-1998)

Manages all technical and client-related response for environmental projects, including Phase I environmental site assessments, air-quality monitoring surveys, asbestos and lead-based paint surveys, and environmental consulting. As a Certified Environmental Inspector, Mr. Ryniak has conducted or supervised over 700 environmental site assessments for several national consulting firms, including Commercial Inspectors LLC, Kleinfelder Inc., Jaykim Engineers, Inc., and EMG Inc. Projects have included both Phase I and Phase II environmental site assessments.

Previous experience includes: Provided consulting and oversight on projects for the Resolution Trust Corporation (RTC) and related financial institutions/management firms regarding RTC environmental policies and procedures. Conducted or supervised report reviews for all phases of environmental work provided to the RTC and related institutions.

Participated in remedial investigation and feasibility studies for four Arizona "Superfund" sites in Phoenix and Tucson for the Arizona Department of Environmental Quality.

QUALIFICATIONS:

B.A., Anthropology: University of Notre Dame
Master Degree Program (Geology): Arizona State University

AHERA Certified Building Inspector
AHERA Certified Management Planner
OSHA 40-Hour Health & Safety Training Certificate
Certified Environmental Inspector (CEI)
(Environmental Assessment Association , Scottsdale, AZ)

ATTACHMENT 3
NO SANBORN MAPS FOUND NOTIFICATION

PHASE I ENVIRONMENTAL SITE ASSESSMENT FOR
Solana Highlands Apartments
701 South Nardo Avenue
Solana Beach, San Diego County, CA 92075-2309
APN: 298-260-33-00

July 16, 2010
EAI Project No.: 01.UNBNK13.10
UBNA RIMS No.: 10-1089

Solana Highlands Apartments
701 South Nardo Avenue
Solana Beach, CA 92075

Inquiry Number: 2794855.4
June 21, 2010

The EDR Aerial Photo Decade Package

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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Date EDR Searched Historical Sources:

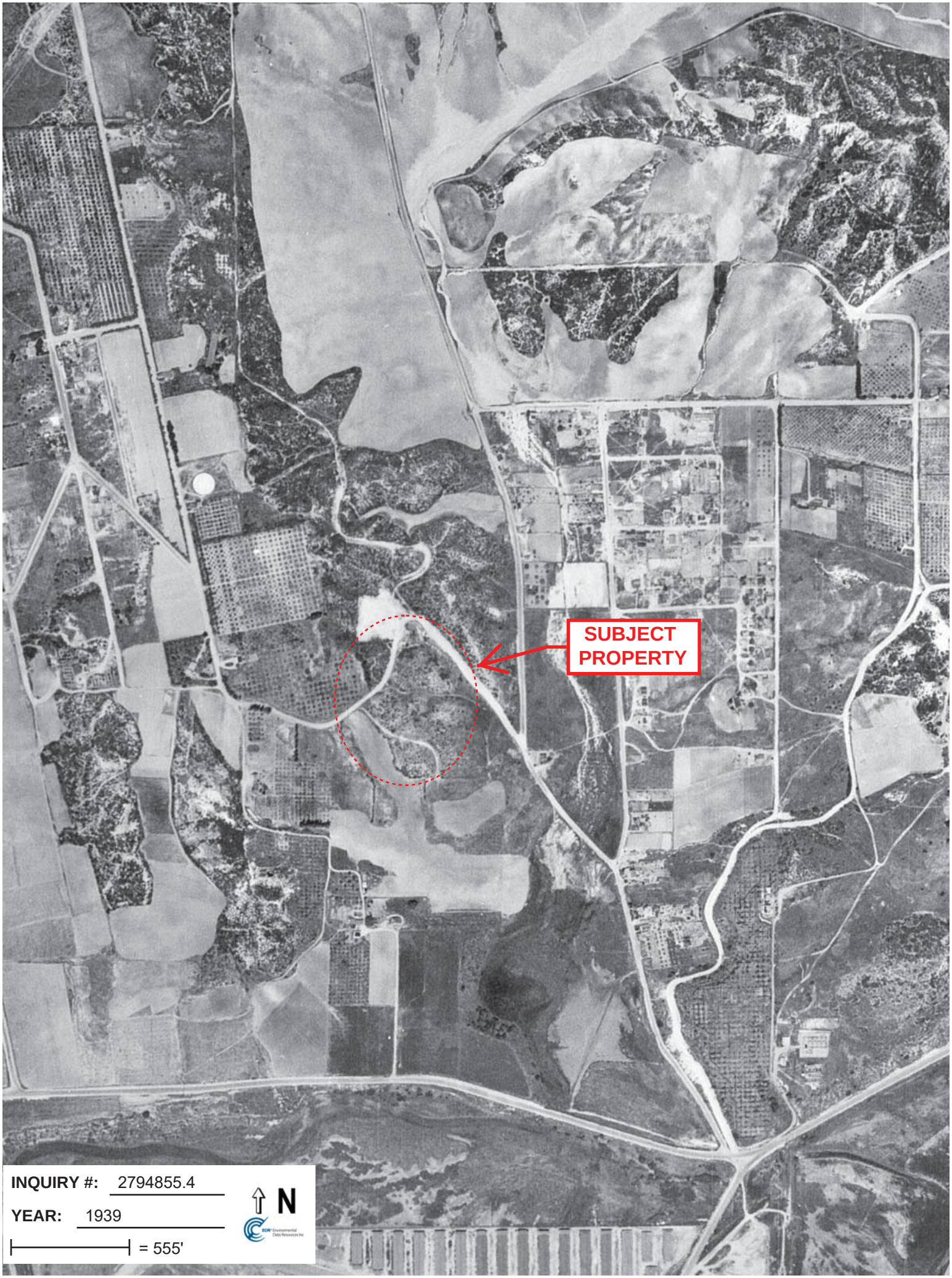
Aerial Photography June 21, 2010

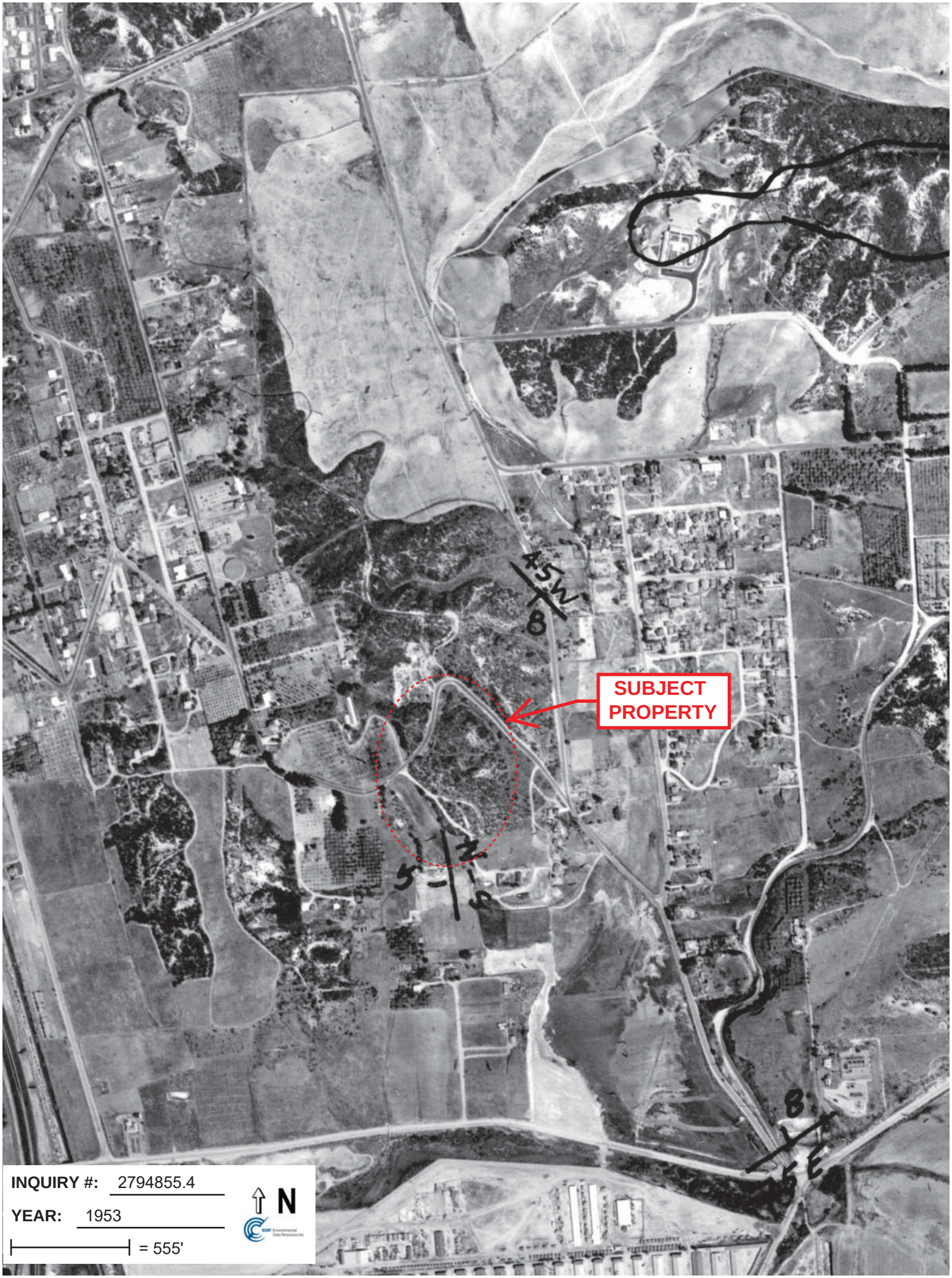
Target Property:

701 South Nardo Avenue

Solana Beach, CA 92075

Year	***Scale***	***Details***	***Source***
1939	Aerial Photograph. Scale: 1"=555'	Flight Year: 1939	Fairchild
1953	Aerial Photograph. Scale: 1"=555'	Flight Year: 1953	Park
1963	Aerial Photograph. Scale: 1"=555'	Flight Year: 1963	Cartwright
1974	Aerial Photograph. Scale: 1"=600'	Flight Year: 1974	AMI
1990	Aerial Photograph. Scale: 1"=666'	Flight Year: 1990	USGS
1994	Aerial Photograph. Scale: 1"=666'	Flight Year: 1994	USGS
2002	Aerial Photograph. Scale: 1"=666'	Flight Year: 2002	USGS
2005	Aerial Photograph. Scale: 1"=604'	Flight Year: 2005	EDR


SUBJECT PROPERTY
INQUIRY #: 2794855.4
YEAR: 1939
= 555'
N

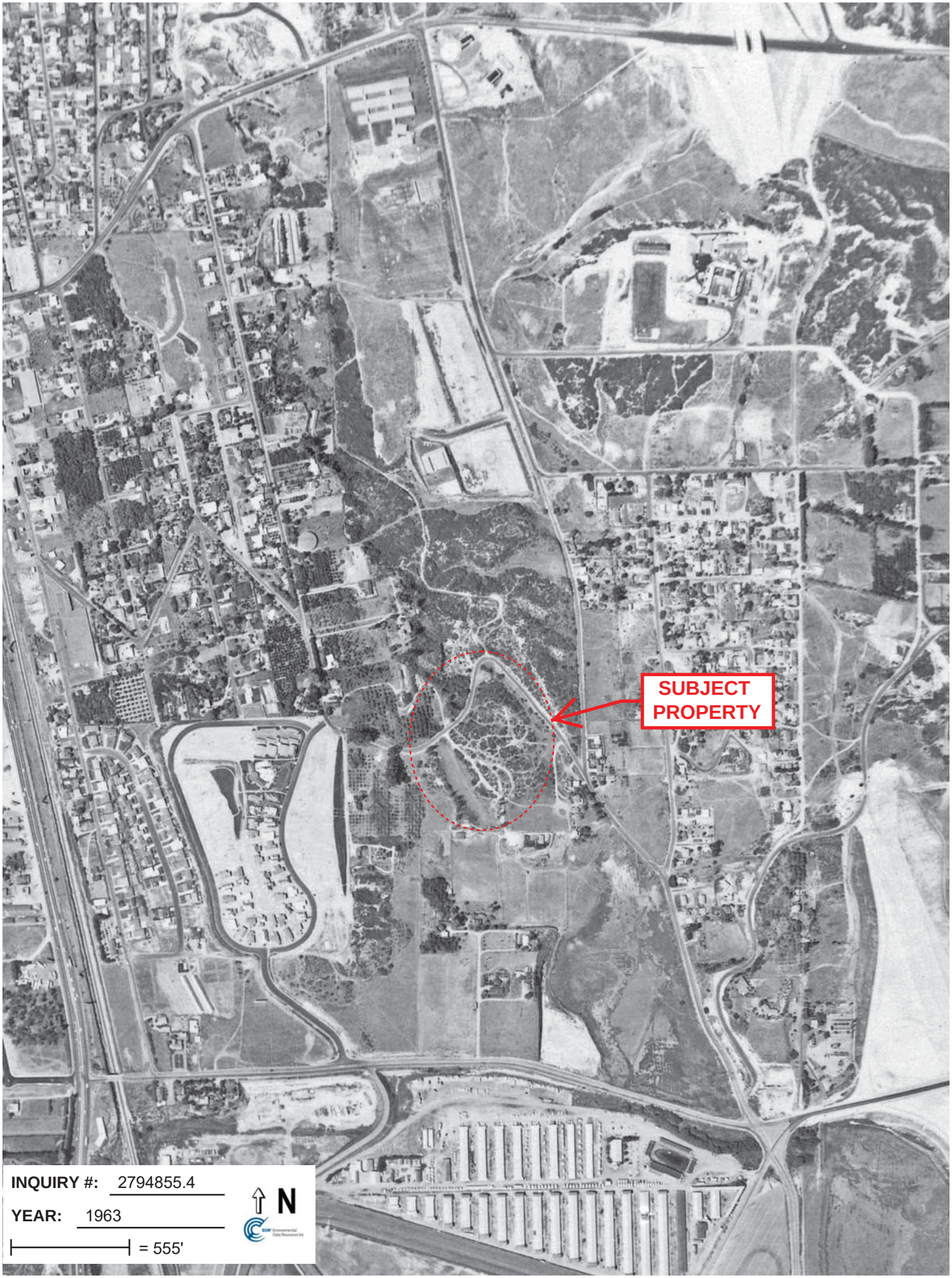


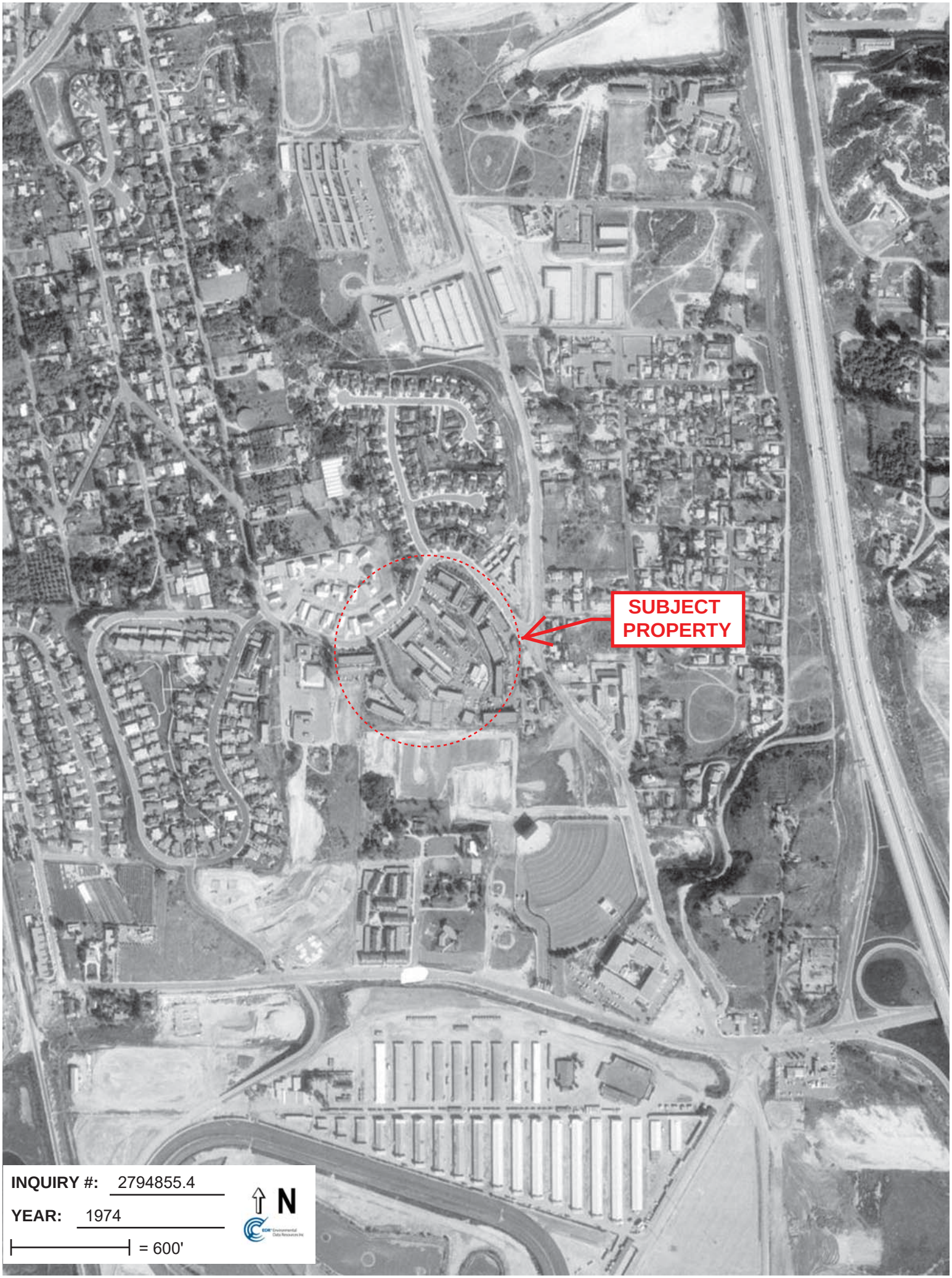
INQUIRY #: 2794855.4

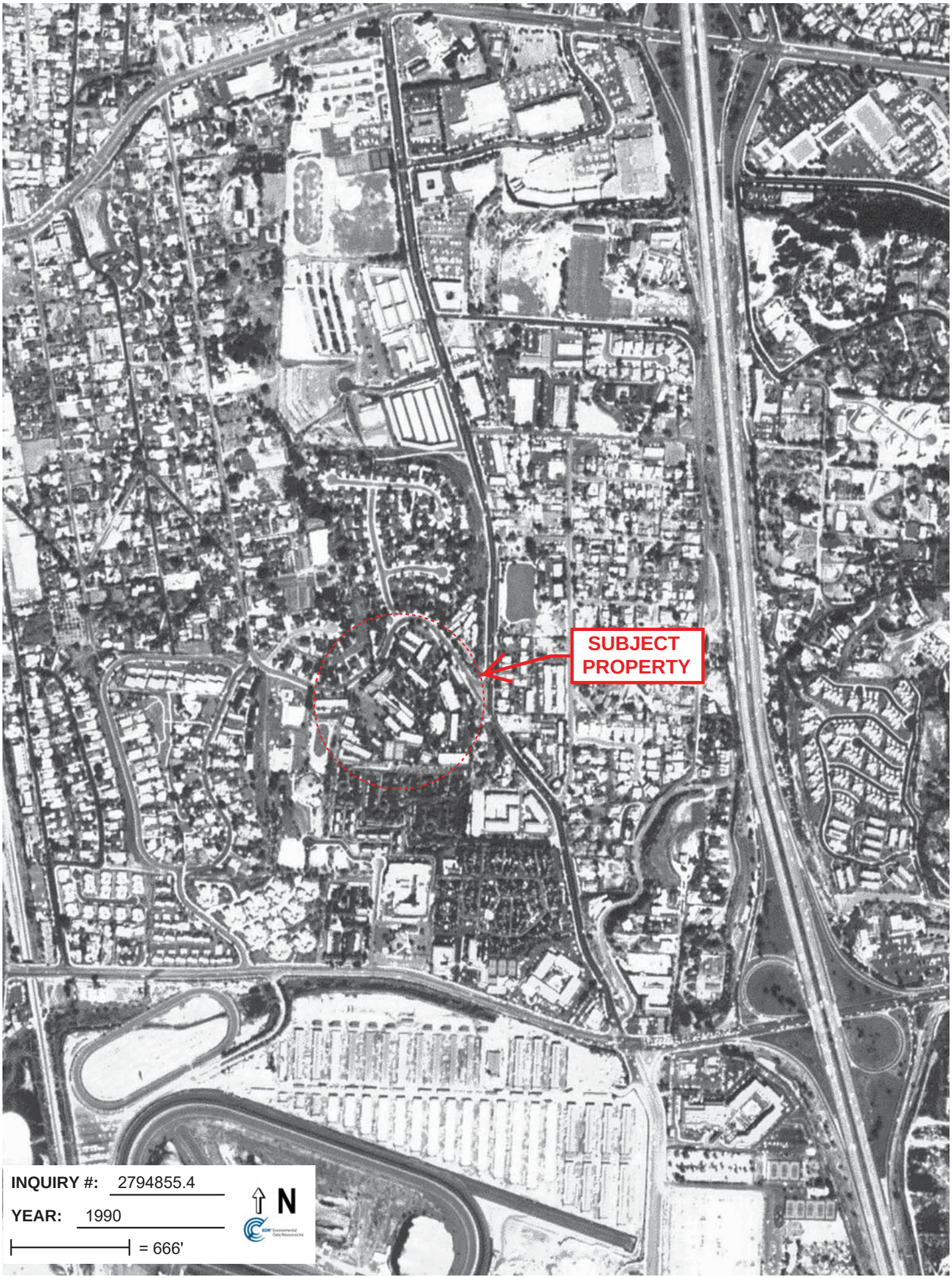
YEAR: 1953

= 555'

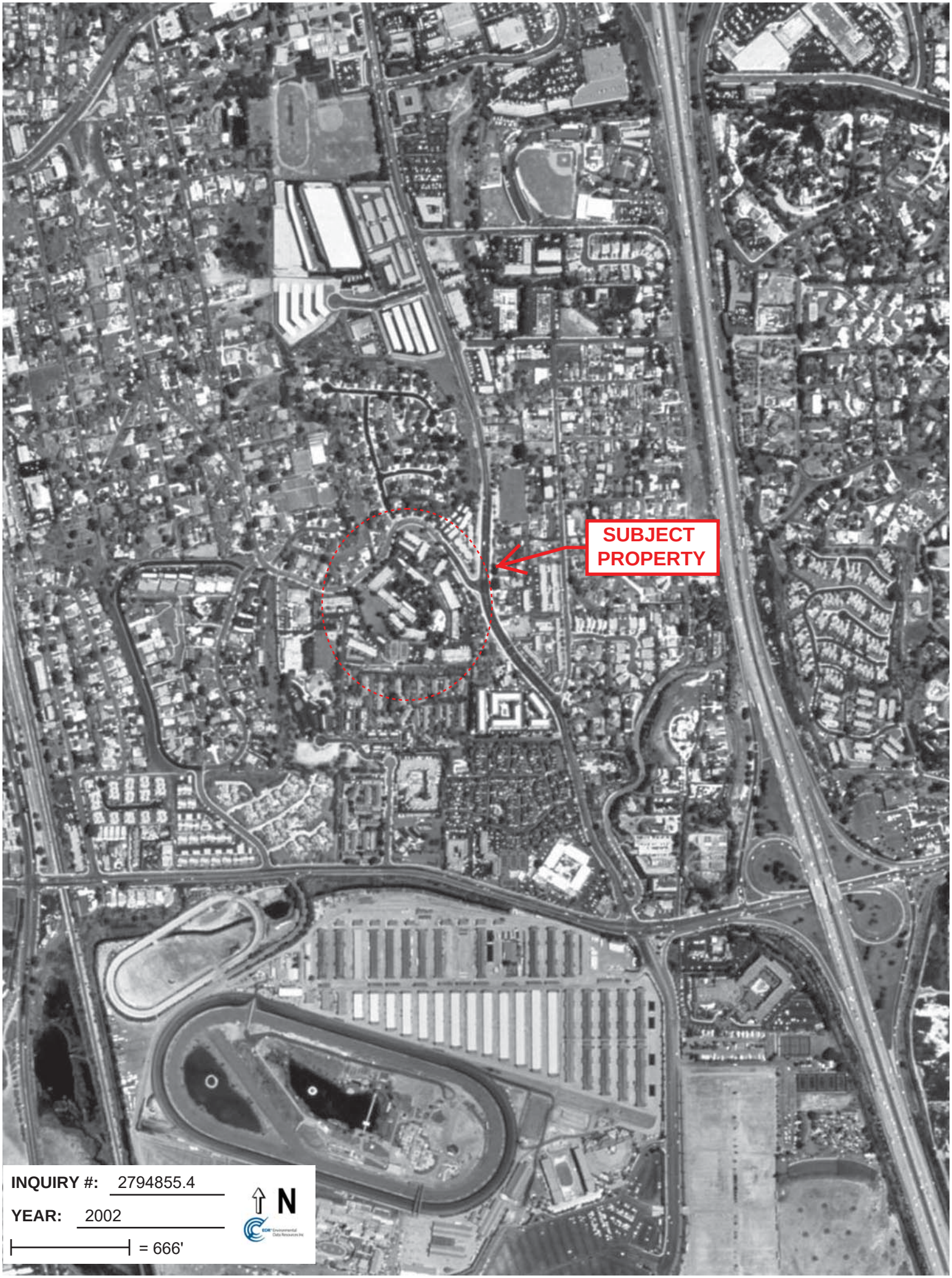
N

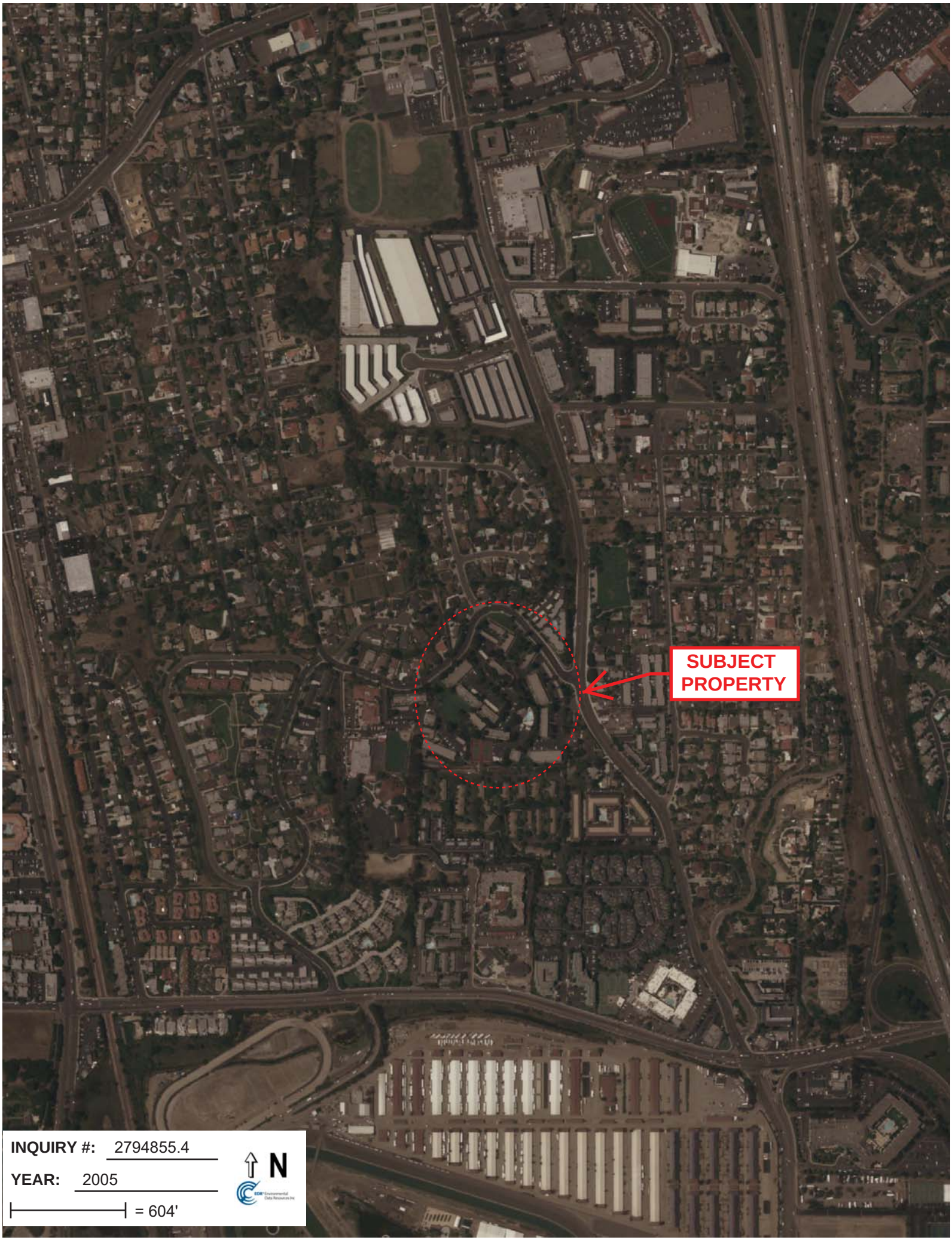

SUBJECT PROPERTY
INQUIRY #: 2794855.4
YEAR: 1963
= 555'
N


SUBJECT PROPERTY
INQUIRY #: 2794855.4
YEAR: 1974
= 600'
N


SUBJECT PROPERTY
INQUIRY #: 2794855.4
YEAR: 1990
= 666'
N

SUBJECT PROPERTY
INQUIRY #: 2794855.4
YEAR: 1994
= 666'
N


SUBJECT PROPERTY
INQUIRY #: 2794855.4
YEAR: 2002
= 666'
N


SUBJECT PROPERTY
INQUIRY #: 2794855.4
YEAR: 2005
= 604'
N

ATTACHMENT 4
NO SANBORN MAPS FOUND NOTIFICATION

PHASE I ENVIRONMENTAL SITE ASSESSMENT FOR
Solana Highlands Apartments
701 South Nardo Avenue
Solana Beach, San Diego County, CA 92075-2309
APN: 298-260-33-00

July 16, 2010
EAI Project No.: 01.UNBNK13.10
UBNA RIMS No.: 10-1089

Solana Highlands Apartments
701 South Nardo Avenue
Solana Beach, CA 92075

Inquiry Number: 2794855.3
June 16, 2010

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

6/16/10

Site Name:
Solana Highlands Apartments
701 South Nardo Avenue
Solana Beach, CA 92075

EDR Inquiry # 2794855.3

Client Name:
Enviroapplications Inc.
2831 Camino Del Rio South
San Diego, CA 92108

Contact: Fred Allee

EDR® Environmental Data Resources Inc

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by Enviroapplications Inc. were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

Certified Sanborn Results:

Site Name: Solana Highlands Apartments
Address: 701 South Nardo Avenue
City, State, Zip: Solana Beach, CA 92075
Cross Street:
P.O. # 01.UNBNK13.10.01.0
Project: Solana Highlands Apartments
Certification # 9596-4D8E-BE5E

Sanborn® Library search results
Certification # 9596-4D8E-BE5E

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✔ Library of Congress
- ✔ University Publications of America
- ✔ EDR Private Collection

The Sanborn Library LLC Since 1866™

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ATTACHMENT 5
ENVIRONMENTAL DATABASE SEARCH REPORT

PHASE I ENVIRONMENTAL SITE ASSESSMENT FOR
Solana Highlands Apartments
701 South Nardo Avenue
Solana Beach, San Diego County, CA 92075-2309
APN: 298-260-33-00

July 16, 2010
EAI Project No.: 01.UNBNK13.10
UBNA RIMS No.: 10-1089

Solana Highlands Apartments
701 South Nardo Avenue
Solana Beach, CA 92075

Inquiry Number: 2794855.2s
June 16, 2010

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

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Detail Map	3
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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

701 SOUTH NARDO AVENUE
SOLANA BEACH, CA 92075

COORDINATES

Latitude (North):	32.986100 - 32˚ 59' 10.0''
Longitude (West):	117.261800 - 117˚ 15' 42.5''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	475539.3
UTM Y (Meters):	3649585.2
Elevation:	99 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	32117-H3 DEL MAR OE W, CA
Most Recent Revision:	Not reported
North Map:	33117-A3 ENCINITAS, CA
Most Recent Revision:	Not reported
East Map:	32117-H2 DEL MAR, CA
Most Recent Revision:	Not reported

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2005
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
SOLANA HIGHLANDS APARTMENTS 701 S NARDO AVE SOLANA BEACH, CA 92075	HAZNET	N/A

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ..... National Priority List
Proposed NPL ..... Proposed National Priority List Sites
NPL LIENS ..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ..... National Priority List Deletions

Federal CERCLIS list

CERCLIS ..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY ..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP ..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS ..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ..... RCRA - Large Quantity Generators
RCRA-CESQG ..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS ..... Engineering Controls Sites List
US INST CONTROL ..... Sites with Institutional Controls

Federal ERNS list

ERNS ..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ..... State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ..... Solid Waste Information System

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

LUST ..... Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

UST ..... Active UST Facilities
AST ..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST ..... Underground Storage Tanks on Indian Land
FEMA UST ..... Underground Storage Tank Listing

State and tribal voluntary cleanup sites

INDIAN VCP ..... Voluntary Cleanup Priority Listing
VCP ..... Voluntary Cleanup Program Properties

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
ODI ..... Open Dump Inventory
WMUDS/SWAT ..... Waste Management Unit Database
SWRCY ..... Recycler Database
HAULERS ..... Registered Waste Tire Haulers Listing
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL ..... Clandestine Drug Labs
HIST Cal-Sites ..... Historical Calsites Database
SCH ..... School Property Evaluation Program
Toxic Pits ..... Toxic Pits Cleanup Act Sites
CDL ..... Clandestine Drug Labs
San Diego Co. HMMD ..... Hazardous Materials Management Division Database
US HIST CDL ..... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

CA FID UST ..... Facility Inventory Database
HIST UST ..... Hazardous Substance Storage Container Database

Local Land Records

LIENS 2 ..... CERCLA Lien Information
LUCIS ..... Land Use Control Information System
LIENS ..... Environmental Liens Listing
DEED ..... Deed Restriction Listing

EXECUTIVE SUMMARY

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing

Other Ascertainable Records

RCRA-NonGen	RCRA - Non Generators
DOT OPS	Incident and Accident Data
DOD	Department of Defense Sites
FUDS	Formerly Used Defense Sites
CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records Of Decision
UMTRA	Uranium Mill Tailings Sites
MINES	Mines Master Index File
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
RADINFO	Radiation Information Database
FINDS	Facility Index System/Facility Registry System
RAATS	RCRA Administrative Action Tracking System
CA BOND EXP. PLAN	Bond Expenditure Plan
CA WDS	Waste Discharge System
NPDES	NPDES Permits Listing
Cortese	"Cortese" Hazardous Waste & Substances Sites List
HIST CORTESE	Hazardous Waste & Substance Site List
DRYCLEANERS	Cleaner Facilities
WIP	Well Investigation Program Case List
EMI	Emissions Inventory Data
INDIAN RESERV	Indian Reservations
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
FINANCIAL ASSURANCE	Financial Assurance Information Listing
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
COAL ASH DOE	Sleam-Electric Plan Operation Data
MWMP	Medical Waste Management Program Listing
PROC	Certified Processors Database

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants	EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR Historical Auto Stations EDR Proprietary Historic Gas Stations
EDR Historical Cleaners EDR Proprietary Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 02/17/2010 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SIGNATURE GROUP KAYPRO THE	***533 STEVENS AVE***	***NNE 1/8 - 1/4 (0.231 mi.)***	***A3***	***10***

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 05/11/2010 has revealed that there is 1 ENVIROSTOR site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SOLANA BEACH PLAZA Status: Refer: 1248 Local Agency	124 LOMAS SANTA FE DR.	NW 1/2 - 1 (0.649 mi.)	6	17

State and tribal leaking storage tank lists

SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the SLIC list, as provided by EDR, and dated 05/05/2010 has revealed that there are 2 SLIC sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
KAYPRO INC Facility Status: Completed - Case Closed	***533 STEVENS AV***	***NNE 1/8 - 1/4 (0.231 mi.)***	***A2***	***8***
CBS SCIENTIFIC COMPANY INC. Facility Status: Completed - Case Closed	***420 S CEDROS AV***	***WNW 1/4 - 1/2 (0.471 mi.)***	***5***	***13***

SAN DIEGO CO. SAM: The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

A review of the SAN DIEGO CO. SAM list, as provided by EDR, and dated 09/23/2009 has revealed that there are 2 SAN DIEGO CO. SAM sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
KAYPRO INC	***533 STEVENS AV***	***NNE 1/8 - 1/4 (0.231 mi.)***	***A2***	***8***
CBS SCIENTIFIC COMPANY INC.	***420 S CEDROS AV***	***WNW 1/4 - 1/2 (0.471 mi.)***	***5***	***13***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MB SELECT SERVICE	***637 VALLEY AVE***	***NE 1/8 - 1/4 (0.244 mi.)***	***4***	***12***

Other Ascertainable Records

Notify 65: Notify 65 records contain facility notifications about any release that could impact drinking water and thereby expose the public to a potential health risk. The data come from the State Water Resources Control Board's Proposition 65 database.

A review of the Notify 65 list, as provided by EDR, and dated 10/21/1993 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CEDROS & LOMA SANTA FE	143 CEDROS	NW 1/2 - 1 (0.679 mi.)	7	18

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
SOLANA BEACH PROPERTY	HIST CORTESE
LOMAS SANTA FE SOLANA HILLS	NPDES
USHY 101 ESTATEBLYTHEDALEEXIT	SLIC, CHMIRS
SOLANA BEACH BURNSITE	SWF/LF
JUNE & MILTON ULLMAN	LUST, SAN DIEGO CO. SAM
SOLANA BEACH CHIROPRACTIC	LUST, SAN DIEGO CO. SAM
UNOCAL CORPORATION	LUST, SAN DIEGO CO. SAM
EUCALYPTUS APARTMENTS	HAZNET
FENTON SOLANA HIGHLANDS LLC	HAZNET
FENTON SOLANA HIGHLANDS LLC	HAZNET
SOLANA BEACH CHIROPRACTIC	San Diego Co. HMMD
SOLANA BEACH BURNSITE	San Diego Co. HMMD
THE GAS STATION ETC	SLIC, SAN DIEGO CO. SAM
COAST RENTALS	SLIC, SAN DIEGO CO. SAM
VULCAN MATERIALS CO.	MINES

OVERVIEW MAP - 2794855.2s

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Solana Highlands Apartments	CLIENT: Enviroapplications Inc.
ADDRESS: 701 South Nardo Avenue Solana Beach CA 92075	CONTACT: Fred Allee
LAT/LONG: 32.9861 / 117.2618	INQUIRY #: 2794855.2s
	DATE: June 16, 2010 11:45 am

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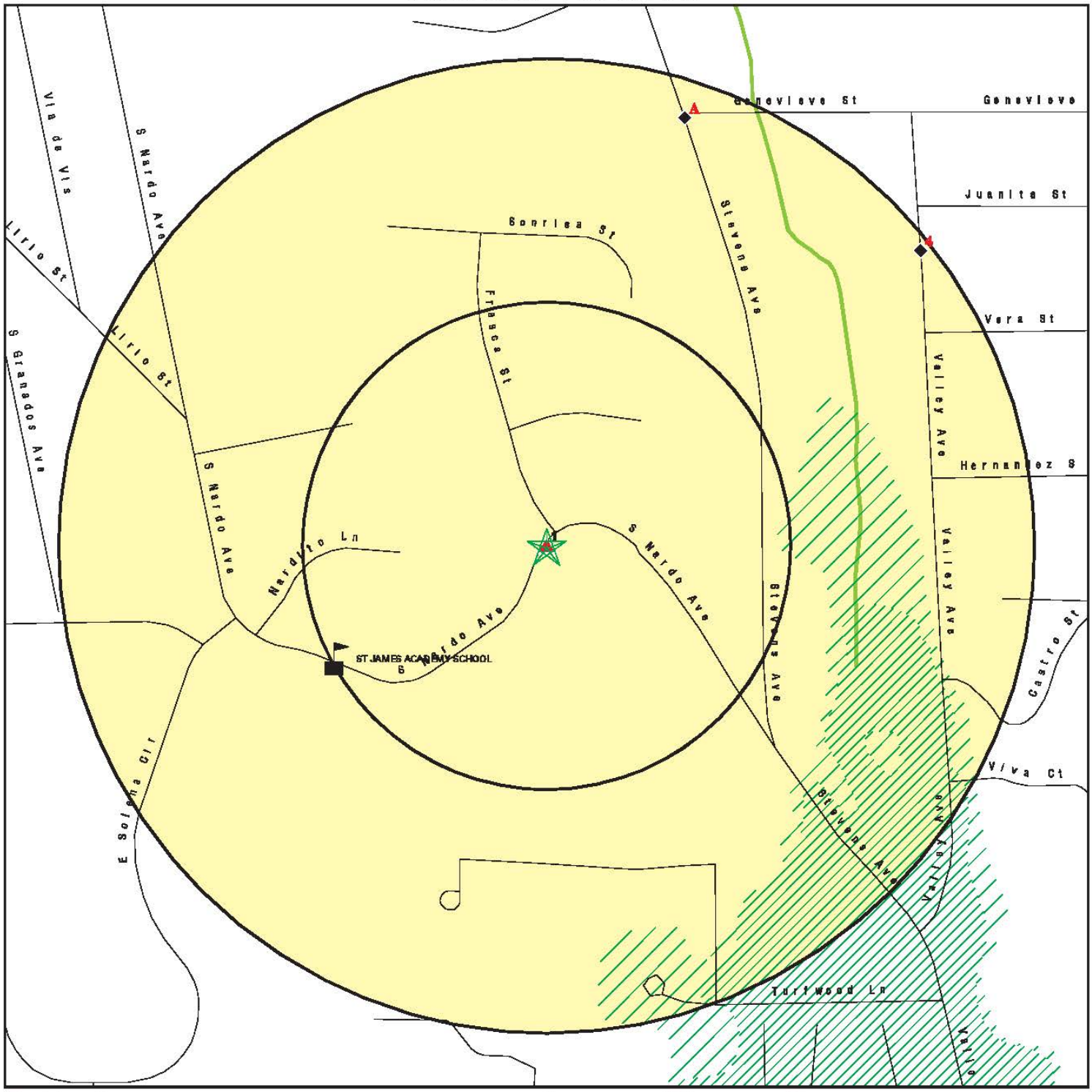
DETAIL MAP - 2794855.2s



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Solana Highlands Apartments	CLIENT: Enviroapplications Inc.
ADDRESS: 701 South Nardo Avenue Solana Beach CA 92075	CONTACT: Fred Allee INQUIRY #: 2794855.2s
LAT/LONG: 32.9861 / 117.2618	DATE: June 16, 2010 11:46 am

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MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
NPL LIENS		TP	NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL		1.000	0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS		0.500	0	0	0	NR	NR	0
FEDERAL FACILITY		1.000	0	0	0	0	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP		0.500	0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS		1.000	0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF		0.500	0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG		0.250	0	0	NR	NR	NR	0
RCRA-SQG		0.250	0	1	NR	NR	NR	1
RCRA-CESQG		0.250	0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
Federal ERNS list								
ERNS		TP	NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE		1.000	0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR		1.000	0	0	0	1	NR	1
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF		0.500	0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST		0.500	0	0	0	NR	NR	0
SLIC		0.500	0	1	1	NR	NR	2

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SAN DIEGO CO. SAM		0.500	0	1	1	NR	NR	2
INDIAN LUST		0.500	0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST		0.250	0	0	NR	NR	NR	0
AST		0.250	0	0	NR	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
FEMA UST		0.250	0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
WMUDS/SWAT		0.500	0	0	0	NR	NR	0
SWRCY		0.500	0	0	0	NR	NR	0
HAULERS		TP	NR	NR	NR	NR	NR	0
INDIAN ODI		0.500	0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL		TP	NR	NR	NR	NR	NR	0
HIST Cal-Sites		1.000	0	0	0	0	NR	0
SCH		0.250	0	0	NR	NR	NR	0
Toxic Pits		1.000	0	0	0	0	NR	0
CDL		TP	NR	NR	NR	NR	NR	0
San Diego Co. HMMD		TP	NR	NR	NR	NR	NR	0
US HIST CDL		TP	NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA FID UST		0.250	0	0	NR	NR	NR	0
HIST UST		0.250	0	0	NR	NR	NR	0
SWEEPS UST		0.250	0	1	NR	NR	NR	1
Local Land Records								
LIENS 2		TP	NR	NR	NR	NR	NR	0
LUCIS		0.500	0	0	0	NR	NR	0
LIENS		TP	NR	NR	NR	NR	NR	0
DEED		0.500	0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS		TP	NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS		TP	NR	NR	NR	NR	NR	0
LDS		TP	NR	NR	NR	NR	NR	0
MCS		TP	NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA-NonGen		0.250	0	0	NR	NR	NR	0
DOT OPS		TP	NR	NR	NR	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
HIST FTTS		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
ICIS		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
RADINFO		TP	NR	NR	NR	NR	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN		1.000	0	0	0	0	NR	0
CA WDS		TP	NR	NR	NR	NR	NR	0
NPDES		TP	NR	NR	NR	NR	NR	0
Cortese		0.500	0	0	0	NR	NR	0
HIST CORTESE		0.500	0	0	0	NR	NR	0
Notify 65		1.000	0	0	0	1	NR	1
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
WIP		0.250	0	0	NR	NR	NR	0
HAZNET	X	TP	NR	NR	NR	NR	NR	0
EMI		TP	NR	NR	NR	NR	NR	0
INDIAN RESERV		1.000	0	0	0	0	NR	0
SCRD DRYCLEANERS		0.500	0	0	0	NR	NR	0
FINANCIAL ASSURANCE		TP	NR	NR	NR	NR	NR	0
HWP		1.000	0	0	0	0	NR	0
HWT		0.250	0	0	NR	NR	NR	0
COAL ASH EPA		0.500	0	0	0	NR	NR	0
PCB TRANSFORMER		TP	NR	NR	NR	NR	NR	0
COAL ASH DOE		TP	NR	NR	NR	NR	NR	0
MWMP		0.250	0	0	NR	NR	NR	0
PROC		0.500	0	0	0	NR	NR	0
EDR PROPRIETARY RECORDS								
EDR Proprietary Records								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0
EDR Historical Auto Stations		0.250	0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR Historical Cleaners		0.250	0	0	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1 Target Property | **SOLANA HIGHLANDS APARTMENTS**
701 S NARDO AVE
SOLANA BEACH, CA 92075 | **HAZNET** | **S108755322**
N/A

Actual: 99 ft.

HAZNET:

Gepaid:	CAL000301754
Contact:	BILL LAWRENCE
Telephone:	6194000140
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	7577 MISSION VALLEY RD
Mailing City,St,Zip:	SAN DIEGO, CA 921084432
Gen County:	San Diego
TSD EPA ID:	CAD009007626
TSD County:	Los Angeles
Waste Category:	Asbestos-containing waste
Disposal Method:	Disposal, Land Fill
Tons:	0.84
Facility County:	San Diego

A2 NNE 1/8-1/4 0.231 mi. 1219 ft. | **KAYPRO INC**
533 STEVENS AV
SOLANA BEACH, CA 92075 | **SLIC**
San Diego Co. HMMD
SAN DIEGO CO. SAM | **S104746727**
N/A

Site 1 of 2 in cluster A

Relative: Lower

Actual: 45 ft.

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	1992-03-26 00:00:00
Global Id:	T0608186917
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H09184-001
Latitude:	32.991136
Longitude:	-117.263407
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Soil
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

San Diego Co. HMMD:

Facility ID:	109184
Inactive Indicator:	Active
Business Code:	6HK36
SIC:	Not reported
Permit Expiration:	Not reported
Owner:	KAYPRO CORPORATION
2nd Name:	Not reported
Mailing Address:	P O BOX
Mailing City,St,Zip:	DEL MAR, CA 92014
Map Code/Business Plan on File:	Not reported
Corporate Code:	Not reported
Fire Dept District:	Not reported
Census Tract Number:	173.0
EPA ID:	CAD008384422

KAYPRO INC (Continued) **S104746727**

Gas Station:	Not reported
Inspection Date:	12/22/1989 0:00:00
Reinspection Date:	Not reported
Inspector Name:	LEGACY
Violation Notice Issued:	Not reported
Facility Contact:	TOM SOUCE
Delinquent Flag:	Not Delinquent
Last Update:	5/28/2008 9:14:17 AM
Last Delinquent Letter:	Not reported
Delinquent Comment:	Not reported
Last Letter Type:	Not reported
Property Owner:	Not reported
Property Address:	Not reported
Property City,St,Zip:	Not reported
Tank Owner:	Not reported
Tank Address:	Not reported
Tank City,St,Zip:	Not reported
Business Plan Acceptance Date:	Not reported
Reinspection Date Y2K Compatible:	Not reported
Facility Phone:	858-481-4390

HMMD DISCLOSURE INVENTORY:

Item Number:	Not reported
Chemical Name:	Not reported
Case Number:	Not reported
Quantity Stored At One Time:	Not reported
Quantity Stored at One Time:	Not reported
Annual Quantity String:	Not reported
Annual Quantity String:	Not reported
Measurement Units:	Not reported
Carcinogen:	No
1st Hazard Category:	Not reported
2nd Hazard Category:	Not reported

HMMD UNDERGROUND TANKS:

Tank Number:	Not reported
Tank ID Number:	Not reported
Waste or Product:	Not reported
Tank Contents:	Not reported

HMMD VIOLATIONS:

Inspection Date:	Not reported
Waste Code:	Not reported
Occurrences:	Not reported
Item Number:	Not reported

HMMD WASTE STREAMS:

Inspection Date:	Not reported
Waste Item #:	Not reported
Waste Code:	Not reported
Waste Name:	Not reported
Qnty at Inspection:	Not reported
Quantity String:	Not reported
Annual Qty:	Not reported
Annual Qty String:	Not reported
Measurement Unit:	Not reported

KAYPRO INC (Continued) **S104746727**

Treatment Method: Not reported
Storage Method: Not reported
Haz Waste Hauler: Not reported
Waste Desc: Not reported
Carcinogen: No

SAN DIEGO CO. SAM:
Case Number: H09184-001
Agency: DEH Site Assessment & Mitigation
Funding: Private - VAP
FType: Soils Only
FStatus: 9
Date: 3/26/1992
Date Began: 3/11/1991

A3 NNE 1/8-1/4 0.231 mi. 1219 ft. | **SIGNATURE GROUP KAYPRO THE**
533 STEVENS AVE
SOLANA BEACH, CA 92075
Site 2 of 2 in cluster A | **RCRA-SQG FINDS** | **1000349683 CAD008384422**

Relative: Lower

Actual: 45 ft.

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: SIGNATURE GROUP KAYPRO THE
Facility address: 533 STEVENS AVE
SOLANA BEACH, CA 92075
EPA ID: CAD008384422
Mailing address: 11400 W OLYMPIC BLVD STE 1500
LOS ANGELES, CA 90064
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: THE SIGNATURE GROUP
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED

SIGNATURE GROUP KAYPRO THE (Continued) **1000349683**

NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: Unknown
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: Unknown
Furnace exemption: Unknown
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Verified to be non-commercial

Historical Generators:
Date form received by agency: 03/06/1991
Facility name: SIGNATURE GROUP KAYPRO THE
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002143966

Environmental Interest/Information System
US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

4 NE 1/8-1/4 0.244 mi. 1290 ft. | **MB SELECT SERVICE**
637 VALLEY AVE
SOLANA BEACH, CA 92075 | **SWEEPS UST**
HAZNET | **S103959769**
N/A

Relative: Lower

Actual: 53 ft.

SWEEPS UST:

Status:	A
Comp Number:	27340
Number:	9
Board Of Equalization:	44-023738
Ref Date:	Not reported
Act Date:	06-26-92
Created Date:	02-29-88
Tank Status:	Not reported
Owner Tank Id:	Not reported
Swrcb Tank Id:	Not reported
Actv Date:	Not reported
Capacity:	Not reported
Tank Use:	Not reported
Stg:	Not reported
Content:	Not reported
Number Of Tanks:	Not reported

Status:	Not reported
Comp Number:	27340
Number:	Not reported
Board Of Equalization:	44-023738
Ref Date:	Not reported
Act Date:	Not reported
Created Date:	Not reported
Tank Status:	Not reported
Owner Tank Id:	Not reported
Swrcb Tank Id:	37-000-027340-000001
Actv Date:	Not reported
Capacity:	500
Tank Use:	PETROLEUM
Stg:	WASTE
Content:	Not reported
Number Of Tanks:	1

HAZNET:

Gepaid:	CAL000139805
Contact:	DANIEL MORGAN-OWNER
Telephone:	6192591291
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	637 VALLEY AVE
Mailing City,St,Zip:	SOLANA BEACH, CA 920750000
Gen County:	San Diego
TSD EPA ID:	Not reported
TSD County:	Los Angeles
Waste Category:	Aqueous solution with less than 10% total organic residues
Disposal Method:	Transfer Station
Tons:	0.02
Facility County:	Not reported

Gepaid:	CAL000139805
Contact:	DANIEL MORGAN

MB SELECT SERVICE (Continued) **S103959769**

Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	637 VALLEY AVE
Mailing City,St,Zip:	SOLANA BEACH, CA 920750000
Gen County:	San Diego
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Aqueous solution with 10% or more total organic residues
Disposal Method:	Recycler
Tons:	.4586
Facility County:	San Diego

Gepaid:	CAL000139805
Contact:	DANIEL MORGAN
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	637 VALLEY AVE
Mailing City,St,Zip:	SOLANA BEACH, CA 920750000
Gen County:	San Diego
TSD EPA ID:	CAT000613893
TSD County:	Los Angeles
Waste Category:	Aqueous solution with less than 10% total organic residues
Disposal Method:	Transfer Station
Tons:	.0540
Facility County:	San Diego

Gepaid:	CAL000139805
Contact:	DANIEL MORGAN
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	637 VALLEY AVE
Mailing City,St,Zip:	SOLANA BEACH, CA 920750000
Gen County:	San Diego
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Aqueous solution with 10% or more total organic residues
Disposal Method:	Recycler
Tons:	0.4587
Facility County:	San Diego

Click this hyperlink while viewing on your computer to access
-1 additional CA_HAZNET: record(s) in the EDR Site Report.

5
WNW
1/4-1/2
0.471 mi.
2486 ft.

CBS SCIENTIFIC COMPANY INC.
420 S CEDROS AV
SOLANA BEACH, CA 92075

SLIC **S100727864**
San Diego Co. HMMD **N/A**
SAN DIEGO CO. SAM

Relative:
Lower

Actual:
82 ft.

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	1992-02-03 00:00:00
Global Id:	T0608199980
Lead Agency:	SAN DIEGO COUNTY LOP

CBS SCIENTIFIC COMPANY INC. (Continued) **S100727864**

Lead Agency Case Number:	H09505-001
Latitude:	32.987055
Longitude:	-117.269443
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Soil
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

San Diego Co. HMMD:

Facility ID:	109505
Inactive Indicator:	Active
Business Code:	6HK67
SIC:	Not reported
Permit Expiration:	Not reported
Owner:	CHUCK & JOCELYN SCOTT
2nd Name:	Not reported
Mailing Address:	P O BOX 856
Mailing City,St,Zip:	DEL MAR, CA 92014
Map Code/Business Plan on File:	Not reported
Corporate Code:	Not reported
Fire Dept District:	Not reported
Census Tract Number:	173.0
EPA ID:	CAD070532171
Gas Station:	Not reported
Inspection Date:	4/25/2007 0:00:00
Reinspection Date:	Not reported
Inspector Name:	MMALONZO
Violation Notice Issued:	Not reported
Facility Contact:	VICTOR MCKNIGHT
Delinquent Flag:	Not Delinquent
Last Update:	5/28/2008 9:14:17 AM
Last Delinquent Letter:	Not reported
Delinquent Comment:	Not reported
Last Letter Type:	Not reported
Property Owner:	SOUTH CEDROS ASSOCIATES
Property Address:	444 S CEDROS AVE 295
Property City,St,Zip:	SOLANA BEACH, CA 92075
Tank Owner:	Not reported
Tank Address:	Not reported
Tank City,St,Zip:	Not reported
Business Plan Acceptance Date:	Not reported
Reinspection Date Y2K Compatible:	Not reported
Facility Phone:	858-755-4959

HMMD DISCLOSURE INVENTORY:

Item Number:	OX76
Chemical Name:	OXYGEN
Case Number:	7782-44-7
Quantity Stored At One Time:	Not reported
Quantity Stored at One Time:	Not reported
Annual Quantity String:	Not reported
Annual Quantity String:	Not reported
Measurement Units:	Not reported

CBS SCIENTIFIC COMPANY INC. (Continued) **S100727864**

Carcinogen: No
1st Hazard Category: PRESSURE RELEASE
2nd Hazard Category: Not reported

Item Number: PO75
Chemical Name: POLYMERIC DIPHENYLMETHANE DIISOCYANATE: INSTAFILL PART A
Case Number: 9016-87-9
Quantity Stored At One Time: Not reported
Quantity Stored at One Time: Not reported
Annual Quantity String: Not reported
Annual Quantity String: Not reported
Measurement Units: Not reported
Carcinogen: No
1st Hazard Category: REACTIVE
2nd Hazard Category: ACUTE

Item Number: NA74
Chemical Name: NAPTHA
Case Number: 8030-31-7
Quantity Stored At One Time: Not reported
Quantity Stored at One Time: Not reported
Annual Quantity String: Not reported
Annual Quantity String: Not reported
Measurement Units: Not reported
Carcinogen: No
1st Hazard Category: FIRE
2nd Hazard Category: ACUTE

Item Number: ME78
Chemical Name: METHYLENE CHLORIDE
Case Number: 75-09-2
Quantity Stored At One Time: Not reported
Quantity Stored at One Time: Not reported
Annual Quantity String: Not reported
Annual Quantity String: Not reported
Measurement Units: Not reported
Carcinogen: No
1st Hazard Category: ACUTE
2nd Hazard Category: CHRONIC

Item Number: HY77
Chemical Name: HYDROGEN
Case Number: 133-74-0
Quantity Stored At One Time: Not reported
Quantity Stored at One Time: Not reported
Annual Quantity String: Not reported
Annual Quantity String: Not reported
Measurement Units: Not reported
Carcinogen: No
1st Hazard Category: FIRE
2nd Hazard Category: PRESSURE RELEASE

HMMD UNDERGROUND TANKS:
Tank Number: Not reported
Tank ID Number: Not reported
Waste or Product: Not reported
Tank Contents: Not reported

CBS SCIENTIFIC COMPANY INC. (Continued) **S100727864**

HMMD VIOLATIONS:

Inspection Date:	1/16/2002
Waste Code:	Not reported
Occurrences:	Not reported
Item Number:	1646
Inspection Date:	4/3/2000
Waste Code:	Not reported
Occurrences:	Not reported
Item Number:	2691
Inspection Date:	7/14/1998
Waste Code:	Not reported
Occurrences:	Not reported
Item Number:	4179
Inspection Date:	4/25/2007
Waste Code:	Not reported
Occurrences:	Not reported
Item Number:	5594
Inspection Date:	4/25/2007
Waste Code:	Not reported
Occurrences:	Not reported
Item Number:	5595

HMMD WASTE STREAMS:

Inspection Date:	Not reported
Waste Item #:	Not reported
Waste Code:	Not reported
Waste Name:	Not reported
Qnty at Inspection:	Not reported
Quantity String:	Not reported
Annual Qty:	Not reported
Annual Qty String:	Not reported
Measurement Unit:	Not reported
Treatment Method:	Not reported
Storage Method:	Not reported
Haz Waste Hauler:	Not reported
Waste Desc:	Not reported
Carcinogen:	No

SAN DIEGO CO. SAM:

Case Number:	H09505-001
Agency:	DEH Site Assessment & Mitigation
Funding:	**Private - VAP**
FType:	Soils Only
FStatus:	9
Date:	2/3/1992
Date Began:	2/3/1992

6 NW 1/2-1 0.649 mi. 3426 ft. | **SOLANA BEACH PLAZA**
124 LOMAS SANTA FE DR.
SOLANA BEACH, CA 92075 | **ENVIROSTOR** | **S106797737**
N/A

Relative: Lower

Actual: 72 ft.

ENVIROSTOR:

Site Type:	Evaluation
Site Type Detailed:	Evaluation
Acres:	0.06
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Referred - Not Assigned
Division Branch:	Cypress
Facility ID:	37720034
Site Code:	Not reported
Assembly:	74
Senate:	38
Special Program:	EPA - PASI
Status:	Refer: 1248 Local Agency
Status Date:	2001-11-06 00:00:00
Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	EPA Grant
Latitude:	32.9926644057308
Longitude:	-117.270134264971
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	37720034
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Screening
Completed Date:	2007-06-06 00:00:00
Comments:	EPA approved report.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

7
NW
1/2-1
0.679 mi.
3585 ft.

CEDROS & LOMA SANTA FE
143 CEDROS
SOLANA BEACH, CA 92075

Notify 65

S100178317
N/A

Relative:
Lower

Actual:
71 ft.

Notify 65:

Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Incident Description:	92075

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
ENCINITAS	S108206308	EUCALYPTUS APARTMENTS	1201 N VULCAN AVE APT 20 / 2	92075	HAZNET
SAN DIEGO COUNTY	M300003190	VULCAN MATERIALS CO.	MISSION VALLEY (#022)		MINES
SOLANA BEACH	S106915857	JUNE & MILTON ULLMAN	343 HWY 101	92075	LUST, SAN DIEGO CO. SAM
SOLANA BEACH	S107143724	FENTON SOLANA HIGHLANDS LLC	695TH & 661ST S NARDO	92075	HAZNET
SOLANA BEACH	S109349417	SOLANA BEACH BURNSITE	SE CORNER OF STATION HELENA &	92075	SWF/LF
SOLANA BEACH	S106063733	SOLANA BEACH CHIROPRACTIC	155 S HWY 101	92075	San Diego Co. HMMD
SOLANA BEACH	S106916381	SOLANA BEACH CHIROPRACTIC	155 S HWY 101	92075	LUST, SAN DIEGO CO. SAM
SOLANA BEACH	S106915880	THE GAS STATION ETC	435 N HWY 101	92075	SLIC, SAN DIEGO CO. SAM
SOLANA BEACH	S106916196	COAST RENTALS	153 N HWY 101	92075	SLIC, SAN DIEGO CO. SAM
SOLANA BEACH	S105690668	UNOCAL CORPORATION	101 S HWY 101	92075	LUST, SAN DIEGO CO. SAM
SOLANA BEACH	S109448834	LOMAS SANTA FE SOLANA HILLS	LOMAS SANTA FE SOLANA HILLS	92075	NPDES
SOLANA BEACH	S108206803	FENTON SOLANA HIGHLANDS LLC	765 S NORDO	92075	HAZNET
SOLANA BEACH	S106070074	SOLANA BEACH BURNSITE	SANTA VICTORIA DR	92075	San Diego Co. HMMD
SOLANA BEACH	S105026667	SOLANA BEACH PROPERTY	437 101ST ST	92075	HIST CORTESE
SOLANA BEACH	S105632050		USHY 101 ESTATEBLYTHEDALEEXIT	92075	SLIC, CHMIRS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/31/2010
Date Data Arrived at EDR: 04/02/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 05/07/2010
Next Scheduled EDR Contact: 07/26/2010
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/31/2010
Date Data Arrived at EDR: 04/02/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 05/07/2010
Next Scheduled EDR Contact: 07/26/2010
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 05/17/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/31/2010	Source: EPA
Date Data Arrived at EDR: 04/02/2010	Telephone: N/A
Date Made Active in Reports: 04/12/2010	Last EDR Contact: 05/07/2010
Number of Days to Update: 10	Next Scheduled EDR Contact: 07/26/2010
	Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/29/2010	Source: EPA
Date Data Arrived at EDR: 02/09/2010	Telephone: 703-412-9810
Date Made Active in Reports: 04/12/2010	Last EDR Contact: 06/11/2010
Number of Days to Update: 62	Next Scheduled EDR Contact: 07/12/2010
	Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of NPL and Base Realighnment & Closure sites found in the CERCLIS database where FERRO is involved in cleanup projects.

Date of Government Version: 06/23/2009	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/15/2010	Telephone: 703-603-8704
Date Made Active in Reports: 02/10/2010	Last EDR Contact: 04/30/2010
Number of Days to Update: 26	Next Scheduled EDR Contact: 07/26/2010
	Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 06/23/2009	Source: EPA
Date Data Arrived at EDR: 09/02/2009	Telephone: 703-412-9810
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 06/11/2010
Number of Days to Update: 19	Next Scheduled EDR Contact: 09/13/2010
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/25/2010	Source: EPA
Date Data Arrived at EDR: 03/31/2010	Telephone: 800-424-9346
Date Made Active in Reports: 05/27/2010	Last EDR Contact: 05/17/2010
Number of Days to Update: 57	Next Scheduled EDR Contact: 08/30/2010
	Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/29/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/29/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/29/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/29/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 12/20/2009
Date Data Arrived at EDR: 01/20/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 06/14/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 12/20/2009
Date Data Arrived at EDR: 01/20/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 06/14/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 01/22/2010
Date Made Active in Reports: 02/11/2010
Number of Days to Update: 20

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 04/07/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 05/11/2010
Date Data Arrived at EDR: 05/12/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 6

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/12/2010
Next Scheduled EDR Contact: 08/23/2010
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 05/11/2010
Date Data Arrived at EDR: 05/12/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 6

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/12/2010
Next Scheduled EDR Contact: 08/23/2010
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System
Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/22/2010
Date Data Arrived at EDR: 02/24/2010
Date Made Active in Reports: 03/04/2010
Number of Days to Update: 8

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/25/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 03/29/2010
Next Scheduled EDR Contact: 07/12/2010
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 06/14/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 05/17/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 04/05/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Quarterly

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 06/07/2010
Next Scheduled EDR Contact: 09/20/2010
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 04/19/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 03/22/2010
Next Scheduled EDR Contact: 07/05/2010
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 05/05/2010
Date Data Arrived at EDR: 05/05/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 13

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 05/05/2010
Next Scheduled EDR Contact: 07/05/2010
Data Release Frequency: Quarterly

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 04/19/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: Varies

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/05/2010
Date Data Arrived at EDR: 05/05/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 13

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/05/2010
Next Scheduled EDR Contact: 07/05/2010
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 03/22/2010
Next Scheduled EDR Contact: 07/05/2010
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 04/19/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 04/05/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 06/14/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 05/17/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 05/17/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 06/14/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 05/10/2010
Next Scheduled EDR Contact: 08/23/2010
Data Release Frequency: Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 05/04/2010
Date Data Arrived at EDR: 05/05/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 22

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/19/2009
Date Data Arrived at EDR: 02/19/2009
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 25

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 02/25/2010
Date Data Arrived at EDR: 02/25/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 46

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/03/2010
Date Data Arrived at EDR: 05/05/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 22

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 03/10/2010
Date Data Arrived at EDR: 03/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 27

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Semi-Annually

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 02/01/2010
Date Data Arrived at EDR: 03/03/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/24/2009
Date Data Arrived at EDR: 05/20/2009
Date Made Active in Reports: 06/17/2009
Number of Days to Update: 28

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/04/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Varies

State and tribal registered storage tank lists

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 05/05/2010
Date Data Arrived at EDR: 05/05/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 13

Source: SWRCB
Telephone: 916-480-1028
Last EDR Contact: 05/05/2010
Next Scheduled EDR Contact: 07/05/2010
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
Registered Aboveground Storage Tanks.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 09/10/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 916-341-5712
Last EDR Contact: 04/12/2010
Next Scheduled EDR Contact: 07/26/2010
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 05/04/2010
Date Data Arrived at EDR: 05/05/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 22

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/01/2010
Date Data Arrived at EDR: 03/03/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 40

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 02/25/2010
Date Data Arrived at EDR: 02/25/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 46

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/01/2008
Date Data Arrived at EDR: 12/30/2008
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 76

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/12/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/03/2010
Date Data Arrived at EDR: 05/05/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 22

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 02/11/2010
Date Data Arrived at EDR: 02/11/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 60

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 03/10/2010
Date Data Arrived at EDR: 03/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 27

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/19/2009
Date Data Arrived at EDR: 02/19/2009
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 25

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Varies

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/19/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 05/11/2010
Date Data Arrived at EDR: 05/12/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 6

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/12/2010
Next Scheduled EDR Contact: 08/23/2010
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 04/02/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 04/05/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 03/02/2010
Date Data Arrived at EDR: 03/23/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 55

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/23/2010
Next Scheduled EDR Contact: 07/12/2010
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-972-3336
Last EDR Contact: 06/07/2010
Next Scheduled EDR Contact: 09/20/2010
Data Release Frequency: Varies

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 05/17/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: Quarterly

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 01/06/2010
Date Data Arrived at EDR: 03/24/2010
Date Made Active in Reports: 04/09/2010
Number of Days to Update: 16

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/24/2010
Next Scheduled EDR Contact: 07/05/2010
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 03/09/2010
Date Data Arrived at EDR: 03/10/2010
Date Made Active in Reports: 04/09/2010
Number of Days to Update: 30

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 06/07/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 06/08/2010
Next Scheduled EDR Contact: 08/23/2010
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/19/2009
Date Data Arrived at EDR: 12/29/2009
Date Made Active in Reports: 02/10/2010
Number of Days to Update: 43

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/08/2010
Next Scheduled EDR Contact: 09/20/2010
Data Release Frequency: Quarterly

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 05/11/2010
Date Data Arrived at EDR: 05/12/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 6

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/12/2010
Next Scheduled EDR Contact: 08/23/2010
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 02/25/2010
Date Made Active in Reports: 03/04/2010
Number of Days to Update: 7

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/05/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009
Date Data Arrived at EDR: 09/23/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 8

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 06/07/2010
Next Scheduled EDR Contact: 09/20/2010
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWEEPS UST: SWEEPS UST Listing
Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/05/2010
Date Data Arrived at EDR: 02/11/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 60

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Varies

LUCIS: Land Use Control Information System
LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/24/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Varies

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 05/05/2010
Date Data Arrived at EDR: 05/07/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 11

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/15/2010
Date Data Arrived at EDR: 03/16/2010
Date Made Active in Reports: 04/09/2010
Number of Days to Update: 24

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 06/15/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 04/06/2010
Date Data Arrived at EDR: 04/07/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 50

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 04/07/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 05/09/2008
Date Made Active in Reports: 06/20/2008
Number of Days to Update: 42

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 05/05/2010
Date Data Arrived at EDR: 05/05/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 13

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/05/2010
Next Scheduled EDR Contact: 07/05/2010
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 05/05/2010
Date Data Arrived at EDR: 05/05/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 13

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/05/2010
Next Scheduled EDR Contact: 07/05/2010
Data Release Frequency: Quarterly

Other Ascertainable Records

RCRA-NonGen: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/29/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/12/2010
Date Data Arrived at EDR: 02/09/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 62

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 05/12/2010
Next Scheduled EDR Contact: 08/23/2010
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 703-692-8801
Last EDR Contact: 04/21/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 09/30/2009
Date Made Active in Reports: 12/01/2009
Number of Days to Update: 62

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 06/16/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 04/11/2010
Date Data Arrived at EDR: 04/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 28

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/05/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/29/2010
Date Data Arrived at EDR: 05/07/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 20

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/16/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 01/05/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 05/08/2009
Number of Days to Update: 1

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 06/01/2010
Next Scheduled EDR Contact: 09/13/2010
Data Release Frequency: Varies

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/12/2010
Date Data Arrived at EDR: 03/10/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 68

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 06/09/2010
Next Scheduled EDR Contact: 09/20/2010
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 01/13/2010
Date Made Active in Reports: 02/18/2010
Number of Days to Update: 36

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 06/04/2010
Next Scheduled EDR Contact: 09/13/2010
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002
Date Data Arrived at EDR: 04/14/2006
Date Made Active in Reports: 05/30/2006
Number of Days to Update: 46

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 04/21/2010
Next Scheduled EDR Contact: 07/12/2010
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 06/01/2010
Next Scheduled EDR Contact: 09/13/2010
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 06/01/2010
Next Scheduled EDR Contact: 09/13/2010
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 01/06/2010
Date Made Active in Reports: 02/10/2010
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 04/24/2010
Date Data Arrived at EDR: 04/29/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 18

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 03/29/2010
Next Scheduled EDR Contact: 07/12/2010
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 09/01/2009
Date Data Arrived at EDR: 10/21/2009
Date Made Active in Reports: 12/01/2009
Number of Days to Update: 41

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/22/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/18/2010
Date Data Arrived at EDR: 04/06/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 51

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 06/14/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/13/2010
Date Data Arrived at EDR: 04/14/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/14/2010
Next Scheduled EDR Contact: 07/26/2010
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/14/2010
Date Data Arrived at EDR: 04/16/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 41

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 06/14/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 02/25/2010
Date Made Active in Reports: 05/12/2010
Number of Days to Update: 76

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/25/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Biennially

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CA WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 06/01/2010
Next Scheduled EDR Contact: 09/13/2010
Data Release Frequency: Quarterly

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 02/22/2010
Date Data Arrived at EDR: 02/24/2010
Date Made Active in Reports: 03/04/2010
Number of Days to Update: 8

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/25/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Quarterly

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.

Date of Government Version: 04/05/2010
Date Data Arrived at EDR: 04/07/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 41

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 04/07/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES].

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NOTIFY 65: Proposition 65 Records

Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/29/2010
Next Scheduled EDR Contact: 07/12/2010
Data Release Frequency: No Update Planned

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 12/22/2009
Date Data Arrived at EDR: 01/25/2010
Date Made Active in Reports: 01/29/2010
Number of Days to Update: 4

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 06/14/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: Annually

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 04/14/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 10/21/2009
Date Made Active in Reports: 10/28/2009
Number of Days to Update: 7

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/26/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 07/14/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 9

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 04/09/2010
Next Scheduled EDR Contact: 07/12/2010
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/21/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 02/10/2010
Date Data Arrived at EDR: 02/11/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 60

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/10/2010
Next Scheduled EDR Contact: 08/09/2010
Data Release Frequency: Varies

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 01/06/2010
Date Data Arrived at EDR: 03/24/2010
Date Made Active in Reports: 04/09/2010
Number of Days to Update: 16

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/24/2010
Next Scheduled EDR Contact: 07/05/2010
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 02/24/2010
Date Data Arrived at EDR: 03/17/2010
Date Made Active in Reports: 04/09/2010
Number of Days to Update: 23

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 06/14/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 04/21/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 11/09/2009
Date Data Arrived at EDR: 12/18/2009
Date Made Active in Reports: 02/10/2010
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/14/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: Varies

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/21/2010
Date Data Arrived at EDR: 04/21/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 27

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/21/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: Quarterly

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action (a??cleanupsa??) tracked in EnviroStor.

Date of Government Version: 05/11/2010
Date Data Arrived at EDR: 05/12/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 6

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/12/2010
Next Scheduled EDR Contact: 08/23/2010
Data Release Frequency: Quarterly

FINANCIAL ASSURANCE 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 03/09/2010
Date Data Arrived at EDR: 03/10/2010
Date Made Active in Reports: 04/09/2010
Number of Days to Update: 30

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 06/07/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Varies

FINANCIAL ASSURANCE: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 03/01/2007
Date Data Arrived at EDR: 06/01/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 28

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 05/05/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/21/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: N/A

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 01/01/2008
Date Data Arrived at EDR: 02/18/2009
Date Made Active in Reports: 05/29/2009
Number of Days to Update: 100

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/14/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Varies

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Historical Auto Stations: EDR Proprietary Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Historical Cleaners: EDR Proprietary Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 04/12/2010
Date Data Arrived at EDR: 04/14/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 34

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/05/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 04/12/2010
Date Data Arrived at EDR: 04/14/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 34

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/05/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/10/2010
Date Data Arrived at EDR: 02/11/2010
Date Made Active in Reports: 02/18/2010
Number of Days to Update: 7

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 05/24/2010
Next Scheduled EDR Contact: 08/23/2010
Data Release Frequency: Semi-Annually

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 04/15/2010
Date Data Arrived at EDR: 04/16/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 32

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 04/16/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: Semi-Annually

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing

Kern County Sites and Tanks Listing.

Date of Government Version: 03/16/2010
Date Data Arrived at EDR: 03/17/2010
Date Made Active in Reports: 04/14/2010
Number of Days to Update: 28

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/17/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: Quarterly

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 03/29/2010
Next Scheduled EDR Contact: 07/12/2010
Data Release Frequency: No Update Planned

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 04/13/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 35

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/19/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/23/2010
Date Data Arrived at EDR: 04/26/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 22

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/23/2010
Next Scheduled EDR Contact: 08/09/2010
Data Release Frequency: Varies

City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Date Data Arrived at EDR: 03/10/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 29

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 05/27/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 02/09/2010
Date Data Arrived at EDR: 02/12/2010
Date Made Active in Reports: 03/04/2010
Number of Days to Update: 20

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/22/2010
Next Scheduled EDR Contact: 08/09/2010
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 04/28/2010
Date Data Arrived at EDR: 04/29/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 19

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/23/2010
Next Scheduled EDR Contact: 08/09/2010
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003
Date Data Arrived at EDR: 10/23/2003
Date Made Active in Reports: 11/26/2003
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 04/19/2010
Date Data Arrived at EDR: 04/21/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 27

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/19/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: Semi-Annually

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 04/19/2010
Date Data Arrived at EDR: 04/30/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 18

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 04/12/2010
Next Scheduled EDR Contact: 07/26/2010
Data Release Frequency: Semi-Annually

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 07/09/2008
Date Data Arrived at EDR: 07/09/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 22

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 06/07/2010
Next Scheduled EDR Contact: 09/20/2010
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 06/07/2010
Next Scheduled EDR Contact: 09/20/2010
Data Release Frequency: No Update Planned

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 12/02/2009
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 03/04/2010
Number of Days to Update: 16

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/18/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 02/03/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 03/04/2010
Number of Days to Update: 16

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/18/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/03/2010
Date Data Arrived at EDR: 02/12/2010
Date Made Active in Reports: 02/23/2010
Number of Days to Update: 11

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/28/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 03/16/2010
Date Data Arrived at EDR: 03/17/2010
Date Made Active in Reports: 04/09/2010
Number of Days to Update: 23

Source: Placer County Health and Human Services
Telephone: 530-889-7312
Last EDR Contact: 06/14/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/19/2010
Date Data Arrived at EDR: 04/19/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 29

Source: Department of Public Health
Telephone: 951-358-5055
Last EDR Contact: 03/29/2010
Next Scheduled EDR Contact: 07/12/2010
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 04/19/2010
Date Data Arrived at EDR: 04/19/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 29

Source: Health Services Agency
Telephone: 951-358-5055
Last EDR Contact: 03/29/2010
Next Scheduled EDR Contact: 07/12/2010
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 04/01/2010
Date Data Arrived at EDR: 04/15/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 33

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/12/2010
Next Scheduled EDR Contact: 07/26/2010
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 03/03/2010
Date Data Arrived at EDR: 04/16/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 32

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/12/2010
Next Scheduled EDR Contact: 07/26/2010
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 03/16/2010
Date Data Arrived at EDR: 03/17/2010
Date Made Active in Reports: 04/09/2010
Number of Days to Update: 23

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 05/17/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database
The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 07/16/2008
Date Data Arrived at EDR: 10/29/2008
Date Made Active in Reports: 11/26/2008
Number of Days to Update: 28

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/31/2010
Next Scheduled EDR Contact: 06/28/2010
Data Release Frequency: Quarterly

Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2009
Date Data Arrived at EDR: 12/04/2009
Date Made Active in Reports: 01/18/2010
Number of Days to Update: 45

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Varies

Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 09/23/2009
Date Data Arrived at EDR: 12/15/2009
Date Made Active in Reports: 01/18/2010
Number of Days to Update: 34

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 06/15/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: Varies

SAN FRANCISCO COUNTY:

Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 05/17/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 03/26/2010
Date Data Arrived at EDR: 04/30/2010
Date Made Active in Reports: 05/10/2010
Number of Days to Update: 10

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 05/17/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 10/14/2009
Date Data Arrived at EDR: 10/15/2009
Date Made Active in Reports: 11/02/2009
Number of Days to Update: 18

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/29/2010
Next Scheduled EDR Contact: 07/12/2010
Data Release Frequency: Semi-Annually

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 04/20/2010
Date Data Arrived at EDR: 04/21/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 27

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/22/2010
Next Scheduled EDR Contact: 07/05/2010
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/22/2010
Date Data Arrived at EDR: 03/23/2010
Date Made Active in Reports: 04/09/2010
Number of Days to Update: 17

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/22/2010
Next Scheduled EDR Contact: 07/05/2010
Data Release Frequency: Semi-Annually

SANTA CLARA COUNTY:

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 05/29/2009
Date Data Arrived at EDR: 06/01/2009
Date Made Active in Reports: 06/15/2009
Number of Days to Update: 14

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 06/07/2010
Next Scheduled EDR Contact: 09/20/2010
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 08/31/2009
Date Data Arrived at EDR: 08/31/2009
Date Made Active in Reports: 09/18/2009
Number of Days to Update: 18

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 06/14/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: Annually

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 03/11/2010
Date Data Arrived at EDR: 03/16/2010
Date Made Active in Reports: 04/09/2010
Number of Days to Update: 24

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/07/2010
Next Scheduled EDR Contact: 09/20/2010
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 03/11/2010
Date Data Arrived at EDR: 03/16/2010
Date Made Active in Reports: 04/14/2010
Number of Days to Update: 29

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/08/2010
Next Scheduled EDR Contact: 09/20/2010
Data Release Frequency: Quarterly

SONOMA COUNTY:

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/06/2010
Date Data Arrived at EDR: 04/07/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 41

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 04/05/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 04/01/2009
Date Data Arrived at EDR: 04/02/2009
Date Made Active in Reports: 04/09/2009
Number of Days to Update: 7

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 06/14/2010
Next Scheduled EDR Contact: 09/27/2010
Data Release Frequency: Semi-Annually

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 01/26/2010
Date Data Arrived at EDR: 02/25/2010
Date Made Active in Reports: 03/04/2010
Number of Days to Update: 7

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/23/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 10/05/2009
Date Made Active in Reports: 10/13/2009
Number of Days to Update: 8

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/24/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 03/05/2010
Date Data Arrived at EDR: 03/24/2010
Date Made Active in Reports: 04/14/2010
Number of Days to Update: 21

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/24/2010
Next Scheduled EDR Contact: 07/05/2010
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 04/07/2010
Date Data Arrived at EDR: 04/13/2010
Date Made Active in Reports: 05/18/2010
Number of Days to Update: 35

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/29/2010
Next Scheduled EDR Contact: 07/12/2010
Data Release Frequency: Annually

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 08/26/2009
Date Made Active in Reports: 09/11/2009
Number of Days to Update: 16

Source: Department of Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 06/04/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 01/20/2010
Date Made Active in Reports: 02/05/2010
Number of Days to Update: 16

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/23/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/04/2010
Date Data Arrived at EDR: 02/11/2010
Date Made Active in Reports: 03/17/2010
Number of Days to Update: 34

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/13/2010
Next Scheduled EDR Contact: 08/23/2010
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 12/01/2009
Date Made Active in Reports: 12/14/2009
Number of Days to Update: 13

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 05/24/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 11/03/2009
Date Data Arrived at EDR: 02/12/2010
Date Made Active in Reports: 02/22/2010
Number of Days to Update: 10

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 06/01/2010
Next Scheduled EDR Contact: 09/13/2010
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 07/17/2009
Date Made Active in Reports: 08/10/2009
Number of Days to Update: 24

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/22/2010
Next Scheduled EDR Contact: 07/05/2010
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2009 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

SOLANA HIGHLANDS APARTMENTS
701 SOUTH NARDO AVENUE
SOLANA BEACH, CA 92075

TARGET PROPERTY COORDINATES

Latitude (North):	32.98610 - 32° 59' 10.0''
Longitude (West):	117.2618 - 117° 15' 42.5''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	475539.3
UTM Y (Meters):	3649585.2
Elevation:	99 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	32117-H3 DEL MAR OE W, CA
Most Recent Revision:	Not reported
North Map:	33117-A3 ENCINITAS, CA
Most Recent Revision:	Not reported
East Map:	32117-H2 DEL MAR, CA
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

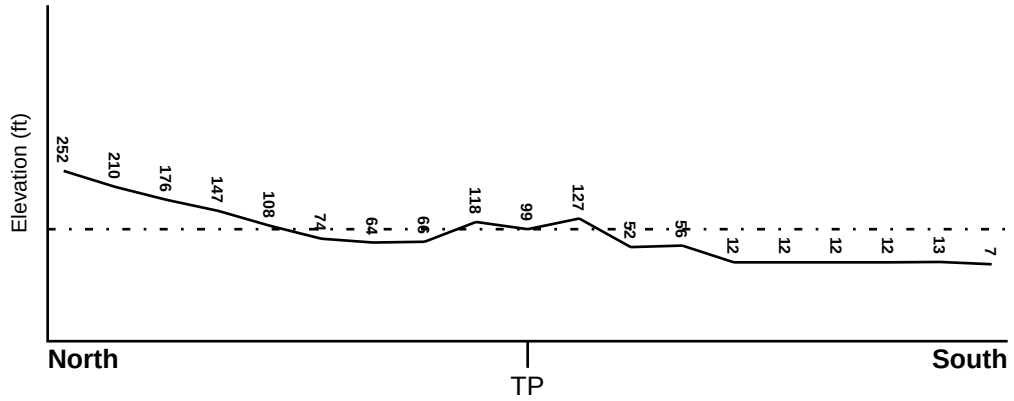
TOPOGRAPHIC INFORMATION

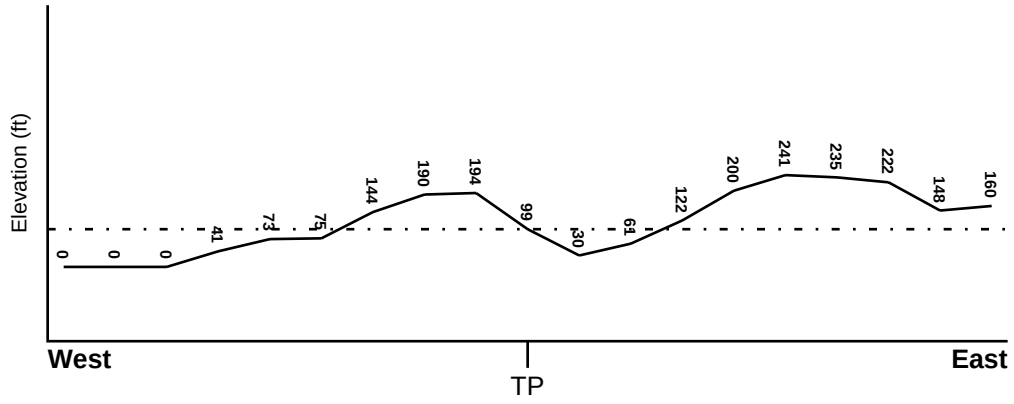
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General East

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 99 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
SAN DIEGO, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 06073C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
WEST DEL MAR (OE)	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
1	1/4 - 1/2 Mile SSE	SW
A3	1/2 - 1 Mile NW	WNW
A4	1/2 - 1 Mile NW	W
5	1/2 - 1 Mile ESE	WSW
6	1/2 - 1 Mile South	WNW

For additional site information, refer to Physical Setting Source Map Findings.

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

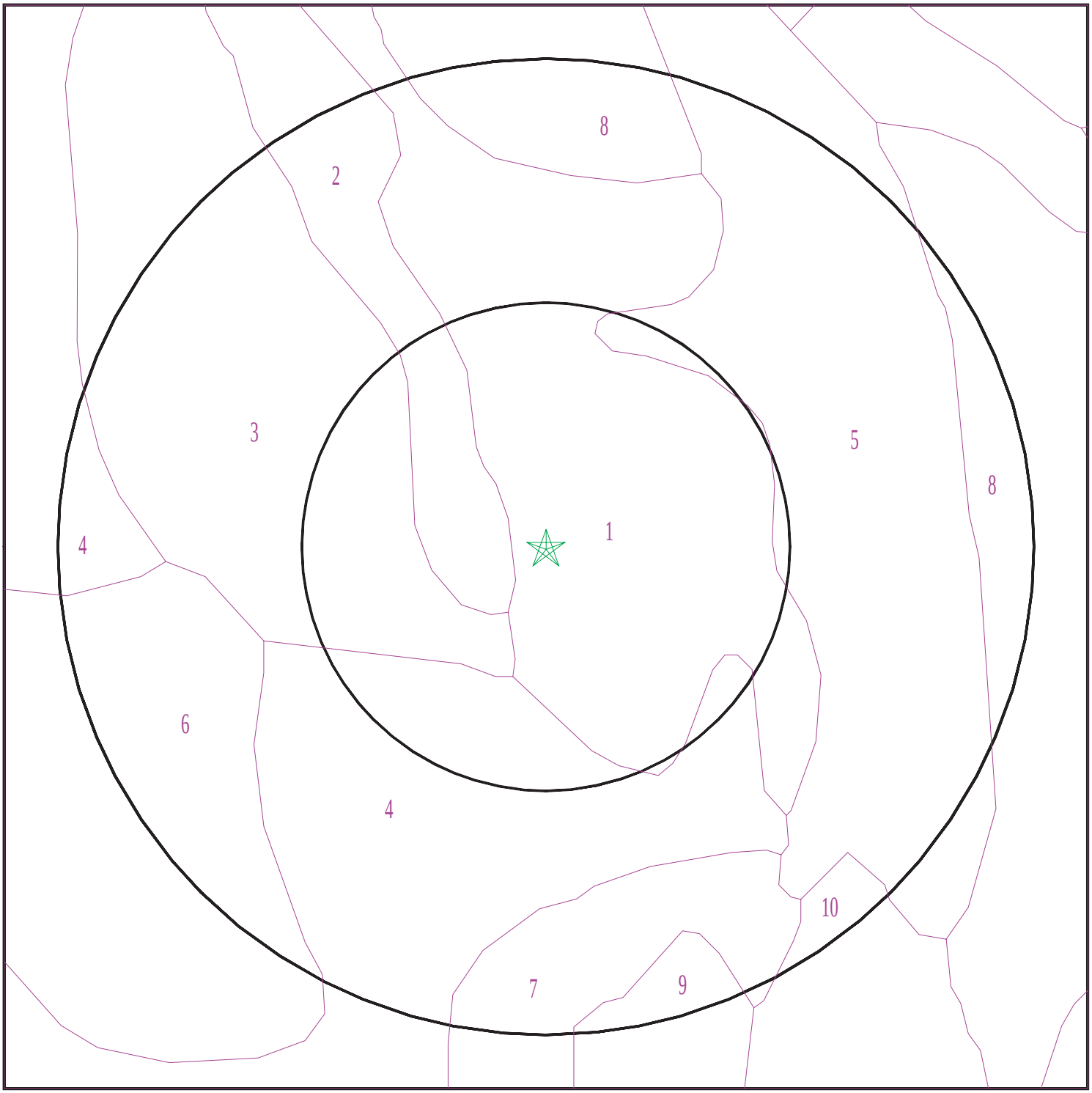
Era:	Cenozoic
System:	Tertiary
Series:	Eocene
Code:	Te *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 2794855.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Solana Highlands Apartments ADDRESS: 701 South Nardo Avenue Solana Beach CA 92075 LAT/LONG: 32.9861 / 117.2618	CLIENT: Enviroapplications Inc. CONTACT: Fred Allee INQUIRY #: 2794855.2s DATE: June 16, 2010 11:46 am

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: LOAMY ALLUVIAL LAND

Soil Surface Texture: variable

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches	variable	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 2

Soil Component Name: TERRACE ESCARPMENTS

Soil Surface Texture: variable

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches	variable	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 3

Soil Component Name: MARINA

Soil Surface Texture: loamy coarse sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 7.4
2	9 inches	57 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 7.4

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
3	57 inches	59 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 7.4

Soil Map ID: 4

Soil Component Name: MARINA

Soil Surface Texture: loamy coarse sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 7.4

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	9 inches	57 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 7.4
3	57 inches	59 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 7.4

Soil Map ID: 5

Soil Component Name: CORRALITOS

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.6
2	11 inches	42 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.6
3	42 inches	72 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.6

Soil Map ID: 6

Soil Component Name: CARLSBAD

Soil Surface Texture: gravelly loamy sand

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	Not reported	Max: Min:	Max: Min:
2	20 inches	38 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	Not reported	Max: Min:	Max: Min:
3	38 inches	50 inches	indurated	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	Not reported	Max: Min:	Max: Min:

Soil Map ID: 7

Soil Component Name: CORRALITOS

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.6
2	9 inches	42 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.6
3	42 inches	72 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.6

Soil Map ID: 8

Soil Component Name: CORRALITOS

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.6
2	9 inches	42 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.6
3	42 inches	72 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.6

Soil Map ID: 9

Soil Component Name: HUERHUERO

Soil Surface Texture: loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
2	11 inches	55 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
3	55 inches	72 inches	stratified sand to sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4

Soil Map ID: 10

Soil Component Name: MADE LAND

Soil Surface Texture: variable

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	variable	Not reported	Not reported	Max: Min:	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

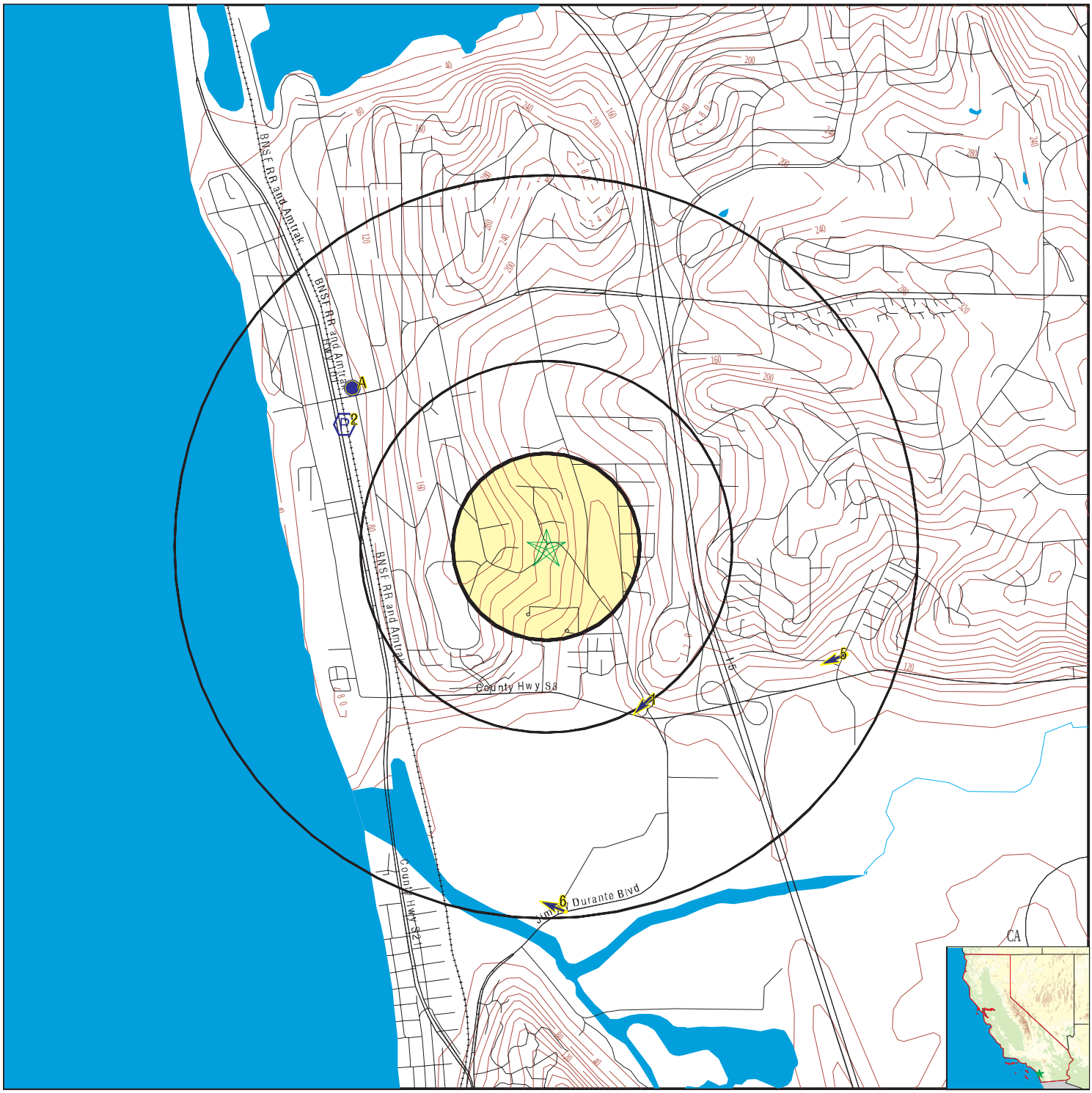
MAP ID	WELL ID	LOCATION FROM TP
2	CA3702215	1/2 - 1 Mile WNW

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 2794855.2s



0 1/4 1/2 1 Miles

- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Solana Highlands Apartments	CLIENT:	Enviroapplications Inc.
ADDRESS:	701 South Nardo Avenue Solana Beach CA 92075	CONTACT:	Fred Allee
		INQUIRY #:	2794855.2s
LAT/LONG:	32.9861 / 117.2618	DATE:	June 16, 2010 11:46 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
1 **SSE** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported SW Not Reported Not Reported 9 01/16/1991	**AQUIFLOW**	**38804**

2
WNW
1/2 - 1 Mile
Lower

FRDS PWS **CA3702215**

PWS ID: CA3702215
Date Initiated: 7706 Date Deactivated: Not Reported
PWS Name: BORREGO SPRINGS PROPERTY, INC
BORREGO VILLAGE RESORT
3241 BORREGO VY STRT
BORREGO SPRINGS, CA 92004

Addressee / Facility: System Owner/Responsible Party
BORREGO VILLAGE RESORT
P O BOX 6
SOLANA BEACH, CA 92075

Facility Latitude: 32 59 27 Facility Longitude: 117 16 13
City Served: Not Reported
Treatment Class: Untreated Population: 00000028

Violations information not reported.

A3 **NW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported WNW Not Reported Not Reported 30 04/03/1995	**AQUIFLOW**	**38823**

A4 **NW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported W Not Reported Not Reported 40 11/02/1994	**AQUIFLOW**	**37965**

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5 **ESE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported WSW Not Reported Not Reported 20 10/24/1994	**AQUIFLOW**	**38300**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
6 **South** **1/2 - 1 Mile** **Lower**	Site ID:	Not Reported	**AQUIFLOW**	**38677**
	Groundwater Flow:	WNW		
	Shallow Water Depth:	Not Reported		
	Deep Water Depth:	Not Reported		
	Average Water Depth:	11		
	Date:	10/15/1991		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zip	Total Sites	> 4 Pci/L	Pct. > 4 Pci/L
92075	5	0	0.00

Federal EPA Radon Zone for SAN DIEGO County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SAN DIEGO COUNTY, CA

Number of sites tested: 30

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.677 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.400 pCi/L	100%	0%	0%
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2009 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Health Services
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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ATTACHMENT 6
AGENCY RECORD REQUESTS AND RESPONSES

PHASE I ENVIRONMENTAL SITE ASSESSMENT FOR
Solana Highlands Apartments
701 South Nardo Avenue
Solana Beach, San Diego County, CA 92075-2309
APN: 298-260-33-00

July 16, 2010
EAI Project No.: 01.UNBNK13.10
UBNA RIMS No.: 10-1089

Fred Allee

From: Fred Allee
Sent: Friday, July 09, 2010 10:24 AM
To: 'Kathleen Boitano'
Cc: Robert Gottlieb
Subject: RE: Solana Highlands - Certificate of Occupancy and Permits - unable to locate

Thank you for trying Kathleen (and Robert). I am waiting for one last call from the county who is checking for records under "Del Mar Turf Club" apartments, the old, original name of the development and then I am done trying.

Hope you both have a good weekend,

Fred Allee
Sr. Chemical/Environmental Engineer
EnviroApplications, Inc.

PRIVILEGED & CONFIDENTIAL COMMUNICATION. This e-mail is intended only for the use of the persons to whom it is addressed, and may contain information that is privileged, confidential, or otherwise protected under applicable law. If you are not the intended recipient, or authorized by the recipient to read this, you are hereby notified that you are prohibited from using, copying, disseminating, or replying to this e-mail. IF YOU RECEIVED THIS E-MAIL IN ERROR, PLEASE ADVISE THE SENDER IMMEDIATELY BY RETURN E-MAIL

From: Kathleen Boitano [mailto:kboitano@hgfenton.com]
Sent: Wednesday, July 07, 2010 4:36 PM
To: Fred Allee
Cc: Robert Gottlieb
Subject: Solana Highlands - Certificate of Occupancy and Permits - unable to locate

Mr. Alle:

Thank you for your patience as we have tried to locate the documents you requested for the Solana Highlands Apartment complex.
After exhausting our search here at the office, we have not been able to locate the Certificate of Occupancy or other permit records.

If I can be of any further assistance, please feel free to contact me and I will follow up immediately.

Sincerely,

Kathleen Boitano
Executive Assistant to Robert Gottlieb
H.G. Fenton Company
619-400-0143

Fred Allee

From: Carmichael, Leann [mailto:Leann.Carmichael@sdcounty.ca.gov]
Sent: Tuesday, July 13, 2010 1:51 PM
To: fallee@enviroapplications.com
Cc: Andrew, Dave; Mabolia, Lily
Subject: Public Records Act Request

Hi Fred,

Per your request left in a follow-up voicemail message on July 2, we can confirm that all building, planning and land use records had been uniformly
transferred to Solana Beach when they incorporated on July 1, 1986. Dave Andrew has confirmed that there are no Solana Beach records in our files.

If you would like to arrange for any other searches besides Solana Beach, please let me know. Thanks!

LeAnn Carmichael

Department of Planning and Land Use
5201 Ruffin Road, Suite B
San Diego, California 92123
Direct: (858) 694-3739
Fax: (858) 694-2555

New Search

Page: 5 of 7
Total Records Found: 152

Establishment Details

|<< << >> >>|

	Estab. Number	Establishment Name	Address	City
101	137775	SAV-ON DRUG STORE #3187	683 LOMAS SANTA FE DR	SOLANA
102	112951	EXXON MOBIL OIL CORP S/S#18-JT	705 LOMAS SANTA FE DR	SOLANA
103	112950	LOMAS SANTA FE TEXACO	706 LOMAS SANTA FE DR	SOLANA
104	154799	GENESISCARE, INC	740 LOMAS SANTA FE DR	SOLANA
105	111043	LOMAS SANTA FE CLEANERS	917 LOMAS SANTA FE DR	SOLANA
106	151657	RAYMOND C MUELLER DDS	943 LOMAS SANTA FE DR	SOLANA
107	134003	MOTO PHOTO	953 LOMAS SANTA FE DR	SOLANA
108	153948	RAYMOND C. MUELLER, DDS	957 LOMAS SANTA FE DR	SOLANA
109	151656	ANDREW MESHNIK	983 LOMAS SANTA FE DR	SOLANA
110	132962	SOLANA BEACH DENTAL X-RAY	983 LOMAS SANTA FE DR	SOLANA
111	137830	NEW LIFE CHIROPRACTIC CLINIC	983 LOMAS SANTA FE DR	SOLANA
112	134002	LOMAS SANTA FE CHIROPRACTIC	991 LOMAS SANTA FE DR	SOLANA
113	153126	BARROWS WEIGHT LOSS CENTERS	140 MARINE VIEW	SOLANA
114	151743	BARROWS MEDICAL GROUP	140 MARINE VIEW AV	SOLANA
115	120854	SOLANA BEACH FIRE DEPARTMENT	102 S NARDO AV	SOLANA
116	201995	EAST WEST HEALTH SERVICES	718 S NARDO AV	SOLANA
117	151718	PACIFIC ENT MEDICAL GROUP	100 N PACIFIC AV	SOLANA
118	136439	BROADMOOR BEACH PROJECT	236 PATTY HILL DR	SOLANA
119	151394	ROBERT A ROSENFELD	116 W PLAZA ST	SOLANA
120	150629	LAWRENCE D FREYMILLER DDS	116 W PLAZA ST	SOLANA
121	151380	ALLEN M MOFFSON D M D	116 W PLAZA ST	SOLANA
122	151432	DAVID F URICH, DDS	125 W PLAZA ST	SOLANA
123	199046	ERWIN MOJONNIER	830 N RIOS AV	SOLANA
124	120858	TANGAROA ESTATES	830 N RIOS AV	SOLANA
125	120857	SOLANA BEACH PUMP STATION	N RIOS AV	SOLANA

-

Fred Allee

From: Gould, Cynthia [Cynthia.Gould@sdcounty.ca.gov]
Sent: Friday, June 18, 2010 7:36 AM
To: Fred Allee
Subject: RE: APCD File Requests

Hello, I found no records. Thanks much.

Cynthia R. Gould, B.A., B.S., GISci
Air Pollution Control Aide, APCD
10124 Old Grove Road
San Diego, CA 92131
work: 858-586-2618
fax:858-586-2601
Celebrating 50 years of Air Quality Progress!

From: Fred Allee [mailto:fallee@enviroapplications.com]
Sent: Thursday, June 17, 2010 4:19 PM
To: Gould, Cynthia
Subject: APCD File Requests

Hi Cynthia, hope you are doing well and having a good Summer 2010 so far. We are doing environmental compliance assessments of the:

A-1 Storage Facility – 4680 & 4688 Alvarado Canyon Road in San Diego 92069;

Solana Highlands Apartments – 701 South Nardo Avenue in Solana Beach 92075; and

Sea Vale/Pepperwood Court Apts. – 657, 659, 661, 663, 665 and 667 Sea Vale Street in Chula Vista 91910.

When you get a chance, as always, any APCD inspection and other file record copies that you can find and send over will help me.

Thank you & may God bless you,

Fred Allee
Senior Chemical/Environmental Engineer
EnviroApplications, Inc.
Rio Sur Office Complex
2831 Camino Del Rio South, Suite 214
San Diego, CA 92108-3828

EnviroApplications, Inc.
Engineering & Consulting

www.enviroapplications.com

EnviroApplications, Inc.
Engineering & Consulting
WWW.ENVIROAPPLICATIONS.COM

2831 Camino del Rio South, Suite 214
San Diego, CA 92108-3828
Office: (619) 291-3636
Fax: (619) 291-3639

June 17, 2010

07.06.2010 ~11AM
TROY CALLED TO
INDICATE A CHECK
OF SDRWQCB FILES
REVEALED NO
RECORDS FOR
S.H. APTS.
OR ADDRESS.
J. Allee

Via Facsimile (858) 571-6972

San Diego Regional Water Quality Control Board
Attn: Sylvia Wellnitz
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Re: California Public Records Act GC §6250-6276.48 Request
Site Location: Solana Highlands Apts. (et al.)
701 S. Nardo Avenue
Solana Beach CA 92075
EnviroApplications Project No.: 01.UNBNK13.10

Hi Sylvia:

Hope you are doing well. EnviroApplications, Inc. is performing an environmental assessment of the property at the above-referenced address. As part of our assessment, I am requesting that the SDRWQB provide copies of file records including but not limited to NPDES and other WDR permits, notices of violations, underground and above ground storage tanks, cleanup and abatement orders, storm water management, hazardous materials disclosures; and, remedial action at the above-referenced property. An initial check of the SLIC database indicates that the facility has not come to the attention of Cal/EPA.

Please e-mail (fallee@enviroapplications.com); fax 619.291.3639 or mail copies of any records you find or a reply of no file records found, if appropriate, to Fred Allee, 2831 Camino del Rio South, Suite 214, San Diego, CA 92108-3828. Please call me at 619.291.3636 x227 if you need any additional information related to this CPRA request.

Thank you in advance for your assistance with this project.

Sincerely,
EnviroApplications, Inc.

Fred Allee
Chemical/Environmental Engineer

Fred Allee

-----Original Message-----
From: Cleo Navarrette-Munoz [mailto:CNavarre@dtsc.ca.gov]
Sent: Thursday, June 24, 2010 08:34 AM
To: Fred Allee
Subject: Re: DTSC Records Request - Solana Highlands Apts., Solana Beach

Good Morning Fred,

Sorry it has taken me long to respond, but I am just now returning to the office. I have found no documents regarding your file request.
If you have any questions please feel free to contact me.
Thanks Cleo

Cleo Muñoz
Office Technician
Dept. of Toxic Substances Control
9174 Sky Park Court, Suite 150
San Diego, CA 92123
(858) 637-5531

EnviroApplications, Inc.
Engineering & Consulting
WWW.ENVIROAPPLICATIONS.COM

Rio Sur Office Complex
2831 Camino del Rio South, Suite 214
San Diego, CA 92108-3828
Office: (619) 291-3636
Fax: (619) 291-3639

June 17, 2010

Via Facsimile (858) 637-5550

Cleo Muñoz
CA DTSC – San Diego
Public Participation Unit
9174 Sky Park Court, Suite 150
San Diego, CA 92123-4340

Re: California Public Records Act GC §6250-6276.48 Request
Site Location: Solana Highlands Apts. (et al.)
701 S. Nardo Avenue
Solana Beach CA 92075
EnviroApplications Project No.: 01.UNBNK13.10

Dear Cleo,

Hope you are doing well and had a good weekend. EnviroApplications, Inc. is performing an environmental assessment of the property at the above-referenced addresses. As part of our assessment, I am requesting that the DTSC provide copies of file records including but not limited to operating permits, notices of violations, underground and above ground storage tanks, human and ecological risk assessment, hazardous materials disclosure; and, environmental remedial action at the above-referenced property. An initial check of the DTSC ENVIROSTOR database indicates that the facility has not come to the attention of Cal/EPA.

Please e-mail (fallee@enviroapplications.com); fax 619.291.3639 or mail copies of any records you find or a reply of no file records found, if appropriate, to Fred Allee, 2831 Camino del Rio South, Suite 214, San Diego, CA 92108-3828. Please call me at 619.291.3636 x227 if you need any additional information related to this CPRA request.

Thank you in advance for your assistance with this records inquiry.

Sincerely,
EnviroApplications, Inc.

Fred Allee
Chemical/Environmental Engineer

ATTACHMENT 7
PREPARER'S RÉSUMÉS

PHASE I ENVIRONMENTAL SITE ASSESSMENT FOR
Solana Highlands Apartments
701 South Nardo Avenue
Solana Beach, San Diego County, CA 92075-2309
APN: 298-260-33-00

July 16, 2010
EAI Project No.: 01.UNBNK13.10
UBNA RIMS No.: 10-1089

CRAIG A. SMITH, P.G., R.E.A.
Principal Scientist/President

M.S. Geology, 1986
San Diego State University
B.A. Chemistry, 1981
University of California/San Diego

Expertise Project Management, Remedial System Design and Implementation, Bioremediation/Vapor Extraction, RI/FS Projects, Environmental Permitting, Site Assessments, E-SMART Program, State Reimbursement Fund (UST), CA, UST Management, ,Construction Management

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Mr. Smith has over 20 years of professional experience in research, development, analyses, and project management for both the U.S. Government and private sectors. His areas of expertise have included hazardous waste site assessment, underground storage tank management, site remediation, remediation system design, regulatory permitting, project supervision and strategy, property transfer assessments, water-soluble polymer research and development, and engineering of government chemical materials experiments. He has performed analysis and interpretations of environmental data with respect to risk assessment (modification). Mr. Smith has served as a Regional Manager for the southern California offices of a large national consulting company and is currently the President of a new employee-owned environmental consulting firm in San Diego. His project experience is presented below.

Project Experience

Site Assessment

- Managed hazardous waste site assessments and supervised site remediation activities. Prepared proposals, cost estimates, reports, and supervised all phases of projects. Involved with nearly 200 subsurface hazardous waste investigations focusing primarily on UST petroleum hydrocarbons but also experience with volatile organic compounds (VOCs), pesticide, and metal contaminants. Managed over 50 of these projects.

- Performed and managed numerous property transfer assessments at commercial, industrial, mobile home parks, retail, and undeveloped properties throughout Nevada and Central/Southern California to evaluate the potential for impairment by hazardous materials, waste or substances on each site. Reviewed historical site use, government agency records, and historical aerial photographs of both subject and vicinity properties. Also reviewed available geologic and hydrogeologic literature and performed site/vicinity reconnaissance to assess potential effect from past and present operations of surrounding properties. Prepared final reports.

- Provided Senior/Technical review for nearly 50 ARCO/BP potential acquisitions projects over the past 8 years.

- Performed subsurface assessment and coordinated remedial activity at an elastomer manufacturing facility. Obtained regulatory closure.

- Performed subsurface assessment and remediation of soil and groundwater at termite pest control facility. Coordinated waste disposal and treatment of affected medium. Obtained regulatory closure.

- Managed assessment of a downtown San Diego city block occupied by an abandoned dairy, industrial/commercial outlet. Performed investigation of fuel oil, waste oil, gasoline, and kerosene in soil and groundwater. Prepared a Feasibility Study (FS) discussing remedial options and costs/benefits. Site under consideration for closure following one year of groundwater monitoring, no remediation.

- Directed assessment of a non-permitted dumping area at an industrial complex construction site in Southern California. Identified high-molecular-weight hydrocarbons, metals, pesticides, and solvents. Prepared remedial feasibility/risk assessment with associate costs/benefit analysis involving 30,000 yards of stockpiled soils and remaining in-situ soils.

Remediation Management

- Managed and designed remediation projects, including high- and low-volume soil vacuum extraction, soil ventilation, above- and below-ground water perfusion bioremediation, and in-situ bioremediation. Monitored and interpreted data related to changes of subsurface environments due to the effects of remediation. Projects include retail petroleum sites, petroleum terminals, and manufacturing facilities.

- Supervised aboveground bioremediation of soil stockpiles. Designed and constructed aeration and water infiltration systems for the introduction of growth-promoting nutrients into hydrocarbon-contaminated soils.

- Managed projects using in-situ bioremediation. Designed and constructed subsurface infiltration galleries and wells. Designed water-handling equipment and plumbing for the delivery of oxygen and nutrient-rich fluids to contaminated soils and groundwater.

- Operated and maintained a high-volume (1,000 SCFM), in-situ, soil vapor extraction (SVE) system concurrently with a groundwater-recovery system in silt- and clay-rich soils. Treated vapors with catalytic oxidizer; discharged water to POTW under permit. No further regulatory action regarding soils required. Dissolved-phase hydrocarbon concentrations in groundwater decreased more than an order of magnitude within six months of completion of vapor extraction equipment operation.

- Re-designed and modified an in-situ vapor extraction system (VES) to in-situ bioremediation system for remediation of diesel-contaminated soil and a thin layer of free-product beneath a wing of a large hotel. Active bioremediation occurred as indicated by measurement of effluent CO_2 and O_2 concentrations.

- Supervised, designed, prepared the RAP, and permitted a high-volume VES at a retail service station site with underlying heterogeneous soil types. Designed vapor extraction wells to meet subsurface conditions.

Research and Development

- Coordinated company resources, performed research, planned overall strategy, and assisted in report preparation of the WSPA-sponsored California Groundwater Purging Study for Petroleum Hydrocarbons. Designed and helped implement the California No-Purge Groundwater Sampling Study protocol. Based on the results, many areas of California approved the sampling approach for quarterly sampling events, resulting in annual savings of several hundred thousand dollars to ARCO and others.

- Participated in an in-situ environmental sensor and monitoring system (E-SMART) program sponsored by the federal government (DARPA).

- Utilized X-ray diffraction analyses of clay cuttings derived from oil exploration and production wells to assess petroleum mitigation and accumulation. Identified chemical and diagenetic trends and their relationships to natural gas production. Prepared journal publications.

- Performed U.S. Department of Defense (DOD) chemical research and development, including analyses of drag-reducing, water-soluble polymers; and synthesis, modification, and subsequent measurement of water-soluble polymer molecular weights using LC, HPLC, LALLS, and viscosity techniques; electrochemical cell development and testing; and synthesis and chemical modification of semiconducting polyacetylenes. Experienced in using PID, FID, AA, XRD, FTIR analyses and LSI-11 computer system. Security clearance: Secret.

Professional Memberships

Association of Hazardous Materials Professionals, San Diego Chapter
National Water Well Association (NWWA)
San Diego County Health Department (SAM) Technical Work Groups:
On-Site Treatment, and Permitting Technical Work Group for Hazardous Waste Determination
Risk-Based Corrective Action

Professional Certifications and Registrations

California General Engineering and Contracting License (A)
Hazardous Substances Removal and Remedial Actions License (Haz), California
Professional Geologist, California (No. 8225)
Registered Environmental Assessor, California (No. REA 3166)
40-Hour OSHA Health & Safety Certification (29 CFR 1910.120)
8-Hour OSHA Health & Safety Annual Update Certification, 2006
8-Hour OSHA Site Supervisor's Certification, 1995
First Aid/CPR Certifications, 2005

FREDERIC A. ALLEE, E.I.T.
Senior Chemical/Environmental Engineer

B.S. Chemical Engineering (Minors: Musical Performance and Numerical Analysis), 1984
University of California, San Diego (UCSD)

Overall Expertise

Mr. Allee has more than 26 years of professional experience primarily in environmental consulting, vapor intrusion and human health risk assessment, hazardous materials and waste management; and, due diligence. This experience has included all aspects of projects dealing with the application of technologies to the assessment and mitigation of contaminated sites.

Early work following college included geotechnical consulting, landfill management and construction materials testing and inspection. As an Environmental Regulator/Project Manager with the County of San Diego, he conducted compliance inspections of industries using hazardous materials and generating hazardous wastes; participated on interagency enforcement action teams; reviewed and evaluated technical reports relating to the discovery, assessment, and remediation of sites contaminated with hazardous materials/wastes; and directed the investigation and remediation of sites contaminated with petroleum, solvents, pesticides, heavy metals, asbestos, and other hazardous wastes. He provided regulatory oversight during the assessment and cleanup of over 350 contaminated sites worth more than $350 million, and was responsible for the regulatory closure of more than 200 contaminated sites.

Later, as a Project Engineer he provided technical support for the Navy's Site Characterization and Analysis Penetrometer System (SCAPS), the EPA's Hazardous Waste Compliance Monitoring for Mexican/U.S. Customs and environmental inspectors' training program, the Navy's Comprehensive Long-term Environmental Action for Navy (CLEAN) program, the DOD's Unexploded Ordnance (UXO) contaminated land Advanced Technology Demonstration (ATD) program, the Naval Environmental Leadership Program (NELP), the EPA's Superfund Innovative Technologies Evaluation (SITE) program, and several U.S.-to-Mexico technology transfer projects under the EPA's RCRA Enforcement and Permitting Assistance (REPA) program including the start of Border XXI. Mr. Allee remains active along the border as a reviewer for Border 2012 (the next milestone of border XXI). A variety of projects for private-sector clients have included contaminated site closures for major oil companies, cities, municipal water districts, and several different types of commercial companies. He additionally served as the Site Safety Officer responsible for health and safety issues during approximately 25 projects. Mr. Allee has participated in projects involving asbestos assessment and abatement, where he supervised sampling and disposal activities. He assisted the County of San Diego U.S./Mexico Border Environmental Health Specialist during the period from 1989 to 1992 in his efforts to train local health department, customs, and environmental agency inspectors on both sides of the border. Because of his interest in trans-border affairs, Mr. Allee utilized off-work hours to assist the Chief Technical Advisor to (and Hazardous Material Instructor for) the Tijuana Mayor's Office of Disaster Preparedness, the Tijuana Fire and Police Departments, the Baja California Department of Ecology, the Baja California Secretariat of Environmental Health Services, and the Federal Secretariat of Environmental Affairs. Mr. Allee has guest lectured for environmental science classes offered through both the University of California, San Diego and Riverside, Southwestern College, has instructed courses at NAS North Island; and, has been an instructor for the Certified Hazardous Materials Manager (CHMM) exam review. A sampling of his project experience is presented on the following pages.

Project Experience

Management

- Currently providing technical assistance and management for due diligence, contaminant vapor intrusion risk assessment, litigation support, and closure of multiple projects involving release sites for major petroleum companies, other companies and municipalities.

- Lead technical teams in laboratory, office, and field settings ranging from management of 12 staff members supporting a full-service construction materials testing laboratory to management of support staff in report preparation while working in the geotechnical and environmental consulting industries. Performed management of site assessment and mitigation efforts simultaneously at as many as 140 contaminated sites, including review and comment on Work Plans, Sampling and Analysis Plans (SAPs), and a wide variety of Technical Reports. Also managed budgeting, regulatory permitting, multiple subcontractors, and sub-consultant, client and community relations and technology vendors, on a variety of both Federal government and private-sector client projects.

- Provided management, as well as regulatory, technical, and field support efforts as needed, for projects conducted at several military facilities under the Navy's CLEAN I and II with Engineering Field Activity West. Included preparation of cost estimates, work plans, sampling plans, quality assurance project plans, health and safety plans, monthly status reports, and technical memorandums and reports. Performed all work on these projects with the goal of mitigating human health and environmental impact concerns leading to closure of the sites by Records of Decision with the oversight agencies.

Engineering and Technology

- Provided project engineering services for the UXO ATDs that took place at the Yuma Proving Ground in Arizona during mid to late 1995. Performed work under contract to the Naval Explosive Ordnance Disposal Technology Division. Also conducted planning and preparation meetings with Yuma Proving Ground representatives, and arranged procurement of equipment and supplies necessary for the demonstration. Included airborne and portable earth-based innovative technologies utilizing combinations of new ground penetrating radar and magnetometer systems.

- Provided engineering support to SITE that included technical and regulatory expertise as needed for a contract to support the EPA's SITE program. Reviewed laboratory sample analysis data for the wastes generated during a SITE demonstration for the Fiery Marsh site at NAS North Island (IR Site 9); completed the necessary Navy, regulatory agency, and civilian disposal company paperwork regarding the wastes; then coordinated the proper recycling, treatment, and disposal of the wastes.

- Provided technical support on an as-needed basis for the U.S. Navy's SCAPS contract. Projects included dense data assessment of several Southwest Division CLEAN underground storage tank (UST) petroleum release sites. Also assisted with the development and testing of SCAPS (a laser-induced fluorescent detector integrated with a cone penetrometer capable of providing real time, in-situ measurement of petroleum contaminant concentrations). Assisted in the field deployment and testing of new SCAPS sensors that were to be used to detect chlorinated solvents, saturated zone interface and hydrogeologic parameters, and heavy metals.

Emergency Response

- Responded to approximately 20 emergency response incidents involving abandoned and spilled chemicals from illegal methamphetamine drug labs, fires at industrial facilities (including plating facilities), radioactive sources at landfills, and pesticide spills. Included selection and use of appropriate personal protective equipment (Levels A-C), selection and use of monitoring equipment (CGI/HNu/Draeger tubes and radiation meters), establishment of work zones, containment of spills, identification and categorization of known and unknown chemicals (HAZCAT) with supervision and documentation of cleanup actions.

- Responded to a public emergency incident that involved gasoline released to storm drain systems. Monitored areas for explosive conditions and potential ignition sources. Supervised and documented the cleanup actions taken by a contractor.

- Served on a team that investigated asbestos-contaminated soils that had been placed as fill during construction of a residential area in Paradise Hills, California. Included research of Potentially Responsible Parties (PRPs) who may have disposed of waste asbestos. Provided technical support of the U.S. EPA cleanup that was conducted based on the team's site assessment data.

- Served as the local Regulatory Oversight Specialist for a diesel and gasoline release to Rattlesnake Creek in Poway, California. Performed environmental engineering evaluations and cost analysis related to mitigating further releases to the creek. Began enforcement on PRP when they refused to abate situation as required by law. Provided all technical data to U.S. EPA Region IX when they assumed management and cleanup of the site as an emergency response in conjunction with the U.S. Coast Guard.

Preparedness and Prevention

- Inspected more than 150 businesses that were handling enough hazardous materials to necessitate creation of Chemical Emergency Contingency Plans. Assisted these businesses (including aerospace, plating, equipment manufacturing, furniture building, wastewater treatment related to coating operations, and auto painting) in the preparation of these plans. Facilitated contact between operators of similar industries in order to foster information exchange regarding process safety improvements.

- Served as Site Safety Officer and as a technology observer for the demonstration team during the UXO Detection, Identification, and Remediation Advanced Technology Demonstration at the Yuma Proving Ground in Arizona.

Spill Prevention Control and Countermeasures (SPCC) Plans

- Helped businesses to identify storm drain openings and other pathways by which accidental chemical releases might leave their control. Suggested methods (still) successfully being used to control access to pathways. Conducted re-inspections when warranted.

- Participated as a member of the San Diego Hazardous Waste Task Force (a multi-agency environmental crimes enforcement team) inspection of an aerospace company. Inspection verified and documented the complete lack of a SPCC Plan at the facility and indicated that several serious releases to the environment had occurred as a result. Involved environmental releases of post-

process sludges containing heavy metals from metals finishing, plating, and production lines as well as improper handling and releases of both hydrocarbon-based and halogenated solvents.

Technical Support

- Instructed over 15 courses on emergency response, site assessment, remediation, and public relations for the University of California at San Diego, University of California at Riverside and Southwestern Community College Extensions.

- Assisted the Border Environmental Health Specialist to train County of San Diego Environmental Health Department, U.S. Customs, Environmental, Disaster Preparedness, Fire Department, and local law enforcement inspectors on both sides of the U.S./Mexico border. Regularly interacted with the EPA's REPA program staff to achieve technology transfer objectives.

- Trained U.S. and Mexican Customs and Environmental Inspectors in hazardous waste compliance monitoring. Assisted with the development of course materials for ongoing training, assembled actual contraband hazardous waste case studies, facilitated classes, and participated in the first train-the-trainers session to turn the technology transfer effort over to state and local agency experts in Arizona, California, New Mexico, and Texas.

- Worked through a REPA contract supporting EPA's Border XXI Program aimed at defining a shared vision between governments and communities along the U.S./Mexico border committed to environmental protection and sustainable development. Assisted in authoring guidance documents for Border XXI serving as both Facilitator and Note Taker during Border XXI community meetings along the Arizona/California border. Served as coauthor of the summary document for the meetings, while coordinating the delivery of court reporter transcripts from the meetings held in Arizona, California, New Mexico, and Texas to the EPA. Personal involvement continues with Border XXI as a Citizen Expert.

- Served as a Consultant to EPA officials who participated in the Border XXI binational meeting in Tijuana, Mexico that was held following the domestic community meetings. Also took notes for the public health and safety, emergency response, and solid waste management binational task group sub-meetings.

- Served as co-chairman of the County of San Diego Site Assessment and Mitigation Division's technical work group that developed guidelines for preparation of Community Health and Safety Plans prior to performing environmental assessment and cleanup work at contaminated sites in San Diego County.

- Provided technical and administrative support to the EPA during a long-term release of diesel and gasoline to Rattlesnake Creek in Poway, California.

Project Work Plans

- Prepared more than 250 assessment and remediation work plans for all types and sizes of public, municipal, private and U.S. Navy contaminated sites.

- Provided technical review and comment on more than 200 assessment and remediation work plans while working as a regulator.

- Prepared the technology demonstration plan for the U.S. Navy Site Characterization and Analysis Penetrometer System, which led to Cal-EPA and U.S. EPA certification of the technology.

Enforcement

- Provided documentation and information to the County of San Diego District Attorney's Office for an enforcement case on a Clean Water Act (CWA) violation regarding a release of petroleum to a waterway at a gas station release site.

- Provided expert testimony in court for the County of San Diego District Attorney's Office on an enforcement case regarding illegal abandonment and disposal of hazardous materials to the ground. Collected samples of hazardous materials, hazardous wastes, soil, and water to help provide evidence to prove the case.

- Assisted in planning and conducting a field investigation for the County of San Diego's Hazardous Material Task Force on an illegal hazardous waste dumping case.

International

- Provided environmental engineering services on a voluntary basis as a consultant for hazardous materials and public health and safety affairs. Involvement included subterranean explosive gas migration assessment and control, explosive sewer-storm drain conditions abatement, chemical emergency response drills, and air monitoring equipment training and procurement for municipalities and clients in the Republic of Mexico.

- Provided waste sampling and characterization services to Mexican manufacturing companies to characterize waste streams for recycling, treatment, and disposal under Mexican environmental agency scrutiny.

- Provided RCRA enforcement, permitting, and assistance (REPA) for a contract to support the EPA's REPA program, which consisted primarily of technology transfer regarding the management of hazardous materials and wastes to officials of the Republic of Mexico.

Other Related Experience

- Proposed, designed, budgeted, and coordinated groundwater and soil exploration and remediation projects. Performed projects involving air pollution control and air resources management. Also provided client support and engineering services, including quality assurance/quality control (QA/QC), during projects. Assisted staff-level engineers and geologists, and provided support for all projects involving regulatory compliance and/or permitting.

- Served as a Hazardous Materials Specialist for the County of San Diego's Department of Environmental Health. Provided consultation and education related to hazardous material and waste management to industry. Inspected hazardous waste generators assisting them in complying with applicable environmental regulations. Educated generators regarding resource recovery methods for hazardous liquids (e.g., used oil and solvents). Conducted special projects as assigned for both industry compliance and site assessment and mitigation.

- Served as Staff Engineer performing various duties to help operate a full-service construction materials testing laboratory. Supervised and scheduled lab and field activities for 4 to 12

engineering and geologic technicians. Assisted environmental engineering group as Staff Chemical/Environmental Engineer on environmental projects, as necessary.

- Served as a Student Engineer at a San Diego utility performing air quality control inspections that involved power plant exhaust stack emissions monitoring and sampling, and conducted laboratory chemical analyses of the air samples. Summarized the inspections for use by the company's management in documenting compliance with local, state, and federal air pollution control regulations. Conducted boiler efficiency testing procedures for two power plants.

Professional Certifications and Registrations

Engineer-in-Training, California (No. XE065066), 1986
Certificate in Hazardous Materials Management, UCSD, 1990
Colorado Listed Environmental Consultant 2000 - 2010
Equivalent 40-Hour OSHA Health & Safety Training (Agency-Grandfathered), 1989
8-Hour OSHA Site Supervisor's Certification, 1992
8-Hour OSHA Health & Safety Annual Update Certification, 1990 - 2010

Continuing Education and Training

Petroleum Vapor Intrusion Webinar - USEPA/OSWER/OUST, 2010
Mold Consulting Seminar, SECOR International Inc. - P.A. Platcow, CIH, 2003
8 Hour CPR and First Aid Courses, 1987 – 2002
Chevron Loss Prevention Training, SECOR International Inc. – P.A. Platcow, CIH, 2001
Top Quality Management and Streamlining Principles in Government, MRI, 1992
Incinerable Hazardous Waste Minimization Workshop, Cal-EPA, 1991
Waste Classification and the Land Ban, U.S. EPA, 1990
Hazardous Waste Element of the San Diego Regional Solid Waste Management Plan, UCSD, 1990
Bioremediation of Contaminated Groundwater, Dr. Michael Piotrowski, 1990
Introduction to Environmental/Human Toxicology, UCSD, 1990
Update on Environmental Bioremediation, CDOHS, 1990
How to be a More Effective Supervisor, Career Track, 1990
Environmental Health Services Cross Orientation, County of San Diego, 1990
Hazardous Incident Response Team Annual Level A Emergency Response Exercise, County of San Diego, 1990
Court Case Preparation, San Diego County District Attorney's Office, 1990
Regulatory Framework for Toxic Substances, UCSD, 1989
Aquifer Testing Methods, CDOHS, 1989
AB3777 Risk Management and Prevention Planning, UCSD, 1989
Assessment and Remediation of Chemicals in the Environment, UCSD, 1989
Permit Variances, Permit-by-Rule, Transportable Treatment Units, CDOHS, 1989
AB2588 Air Toxic Hot Spots, UCSD, 1989
Quality Assurance/Quality Control for Analytical Methods, Analytical Technologies Inc., 1989
Vector Control and Environmental Health, County of San Diego Vector Control Division, 1989
Hazardous Incident Response Team Contaminated Site Sampling Safety, County of San Diego, 1989
Emergency Preparedness, Response, and Planning, UCSD, 1989
Hazardous Incident Response Team (HIRT) Annual Level A Emergency Response Exercise and Drug Lab Waste Training, County of San Diego, 1989
HIRT Hazardous Materials Field Instruments Trials, County of San Diego, 1989
Leaking Underground Storage Tank Tech and Environmental Compliance, California SWRCB, 1988

Hazardous Incident Response Team SCBA Level A and B, County of San Diego, 1988
Management of Chemical Releases, CSTI, 1988
Site Assessment and Mitigation Technology Update Conference, UCSD, 1988
Principles of Industrial Hygiene, UCSD, 1988

Current Status of the Leaking Underground Fuel Tank (LUFT) Document, CDOHS/DTSC, 1988

Groundwater Hydrogeology Course, Paul Hargis, UCSD Extension, 1988

Risk Assessment at Chemically Contaminated Sites, California RWQCB/San Diego Region, 1988
Introduction to Hazardous Materials Management, UCSD-Extension, 1988

Honors and Awards

Letter of Promotion, County of San Diego, 1988
Letter of Commendation, County of San Diego, 1989
Letter of Commendation, County of San Diego, May 1990
Letter of Commendation, County of San Diego, June 1990
Letter of Commendation, County of San Diego, 1991
Letter of Commendation, County of San Diego, 1992
Letter of Commendation, County of San Diego, 1993

Publications and Presentations

Allee, F.A., "Assessment and Cleanup Technologies for Chemically Contaminated Sites and Career Pathways in the Environmental Field", presented to the Fall Hazardous Materials Management Series Class, Southwestern College, San Diego, California, September 1993, 1996-2004.

Allee, F.A., "Remediation Methods for Petroleum Hydrocarbon-Contaminated Sites," instructor for the Spring 1997 Courses in Newport Beach & Fresno, University of California at Riverside Extension.

Allee, F.A., "Introduction to Wastewater Treatment: The Clean Water Act, and Underground Storage Tank Management", presented at the Fall 1996 CHMM Review Course, University of Cincinnati, St. Louis, Missouri, October 17, 1996.

Allee, F.A., "Introduction to Wastewater Treatment: The Clean Water Act, and Underground Storage Tank Management", presented at the Fall 1996 CHMM Review Course, University of Cincinnati, St. Louis, Missouri, October 17, 1996.

Allee, F.A., "Introduction to the County of San Diego's Site Assessment and Mitigation Division: Regulations, Organization Structure, and Operations", presented to the Fall 1994 Regulatory Framework for Toxic Substances Class, University of California/San Diego (UCSD), La Jolla, California, October 4, 1994.

Allee, F.A., "Assessment and Cleanup Technologies for Chemically Contaminated Sites", presented to the Fall 1994 Hazardous Materials Management Series Class, SWC, San Diego, California, September 27, 1994.

Allee, F.A., "Introduction to the County of San Diego's Site Assessment and Mitigation Division: Regulations, Organization Structure, and Operations", presented to the Spring 1994 Regulatory

Framework for Toxic Substances Class, UCSD, La Jolla, California, April 6, 1994.

Allee, F.A. and P.M. Tanner, "Accomplishments of the Department of Environmental Health's (DEH) Customer Service Improvement Team", presented to the DEH Assistant Director and Division Chief's, San Diego, California, March 21, 1994.

Allee, F.A. and C. Bejar L., "Introduction to the Regulation of Underground Storage Tank Systems and Unauthorized Releases: The Rattlesnake Creek, Poway Case Study", presented to the Spring 1994 Hazardous Materials Management Series Class, SWC, San Diego, California, March 16, 1994.

Allee, F.A., "Accomplishments of the DEH's Customer Service Improvement Team", presented to the DEH Management Enhancement Group, San Diego, California, February 23, 1994.

Allee, F.A. and C. Bejar L., "Introduction to the Regulation of Hazardous Materials and Wastes: San Diego County's Industry Compliance Program: The Nelco Oil Co., National City Case Study", presented to the Fall 1994 Hazardous Materials Management Series Class, SWC, San Diego, California, November 9, 1994.

Allee, F.A., "Introduction to the County of San Diego's Site Assessment and Mitigation Division: Regulations, Organization Structure, and Operations", presented to the Fall 1993 Regulatory Framework for Toxic Substances Class, University of California/San Diego (UCSD), La Jolla, California, October 6, 1993.

Allee, F.A., "Assessment and Cleanup Technologies for Chemically Contaminated Sites", presented to the Fall 1993 Hazardous Materials Management Series Class, SWC, San Diego, California, September 30, 1993.

Allee, F.A. and C. Bejar L., "Introduction to the Regulation of Underground Storage Tank Systems and Unauthorized Releases: The Rattlesnake Creek, Poway Case Study", presented to the Spring 1993 Hazardous Materials Management Series Class, SWC, San Diego, California, April 12, 1993.

Allee, F.A., "Introduction to the County of San Diego's Site Assessment and Mitigation Division: Regulations, Organization Structure, and Operations", presented to the Spring 1993 Regulatory Framework for Toxic Substances Class, University of California/San Diego (UCSD), La Jolla, California, April 7, 1993.

Allee, F.A., "Current Status of the Poway Rattlesnake Creek Oil Release", presented to the Poway City Council, Poway, California, September 26, 1993.

Allee, F.A., "Current Status of the Poway Rattlesnake Creek Oil Release: Community Health and Safety Concerns", presented to a special Poway Community Meeting, Poway, California, September 25, 1993.

Allee, F.A. and C. Bejar L., "Introduction to the Regulation of Hazardous Materials and Wastes: San Diego County's Industry Compliance Program: The Nelco Oil Co., National City Case Study", presented to the Fall 1992 Hazardous Materials Management Series Class, SWC, San Diego, California, October 27, 1992.

Allee, F.A., "Introduction to the County of San Diego's Site Assessment and Mitigation Division: Regulations, Organization Structure, and Operations", presented to the Fall 1992 Regulatory Framework for Toxic Substances Class, University of California/San Diego (UCSD), La Jolla, California, September 1992, 1993, 1994, 1997.

APPENDIX J

Preliminary Hydrology Report

PRELIMINARY HYDROLOGY STUDY

FOR

REVITALIZING SOLANA HIGHLANDS
701 South Nardo Avenue
Solana Beach, CA 92075

CITY OF SOLANA BEACH, CA

PREPARED FOR:

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7577 Mission Valley Road, Suite 200
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DATE:
August 11, 2014
Revised May 21, 2015
Revised September 2017

9-21-2017

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1.0 EXECUTIVE SUMMARY

1.1 Introduction

This Hydrology Study for Solana Highlands, located at 701 South Nardo Avenue, has been prepared to analyze the hydrologic and hydraulic characteristics of the project site in both the existing and the redeveloped condition. The purpose of this report is to help meet the requirements of the California Environmental Quality Act (CEQA). Storm water quality is addressed under separate cover in the report titled "Priority Development Project Water Quality Technical Report (WQTR) for Revitalizing Solana Highlands" prepared by Pasco Laret Suiter & Associates, dated September 2017. This hydrology report intends to present both the methodology and the calculations used for determining the runoff from the project site in both the pre-developed (existing) conditions and the redeveloped (proposed) conditions produced by the 100-year 6-hour storm event. With this data, it can be shown that some of the problematic drainage issues associated with this property will be improved by detention and re-routing such that impact to adjacent downstream properties is substantially reduced.

1.2 Existing Conditions

The property is geographically located at N32° 59' 6.3'' W117° 15' 41.8''. The site is bordered by residential lots to the north, south, east, and west. South Nardo Avenue is located north of the site and Stevens Avenue is located to the east. The site is located in the Solana Beach Hydrologic Area and more specifically, the Rancho Santa Fe Hydrologic Sub-Area (905.11).

The existing project site consists of an apartment complex, asphalt access driveway and parking, two tennis courts, a pool and associated hardscape improvements. Onsite storm water currently flows in two directions. Runoff flows overland from the northwestern portion of the site south eventually being conveyed in two concrete brow ditches that ultimately outlet onto the adjacent property (Turfwood). The majority of the eastern region of the site flows east overland where it enters an existing storm drain system which flows north in Stevens Avenue and ultimately ties into the box culvert running south toward Via De La Valle and outlets on the Race Track property into Stevens Creek. A small area near the southeast corner of the site flows overland to Stevens Avenue. All storm water originating on the subject property eventually enters Stevens Creek where it is conveyed to the Pacific Ocean via the San Dieguito River Lagoon.

1.3 Proposed Project

The intent of the proposed project is to demolish the existing apartment complex, asphalt access driveway and parking, tennis courts, pool and associated hardscape improvements and construct a new apartment complex, paved driveways and parking, pool and associated hardscape, and Hydromodification (HMP) Biofiltration basins to provide storm

water pollutant control, hydromodification flow control and detention for the 100-year storm event peak discharge.

To reduce the drainage impacts to adjacent downstream properties, the project proposes to re-route the storm water originating onsite such that it does not flow south to the Turfwood property as it does in the existing condition. Runoff generated from the proposed development will be conveyed in a storm drain system that will pass through proposed HMP Biofiltration basins and ultimately discharge to the existing storm drain located on the eastern boundary of the site at the intersection of South Nardo Avenue and Stevens Avenue. The proposed HMP Biofiltration basins will provide pollutant control, hydromodification management, as well as detention of the 100-year storm event peak runoff such that it doesn't exceed the existing flows entering the Solana Beach MS4 system at that location. Storm flows will continue as in the existing condition to the existing box culvert located north east of the project site between Valley and Stevens. In the proposed condition, only a very small area will remain tributary to the concrete down drain that releases storm flows onto the Turfwood property.

1.4 FEMA

Based on the FEMA Flood Insurance Rate Map, the proposed Solana Highlands project is not impacted by and does not cause impact to the flood zone.

1.5 CEQA Summary

This section summarizes the results of the drainage analysis in the context of CEQA significance guidelines.

5.1 Drainage

5.1.1 Erosion and/or Sedimentation

Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?

No. The project will not substantially alter existing drainage patterns of the site area in a manner that would result in substantial erosion or siltation. The project does not alter the course of a stream or river.

- The proposed project drainage system safely intercepts, conveys, treats, provides hydromodification flow control, and detains the 100-year storm event peak discharge to the City of Solana Beach MS4 system without increasing the rate or frequency over that of the existing condition.

- In the existing condition storm flows discharging across the southerly property line have been associated with flooding, erosion and siltation. To reduce the drainage impacts to adjacent downstream properties, the project proposes to re-route the storm water to the easterly side of the project via new storm drain pipe to connect to the existing storm drain system. The proposed runoff will be conveyed to the HMP Biofiltration basins which will provide pollutant control treatment, hydromodification flow control, and detention of the 100-year storm event peak discharge such that it does not exceed the existing condition. All onsite runoff is ultimately conveyed to the same historic point in the City's MS4 drainage system.
- Five HMP Biofiltration basins placed throughout the site mitigate the proposed condition runoff such that no significant erosion and/or siltation are expected.

5.1.2 Flooding

Does the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?

No. The project will not substantially alter existing drainage patterns of the site area in a manner that would result in flooding on- or off-site. The project does not alter the course of a stream or river.

- The proposed project will not increase the peak 100-year storm event peak discharge rate from the on-site contributing watershed. The proposed HMP Biofiltration basins will provide pollutant control treatment, hydromodification flow control, and detention of the 100-year storm event peak discharge such that it does not exceed the existing condition.

5.1.3 Drainage System Capacity

Does the project create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems?

No. The project will not create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems.

- The project would affect any existing or planned City of Solana Beach MS4 facilities.

5.2 Flood Hazards

5.2.1 Residential Flood Hazard

Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, including County Floodplain Maps?

No. The project does not propose to locate any housing within the 100-year flood hazard area.

- The project does not propose any development within the 100-year floodplain or other Special Flood Hazard Area (SFHA) designated by FEMA or the County of San Diego.

5.2.2 Flood Flow

Does the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?

No. The project does not propose to locate any structures or grading in the floodplain that would impede or redirect flood flows.

- The project does not propose any development within the 100-year floodplain or other Special Flood Hazard Area (SFHA) designated by FEMA or the County of San Diego.

5.2.3 Flood Hazard

Does the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

No. The project does not place any people or structures at significant risk of loss, injury, or death due to flooding.

- The project does not propose any development within the 100-year floodplain or other Special Flood Hazard Area (SFHA) designated by FEMA or the County of San Diego.
- The project will ensure emergency access during significant flood events. The project is not located behind a levee or below a dam that would present a flood hazard upon its failure.

5.2.4 Other Hazards

Is the project at significant risk of inundation by seiche, tsunami, or mudflow?

No. The project is not located within an area at risk of inundation by seiche (lake slosh) tsunami, or mud flow.

5.3 Waiver and Release Agreements

The project does not alter downstream flow characteristics significantly, either due to increase in flow or flood condition, diversion of flow, or flow concentration. Therefore, it should not be necessary to obtain waiver and release agreements from any affected property owners.

1.6 Conclusion

As a result of the redevelopment of the Solana Highlands project, the storm water discharge southerly across the Turfwood property will be substantially reduced. The proposed HMP Biofiltration basins will provide pollutant control treatment, hydromodification flow control and attenuation of the 100-year storm event peak discharge from the site and release it into the City of Solana Beach MS4 storm drain system such that it will not cause an increase in hydraulic grade levels within that storm drain system. It is our professional opinion that the proposed drainage system will adequately intercept, detain and convey the 100-year storm event peak discharge to the historic point of discharge.

1.7 References

"San Diego County Hydrology Manual", revised June 2003, County of San Diego, Department of Public Works, Flood Control Section.

"Drainage Design Manual", City of San Diego, April 1984, addendum March 1989.

"California Regional Water Quality Control Board Order No. 2001-01," California Regional Water Quality Control Board, San Diego Region (SDRWQCB).

"Excavation and Grading," Solana Beach Municipal Code Chapter 15.40, City of Solana Beach.

2.0 METHODOLOGY

2.1 Introduction

The hydrologic model used to perform the hydrologic analysis presented in this report utilizes the Rational Method (RM) equation, Q=CIA. The RM formula estimates the peak rate of runoff based on the variables of area, runoff coefficient, and rainfall intensity. The rainfall intensity (I) is equal to:

$$I = 7.44 \times P_6 \times D^{-0.645}$$

Where:

I = Intensity (inches per hour)
P_6 = 6-hour precipitation (inches)
D = duration (minutes – use Tc)

Using the Time of Concentration (Tc), which is the time required for a given element of water that originates at the most remote point of the basin being analyzed to reach the point at which the runoff from the basin is being analyzed. The RM equation determines the storm water runoff rate (Q) for a given basin in terms of flow (typically in cubic feet per second (cfs) but sometimes as gallons per minute (gpm)). The RM equation is as follows:

$$Q = CIA$$

Where:

Q= flow (cubic feet per second)
C = runoff coefficient, ratio of rainfall that produces storm water runoff (runoff vs. infiltration/evaporation/absorption/etc)
I = average rainfall intensity for a duration equal to the Tc for the Area (inches per hour)
A = drainage area contributing to the basin (acres)

The RM equation assumes that the storm event being analyzed delivers precipitation to the entire basin uniformly, and therefore the peak discharge rate will occur when a raindrop falls at the most remote portion of the basin arrives at the point of analysis. The RM also assumes that the fraction of rainfall that becomes runoff or the runoff coefficient C is not affected by the storm intensity, I, or the precipitation zone number.

In addition to the above Rational Method assumptions, the conservative assumption that all runoff coefficients are based on type “D” soils has been utilized for this report.

2.2 County of San Diego Criteria

As defined by the County Hydrology Manual dated June 2003, the Rational Method is the preferred equation for determining the hydrologic characteristics of basins up to approximately one square mile in size. The County of San Diego has developed its own

tables, nomographs, and methodologies for analyzing storm water runoff for areas within the county. The County has also developed precipitation isopluvial contour maps that show even lines of rainfall anticipated from a given storm event (i.e. 100-year, 6-hour storm).

One of the variables of the RM equation is the runoff coefficient, C. The runoff coefficient is dependent only upon land use and soil type and the County of San Diego has developed a table of Runoff Coefficients for Urban Areas to be applied to basin located within the County of San Diego. The table categorizes the land use, the associated development density (dwelling units per acre) and the percentage of impervious area. Each of the categories listed has an associated runoff coefficient, C, for each soil type class.

The County has also illustrated in detail the methodology for determining the time of concentration, in particular the initial time of concentration. The County has adopted the Federal Aviation Agency's (FAA) overland time of flow equation. This equation essentially limits the flow path length for the initial time of concentration to lengths of 100 feet or less, and is dependent on land use and slope.

2.3 City of Solana Beach Standards

The City of Solana Beach has additional requirements for hydrology reports which are outlined in the Solana Beach Municipal Code (Ch. 15.40). Please refer to this chapter for further details.

2.4 Runoff Coefficient Determination

As stated in section 2.2, the runoff coefficient is dependent upon land use and soil type and the County of San Diego has developed a table of Runoff Coefficients for Urban Areas to be applied to basins located within the County of San Diego. The table categorizes the land use, the associated development density (dwelling units per acre) and the percentage of impervious area. A composite C value can also be calculated for an area based on soil type and impervious percentage using the following formula:

$$C = 0.90 \times (\% \text{ Impervious}) + Cp \times (1 - \% \text{ Impervious})$$

Where: Cp = Pervious Coefficient Runoff Value for the soil type (shown in Table 3-1 as Undisturbed Natural Terrain/Permanent Open Space, 0% Impervious).

The calculations contained herein figure a composite runoff coefficient for the onsite project areas based on the percentage of impervious area and the percentage of porous or landscape area. Refer to the Existing and Proposed Hydrologic Maps in Appendix B for the impervious areas and weighted runoff coefficients.

DECLARATION OF RESPONSIBLE CHARGE

I hereby declare that I am the Engineer of Work for this project. That I have exercised responsible charge over the design of the project as defined in section 6703 of the business and professions code, and that the design is consistent with current standards.

I understand that the check of project drawings and specifications by the County of San Diego is confined to a review only and does not relieve me, as engineer of work, of my responsibilities for project design.

9-21-2017

Michael H. Smith, R. C. E. 65090 Date

3.0 HYDROLOGY MODEL OUTPUT

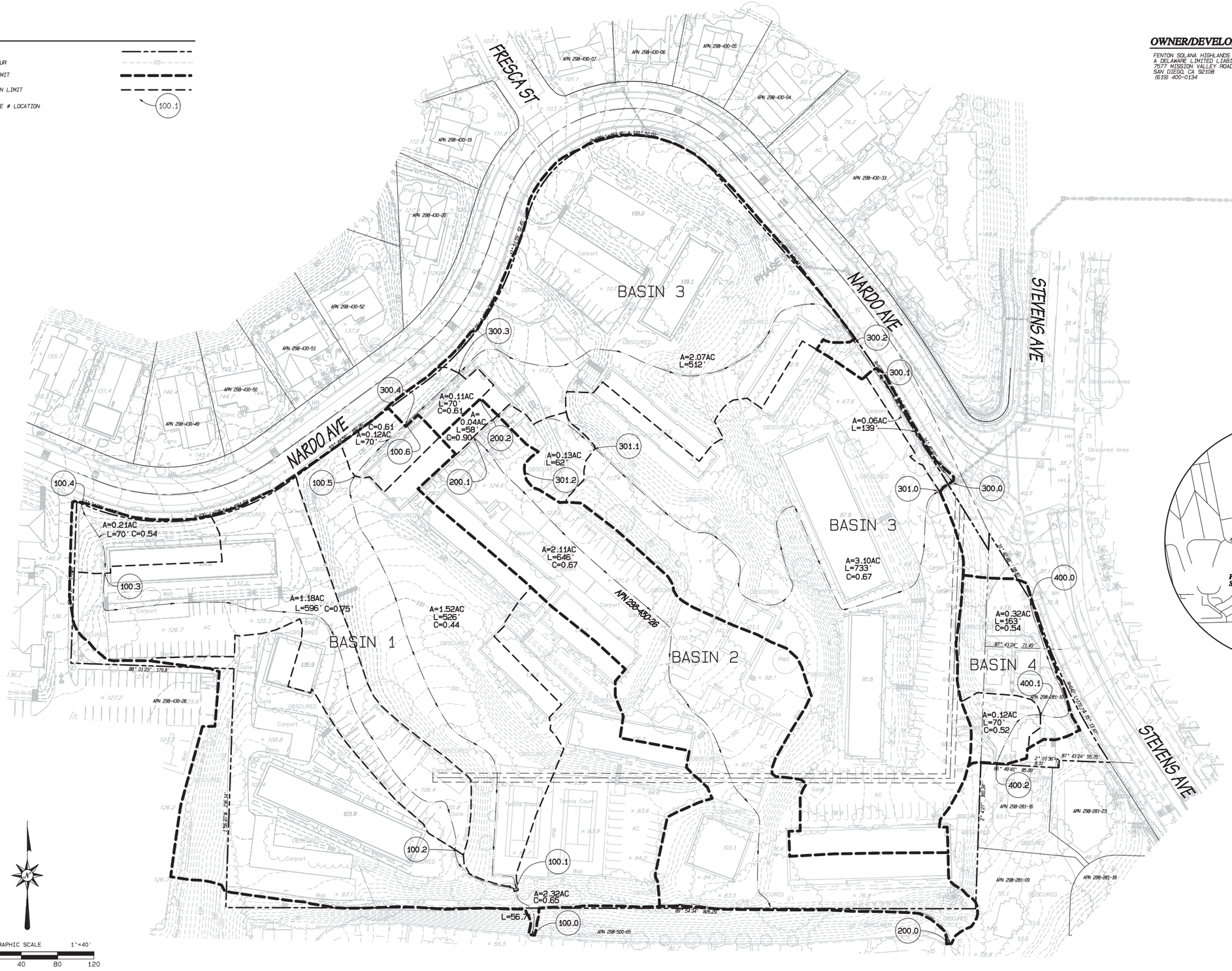
3.1 EXISTING CONDITION HYDROLOGY CALCULATIONS

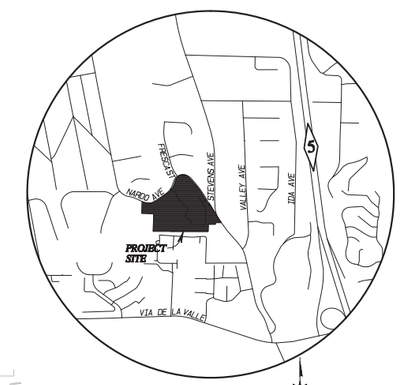
LEGEND:

PROPERTY LINE
EXISTING CONTOUR
MAJOR BASIN LIMIT
MINOR SUB-BASIN LIMIT
HYDROLOGIC NODE # LOCATION

OWNER/DEVELOPER:

FENTON SOLANA HIGHLANDS LLC.
A DELAWARE LIMITED LIABILITY COMPANY
7577 MISSION VALLEY ROAD #200
SAN DIEGO, CA 92108
(619) 400-0134





VICINITY MAP
NTS

PASCO LARET SUITER & ASSOCIATES
CIVIL ENGINEERING + LAND PLANNING + LAND SURVEYING
535 N Coast Highway 101 Ste A Solana Beach, CA 92075
ph 858.259.8212 | fx 858.259.4812 | plsaengineering.com

REVITALIZING SOLANA HIGHLANDS

EXISTING TOPOGRAPHY AND HYDROLOGY MAP

DEVELOPMENT REVIEW PERMIT
SUBMITTAL 1
5/02/14

HYD 1.0

```
****************************************************************************

            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
            Reference: SAN DIEGO COUNTY FLOOD CONTROL DISTRICT
                          2003,1985,1981 HYDROLOGY MANUAL
         (c) Copyright 1982-2008 Advanced Engineering Software (aes)
             Ver. 15.0 Release Date: 04/01/2008  License ID 1452

                           Analysis prepared by:

                     PASCO LARET SUITER AND ASSOCIATES
                          535 N. HWY. 101 SUITE A
                           SOLANA BEACH, CA 92075
                  PHONE (858) 259-8212 FAX (858) 259-4812

 ************************** DESCRIPTION OF STUDY **************************
* Existing condition hydrology analysis                                    *
* 100 year storm, D type soils                                             *
* See HYD. 2.0 for hydrology node locations.                               *
 ***************************************************************************

  FILE NAME: 1782E.DAT
  TIME/DATE OF STUDY: 09:36 08/08/2014
----------------------------------------------------------------------------
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
----------------------------------------------------------------------------
  2003 SAN DIEGO MANUAL CRITERIA

  USER SPECIFIED STORM EVENT(YEAR) = 100.00
  6-HOUR DURATION PRECIPITATION (INCHES) =   2.500
  SPECIFIED MINIMUM PIPE SIZE(INCH) =   4.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  SAN DIEGO HYDROLOGY MANUAL "C"-VALUES USED FOR RATIONAL METHOD
  NOTE: USE MODIFIED RATIONAL METHOD PROCEDURES FOR CONFLUENCE ANALYSIS
  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  ================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*

****************************************************************************
  FLOW PROCESS FROM NODE    100.60 TO NODE    100.50 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
============================================================================
```

```
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (1. DU/AC OR LESS) RUNOFF COEFFICIENT = .6100
  S.C.S. CURVE NUMBER (AMC II) =   0
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    70.00
  UPSTREAM ELEVATION(FEET) =    126.80
  DOWNSTREAM ELEVATION(FEET) =    126.00
  ELEVATION DIFFERENCE(FEET) =      0.80
  SUBAREA OVERLAND TIME OF FLOW(MIN.) =    7.058
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.274
  SUBAREA RUNOFF(CFS) =      0.39
  TOTAL AREA(ACRES) =      0.12   TOTAL RUNOFF(CFS) =      0.39

****************************************************************************
  FLOW PROCESS FROM NODE    100.50 TO NODE    100.10 IS CODE =  51
----------------------------------------------------------------------------
  >>>>>COMPUTE TRAPEZOIDAL CHANNEL FLOW<<<<<
  >>>>>TRAVELTIME THRU SUBAREA (EXISTING ELEMENT)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    126.00  DOWNSTREAM(FEET) =     86.00
  CHANNEL LENGTH THRU SUBAREA(FEET) =   526.00   CHANNEL SLOPE =  0.0760
  CHANNEL BASE(FEET) =   20.00   "Z" FACTOR =   2.000
  MANNING'S FACTOR = 0.030   MAXIMUM DEPTH(FEET) =   1.00
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  3.717
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (1. DU/AC OR LESS) RUNOFF COEFFICIENT = .4400
  S.C.S. CURVE NUMBER (AMC II) =   0
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       1.69
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   1.73
  AVERAGE FLOW DEPTH(FEET) =   0.05   TRAVEL TIME(MIN.) =   5.08
  Tc(MIN.) =   12.14
  SUBAREA AREA(ACRES) =     1.50       SUBAREA RUNOFF(CFS) =    2.45
  AREA-AVERAGE RUNOFF COEFFICIENT =  0.453
  TOTAL AREA(ACRES) =        1.6         PEAK FLOW RATE(CFS) =       2.73

  END OF SUBAREA CHANNEL FLOW HYDRAULICS:
  DEPTH(FEET) =  0.06   FLOW VELOCITY(FEET/SEC.) =   2.12
  LONGEST FLOWPATH FROM NODE    100.60 TO NODE    100.10 =     596.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    100.50 TO NODE    100.10 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =   12.14
  RAINFALL INTENSITY(INCH/HR) =   3.72
  TOTAL STREAM AREA(ACRES) =     1.62
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      2.73

****************************************************************************
  FLOW PROCESS FROM NODE    100.40 TO NODE    100.30 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
```

```
============================================================================
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (1. DU/AC OR LESS) RUNOFF COEFFICIENT = .5400
  S.C.S. CURVE NUMBER (AMC II) =   0
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    70.00
  UPSTREAM ELEVATION(FEET) =    149.00
  DOWNSTREAM ELEVATION(FEET) =    133.00
  ELEVATION DIFFERENCE(FEET) =     16.00
  SUBAREA OVERLAND TIME OF FLOW(MIN.) =    3.915
  WARNING: THE MAXIMUM OVERLAND FLOW SLOPE, 10.%, IS USED IN Tc CALCULATION!
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.587
  NOTE: RAINFALL INTENSITY IS BASED ON Tc = 5-MINUTE.
  SUBAREA RUNOFF(CFS) =      0.75
  TOTAL AREA(ACRES) =      0.21   TOTAL RUNOFF(CFS) =      0.75

****************************************************************************
  FLOW PROCESS FROM NODE    100.30 TO NODE    100.20 IS CODE =  61
----------------------------------------------------------------------------
  >>>>>COMPUTE STREET FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>(STANDARD CURB SECTION USED)<<<<<
============================================================================
  UPSTREAM ELEVATION(FEET) =  133.00  DOWNSTREAM ELEVATION(FEET) =  104.00
  STREET LENGTH(FEET) =   596.00   CURB HEIGHT(INCHES) =  6.0
  STREET HALFWIDTH(FEET) = 12.00

  DISTANCE FROM CROWN TO CROSSFALL GRADEBREAK(FEET) =   5.00
  INSIDE STREET CROSSFALL(DECIMAL) =  0.020
  OUTSIDE STREET CROSSFALL(DECIMAL)  =  0.020

  SPECIFIED NUMBER OF HALFSTREETS CARRYING RUNOFF =  1
  Manning's FRICTION FACTOR for Streetflow Section(curb-to-curb) =   0.0150

    **TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       3.28
    STREETFLOW MODEL RESULTS USING ESTIMATED FLOW:
    STREET FLOW DEPTH(FEET) =  0.29
    HALFSTREET FLOOD WIDTH(FEET) =    7.94
    AVERAGE FLOW VELOCITY(FEET/SEC.) =    4.38
    PRODUCT OF DEPTH&VELOCITY(FT*FT/SEC.) =    1.25
  STREET FLOW TRAVEL TIME(MIN.) =   2.27   Tc(MIN.) =    6.18
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.744
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (1. DU/AC OR LESS) RUNOFF COEFFICIENT = .7500
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT =  0.718
  SUBAREA AREA(ACRES) =    1.18      SUBAREA RUNOFF(CFS) =    5.08
  TOTAL AREA(ACRES) =        1.4        PEAK FLOW RATE(CFS) =       5.73

  END OF SUBAREA STREET FLOW HYDRAULICS:
  DEPTH(FEET) = 0.33   HALFSTREET FLOOD WIDTH(FEET) =  10.15
  FLOW VELOCITY(FEET/SEC.) =  4.99   DEPTH*VELOCITY(FT*FT/SEC.) =   1.64
  LONGEST FLOWPATH FROM NODE    100.40 TO NODE    100.20 =     666.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    100.20 TO NODE    100.10 IS CODE =  41
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING USER-SPECIFIED PIPESIZE (EXISTING ELEMENT)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   104.00  DOWNSTREAM(FEET) =    86.00
  FLOW LENGTH(FEET) =    85.00   MANNING'S N =  0.024
  DEPTH OF FLOW IN  24.0 INCH PIPE IS   5.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =  11.33
  GIVEN PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       5.73
  PIPE TRAVEL TIME(MIN.) =   0.13    Tc(MIN.) =    6.31
  LONGEST FLOWPATH FROM NODE    100.40 TO NODE    100.10 =     751.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    100.20 TO NODE    100.10 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =    6.31
  RAINFALL INTENSITY(INCH/HR) =   5.67
  TOTAL STREAM AREA(ACRES) =     1.39
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      5.73

  ** CONFLUENCE DATA **
  STREAM     RUNOFF       Tc      INTENSITY      AREA
  NUMBER      (CFS)     (MIN.)   (INCH/HOUR)    (ACRE)
      1        2.73    12.14        3.717          1.62
      2        5.73     6.31        5.670          1.39

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
  STREAM     RUNOFF      Tc      INTENSITY
  NUMBER      (CFS)    (MIN.)   (INCH/HOUR)
      1        7.15     6.31       5.670
      2        6.48    12.14       3.717

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =       7.15   Tc(MIN.) =    6.31
  TOTAL AREA(ACRES) =        3.0
  LONGEST FLOWPATH FROM NODE    100.40 TO NODE    100.10 =     751.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    100.10 TO NODE    100.00 IS CODE =  41
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING USER-SPECIFIED PIPESIZE (EXISTING ELEMENT)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    86.00  DOWNSTREAM(FEET) =    54.00
  FLOW LENGTH(FEET) =    56.70   MANNING'S N =  0.024
```

```
  DEPTH OF FLOW IN  24.0 INCH PIPE IS   4.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =  17.09
  GIVEN PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       7.15
  PIPE TRAVEL TIME(MIN.) =   0.06    Tc(MIN.) =    6.36
  LONGEST FLOWPATH FROM NODE    100.40 TO NODE    100.00 =     807.70 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    100.10 TO NODE    100.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.638
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (1. DU/AC OR LESS) RUNOFF COEFFICIENT = .6500
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT = 0.6078
  SUBAREA AREA(ACRES) =    2.32   SUBAREA RUNOFF(CFS) =    8.50
  TOTAL AREA(ACRES) =        5.3   TOTAL RUNOFF(CFS) =      18.27
  TC(MIN.) =    6.36

****************************************************************************
  FLOW PROCESS FROM NODE    300.40 TO NODE    300.30 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
============================================================================
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (1. DU/AC OR LESS) RUNOFF COEFFICIENT = .6100
  S.C.S. CURVE NUMBER (AMC II) =   0
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    70.00
  UPSTREAM ELEVATION(FEET) =    126.00
  DOWNSTREAM ELEVATION(FEET) =    124.60
  ELEVATION DIFFERENCE(FEET) =      1.40
  SUBAREA OVERLAND TIME OF FLOW(MIN.) =    5.857
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.948
  SUBAREA RUNOFF(CFS) =      0.40
  TOTAL AREA(ACRES) =      0.11   TOTAL RUNOFF(CFS) =      0.40

****************************************************************************
  FLOW PROCESS FROM NODE    300.30 TO NODE    300.20 IS CODE =  51
----------------------------------------------------------------------------
  >>>>>COMPUTE TRAPEZOIDAL CHANNEL FLOW<<<<<
  >>>>>TRAVELTIME THRU SUBAREA (EXISTING ELEMENT)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    124.60  DOWNSTREAM(FEET) =     68.00
  CHANNEL LENGTH THRU SUBAREA(FEET) =   512.00   CHANNEL SLOPE =  0.1105
  CHANNEL BASE(FEET) =    5.00   "Z" FACTOR =   2.000
  MANNING'S FACTOR = 0.030   MAXIMUM DEPTH(FEET) =   0.50
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  4.887
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (1. DU/AC OR LESS) RUNOFF COEFFICIENT = .4500
  S.C.S. CURVE NUMBER (AMC II) =   0
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       2.73
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   4.09
  AVERAGE FLOW DEPTH(FEET) =   0.13   TRAVEL TIME(MIN.) =   2.08
  Tc(MIN.) =    7.94
  SUBAREA AREA(ACRES) =     2.07       SUBAREA RUNOFF(CFS) =    4.55
  AREA-AVERAGE RUNOFF COEFFICIENT =  0.458
  TOTAL AREA(ACRES) =        2.2         PEAK FLOW RATE(CFS) =       4.88

  END OF SUBAREA CHANNEL FLOW HYDRAULICS:
  DEPTH(FEET) =  0.18   FLOW VELOCITY(FEET/SEC.) =   5.05
  LONGEST FLOWPATH FROM NODE    300.40 TO NODE    300.20 =     582.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    300.20 TO NODE    300.10 IS CODE =  41
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING USER-SPECIFIED PIPESIZE (EXISTING ELEMENT)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    68.00  DOWNSTREAM(FEET) =    62.00
  FLOW LENGTH(FEET) =   139.00   MANNING'S N =  0.024
  DEPTH OF FLOW IN  24.0 INCH PIPE IS   7.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.14
  GIVEN PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       4.88
  PIPE TRAVEL TIME(MIN.) =   0.38    Tc(MIN.) =    8.32
  LONGEST FLOWPATH FROM NODE    300.40 TO NODE    300.10 =     721.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    300.20 TO NODE    300.10 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  4.743
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (1. DU/AC OR LESS) RUNOFF COEFFICIENT = .3500
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT = 0.4566
  SUBAREA AREA(ACRES) =    0.03   SUBAREA RUNOFF(CFS) =    0.05
  TOTAL AREA(ACRES) =        2.2   TOTAL RUNOFF(CFS) =       4.88
  TC(MIN.) =    8.32
  NOTE: PEAK FLOW RATE DEFAULTED TO UPSTREAM VALUE

****************************************************************************
  FLOW PROCESS FROM NODE    300.10 TO NODE    300.00 IS CODE =  41
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING USER-SPECIFIED PIPESIZE (EXISTING ELEMENT)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    62.00  DOWNSTREAM(FEET) =    50.00
  FLOW LENGTH(FEET) =   139.00   MANNING'S N =  0.024
  DEPTH OF FLOW IN  24.0 INCH PIPE IS   6.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.86
  GIVEN PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       4.88
  PIPE TRAVEL TIME(MIN.) =   0.29    Tc(MIN.) =    8.61
  LONGEST FLOWPATH FROM NODE    300.40 TO NODE    300.00 =     860.00 FEET.
```

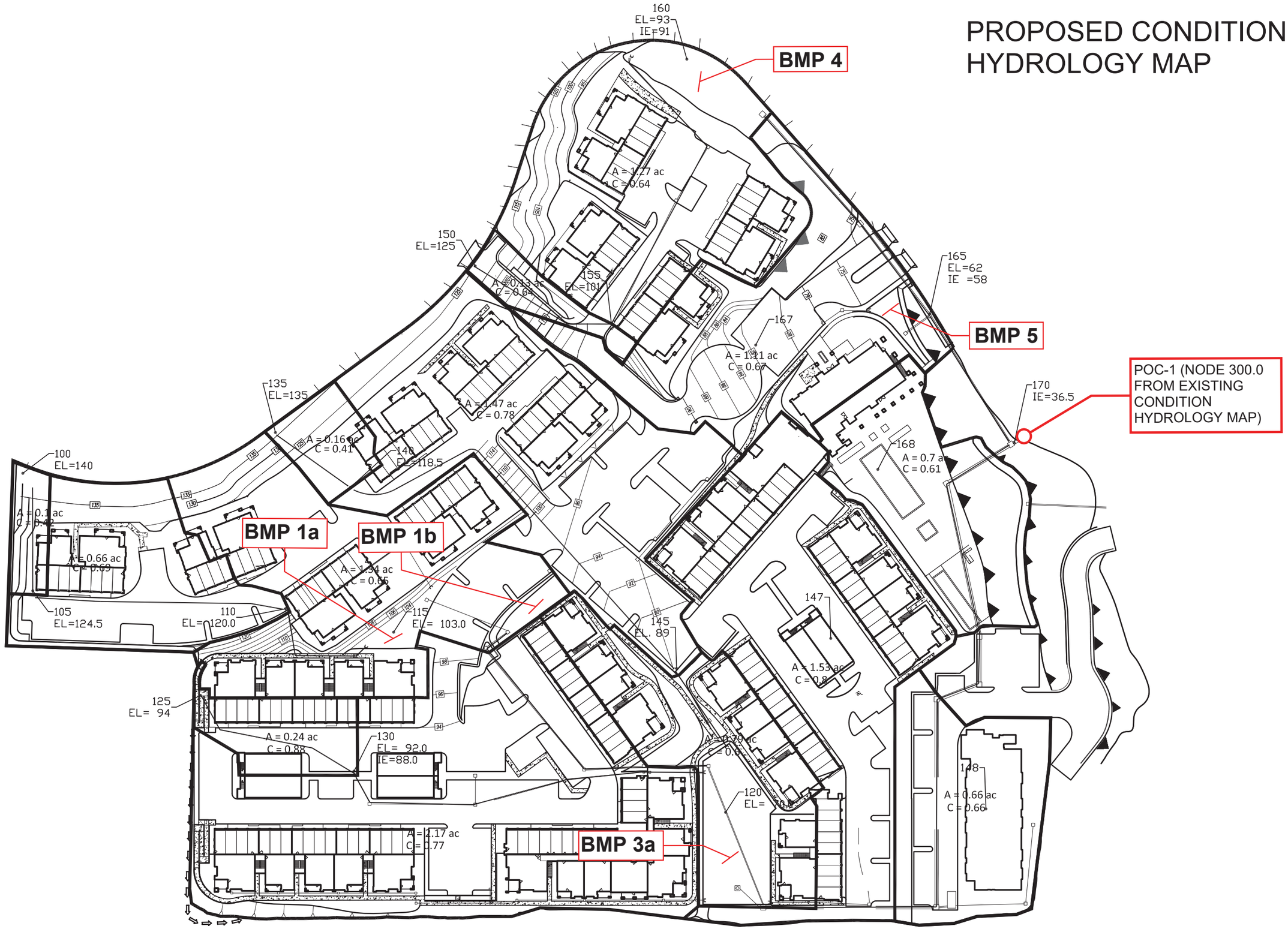
```
****************************************************************************
  FLOW PROCESS FROM NODE    300.10 TO NODE    300.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  4.638
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (1. DU/AC OR LESS) RUNOFF COEFFICIENT = .3500
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT = 0.4538
  SUBAREA AREA(ACRES) =    0.06   SUBAREA RUNOFF(CFS) =    0.10
  TOTAL AREA(ACRES) =        2.3   TOTAL RUNOFF(CFS) =       4.88
  TC(MIN.) =    8.61
  NOTE: PEAK FLOW RATE DEFAULTED TO UPSTREAM VALUE

****************************************************************************
  FLOW PROCESS FROM NODE    300.10 TO NODE    300.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =    8.61
  RAINFALL INTENSITY(INCH/HR) =   4.64
  TOTAL STREAM AREA(ACRES) =     2.27
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      4.88

****************************************************************************
  FLOW PROCESS FROM NODE    301.20 TO NODE    301.10 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
============================================================================
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (1. DU/AC OR LESS) RUNOFF COEFFICIENT = .3500
  S.C.S. CURVE NUMBER (AMC II) =   0
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    62.00
  UPSTREAM ELEVATION(FEET) =    125.00
  DOWNSTREAM ELEVATION(FEET) =    118.00
  ELEVATION DIFFERENCE(FEET) =      7.00
  SUBAREA OVERLAND TIME OF FLOW(MIN.) =    4.934
  WARNING: THE MAXIMUM OVERLAND FLOW SLOPE, 10.%, IS USED IN Tc CALCULATION!
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.587
  NOTE: RAINFALL INTENSITY IS BASED ON Tc = 5-MINUTE.
  SUBAREA RUNOFF(CFS) =      0.30
  TOTAL AREA(ACRES) =      0.13   TOTAL RUNOFF(CFS) =      0.30

****************************************************************************
  FLOW PROCESS FROM NODE    301.10 TO NODE    301.00 IS CODE =  51
----------------------------------------------------------------------------
  >>>>>COMPUTE TRAPEZOIDAL CHANNEL FLOW<<<<<
  >>>>>TRAVELTIME THRU SUBAREA (EXISTING ELEMENT)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    118.00  DOWNSTREAM(FEET) =     56.00
  CHANNEL LENGTH THRU SUBAREA(FEET) =   733.00   CHANNEL SLOPE =  0.0846
  CHANNEL BASE(FEET) =    5.00   "Z" FACTOR =   2.000
  MANNING'S FACTOR = 0.030   MAXIMUM DEPTH(FEET) =   0.50
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.080
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (1. DU/AC OR LESS) RUNOFF COEFFICIENT = .6700
  S.C.S. CURVE NUMBER (AMC II) =   0
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       5.43
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   4.80
  AVERAGE FLOW DEPTH(FEET) =   0.21   TRAVEL TIME(MIN.) =   2.55
  Tc(MIN.) =    7.48
  SUBAREA AREA(ACRES) =     3.10       SUBAREA RUNOFF(CFS) =   10.55
  AREA-AVERAGE RUNOFF COEFFICIENT =  0.657
  TOTAL AREA(ACRES) =        3.2         PEAK FLOW RATE(CFS) =      10.78

  END OF SUBAREA CHANNEL FLOW HYDRAULICS:
  DEPTH(FEET) =  0.32   FLOW VELOCITY(FEET/SEC.) =   6.07
  LONGEST FLOWPATH FROM NODE    301.20 TO NODE    301.00 =     795.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    301.00 TO NODE    300.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    56.00  DOWNSTREAM(FEET) =    50.00
  FLOW LENGTH(FEET) =    18.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   6.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =  25.98
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      10.78
  PIPE TRAVEL TIME(MIN.) =   0.01    Tc(MIN.) =    7.49
  LONGEST FLOWPATH FROM NODE    301.20 TO NODE    300.00 =     813.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    301.00 TO NODE    300.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =    7.49
  RAINFALL INTENSITY(INCH/HR) =   5.07
  TOTAL STREAM AREA(ACRES) =     3.23
  PEAK FLOW RATE(CFS) AT CONFLUENCE =     10.78

  ** CONFLUENCE DATA **
  STREAM     RUNOFF       Tc      INTENSITY      AREA
  NUMBER      (CFS)     (MIN.)   (INCH/HOUR)    (ACRE)
      1        4.88     8.61        4.638          2.27
      2       10.78     7.49        5.075          3.23

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
```

```
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
  STREAM     RUNOFF      Tc      INTENSITY
  NUMBER      (CFS)    (MIN.)   (INCH/HOUR)
      1       15.03     7.49       5.075
      2       14.73     8.61       4.638

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      15.03   Tc(MIN.) =    7.49
  TOTAL AREA(ACRES) =        5.5
  LONGEST FLOWPATH FROM NODE    300.40 TO NODE    300.00 =     860.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    400.20 TO NODE    400.10 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
============================================================================
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (1. DU/AC OR LESS) RUNOFF COEFFICIENT = .5200
  S.C.S. CURVE NUMBER (AMC II) =   0
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    70.00
  UPSTREAM ELEVATION(FEET) =     68.00
  DOWNSTREAM ELEVATION(FEET) =     56.00
  ELEVATION DIFFERENCE(FEET) =     12.00
  SUBAREA OVERLAND TIME OF FLOW(MIN.) =    4.055
  WARNING: THE MAXIMUM OVERLAND FLOW SLOPE, 10.%, IS USED IN Tc CALCULATION!
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.587
  NOTE: RAINFALL INTENSITY IS BASED ON Tc = 5-MINUTE.
  SUBAREA RUNOFF(CFS) =      0.41
  TOTAL AREA(ACRES) =      0.12   TOTAL RUNOFF(CFS) =      0.41

****************************************************************************
  FLOW PROCESS FROM NODE    400.10 TO NODE    400.00 IS CODE =  51
----------------------------------------------------------------------------
  >>>>>COMPUTE TRAPEZOIDAL CHANNEL FLOW<<<<<
  >>>>>TRAVELTIME THRU SUBAREA (EXISTING ELEMENT)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =     56.00  DOWNSTREAM(FEET) =     36.00
  CHANNEL LENGTH THRU SUBAREA(FEET) =   163.00   CHANNEL SLOPE =  0.1227
  CHANNEL BASE(FEET) =    5.00   "Z" FACTOR =   2.000
  MANNING'S FACTOR = 0.030   MAXIMUM DEPTH(FEET) =   0.50
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.587
  NOTE: RAINFALL INTENSITY IS BASED ON Tc = 5-MINUTE.
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (1. DU/AC OR LESS) RUNOFF COEFFICIENT = .5400
  S.C.S. CURVE NUMBER (AMC II) =   0
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       0.98
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   2.90
  AVERAGE FLOW DEPTH(FEET) =   0.07   TRAVEL TIME(MIN.) =   0.94
  Tc(MIN.) =    4.99
  SUBAREA AREA(ACRES) =     0.32       SUBAREA RUNOFF(CFS) =    1.14
  AREA-AVERAGE RUNOFF COEFFICIENT =  0.535
  TOTAL AREA(ACRES) =        0.4         PEAK FLOW RATE(CFS) =       1.55

  END OF SUBAREA CHANNEL FLOW HYDRAULICS:
  DEPTH(FEET) =  0.09   FLOW VELOCITY(FEET/SEC.) =   3.37
  LONGEST FLOWPATH FROM NODE    400.20 TO NODE    400.00 =     233.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    200.20 TO NODE    200.10 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
============================================================================
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (1. DU/AC OR LESS) RUNOFF COEFFICIENT = .9000
  S.C.S. CURVE NUMBER (AMC II) =   0
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    58.00
  UPSTREAM ELEVATION(FEET) =    143.60
  DOWNSTREAM ELEVATION(FEET) =    143.00
  ELEVATION DIFFERENCE(FEET) =      0.60
  SUBAREA OVERLAND TIME OF FLOW(MIN.) =    2.711
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.587
  NOTE: RAINFALL INTENSITY IS BASED ON Tc = 5-MINUTE.
  SUBAREA RUNOFF(CFS) =      0.24
  TOTAL AREA(ACRES) =      0.04   TOTAL RUNOFF(CFS) =      0.24

****************************************************************************
  FLOW PROCESS FROM NODE    200.10 TO NODE    200.00 IS CODE =  61
----------------------------------------------------------------------------
  >>>>>COMPUTE STREET FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>(STANDARD CURB SECTION USED)<<<<<
============================================================================
  UPSTREAM ELEVATION(FEET) =  126.80  DOWNSTREAM ELEVATION(FEET) =   46.00
  STREET LENGTH(FEET) =   646.00   CURB HEIGHT(INCHES) =  6.0
  STREET HALFWIDTH(FEET) = 12.00

  DISTANCE FROM CROWN TO CROSSFALL GRADEBREAK(FEET) =   5.00
  INSIDE STREET CROSSFALL(DECIMAL) =  0.020
  OUTSIDE STREET CROSSFALL(DECIMAL)  =  0.020

  SPECIFIED NUMBER OF HALFSTREETS CARRYING RUNOFF =  1
  Manning's FRICTION FACTOR for Streetflow Section(curb-to-curb) =   0.0150

    **TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       4.89
    STREETFLOW MODEL RESULTS USING ESTIMATED FLOW:
    STREET FLOW DEPTH(FEET) =  0.28
    HALFSTREET FLOOD WIDTH(FEET) =    7.69
    AVERAGE FLOW VELOCITY(FEET/SEC.) =    6.89
    PRODUCT OF DEPTH&VELOCITY(FT*FT/SEC.) =    1.93
  STREET FLOW TRAVEL TIME(MIN.) =   1.56   Tc(MIN.) =    4.27
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.587
  NOTE: RAINFALL INTENSITY IS BASED ON Tc = 5-MINUTE.
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (1. DU/AC OR LESS) RUNOFF COEFFICIENT = .6700
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT =  0.674
  SUBAREA AREA(ACRES) =    2.11      SUBAREA RUNOFF(CFS) =    9.31
```

```
  TOTAL AREA(ACRES) =        2.1        PEAK FLOW RATE(CFS) =       9.55

  END OF SUBAREA STREET FLOW HYDRAULICS:
  DEPTH(FEET) = 0.33   HALFSTREET FLOOD WIDTH(FEET) =  10.32
  FLOW VELOCITY(FEET/SEC.) =  8.07   DEPTH*VELOCITY(FT*FT/SEC.) =   2.69
  LONGEST FLOWPATH FROM NODE    200.20 TO NODE    200.00 =     704.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        2.1  TC(MIN.) =      4.27
  PEAK FLOW RATE(CFS)   =       9.55
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

3.2 DEVELOPED CONDITION HYDROLOGY CALCULATIONS

PROPOSED CONDITION HYDROLOGY MAP



```
****************************************************************************

            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
            Reference: SAN DIEGO COUNTY FLOOD CONTROL DISTRICT
                         2003,1985,1981 HYDROLOGY MANUAL
         (c) Copyright 1982-2008 Advanced Engineering Software (aes)
             Ver. 15.0 Release Date: 04/01/2008  License ID 1452

                           Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* 1782  SOLANA HIGHLANDS                                                 *
* PROPOSED CONDITION                                                     *
* 100-YR                                                                 *
 ************************************************************************

  FILE NAME: 1782P00.DAT
  TIME/DATE OF STUDY: 15:02 09/13/2017
----------------------------------------------------------------------------
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
----------------------------------------------------------------------------
  2003 SAN DIEGO MANUAL CRITERIA

  USER SPECIFIED STORM EVENT(YEAR) = 100.00
  6-HOUR DURATION PRECIPITATION (INCHES) =   2.500
  SPECIFIED MINIMUM PIPE SIZE(INCH) =   8.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.90
  SAN DIEGO HYDROLOGY MANUAL "C"-VALUES USED FOR RATIONAL METHOD
  NOTE: USE MODIFIED RATIONAL METHOD PROCEDURES FOR CONFLUENCE ANALYSIS
  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150
  2   12.0      7.0    0.020/0.020/0.020   0.50    1.50 0.0100 0.125 0.0180

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.50 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*

****************************************************************************
  FLOW PROCESS FROM NODE    100.00 TO NODE    105.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
============================================================================
  *USER SPECIFIED(SUBAREA):
  USER-SPECIFIED RUNOFF COEFFICIENT = .4200
  S.C.S. CURVE NUMBER (AMC II) =   0
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   100.00
  UPSTREAM ELEVATION(FEET) =    140.00
  DOWNSTREAM ELEVATION(FEET) =    124.50
  ELEVATION DIFFERENCE(FEET) =     15.50
  SUBAREA OVERLAND TIME OF FLOW(MIN.) =    5.682
  WARNING: THE MAXIMUM OVERLAND FLOW SLOPE, 10.%, IS USED IN Tc CALCULATION!
```



```
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.066
  SUBAREA RUNOFF(CFS) =      0.25
  TOTAL AREA(ACRES) =      0.10   TOTAL RUNOFF(CFS) =      0.25

****************************************************************************
  FLOW PROCESS FROM NODE    105.00 TO NODE    110.00 IS CODE =  62
----------------------------------------------------------------------------
  >>>>>COMPUTE STREET FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>(STREET TABLE SECTION #  2 USED)<<<<<
============================================================================
  UPSTREAM ELEVATION(FEET) =  124.50  DOWNSTREAM ELEVATION(FEET) =  120.00
  STREET LENGTH(FEET) =   240.00   CURB HEIGHT(INCHES) =  6.0
  STREET HALFWIDTH(FEET) = 12.00

  DISTANCE FROM CROWN TO CROSSFALL GRADEBREAK(FEET) =   7.00
  INSIDE STREET CROSSFALL(DECIMAL) =  0.020
  OUTSIDE STREET CROSSFALL(DECIMAL)  =  0.020

  SPECIFIED NUMBER OF HALFSTREETS CARRYING RUNOFF =  1
  STREET PARKWAY CROSSFALL(DECIMAL)  =  0.020
  Manning's FRICTION FACTOR for Streetflow Section(curb-to-curb) =   0.0180
  Manning's FRICTION FACTOR for Back-of-Walk Flow Section =   0.0200

    **TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       1.40
    STREETFLOW MODEL RESULTS USING ESTIMATED FLOW:
    STREET FLOW DEPTH(FEET) =  0.25
    HALFSTREET FLOOD WIDTH(FEET) =    7.49
    AVERAGE FLOW VELOCITY(FEET/SEC.) =    2.16
    PRODUCT OF DEPTH&VELOCITY(FT*FT/SEC.) =    0.55
  STREET FLOW TRAVEL TIME(MIN.) =   1.86   Tc(MIN.) =    7.54
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.055
  *USER SPECIFIED(SUBAREA):
  USER-SPECIFIED RUNOFF COEFFICIENT = .6900
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT =  0.654
  SUBAREA AREA(ACRES) =    0.66      SUBAREA RUNOFF(CFS) =    2.30
  TOTAL AREA(ACRES) =        0.8        PEAK FLOW RATE(CFS) =       2.51

  END OF SUBAREA STREET FLOW HYDRAULICS:
  DEPTH(FEET) = 0.30   HALFSTREET FLOOD WIDTH(FEET) =   9.68
  FLOW VELOCITY(FEET/SEC.) =  2.46   DEPTH*VELOCITY(FT*FT/SEC.) =   0.73
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    110.00 =     340.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    110.00 TO NODE    115.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   115.00  DOWNSTREAM(FEET) =   103.00
  FLOW LENGTH(FEET) =   113.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN   9.0 INCH PIPE IS   4.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =  11.52
  ESTIMATED PIPE DIAMETER(INCH) =   9.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.51
  PIPE TRAVEL TIME(MIN.) =   0.16    Tc(MIN.) =    7.70
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    115.00 =     453.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    110.00 TO NODE    115.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  4.986
```

```
  *USER SPECIFIED(SUBAREA):
  USER-SPECIFIED RUNOFF COEFFICIENT = .6500
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT = 0.6516
  SUBAREA AREA(ACRES) =    1.34   SUBAREA RUNOFF(CFS) =    4.34
  TOTAL AREA(ACRES) =        2.1   TOTAL RUNOFF(CFS) =       6.82
  TC(MIN.) =    7.70

****************************************************************************
  FLOW PROCESS FROM NODE    115.00 TO NODE    120.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   103.00  DOWNSTREAM(FEET) =    70.00
  FLOW LENGTH(FEET) =   290.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   6.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =  15.16
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       6.82
  PIPE TRAVEL TIME(MIN.) =   0.32    Tc(MIN.) =    8.02
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    120.00 =     743.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    120.00 TO NODE    120.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  3
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =    8.02
  RAINFALL INTENSITY(INCH/HR) =   4.86
  TOTAL STREAM AREA(ACRES) =     2.10
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      6.82

****************************************************************************
  FLOW PROCESS FROM NODE    125.00 TO NODE    130.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
============================================================================
  *USER SPECIFIED(SUBAREA):
  USER-SPECIFIED RUNOFF COEFFICIENT = .8800
  S.C.S. CURVE NUMBER (AMC II) =   0
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   175.00
  UPSTREAM ELEVATION(FEET) =     94.00
  DOWNSTREAM ELEVATION(FEET) =     92.00
  ELEVATION DIFFERENCE(FEET) =      2.00
  SUBAREA OVERLAND TIME OF FLOW(MIN.) =    2.969
  WARNING: INITIAL SUBAREA FLOW PATH LENGTH IS GREATER THAN
           THE MAXIMUM OVERLAND FLOW LENGTH =    61.43
           (Reference: Table 3-1B of Hydrology Manual)
           THE MAXIMUM OVERLAND FLOW LENGTH IS USED IN Tc CALCULATION!
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.587
  NOTE: RAINFALL INTENSITY IS BASED ON Tc = 5-MINUTE.
  SUBAREA RUNOFF(CFS) =      1.39
  TOTAL AREA(ACRES) =      0.24   TOTAL RUNOFF(CFS) =      1.39

****************************************************************************
  FLOW PROCESS FROM NODE    130.00 TO NODE    120.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    88.00  DOWNSTREAM(FEET) =    70.00
```



```
  FLOW LENGTH(FEET) =   350.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN   9.0 INCH PIPE IS   3.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.58
  ESTIMATED PIPE DIAMETER(INCH) =   9.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       1.39
  PIPE TRAVEL TIME(MIN.) =   0.77    Tc(MIN.) =    3.74
  LONGEST FLOWPATH FROM NODE    125.00 TO NODE    120.00 =     525.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    130.00 TO NODE    120.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.587
  NOTE: RAINFALL INTENSITY IS BASED ON Tc = 5-MINUTE.
  *USER SPECIFIED(SUBAREA):
  USER-SPECIFIED RUNOFF COEFFICIENT = .7700
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT = 0.7810
  SUBAREA AREA(ACRES) =    2.17   SUBAREA RUNOFF(CFS) =   11.01
  TOTAL AREA(ACRES) =        2.4   TOTAL RUNOFF(CFS) =      12.40
  TC(MIN.) =    3.74

****************************************************************************
  FLOW PROCESS FROM NODE    120.00 TO NODE    120.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  3
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =    3.74
  RAINFALL INTENSITY(INCH/HR) =   6.59
  TOTAL STREAM AREA(ACRES) =     2.41
  PEAK FLOW RATE(CFS) AT CONFLUENCE =     12.40

****************************************************************************
  FLOW PROCESS FROM NODE    135.00 TO NODE    140.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
============================================================================
  *USER SPECIFIED(SUBAREA):
  USER-SPECIFIED RUNOFF COEFFICIENT = .4100
  S.C.S. CURVE NUMBER (AMC II) =   0
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    85.00
  UPSTREAM ELEVATION(FEET) =    135.00
  DOWNSTREAM ELEVATION(FEET) =    118.50
  ELEVATION DIFFERENCE(FEET) =     16.50
  SUBAREA OVERLAND TIME OF FLOW(MIN.) =    5.315
  WARNING: THE MAXIMUM OVERLAND FLOW SLOPE, 10.%, IS USED IN Tc CALCULATION!
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.332
  SUBAREA RUNOFF(CFS) =      0.42
  TOTAL AREA(ACRES) =      0.16   TOTAL RUNOFF(CFS) =      0.42

****************************************************************************
  FLOW PROCESS FROM NODE    140.00 TO NODE    145.00 IS CODE =  62
----------------------------------------------------------------------------
  >>>>>COMPUTE STREET FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>(STREET TABLE SECTION #  2 USED)<<<<<
============================================================================
  UPSTREAM ELEVATION(FEET) =  118.50  DOWNSTREAM ELEVATION(FEET) =   89.00
  STREET LENGTH(FEET) =   412.00   CURB HEIGHT(INCHES) =  6.0
  STREET HALFWIDTH(FEET) = 12.00

  DISTANCE FROM CROWN TO CROSSFALL GRADEBREAK(FEET) =   7.00
```

```
  INSIDE STREET CROSSFALL(DECIMAL) =  0.020
  OUTSIDE STREET CROSSFALL(DECIMAL)  =  0.020

  SPECIFIED NUMBER OF HALFSTREETS CARRYING RUNOFF =  2
  STREET PARKWAY CROSSFALL(DECIMAL)  =  0.020
  Manning's FRICTION FACTOR for Streetflow Section(curb-to-curb) =   0.0180
  Manning's FRICTION FACTOR for Back-of-Walk Flow Section =   0.0200

    **TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       3.39
    STREETFLOW MODEL RESULTS USING ESTIMATED FLOW:
    STREET FLOW DEPTH(FEET) =  0.23
    HALFSTREET FLOOD WIDTH(FEET) =    6.01
    AVERAGE FLOW VELOCITY(FEET/SEC.) =    3.78
    PRODUCT OF DEPTH&VELOCITY(FT*FT/SEC.) =    0.85
  STREET FLOW TRAVEL TIME(MIN.) =   1.82   Tc(MIN.) =    7.13
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.239
  *USER SPECIFIED(SUBAREA):
  USER-SPECIFIED RUNOFF COEFFICIENT = .7800
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT =  0.744
  SUBAREA AREA(ACRES) =    1.47      SUBAREA RUNOFF(CFS) =    6.01
  TOTAL AREA(ACRES) =        1.6         PEAK FLOW RATE(CFS) =       6.35

  END OF SUBAREA STREET FLOW HYDRAULICS:
  DEPTH(FEET) = 0.27   HALFSTREET FLOOD WIDTH(FEET) =   8.04
  FLOW VELOCITY(FEET/SEC.) =  4.34   DEPTH*VELOCITY(FT*FT/SEC.) =   1.15
  LONGEST FLOWPATH FROM NODE    135.00 TO NODE    145.00 =     497.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    145.00 TO NODE    120.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    84.00  DOWNSTREAM(FEET) =    70.00
  FLOW LENGTH(FEET) =    85.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN   9.0 INCH PIPE IS   7.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =  16.45
  ESTIMATED PIPE DIAMETER(INCH) =   9.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       6.35
  PIPE TRAVEL TIME(MIN.) =   0.09    Tc(MIN.) =    7.22
  LONGEST FLOWPATH FROM NODE    135.00 TO NODE    120.00 =     582.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    147.00 TO NODE    120.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.198
  *USER SPECIFIED(SUBAREA):
  USER-SPECIFIED RUNOFF COEFFICIENT = .8000
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT = 0.7709
  SUBAREA AREA(ACRES) =    1.53   SUBAREA RUNOFF(CFS) =    6.36
  TOTAL AREA(ACRES) =        3.2   TOTAL RUNOFF(CFS) =      12.66
  TC(MIN.) =    7.22

****************************************************************************
  FLOW PROCESS FROM NODE    148.00 TO NODE    120.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.198
  *USER SPECIFIED(SUBAREA):
```



```
  USER-SPECIFIED RUNOFF COEFFICIENT = .6600
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT = 0.7518
  SUBAREA AREA(ACRES) =    0.66   SUBAREA RUNOFF(CFS) =    2.26
  TOTAL AREA(ACRES) =        3.8   TOTAL RUNOFF(CFS) =      14.93
  TC(MIN.) =    7.22

****************************************************************************
  FLOW PROCESS FROM NODE    120.00 TO NODE    120.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  3
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  3 ARE:
  TIME OF CONCENTRATION(MIN.) =    7.22
  RAINFALL INTENSITY(INCH/HR) =   5.20
  TOTAL STREAM AREA(ACRES) =     3.82
  PEAK FLOW RATE(CFS) AT CONFLUENCE =     14.93

  ** CONFLUENCE DATA **
  STREAM     RUNOFF       Tc      INTENSITY      AREA
  NUMBER      (CFS)     (MIN.)   (INCH/HOUR)    (ACRE)
      1        6.82     8.02        4.857          2.10
      2       12.40     3.74        6.587          2.41
      3       14.93     7.22        5.198          3.82

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  3 STREAMS.

  ** PEAK FLOW RATE TABLE **
  STREAM     RUNOFF       Tc      INTENSITY
  NUMBER      (CFS)    (MIN.)   (INCH/HOUR)
      1       23.31     3.74       6.587
      2       30.85     7.22       5.198
      3       29.91     8.02       4.857

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      30.85   Tc(MIN.) =    7.22
  TOTAL AREA(ACRES) =        8.3
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    120.00 =     743.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    120.00 TO NODE    120.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.198
  *USER SPECIFIED(SUBAREA):
  USER-SPECIFIED RUNOFF COEFFICIENT = .6000
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT = 0.7233
  SUBAREA AREA(ACRES) =    0.79   SUBAREA RUNOFF(CFS) =    2.46
  TOTAL AREA(ACRES) =        9.1   TOTAL RUNOFF(CFS) =      34.29
  TC(MIN.) =    7.22

****************************************************************************
  FLOW PROCESS FROM NODE    120.00 TO NODE    170.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    66.00  DOWNSTREAM(FEET) =    36.50
  FLOW LENGTH(FEET) =   672.00   MANNING'S N =  0.013
```

```
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  15.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =  15.76
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      34.29
  PIPE TRAVEL TIME(MIN.) =   0.71    Tc(MIN.) =    7.93
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    170.00 =    1415.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    170.00 TO NODE    170.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =    7.93
  RAINFALL INTENSITY(INCH/HR) =   4.89
  TOTAL STREAM AREA(ACRES) =     9.12
  PEAK FLOW RATE(CFS) AT CONFLUENCE =     34.29

****************************************************************************
  FLOW PROCESS FROM NODE    150.00 TO NODE    155.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
============================================================================
  *USER SPECIFIED(SUBAREA):
  USER-SPECIFIED RUNOFF COEFFICIENT = .6400
  S.C.S. CURVE NUMBER (AMC II) =   0
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   140.00
  UPSTREAM ELEVATION(FEET) =    125.00
  DOWNSTREAM ELEVATION(FEET) =    101.00
  ELEVATION DIFFERENCE(FEET) =     24.00
  SUBAREA OVERLAND TIME OF FLOW(MIN.) =    3.844
  WARNING: INITIAL SUBAREA FLOW PATH LENGTH IS GREATER THAN
           THE MAXIMUM OVERLAND FLOW LENGTH =   100.00
           (Reference: Table 3-1B of Hydrology Manual)
           THE MAXIMUM OVERLAND FLOW LENGTH IS USED IN Tc CALCULATION!
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.587
  NOTE: RAINFALL INTENSITY IS BASED ON Tc = 5-MINUTE.
  SUBAREA RUNOFF(CFS) =      0.55
  TOTAL AREA(ACRES) =      0.13   TOTAL RUNOFF(CFS) =      0.55

****************************************************************************
  FLOW PROCESS FROM NODE    155.00 TO NODE    160.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    95.00  DOWNSTREAM(FEET) =    91.00
  FLOW LENGTH(FEET) =   313.00   MANNING'S N =  0.013
  ESTIMATED PIPE DIAMETER(INCH) INCREASED TO  8.000
  DEPTH OF FLOW IN   8.0 INCH PIPE IS   3.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.56
  ESTIMATED PIPE DIAMETER(INCH) =   8.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       0.55
  PIPE TRAVEL TIME(MIN.) =   1.46    Tc(MIN.) =    5.31
  LONGEST FLOWPATH FROM NODE    150.00 TO NODE    160.00 =     453.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    155.00 TO NODE    160.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.338
  *USER SPECIFIED(SUBAREA):
```



```
  USER-SPECIFIED RUNOFF COEFFICIENT = .6400
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT = 0.6400
  SUBAREA AREA(ACRES) =    1.27   SUBAREA RUNOFF(CFS) =    5.15
  TOTAL AREA(ACRES) =        1.4   TOTAL RUNOFF(CFS) =       5.68
  TC(MIN.) =    5.31

****************************************************************************
  FLOW PROCESS FROM NODE    160.00 TO NODE    165.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    80.00  DOWNSTREAM(FEET) =    58.00
  FLOW LENGTH(FEET) =   245.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   6.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =  13.26
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       5.68
  PIPE TRAVEL TIME(MIN.) =   0.31    Tc(MIN.) =    5.62
  LONGEST FLOWPATH FROM NODE    150.00 TO NODE    165.00 =     698.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    167.00 TO NODE    165.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.112
  *USER SPECIFIED(SUBAREA):
  USER-SPECIFIED RUNOFF COEFFICIENT = .6700
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT = 0.6533
  SUBAREA AREA(ACRES) =    1.11   SUBAREA RUNOFF(CFS) =    4.55
  TOTAL AREA(ACRES) =        2.5   TOTAL RUNOFF(CFS) =      10.02
  TC(MIN.) =    5.62

****************************************************************************
  FLOW PROCESS FROM NODE    165.00 TO NODE    170.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    58.00  DOWNSTREAM(FEET) =    36.50
  FLOW LENGTH(FEET) =   145.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   7.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =  18.28
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      10.02
  PIPE TRAVEL TIME(MIN.) =   0.13    Tc(MIN.) =    5.75
  LONGEST FLOWPATH FROM NODE    150.00 TO NODE    170.00 =     843.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    168.00 TO NODE    170.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.021
  *USER SPECIFIED(SUBAREA):
  USER-SPECIFIED RUNOFF COEFFICIENT = .6100
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT = 0.6438
  SUBAREA AREA(ACRES) =    0.70   SUBAREA RUNOFF(CFS) =    2.57
  TOTAL AREA(ACRES) =        3.2   TOTAL RUNOFF(CFS) =      12.44
  TC(MIN.) =    5.75
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    170.00 TO NODE    170.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =    5.75
  RAINFALL INTENSITY(INCH/HR) =   6.02
  TOTAL STREAM AREA(ACRES) =     3.21
  PEAK FLOW RATE(CFS) AT CONFLUENCE =     12.44

  ** CONFLUENCE DATA **
  STREAM     RUNOFF       Tc      INTENSITY      AREA
  NUMBER      (CFS)     (MIN.)   (INCH/HOUR)    (ACRE)
      1       34.29     7.93        4.893         9.12
      2       12.44     5.75        6.021         3.21

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
  STREAM     RUNOFF      Tc      INTENSITY
  NUMBER      (CFS)    (MIN.)   (INCH/HOUR)
      1       40.31     5.75       6.021
      2       44.40     7.93       4.893

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      44.40   Tc(MIN.) =    7.93
  TOTAL AREA(ACRES) =       12.3
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    170.00 =    1415.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    200.00 TO NODE    205.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
============================================================================
  *USER SPECIFIED(SUBAREA):
  USER-SPECIFIED RUNOFF COEFFICIENT = .7600
  S.C.S. CURVE NUMBER (AMC II) =   0
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    80.00
  UPSTREAM ELEVATION(FEET) =     69.00
  DOWNSTREAM ELEVATION(FEET) =     66.00
  ELEVATION DIFFERENCE(FEET) =      3.00
  SUBAREA OVERLAND TIME OF FLOW(MIN.) =    3.523
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.587
  NOTE: RAINFALL INTENSITY IS BASED ON Tc = 5-MINUTE.
  SUBAREA RUNOFF(CFS) =      0.95
  TOTAL AREA(ACRES) =      0.19   TOTAL RUNOFF(CFS) =      0.95

****************************************************************************
  FLOW PROCESS FROM NODE    205.00 TO NODE    210.00 IS CODE =  62
----------------------------------------------------------------------------
  >>>>>COMPUTE STREET FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>(STREET TABLE SECTION #  2 USED)<<<<<
============================================================================
  UPSTREAM ELEVATION(FEET) =   66.00  DOWNSTREAM ELEVATION(FEET) =   37.00
  STREET LENGTH(FEET) =   186.00   CURB HEIGHT(INCHES) =  6.0
  STREET HALFWIDTH(FEET) = 12.00

  DISTANCE FROM CROWN TO CROSSFALL GRADEBREAK(FEET) =   7.00
  INSIDE STREET CROSSFALL(DECIMAL) =  0.020
```



```
  OUTSIDE STREET CROSSFALL(DECIMAL)  =  0.020

  SPECIFIED NUMBER OF HALFSTREETS CARRYING RUNOFF =  1
  STREET PARKWAY CROSSFALL(DECIMAL)  =  0.020
  Manning's FRICTION FACTOR for Streetflow Section(curb-to-curb) =   0.0180
  Manning's FRICTION FACTOR for Back-of-Walk Flow Section =   0.0200

    **TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       2.00
    STREETFLOW MODEL RESULTS USING ESTIMATED FLOW:
    STREET FLOW DEPTH(FEET) =  0.21
    HALFSTREET FLOOD WIDTH(FEET) =    5.36
    AVERAGE FLOW VELOCITY(FEET/SEC.) =    5.36
    PRODUCT OF DEPTH&VELOCITY(FT*FT/SEC.) =    1.14
  STREET FLOW TRAVEL TIME(MIN.) =   0.58   Tc(MIN.) =    4.10
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.587
  NOTE: RAINFALL INTENSITY IS BASED ON Tc = 5-MINUTE.
  *USER SPECIFIED(SUBAREA):
  USER-SPECIFIED RUNOFF COEFFICIENT = .4900
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT =  0.551
  SUBAREA AREA(ACRES) =    0.65      SUBAREA RUNOFF(CFS) =    2.10
  TOTAL AREA(ACRES) =        0.8        PEAK FLOW RATE(CFS) =       3.05

  END OF SUBAREA STREET FLOW HYDRAULICS:
  DEPTH(FEET) = 0.24   HALFSTREET FLOOD WIDTH(FEET) =   6.61
  FLOW VELOCITY(FEET/SEC.) =  5.82   DEPTH*VELOCITY(FT*FT/SEC.) =   1.38
  LONGEST FLOWPATH FROM NODE    200.00 TO NODE    210.00 =     266.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        0.8  TC(MIN.) =      4.10
  PEAK FLOW RATE(CFS)   =       3.05
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

4.0 HYDRAULIC CALCULATIONS

TECHNICAL MEMORANDUM:

Determination of Pre- and Post-Developed 100-year Peak Flow

Solana Highlands

City of Solana Beach, CA

Prepared for:

Pasco Laret Suiter & Associates

September 19, 2017

Tory R. Walker, PE, CFM, LEED GA
R.C.E. 45005

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TECHNICAL MEMORANDUM

TO: Pasco Laret Suiter & Associates
Attention: Michael Smith
535 N Highway 101, STE A
Solana Beach, CA, 92075

FROM: Tory Walker, PE, CFM, LEED GA

DATE: September 19, 2017.

RE: Determination of the 100-year Peak Flow in Pre- and Post-Developed Conditions for Solana Highlands, City of Solana Beach, CA.

INTRODUCTION

This report is based on the hydrologic model used in the technical memorandum *"SWMM Modeling for Hydromodification Compliance of Solana Highlands, City of Solana Beach, CA, September 19, 2017"*[1] (HMP Study) by Tory R. Walker Engineering (TRWE). Pre- and post-developed 100-year, 6-hour hydrographs were generated to prove that post-developed peak flow is smaller than pre-developed peak flow for the project's point of compliance (POC).

For this drainage analysis, time of concentration values and peak flows were obtained from the "*Preliminary Hydrology Study for Revitalizing Solana Highlands, City of Solana Beach, CA,*"[2] (Hydrology Study) by Pasco Laret Suiter & Associates (PLSA). Hydrographs were generated using the "*San Diego County Hydrology Manual (SDCHM), June 2003*"[3] Rational Method Hydrograph procedure. This is the prescribed method for drainage areas less than one square mile. Hydraulic routing was performed in SWMM, as the complex routing structures discharging to the POC have already been built in SWMM for hydromodification analysis. Models include LID calculations and Modified Puls routing at the surface level of the biofiltration facilities.

PRE- AND POST-DEVELOPED CONDITIONS

The Solana Highlands project proposes to redevelop an existing apartment complex located just west of the intersection of Stevens Avenue and South Nardo Avenue in the City of Solana Beach. One (1) Point of Compliance (POC-1) has been identified at Node 300.0, which is the point at which the majority of the proposed site runoff will be discharged to the Solana Beach MS4 system (see Appendix 1 for Hydrology Maps).

GENERAL HYDROLOGIC CONSIDERATIONS

SWMM was selected for the hydraulic routing because the model was already built for hydromodification analysis, and all parameters have already been defined to work under the SWMM framework. In order to change SWMM for hydromodification to SWMM for Q_{100}, changes in the rainfall data, infiltration method, and time interval were required. A general explanation of the changes and

reasoning for the selection of SWMM as a hydraulic modeling tool for routing Q_{100} follows, as well as considerations for typical differences between SWMM and other models.

Rainfall

Rainfall was developed using the SDCHM, where the duration "t" is made equal to the time of concentration to maximize the peak flow. However, longer durations up to 360 minutes are used to build the complete hyetograph (precipitation distribution for the 100-year, 6-hour storm event). The 6-hour storm is distributed according to the methodology explained in the SDCHM, where the peak precipitation starts four hours after the beginning of the storm (see intensity tables in Appendix 2).

Pre- and Post-Developed Hydrograph Determination

For pre-developed conditions, the runoff hydrograph was calculated with a spreadsheet following the SDCHM Rational Method Hydrograph procedure (see results in Appendix 2). Each peak at each time interval is equal to $Q = C \cdot I \cdot A$ (with I corresponding to the intensity at any given time during the 6-hour storm).

For post-developed conditions, runoff hydrographs are determined using the same approach as described above for pre-developed conditions (SDCHM Rational Method Hydrograph spreadsheets were used, see results in Appendix 2). These hydrographs are then entered into the developed condition SWMM model. SWMM was selected for the hydraulic routing because 1) SWMM allows a more accurate routing procedure in all LIDs than other routing models, and 2) the model was already built for hydromodification modeling, with parameters defined to work under the SWMM framework.

LID Routing Considerations

One of the main reasons for selecting SWMM to calculate the 100-year peak flow is because of the ability of SWMM to properly route runoff through a biofiltration cell. The LID routine embedded in SWMM accounts for the ponding at the surface while the water is infiltrating through the amended soil, and it accounts for the release of water through the underground French drain.

For the simplified version of the LID model, SWMM assumes that once the flow fills the surface pond, all peak flows coming into the LID are equal to all flows discharged out of the LID. This approach is usually appropriate for hydromodification modeling, where hourly runoff is calculated and the surface volume does not generate a significant change in the hourly discharge. However, it is only an approximation of the real discharge of the LID, because the routing process taking place at the surface level reduces the peak flow. Expected peak flow reduction is sometimes very small but it can be significant, depending on the characteristics of the surface volume and the outlet structure. In order to properly model the routing process in the biofiltration basin, Modified Puls is performed at the surface level.

In order to account for surface routing, the biofiltration basin is divided in two portions: the LID portion, and the surface volume above the invert of the lowest surface discharge structure. For the LID portion, flows are discharged via infiltration into the underlying subgrade. For the surface portion, the volume of ponding above the invert of the lowest surface discharge opening was considered as a pond, which requires an elevation vs. area table, and an elevation vs. discharge table for use with the Modified Puls Method. The required stage-storage-discharge information and a detailed description of the basin outlet structure are provided in the HMP Study. The elevation vs. area tables, and the elevation vs.

discharge tables are included in Appendix 3 of this report. Detailed explanations for obtaining those values are included in the HMP Study.

MODEL RESULTS

The results show that the proposed biofiltration basins reduce the post-developed peak flow below pre-developed conditions. Results are displayed in Table 1. A pre- vs. post-developed hydrograph comparison is illustrated in Figure 1. It is clear that the proposed BMPs not only satisfy hydromodification criteria, but also reduce the post-developed peak flow below the pre-developed level for the 100-year, 6-hour synthetic storm.

TABLE 1. SUMMARY OF PEAK FLOW RESULTS

POC	Pre-Dev. Peak Flow (cfs)	Post-Dev. Undetained Peak Flow (cfs)	Post-Dev. Detained Peak Flow (cfs)	Post-Dev. – Pre-Dev. Peak Flow (cfs)
1	15.03	39.84	12.71	-2.32

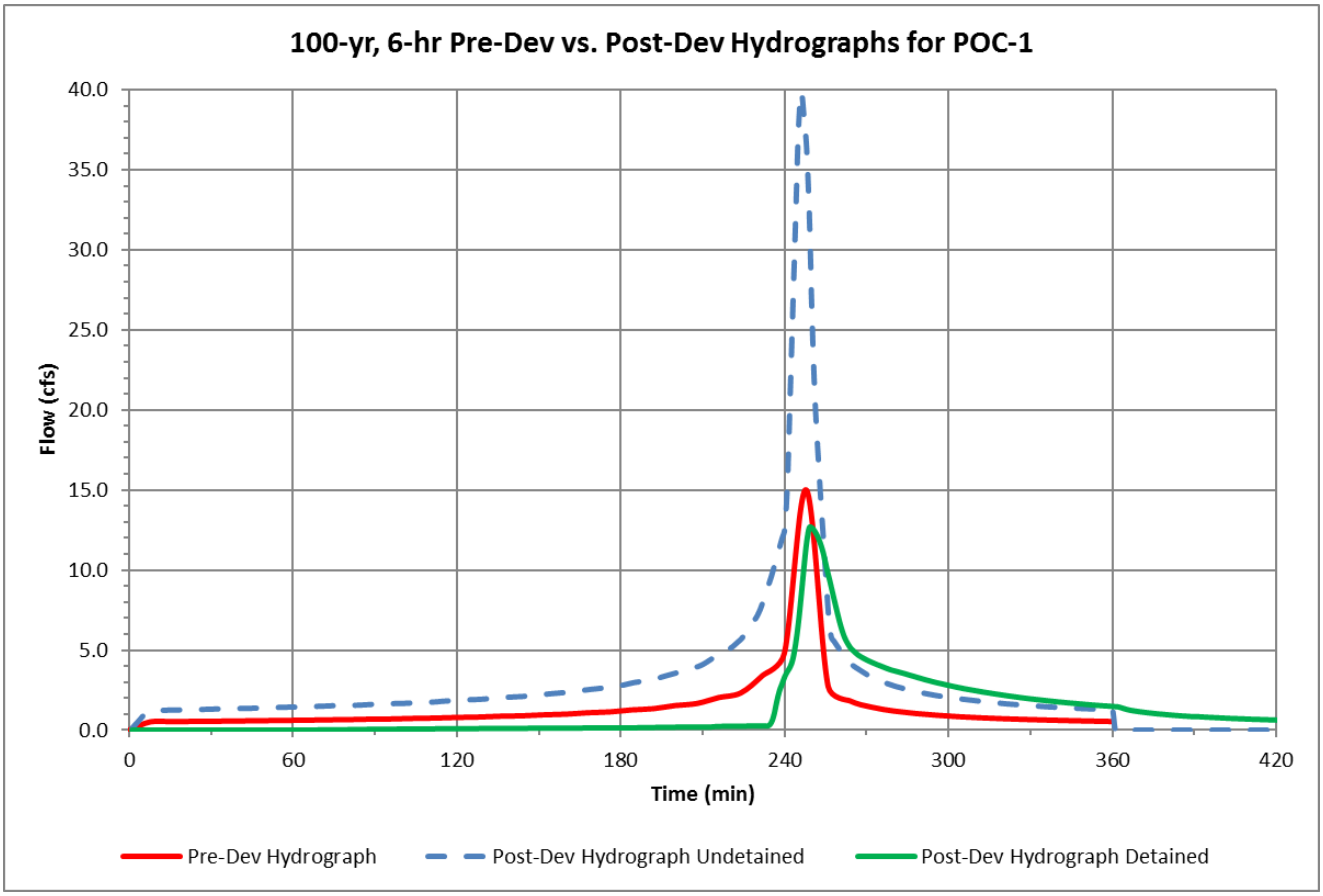


Figure 1. Hydrograph Comparison for POC-1.

CONCLUSION

The design of the biofiltration facilities with multiple functions (water quality, hydromodification, and flood mitigation) allows the reduction of the 100-year post-developed peak flow below the pre-developed level for the project's Point of Compliance.

REFERENCES

[1] "*SWMM Modeling for Hydromodification Compliance of Solana Highlands, City of Solana Beach, CA, September 19, 2017*", prepared by Tory R. Walker Engineering.

[2] "*Preliminary Hydrology Study for Revitalizing Solana Highlands, City of Solana Beach, CA,*" prepared by Pasco Laret Suiter & Associates.

[3] "*San Diego County Hydrology Manual, June 2003".* Available at: http://www.sdcounty.ca.gov/dpw/floodcontrol/hydrologymanual.html

[4] "*Handbook of Hydrology*". David R. Maidment, Editor in Chief. 1992, McGraw Hill.

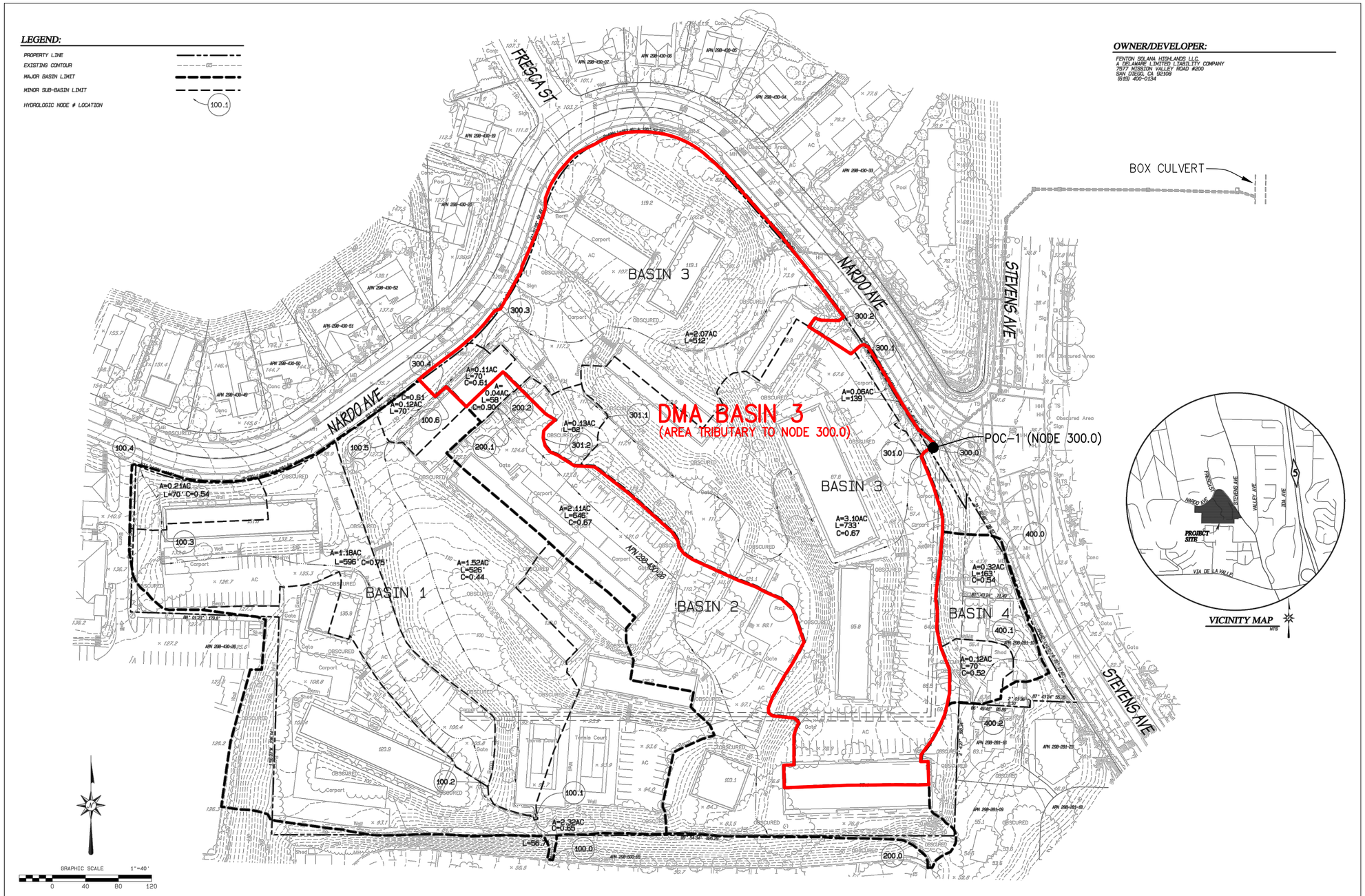
APPENDIX LIST

Appendix 1: Pre- and Post-Developed Hydrology Maps
Appendix 2: Precipitation and Rational Method Hydrograph Data
Appendix 3: Elevation vs. Area and Elevation vs. Discharge Curves
Appendix 4: SWMM Model Input
Appendix 5: SWMM Model Results

Appendix 1:

Pre- and Post-Developed Hydrology Maps

SOLANA HIGHLANDS EXISTING CONDITION DMA MAP



LEGEND

DMA BOUNDARY

DMA ID — DMA 5

POINT OF COMPLIANCE (POC)

PASCO LARET SUITER & ASSOCIATES
CIVIL ENGINEERING + LAND PLANNING + LAND SURVEYING
535 N Coast Highway 101 Ste A Solana Beach, CA 92075
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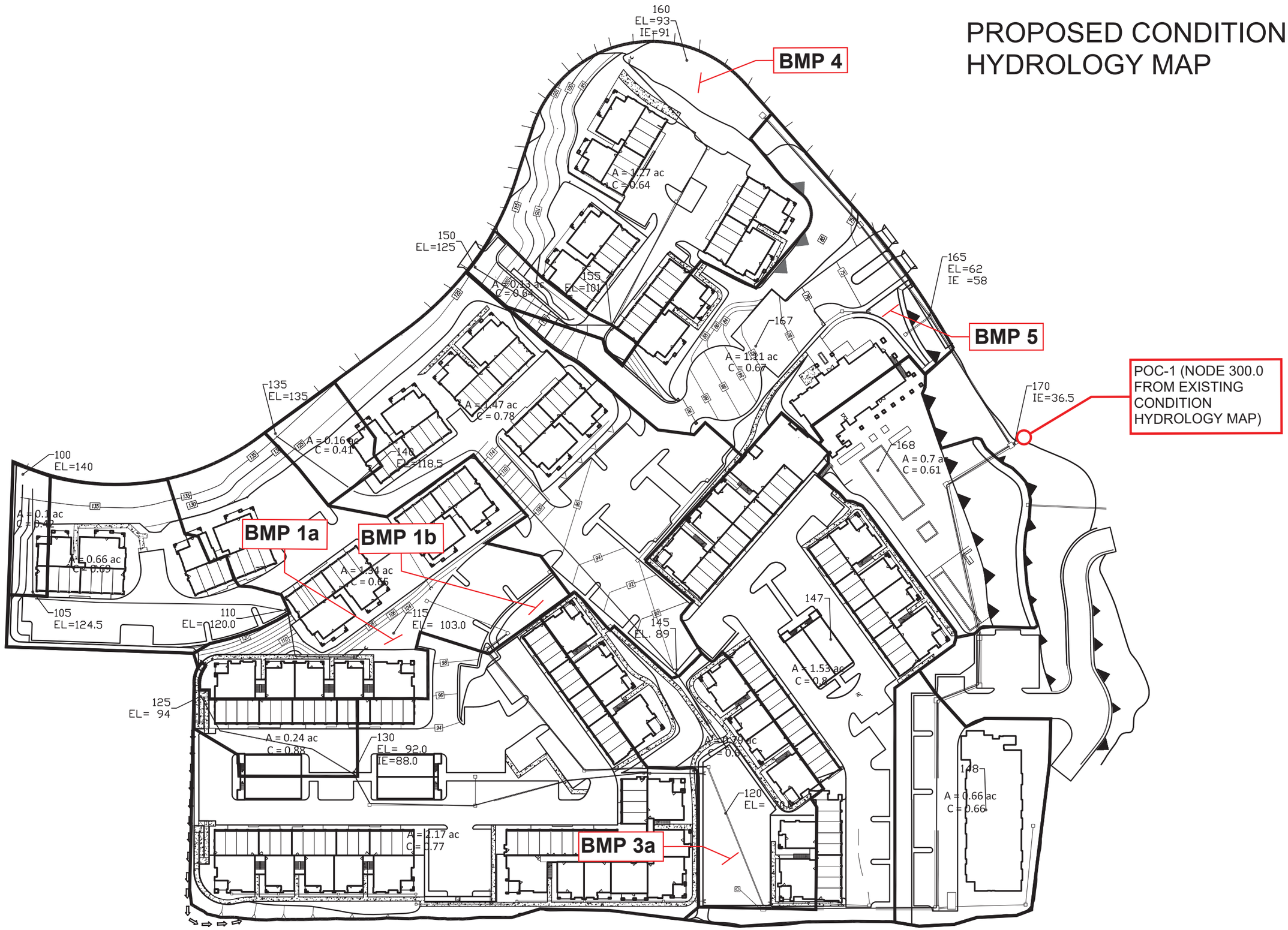
REVITALIZING SOLANA HIGHLANDS

EXISTING TOPOGRAPHY AND DRAINAGE

DEVELOPMENT REVIEW PERMIT
SUBMITTAL 1
5/02/14

HYD 1.0

PROPOSED CONDITION HYDROLOGY MAP



Appendix 2:

Precipitation and Rational Method Hydrograph Data

Rational Method Hydrograph Calculations
for Pre-Developed Conditions
Basin 3 (Area Tributary to Node 300.0)

		Q_{100}=	15.03	cfs				
		Tc=	8	min	C=	0.65		
#=	45	$P_{100,6}$=	2.5	in	A=	5.47	acres	
		*(7.44*P6*D^-.645)*	*(I*D/60)*	*(V1-V0)*	*(Δ V/ Δ T)*	*(Q=ciA)*		*(Re-ordered)*
#	**D (MIN)**	**I (IN/HR)**	**VOL (IN)**	**ΔVOL (IN)**	**I (INCR) (IN/HR)**	**Q (CFS)**	**VOL (CF)**	**ORDINATE SUM=**
0	0	0.00	0.00	0.65	4.86	15.03	7214	0.00
1	8	4.86	0.65	0.18	1.36	4.83	2316	0.53
2	16	3.11	0.83	0.13	0.96	3.42	1644	0.54
3	24	2.39	0.96	0.10	0.77	2.75	1318	0.56
4	32	1.99	1.06	0.09	0.66	2.33	1119	0.56
5	40	1.72	1.15	0.08	0.58	2.05	983	0.58
6	48	1.53	1.23	0.07	0.52	1.84	882	0.59
7	56	1.39	1.29	0.06	0.47	1.68	804	0.61
8	64	1.27	1.36	0.06	0.43	1.55	742	0.63
9	72	1.18	1.41	0.05	0.40	1.44	690	0.65
10	80	1.10	1.47	0.05	0.38	1.35	647	0.66
11	88	1.04	1.52	0.05	0.36	1.27	610	0.69
12	96	0.98	1.57	0.05	0.34	1.20	578	0.71
13	104	0.93	1.61	0.04	0.32	1.15	550	0.74
14	112	0.89	1.66	0.04	0.31	1.09	525	0.76
15	120	0.85	1.70	0.04	0.29	1.05	503	0.80
16	128	0.81	1.74	0.04	0.28	1.01	483	0.82
17	136	0.78	1.77	0.04	0.27	0.97	465	0.88
18	144	0.75	1.81	0.04	0.26	0.94	449	0.90
19	152	0.73	1.84	0.03	0.25	0.90	434	0.97
20	160	0.70	1.88	0.03	0.25	0.88	420	1.01
21	168	0.68	1.91	0.03	0.24	0.85	407	1.09
22	176	0.66	1.94	0.03	0.23	0.82	396	1.15
23	184	0.64	1.97	0.03	0.23	0.80	385	1.27
24	192	0.63	2.00	0.03	0.22	0.78	374	1.35
25	200	0.61	2.03	0.03	0.21	0.76	365	1.55
26	208	0.59	2.06	0.03	0.21	0.74	356	1.68
27	216	0.58	2.09	0.03	0.20	0.72	348	2.05
28	224	0.57	2.12	0.03	0.20	0.71	340	2.33
29	232	0.55	2.14	0.03	0.19	0.69	332	3.42
30	240	0.54	2.17	0.03	0.19	0.68	325	4.83
31	248	0.53	2.19	0.02	0.19	0.66	318	15.03
32	256	0.52	2.22	0.02	0.18	0.65	312	2.75
33	264	0.51	2.24	0.02	0.18	0.64	306	1.84
34	272	0.50	2.27	0.02	0.18	0.63	300	1.44
35	280	0.49	2.29	0.02	0.17	0.61	295	1.20
36	288	0.48	2.31	0.02	0.17	0.60	290	1.05
37	296	0.47	2.34	0.02	0.17	0.59	285	0.94
38	304	0.47	2.36	0.02	0.16	0.58	280	0.85
39	312	0.46	2.38	0.02	0.16	0.57	275	0.78
40	320	0.45	2.40	0.02	0.16	0.56	271	0.72
41	328	0.44	2.42	0.02	0.16	0.56	267	0.68

Rational Method Hydrograph Calculations
for Pre-Developed Conditions
Basin 3 (Area Tributary to Node 300.0)

#	D (MIN)	I (IN/HR)	VOL (IN)	ΔVOL (IN)	I (INCR) (IN/HR)	Q (CFS)	VOL (CF)	ORDINATE SUM=
42	336	0.44	2.44	0.02	0.15	0.55	262	0.64
43	344	0.43	2.47	0.02	0.15	0.54	259	0.60
44	352	0.42	2.49	0.02	0.15	0.53	255	0.57
45	360	0.42	2.51	0.00	0.00	0.00	0	0.55
						SUM=	**30979**	**cubic feet**
							0.71	**acre-feet**

Check: $V = C*A*P_6$

V= 0.74 acre-feet

OK

Rational Method Hydrograph Calculations
for Post Developed Conditions
Node 110 to 115 (Area Tributary to BMPs 1a and 1b)

		Q_{100}=	6.82	cfs				
		Tc=	8	min	C=	0.65		
#=	45	$P_{100,6}$=	2.5	in	A=	2.1	acres	
		*(7.44*P6*D^-.645)*	*(I*D/60)*	*(V1-V0)*	*(Δ V/ Δ T)*	*(Q=ciA)*		*(Re-ordered)*
#	**D (MIN)**	**I (IN/HR)**	**VOL (IN)**	**ΔVOL (IN)**	**I (INCR) (IN/HR)**	**Q (CFS)**	**VOL (CF)**	**ORDINATE SUM=**
0	0	0.00	0.00	0.65	4.86	6.82	3274	0.00
1	8	4.86	0.65	0.18	1.36	1.85	889	0.20
2	16	3.11	0.83	0.13	0.96	1.31	631	0.21
3	24	2.39	0.96	0.10	0.77	1.05	506	0.21
4	32	1.99	1.06	0.09	0.66	0.90	430	0.22
5	40	1.72	1.15	0.08	0.58	0.79	377	0.22
6	48	1.53	1.23	0.07	0.52	0.71	339	0.23
7	56	1.39	1.29	0.06	0.47	0.64	309	0.24
8	64	1.27	1.36	0.06	0.43	0.59	285	0.24
9	72	1.18	1.41	0.05	0.40	0.55	265	0.25
10	80	1.10	1.47	0.05	0.38	0.52	248	0.25
11	88	1.04	1.52	0.05	0.36	0.49	234	0.27
12	96	0.98	1.57	0.05	0.34	0.46	222	0.27
13	104	0.93	1.61	0.04	0.32	0.44	211	0.28
14	112	0.89	1.66	0.04	0.31	0.42	202	0.29
15	120	0.85	1.70	0.04	0.29	0.40	193	0.31
16	128	0.81	1.74	0.04	0.28	0.39	186	0.32
17	136	0.78	1.77	0.04	0.27	0.37	179	0.34
18	144	0.75	1.81	0.04	0.26	0.36	172	0.35
19	152	0.73	1.84	0.03	0.25	0.35	167	0.37
20	160	0.70	1.88	0.03	0.25	0.34	161	0.39
21	168	0.68	1.91	0.03	0.24	0.33	156	0.42
22	176	0.66	1.94	0.03	0.23	0.32	152	0.44
23	184	0.64	1.97	0.03	0.23	0.31	148	0.49
24	192	0.63	2.00	0.03	0.22	0.30	144	0.52
25	200	0.61	2.03	0.03	0.21	0.29	140	0.59
26	208	0.59	2.06	0.03	0.21	0.28	137	0.64
27	216	0.58	2.09	0.03	0.20	0.28	133	0.79
28	224	0.57	2.12	0.03	0.20	0.27	130	0.90
29	232	0.55	2.14	0.03	0.19	0.27	128	1.31
30	240	0.54	2.17	0.03	0.19	0.26	125	1.85
31	248	0.53	2.19	0.02	0.19	0.25	122	6.82
32	256	0.52	2.22	0.02	0.18	0.25	120	1.05
33	264	0.51	2.24	0.02	0.18	0.24	117	0.71
34	272	0.50	2.27	0.02	0.18	0.24	115	0.55
35	280	0.49	2.29	0.02	0.17	0.24	113	0.46
36	288	0.48	2.31	0.02	0.17	0.23	111	0.40
37	296	0.47	2.34	0.02	0.17	0.23	109	0.36
38	304	0.47	2.36	0.02	0.16	0.22	107	0.33
39	312	0.46	2.38	0.02	0.16	0.22	106	0.30
40	320	0.45	2.40	0.02	0.16	0.22	104	0.28
41	328	0.44	2.42	0.02	0.16	0.21	102	0.26

Rational Method Hydrograph Calculations
for Post Developed Conditions
Node 110 to 115 (Area Tributary to BMPs 1a and 1b)

#	D (MIN)	I (IN/HR)	VOL (IN)	ΔVOL (IN)	I (INCR) (IN/HR)	Q (CFS)	VOL (CF)	ORDINATE SUM=
42	336	0.44	2.44	0.02	0.15	0.21	101	0.24
43	344	0.43	2.47	0.02	0.15	0.21	99	0.23
44	352	0.42	2.49	0.02	0.15	0.20	98	0.22
45	360	0.42	2.51	0.00	0.00	0.00	0	0.21
						SUM=	**12397**	**cubic feet**
							0.28	**acre-feet**

Check: $V = C*A*P_6$

V= 0.28 acre-feet

OK

Rational Method Hydrograph Calculations
for Post Developed Conditions
Node 130 to 120 (Area Tributary to BMP 3a)

		Q_{100}=	12.4	cfs				
		Tc=	5	min	C=	0.78		
#=	72	$P_{100,6}$=	2.5	in	A=	2.4	acres	
		*(7.44*P6*D^-.645)*	*(I*D/60)*	*(V1-V0)*	*(Δ V/ Δ T)*	*(Q=ciA)*		*(Re-ordered)*
#	**D (MIN)**	**I (IN/HR)**	**VOL (IN)**	**ΔVOL (IN)**	**I (INCR) (IN/HR)**	**Q (CFS)**	**VOL (CF)**	**ORDINATE SUM=**
0	0	0.00	0.00	0.55	6.59	12.40	3720	0.00
1	5	6.59	0.55	0.15	1.84	3.44	1032	0.28
2	10	4.21	0.70	0.11	1.30	2.44	732	0.28
3	15	3.24	0.81	0.09	1.05	1.96	587	0.29
4	20	2.69	0.90	0.07	0.89	1.66	499	0.29
5	25	2.33	0.97	0.06	0.78	1.46	438	0.29
6	30	2.07	1.04	0.06	0.70	1.31	393	0.30
7	35	1.88	1.10	0.05	0.64	1.19	358	0.30
8	40	1.72	1.15	0.05	0.59	1.10	330	0.31
9	45	1.60	1.20	0.05	0.55	1.03	308	0.31
10	50	1.49	1.24	0.04	0.51	0.96	288	0.32
11	55	1.40	1.29	0.04	0.48	0.91	272	0.32
12	60	1.33	1.33	0.04	0.46	0.86	258	0.33
13	65	1.26	1.36	0.04	0.44	0.82	245	0.34
14	70	1.20	1.40	0.03	0.42	0.78	234	0.34
15	75	1.15	1.44	0.03	0.40	0.75	224	0.35
16	80	1.10	1.47	0.03	0.38	0.72	215	0.35
17	85	1.06	1.50	0.03	0.37	0.69	207	0.36
18	90	1.02	1.53	0.03	0.36	0.67	200	0.37
19	95	0.99	1.56	0.03	0.34	0.64	193	0.38
20	100	0.95	1.59	0.03	0.33	0.62	187	0.38
21	105	0.92	1.62	0.03	0.32	0.61	182	0.40
22	110	0.90	1.64	0.03	0.31	0.59	176	0.40
23	115	0.87	1.67	0.03	0.31	0.57	171	0.42
24	120	0.85	1.70	0.02	0.30	0.56	167	0.42
25	125	0.83	1.72	0.02	0.29	0.54	163	0.44
26	130	0.81	1.75	0.02	0.28	0.53	159	0.45
27	135	0.79	1.77	0.02	0.28	0.52	155	0.46
28	140	0.77	1.79	0.02	0.27	0.50	151	0.47
29	145	0.75	1.81	0.02	0.26	0.49	148	0.49
30	150	0.73	1.84	0.02	0.26	0.48	145	0.50
31	155	0.72	1.86	0.02	0.25	0.47	142	0.53
32	160	0.70	1.88	0.02	0.25	0.46	139	0.54
33	165	0.69	1.90	0.02	0.24	0.45	136	0.57
34	170	0.68	1.92	0.02	0.24	0.45	134	0.59
35	175	0.66	1.94	0.02	0.23	0.44	131	0.62
36	180	0.65	1.96	0.02	0.23	0.43	129	0.64
37	185	0.64	1.98	0.02	0.23	0.42	127	0.69
38	190	0.63	2.00	0.02	0.22	0.42	125	0.72
39	195	0.62	2.02	0.02	0.22	0.41	123	0.78
40	200	0.61	2.03	0.02	0.21	0.40	121	0.82
41	205	0.60	2.05	0.02	0.21	0.40	119	0.91

Rational Method Hydrograph Calculations
for Post Developed Conditions
Node 130 to 120 (Area Tributary to BMP 3a)

#	D (MIN)	I (IN/HR)	VOL (IN)	ΔVOL (IN)	I (INCR) (IN/HR)	Q (CFS)	VOL (CF)	ORDINATE SUM=
42	210	0.59	2.07	0.02	0.21	0.39	117	0.96
43	215	0.58	2.09	0.02	0.21	0.38	115	1.10
44	220	0.57	2.10	0.02	0.20	0.38	114	1.19
45	225	0.57	2.12	0.02	0.20	0.37	112	1.46
46	230	0.56	2.14	0.02	0.20	0.37	110	1.66
47	235	0.55	2.15	0.02	0.19	0.36	109	2.44
48	240	0.54	2.17	0.02	0.19	0.36	107	3.44
49	245	0.54	2.19	0.02	0.19	0.35	106	12.40
50	250	0.53	2.20	0.02	0.19	0.35	105	1.96
51	255	0.52	2.22	0.02	0.18	0.34	103	1.31
52	260	0.52	2.23	0.02	0.18	0.34	102	1.03
53	265	0.51	2.25	0.01	0.18	0.34	101	0.86
54	270	0.50	2.26	0.01	0.18	0.33	100	0.75
55	275	0.50	2.28	0.01	0.18	0.33	98	0.67
56	280	0.49	2.29	0.01	0.17	0.32	97	0.61
57	285	0.49	2.31	0.01	0.17	0.32	96	0.56
58	290	0.48	2.32	0.01	0.17	0.32	95	0.52
59	295	0.47	2.33	0.01	0.17	0.31	94	0.48
60	300	0.47	2.35	0.01	0.17	0.31	93	0.45
61	305	0.46	2.36	0.01	0.16	0.31	92	0.43
62	310	0.46	2.38	0.01	0.16	0.30	91	0.41
63	315	0.46	2.39	0.01	0.16	0.30	90	0.39
64	320	0.45	2.40	0.01	0.16	0.30	89	0.37
65	325	0.45	2.42	0.01	0.16	0.29	88	0.36
66	330	0.44	2.43	0.01	0.16	0.29	88	0.34
67	335	0.44	2.44	0.01	0.15	0.29	87	0.33
68	340	0.43	2.45	0.01	0.15	0.29	86	0.32
69	345	0.43	2.47	0.01	0.15	0.28	85	0.31
70	350	0.43	2.48	0.01	0.15	0.28	84	0.30
71	355	0.42	2.49	0.01	0.15	0.28	84	0.29
72	360	0.42	2.51	0.00	0.00	0.00	0	0.28
						SUM=	**16904**	**cubic feet**
							0.39	**acre-feet**

Check: $V = C*A*P_6$

V= 0.39 acre-feet

OK

Rational Method Hydrograph Calculations
for Post Developed Conditions
Node 148 to 120 (Area Tributary to BMP 3a)

		Q_{100}=	14.93	cfs				
		Tc=	8	min	C=	0.75		
#=	45	$P_{100,6}$=	2.5	in	A=	3.8	acres	
		*(7.44*P6*D^-.645)*	*(I*D/60)*	*(V1-V0)*	*(Δ V/ Δ T)*	*(Q=ciA)*		*(Re-ordered)*
#	**D (MIN)**	**I (IN/HR)**	**VOL (IN)**	**ΔVOL (IN)**	**I (INCR) (IN/HR)**	**Q (CFS)**	**VOL (CF)**	**ORDINATE SUM=**
0	0	0.00	0.00	0.65	4.86	14.93	7166	0.00
1	8	4.86	0.65	0.18	1.36	3.87	1856	0.43
2	16	3.11	0.83	0.13	0.96	2.75	1318	0.43
3	24	2.39	0.96	0.10	0.77	2.20	1057	0.45
4	32	1.99	1.06	0.09	0.66	1.87	897	0.45
5	40	1.72	1.15	0.08	0.58	1.64	788	0.47
6	48	1.53	1.23	0.07	0.52	1.47	707	0.48
7	56	1.39	1.29	0.06	0.47	1.34	645	0.49
8	64	1.27	1.36	0.06	0.43	1.24	594	0.50
9	72	1.18	1.41	0.05	0.40	1.15	553	0.52
10	80	1.10	1.47	0.05	0.38	1.08	519	0.53
11	88	1.04	1.52	0.05	0.36	1.02	489	0.55
12	96	0.98	1.57	0.05	0.34	0.97	463	0.57
13	104	0.93	1.61	0.04	0.32	0.92	441	0.59
14	112	0.89	1.66	0.04	0.31	0.88	421	0.61
15	120	0.85	1.70	0.04	0.29	0.84	403	0.64
16	128	0.81	1.74	0.04	0.28	0.81	387	0.66
17	136	0.78	1.77	0.04	0.27	0.78	373	0.70
18	144	0.75	1.81	0.04	0.26	0.75	360	0.72
19	152	0.73	1.84	0.03	0.25	0.72	348	0.78
20	160	0.70	1.88	0.03	0.25	0.70	337	0.81
21	168	0.68	1.91	0.03	0.24	0.68	327	0.88
22	176	0.66	1.94	0.03	0.23	0.66	317	0.92
23	184	0.64	1.97	0.03	0.23	0.64	308	1.02
24	192	0.63	2.00	0.03	0.22	0.63	300	1.08
25	200	0.61	2.03	0.03	0.21	0.61	293	1.24
26	208	0.59	2.06	0.03	0.21	0.59	285	1.34
27	216	0.58	2.09	0.03	0.20	0.58	279	1.64
28	224	0.57	2.12	0.03	0.20	0.57	272	1.87
29	232	0.55	2.14	0.03	0.19	0.55	266	2.75
30	240	0.54	2.17	0.03	0.19	0.54	261	3.87
31	248	0.53	2.19	0.02	0.19	0.53	255	14.93
32	256	0.52	2.22	0.02	0.18	0.52	250	2.20
33	264	0.51	2.24	0.02	0.18	0.51	245	1.47
34	272	0.50	2.27	0.02	0.18	0.50	241	1.15
35	280	0.49	2.29	0.02	0.17	0.49	236	0.97
36	288	0.48	2.31	0.02	0.17	0.48	232	0.84
37	296	0.47	2.34	0.02	0.17	0.48	228	0.75
38	304	0.47	2.36	0.02	0.16	0.47	224	0.68
39	312	0.46	2.38	0.02	0.16	0.46	221	0.63
40	320	0.45	2.40	0.02	0.16	0.45	217	0.58
41	328	0.44	2.42	0.02	0.16	0.45	214	0.54

Rational Method Hydrograph Calculations
for Post Developed Conditions
Node 148 to 120 (Area Tributary to BMP 3a)

#	D (MIN)	I (IN/HR)	VOL (IN)	ΔVOL (IN)	I (INCR) (IN/HR)	Q (CFS)	VOL (CF)	ORDINATE SUM=
42	336	0.44	2.44	0.02	0.15	0.44	210	0.51
43	344	0.43	2.47	0.02	0.15	0.43	207	0.48
44	352	0.42	2.49	0.02	0.15	0.43	204	0.46
45	360	0.42	2.51	0.00	0.00	0.00	0	0.44
						SUM=	**26216**	**cubic feet**
							0.60	**acre-feet**

Check: $V = C*A*P_6$

V= 0.59 acre-feet

OK

Rational Method Hydrograph Calculations
for Post Developed Conditions
Node 120 to 120 (Area Tributary to BMP 3a)

		Q_{100}=	2.46	cfs				
		Tc=	5	min	C=	0.6		
#=	72	$P_{100,6}$=	2.5	in	A=	0.79	acres	
		*(7.44*P6*D^-.645)*	*(I*D/60)*	*(V1-V0)*	*(Δ V/ Δ T)*	*(Q=ciA)*		*(Re-ordered)*
#	**D (MIN)**	**I (IN/HR)**	**VOL (IN)**	**ΔVOL (IN)**	**I (INCR) (IN/HR)**	**Q (CFS)**	**VOL (CF)**	**ORDINATE SUM=**
0	0	0.00	0.00	0.55	6.59	2.46	738	0.00
1	5	6.59	0.55	0.15	1.84	0.87	261	0.07
2	10	4.21	0.70	0.11	1.30	0.62	185	0.07
3	15	3.24	0.81	0.09	1.05	0.50	149	0.07
4	20	2.69	0.90	0.07	0.89	0.42	126	0.07
5	25	2.33	0.97	0.06	0.78	0.37	111	0.07
6	30	2.07	1.04	0.06	0.70	0.33	100	0.08
7	35	1.88	1.10	0.05	0.64	0.30	91	0.08
8	40	1.72	1.15	0.05	0.59	0.28	84	0.08
9	45	1.60	1.20	0.05	0.55	0.26	78	0.08
10	50	1.49	1.24	0.04	0.51	0.24	73	0.08
11	55	1.40	1.29	0.04	0.48	0.23	69	0.08
12	60	1.33	1.33	0.04	0.46	0.22	65	0.08
13	65	1.26	1.36	0.04	0.44	0.21	62	0.09
14	70	1.20	1.40	0.03	0.42	0.20	59	0.09
15	75	1.15	1.44	0.03	0.40	0.19	57	0.09
16	80	1.10	1.47	0.03	0.38	0.18	55	0.09
17	85	1.06	1.50	0.03	0.37	0.17	52	0.09
18	90	1.02	1.53	0.03	0.36	0.17	51	0.09
19	95	0.99	1.56	0.03	0.34	0.16	49	0.10
20	100	0.95	1.59	0.03	0.33	0.16	47	0.10
21	105	0.92	1.62	0.03	0.32	0.15	46	0.10
22	110	0.90	1.64	0.03	0.31	0.15	45	0.10
23	115	0.87	1.67	0.03	0.31	0.14	43	0.11
24	120	0.85	1.70	0.02	0.30	0.14	42	0.11
25	125	0.83	1.72	0.02	0.29	0.14	41	0.11
26	130	0.81	1.75	0.02	0.28	0.13	40	0.11
27	135	0.79	1.77	0.02	0.28	0.13	39	0.12
28	140	0.77	1.79	0.02	0.27	0.13	38	0.12
29	145	0.75	1.81	0.02	0.26	0.12	37	0.12
30	150	0.73	1.84	0.02	0.26	0.12	37	0.13
31	155	0.72	1.86	0.02	0.25	0.12	36	0.13
32	160	0.70	1.88	0.02	0.25	0.12	35	0.14
33	165	0.69	1.90	0.02	0.24	0.12	35	0.14
34	170	0.68	1.92	0.02	0.24	0.11	34	0.15
35	175	0.66	1.94	0.02	0.23	0.11	33	0.16
36	180	0.65	1.96	0.02	0.23	0.11	33	0.16
37	185	0.64	1.98	0.02	0.23	0.11	32	0.17
38	190	0.63	2.00	0.02	0.22	0.11	32	0.18
39	195	0.62	2.02	0.02	0.22	0.10	31	0.20
40	200	0.61	2.03	0.02	0.21	0.10	31	0.21
41	205	0.60	2.05	0.02	0.21	0.10	30	0.23

Rational Method Hydrograph Calculations
for Post Developed Conditions
Node 120 to 120 (Area Tributary to BMP 3a)

#	D (MIN)	I (IN/HR)	VOL (IN)	ΔVOL (IN)	I (INCR) (IN/HR)	Q (CFS)	VOL (CF)	ORDINATE SUM=
42	210	0.59	2.07	0.02	0.21	0.10	30	0.24
43	215	0.58	2.09	0.02	0.21	0.10	29	0.28
44	220	0.57	2.10	0.02	0.20	0.10	29	0.30
45	225	0.57	2.12	0.02	0.20	0.09	28	0.37
46	230	0.56	2.14	0.02	0.20	0.09	28	0.42
47	235	0.55	2.15	0.02	0.19	0.09	28	0.62
48	240	0.54	2.17	0.02	0.19	0.09	27	0.87
49	245	0.54	2.19	0.02	0.19	0.09	27	2.46
50	250	0.53	2.20	0.02	0.19	0.09	26	0.50
51	255	0.52	2.22	0.02	0.18	0.09	26	0.33
52	260	0.52	2.23	0.02	0.18	0.09	26	0.26
53	265	0.51	2.25	0.01	0.18	0.09	26	0.22
54	270	0.50	2.26	0.01	0.18	0.08	25	0.19
55	275	0.50	2.28	0.01	0.18	0.08	25	0.17
56	280	0.49	2.29	0.01	0.17	0.08	25	0.15
57	285	0.49	2.31	0.01	0.17	0.08	24	0.14
58	290	0.48	2.32	0.01	0.17	0.08	24	0.13
59	295	0.47	2.33	0.01	0.17	0.08	24	0.12
60	300	0.47	2.35	0.01	0.17	0.08	24	0.12
61	305	0.46	2.36	0.01	0.16	0.08	23	0.11
62	310	0.46	2.38	0.01	0.16	0.08	23	0.10
63	315	0.46	2.39	0.01	0.16	0.08	23	0.10
64	320	0.45	2.40	0.01	0.16	0.08	23	0.09
65	325	0.45	2.42	0.01	0.16	0.07	22	0.09
66	330	0.44	2.43	0.01	0.16	0.07	22	0.09
67	335	0.44	2.44	0.01	0.15	0.07	22	0.08
68	340	0.43	2.45	0.01	0.15	0.07	22	0.08
69	345	0.43	2.47	0.01	0.15	0.07	22	0.08
70	350	0.43	2.48	0.01	0.15	0.07	21	0.08
71	355	0.42	2.49	0.01	0.15	0.07	21	0.07
72	360	0.42	2.51	0.00	0.00	0.00	0	0.07
						SUM=	**4076**	**cubic feet**
							0.09	**acre-feet**

Check: $V = C*A*P_6$

V= 0.10 acre-feet

OK

Rational Method Hydrograph Calculations
for Post Developed Conditions
Node 155 to 160 (Area Tributary to BMP 4)

		Q_{100}=	5.68	cfs				
		Tc=	5	min	C=	0.64		
#=	72	$P_{100,6}$=	2.5	in	A=	1.4	acres	
		*(7.44*P6*D^-.645)*	*(I*D/60)*	*(V1-V0)*	*(Δ V/ Δ T)*	*(Q=ciA)*		*(Re-ordered)*
#	**D (MIN)**	**I (IN/HR)**	**VOL (IN)**	**ΔVOL (IN)**	**I (INCR) (IN/HR)**	**Q (CFS)**	**VOL (CF)**	**ORDINATE SUM=**
0	0	0.00	0.00	0.55	6.59	5.68	1704	0.00
1	5	6.59	0.55	0.15	1.84	1.65	494	0.13
2	10	4.21	0.70	0.11	1.30	1.17	351	0.13
3	15	3.24	0.81	0.09	1.05	0.94	281	0.14
4	20	2.69	0.90	0.07	0.89	0.80	239	0.14
5	25	2.33	0.97	0.06	0.78	0.70	210	0.14
6	30	2.07	1.04	0.06	0.70	0.63	188	0.14
7	35	1.88	1.10	0.05	0.64	0.57	171	0.15
8	40	1.72	1.15	0.05	0.59	0.53	158	0.15
9	45	1.60	1.20	0.05	0.55	0.49	147	0.15
10	50	1.49	1.24	0.04	0.51	0.46	138	0.15
11	55	1.40	1.29	0.04	0.48	0.43	130	0.16
12	60	1.33	1.33	0.04	0.46	0.41	123	0.16
13	65	1.26	1.36	0.04	0.44	0.39	117	0.16
14	70	1.20	1.40	0.03	0.42	0.37	112	0.16
15	75	1.15	1.44	0.03	0.40	0.36	107	0.17
16	80	1.10	1.47	0.03	0.38	0.34	103	0.17
17	85	1.06	1.50	0.03	0.37	0.33	99	0.17
18	90	1.02	1.53	0.03	0.36	0.32	96	0.18
19	95	0.99	1.56	0.03	0.34	0.31	93	0.18
20	100	0.95	1.59	0.03	0.33	0.30	90	0.18
21	105	0.92	1.62	0.03	0.32	0.29	87	0.19
22	110	0.90	1.64	0.03	0.31	0.28	84	0.19
23	115	0.87	1.67	0.03	0.31	0.27	82	0.20
24	120	0.85	1.70	0.02	0.30	0.27	80	0.20
25	125	0.83	1.72	0.02	0.29	0.26	78	0.21
26	130	0.81	1.75	0.02	0.28	0.25	76	0.21
27	135	0.79	1.77	0.02	0.28	0.25	74	0.22
28	140	0.77	1.79	0.02	0.27	0.24	72	0.23
29	145	0.75	1.81	0.02	0.26	0.24	71	0.24
30	150	0.73	1.84	0.02	0.26	0.23	69	0.24
31	155	0.72	1.86	0.02	0.25	0.23	68	0.25
32	160	0.70	1.88	0.02	0.25	0.22	67	0.26
33	165	0.69	1.90	0.02	0.24	0.22	65	0.27
34	170	0.68	1.92	0.02	0.24	0.21	64	0.28
35	175	0.66	1.94	0.02	0.23	0.21	63	0.30
36	180	0.65	1.96	0.02	0.23	0.21	62	0.31
37	185	0.64	1.98	0.02	0.23	0.20	61	0.33
38	190	0.63	2.00	0.02	0.22	0.20	60	0.34
39	195	0.62	2.02	0.02	0.22	0.20	59	0.37
40	200	0.61	2.03	0.02	0.21	0.19	58	0.39
41	205	0.60	2.05	0.02	0.21	0.19	57	0.43

Rational Method Hydrograph Calculations
for Post Developed Conditions
Node 155 to 160 (Area Tributary to BMP 4)

#	D (MIN)	I (IN/HR)	VOL (IN)	ΔVOL (IN)	I (INCR) (IN/HR)	Q (CFS)	VOL (CF)	ORDINATE SUM=
42	210	0.59	2.07	0.02	0.21	0.19	56	0.46
43	215	0.58	2.09	0.02	0.21	0.18	55	0.53
44	220	0.57	2.10	0.02	0.20	0.18	54	0.57
45	225	0.57	2.12	0.02	0.20	0.18	54	0.70
46	230	0.56	2.14	0.02	0.20	0.18	53	0.80
47	235	0.55	2.15	0.02	0.19	0.17	52	1.17
48	240	0.54	2.17	0.02	0.19	0.17	51	1.65
49	245	0.54	2.19	0.02	0.19	0.17	51	5.68
50	250	0.53	2.20	0.02	0.19	0.17	50	0.94
51	255	0.52	2.22	0.02	0.18	0.16	49	0.63
52	260	0.52	2.23	0.02	0.18	0.16	49	0.49
53	265	0.51	2.25	0.01	0.18	0.16	48	0.41
54	270	0.50	2.26	0.01	0.18	0.16	48	0.36
55	275	0.50	2.28	0.01	0.18	0.16	47	0.32
56	280	0.49	2.29	0.01	0.17	0.16	47	0.29
57	285	0.49	2.31	0.01	0.17	0.15	46	0.27
58	290	0.48	2.32	0.01	0.17	0.15	46	0.25
59	295	0.47	2.33	0.01	0.17	0.15	45	0.23
60	300	0.47	2.35	0.01	0.17	0.15	45	0.22
61	305	0.46	2.36	0.01	0.16	0.15	44	0.21
62	310	0.46	2.38	0.01	0.16	0.15	44	0.20
63	315	0.46	2.39	0.01	0.16	0.14	43	0.19
64	320	0.45	2.40	0.01	0.16	0.14	43	0.18
65	325	0.45	2.42	0.01	0.16	0.14	42	0.17
66	330	0.44	2.43	0.01	0.16	0.14	42	0.16
67	335	0.44	2.44	0.01	0.15	0.14	42	0.16
68	340	0.43	2.45	0.01	0.15	0.14	41	0.15
69	345	0.43	2.47	0.01	0.15	0.14	41	0.15
70	350	0.43	2.48	0.01	0.15	0.13	40	0.14
71	355	0.42	2.49	0.01	0.15	0.13	40	0.14
72	360	0.42	2.51	0.00	0.00	0.00	0	0.14
						SUM=	**8014**	**cubic feet**
							0.18	**acre-feet**

Check: $V = C*A*P_6$

V= 0.19 acre-feet

OK

Rational Method Hydrograph Calculations
for Post Developed Conditions
Node 167 to 165 (Area Tributary to BMP 5)

		Q_{100}=	4.55	cfs				
		Tc=	6	min	C=	0.67		
#=	60	$P_{100,6}$=	2.5	in	A=	1.11	acres	
		*(7.44*P6*D^-.645)*	*(I*D/60)*	*(V1-V0)*	*(Δ V/ Δ T)*	*(Q=ciA)*		*(Re-ordered)*
#	**D (MIN)**	**I (IN/HR)**	**VOL (IN)**	**ΔVOL (IN)**	**I (INCR) (IN/HR)**	**Q (CFS)**	**VOL (CF)**	**ORDINATE SUM=**
0	0	0.00	0.00	0.59	5.86	4.55	1638	0.00
1	6	5.86	0.59	0.16	1.63	1.22	437	0.11
2	12	3.74	0.75	0.12	1.16	0.86	310	0.11
3	18	2.88	0.86	0.09	0.93	0.69	249	0.11
4	24	2.39	0.96	0.08	0.79	0.59	211	0.12
5	30	2.07	1.04	0.07	0.69	0.52	186	0.12
6	36	1.84	1.11	0.06	0.62	0.46	167	0.12
7	42	1.67	1.17	0.06	0.57	0.42	152	0.12
8	48	1.53	1.23	0.05	0.52	0.39	140	0.12
9	54	1.42	1.28	0.05	0.49	0.36	130	0.13
10	60	1.33	1.33	0.05	0.46	0.34	122	0.13
11	66	1.25	1.37	0.04	0.43	0.32	115	0.13
12	72	1.18	1.41	0.04	0.41	0.30	109	0.14
13	78	1.12	1.46	0.04	0.39	0.29	104	0.14
14	84	1.07	1.49	0.04	0.37	0.28	99	0.14
15	90	1.02	1.53	0.04	0.35	0.26	95	0.15
16	96	0.98	1.57	0.03	0.34	0.25	91	0.15
17	102	0.94	1.60	0.03	0.33	0.24	88	0.15
18	108	0.91	1.63	0.03	0.32	0.24	85	0.16
19	114	0.88	1.67	0.03	0.31	0.23	82	0.16
20	120	0.85	1.70	0.03	0.30	0.22	79	0.17
21	126	0.82	1.73	0.03	0.29	0.21	77	0.17
22	132	0.80	1.75	0.03	0.28	0.21	75	0.18
23	138	0.77	1.78	0.03	0.27	0.20	73	0.19
24	144	0.75	1.81	0.03	0.26	0.20	71	0.19
25	150	0.73	1.84	0.03	0.26	0.19	69	0.20
26	156	0.72	1.86	0.03	0.25	0.19	67	0.21
27	162	0.70	1.89	0.02	0.25	0.18	66	0.22
28	168	0.68	1.91	0.02	0.24	0.18	64	0.23
29	174	0.67	1.94	0.02	0.23	0.17	63	0.24
30	180	0.65	1.96	0.02	0.23	0.17	61	0.25
31	186	0.64	1.98	0.02	0.22	0.17	60	0.28
32	192	0.63	2.00	0.02	0.22	0.16	59	0.29
33	198	0.61	2.03	0.02	0.22	0.16	58	0.32
34	204	0.60	2.05	0.02	0.21	0.16	57	0.34
35	210	0.59	2.07	0.02	0.21	0.15	56	0.39
36	216	0.58	2.09	0.02	0.20	0.15	55	0.42
37	222	0.57	2.11	0.02	0.20	0.15	54	0.52
38	228	0.56	2.13	0.02	0.20	0.15	53	0.59
39	234	0.55	2.15	0.02	0.19	0.14	52	0.86
40	240	0.54	2.17	0.02	0.19	0.14	51	1.22
41	246	0.53	2.19	0.02	0.19	0.14	50	4.55

Rational Method Hydrograph Calculations
for Post Developed Conditions
Node 167 to 165 (Area Tributary to BMP 5)

#	D (MIN)	I (IN/HR)	VOL (IN)	ΔVOL (IN)	I (INCR) (IN/HR)	Q (CFS)	VOL (CF)	ORDINATE SUM=
42	252	0.53	2.21	0.02	0.19	0.14	50	0.69
43	258	0.52	2.23	0.02	0.18	0.14	49	0.46
44	264	0.51	2.24	0.02	0.18	0.13	48	0.36
45	270	0.50	2.26	0.02	0.18	0.13	47	0.30
46	276	0.50	2.28	0.02	0.17	0.13	47	0.26
47	282	0.49	2.30	0.02	0.17	0.13	46	0.24
48	288	0.48	2.31	0.02	0.17	0.13	46	0.21
49	294	0.48	2.33	0.02	0.17	0.12	45	0.20
50	300	0.47	2.35	0.02	0.17	0.12	44	0.18
51	306	0.46	2.36	0.02	0.16	0.12	44	0.17
52	312	0.46	2.38	0.02	0.16	0.12	43	0.16
53	318	0.45	2.40	0.02	0.16	0.12	43	0.15
54	324	0.45	2.41	0.02	0.16	0.12	42	0.14
55	330	0.44	2.43	0.02	0.16	0.12	42	0.14
56	336	0.44	2.44	0.02	0.15	0.11	41	0.13
57	342	0.43	2.46	0.02	0.15	0.11	41	0.13
58	348	0.43	2.48	0.02	0.15	0.11	40	0.12
59	354	0.42	2.49	0.01	0.15	0.11	40	0.12
60	360	0.42	2.51	0.00	0.00	0.00	0	0.11
						SUM=	**6777**	**cubic feet**
							0.16	**acre-feet**

Check: $V = C*A*P_6$

V= 0.15 acre-feet

OK

Appendix 3:

Elevation vs. Area

and

Elevation vs. Discharge Curves

Stage-Area for BMP 1a

Depth (ft)	Area (ft^2)	Volume (ft^3)	
0.00	1884	0	**BIOFILTRATION (1)**
0.08	1884	157	
0.17	1884	314	
0.25	1884	471	
0.33	1884	628	
0.42	1884	785	
0.50	1884	942	**SURFACE OUTLET (2)**
0.58	1884	1099	
0.67	1884	1256	
0.75	1884	1413	
0.83	1884	1570	
0.92	1884	1727	
1.00	1884	1884	
1.08	1884	2041	
1.17	1884	2198	
1.25	1884	2355	
1.33	1884	2512	
1.42	1884	2669	
1.50	1884	2826	

SUB SURFACE STORAGE

Elevation (ft)	Area (ft^2)	Volume (ft^3)	
-1.50	1884	565	**Amended Soil Base (0.2 voids)**
-3.50	1884	754	**Gravel Base (0.4 voids)**
Gravel & Amended Soil	**TOTAL =**	1319	(ft^3)
Surface Total	**TOTAL =**	942	(ft^3) estimated
BMP	**TOTAL =**	**2261**	**(ft^3)**

(1): The area at this surface elevation corresponds to the area of gravel and amended soil (Biofiltration layer)
(2): Volume at this elevation coresponds with surface volume for WQ purposes (invert of lowest surface outlet)

Effective Depth:	6.00 in

Stage-Area for BMP 1b

Depth (ft)	Area (ft^2)	Volume (ft^3)	
0.00	1616	0	**BIOFILTRATION (1)**
0.08	1616	135	
0.17	1616	269	
0.25	1616	404	
0.33	1616	539	
0.42	1616	673	
0.50	1616	808	**SURFACE OUTLET (2)**
0.58	1616	943	
0.67	1616	1077	
0.75	1616	1212	
0.83	1616	1347	
0.92	1616	1481	
1.00	1616	1616	

SUB SURFACE STORAGE

Elevation (ft)	Area (ft^2)	Volume (ft^3)	
-1.50	1616	485	**Amended Soil Base (0.2 voids)**
-3.50	1616	646	**Gravel Base (0.4 voids)**
Gravel & Amended Soil	**TOTAL =**	1131	(ft^3)
Surface Total	**TOTAL =**	808	(ft^3) estimated
BMP	**TOTAL =**	**1939**	**(ft^3)**

(1): The area at this surface elevation corresponds to the area of gravel and amended soil (Biofiltration layer)
(2): Volume at this elevation coresponds with surface volume for WQ purposes (invert of lowest surface outlet)

Effective Depth:	6.00 in

Stage-Area for BMP 3a

Depth (ft)	Area (ft^2)	Volume (ft^3)	
0.00	8617	0	**BIOFILTRATION (1)**
0.08	8617	718	
0.17	8617	1436	
0.25	8617	2154	
0.33	8617	2872	
0.42	8617	3590	
0.50	8617	4309	
0.58	8617	5027	
0.67	8617	5745	
0.75	8617	6463	
0.83	8617	7181	
0.92	8617	7899	
1.00	8617	8617	
1.08	8617	9335	
1.17	8617	10053	
1.25	8617	10771	
1.33	8617	11489	
1.42	8617	12207	
1.50	8617	12926	
1.58	8617	13644	
1.67	8617	14362	
1.75	8617	15080	
1.83	8617	15798	
1.92	8617	16516	
2.00	8617	17234	**SURFACE OUTLET (2)**
2.08	8617	17952	
2.17	8617	18670	
2.25	8617	19388	
2.33	8617	20106	
2.42	8617	20824	
2.50	8617	21543	
2.58	8617	22261	
2.67	8617	22979	
2.75	8617	23697	
2.83	8617	24415	
2.92	8617	25133	
3.00	8617	25851	
3.08	8617	26569	
3.17	8617	27287	
3.25	8617	28005	
3.33	8617	28723	
3.42	8617	29441	
3.50	8617	30160	
3.58	8617	30878	

3.67	8617	31596
3.75	8617	32314
3.83	8617	33032
3.92	8617	33750
4.00	8617	34468
4.08	8617	35186
4.17	8617	35904
4.25	8617	36622
4.33	8617	37340
4.42	8617	38058
4.50	8617	38777

SUB SURFACE STORAGE

Elevation (ft)	Area (ft^2)	Volume (ft^3)	
-1.50	8617	2585	**Amended Soil Base (0.2 voids)**
-3.50	8617	3447	**Gravel Base (0.4 voids)**
Gravel & Amended Soil	**TOTAL =**	6032	(ft^3)
Surface Total	**TOTAL =**	17234	(ft^3) estimated
BMP	**TOTAL =**	**23266**	**(ft^3)**

(1): The area at this surface elevation corresponds to the area of gravel and amended soil (Biofiltration layer)
(2): Volume at this elevation coresponds with surface volume for WQ purposes (invert of lowest surface outlet)

Effective Depth:	24.00 in

Stage-Area for BMP 4

Depth (ft)	Area (ft^2)	Volume (ft^3)	
0.00	2191	0	**BIOFILTRATION (1)**
0.08	2191	183	
0.17	2191	365	
0.25	2191	548	
0.33	2191	730	
0.42	2191	913	
0.50	2191	1096	**SURFACE OUTLET (2)**
0.58	2191	1278	
0.67	2191	1461	
0.75	2191	1643	
0.83	2191	1826	
0.92	2191	2008	
1.00	2191	2191	

SUB SURFACE STORAGE

Elevation (ft)	Area (ft^2)	Volume (ft^3)	
-1.50	2191	657	**Amended Soil Base (0.2 voids)**
-2.50	2191	657	**Gravel Base (0.4 voids)**
Gravel & Amended Soil	**TOTAL =**	1315	(ft^3)
Surface Total	**TOTAL =**	1096	(ft^3) estimated
BMP	**TOTAL =**	**2410**	**(ft^3)**

(1): The area at this surface elevation corresponds to the area of gravel and amended soil (Biofiltration layer)
(2): Volume at this elevation coresponds with surface volume for WQ purposes (invert of lowest surface outlet)

Effective Depth:	6.00 in

Stage-Area for BMP 5

Depth (ft)	Area (ft^2)	Volume (ft^3)	
0.00	962	0	**BIOFILTRATION (1)**
0.08	962	80	
0.17	962	160	
0.25	962	241	
0.33	962	321	
0.42	962	401	
0.50	962	481	
0.58	962	561	
0.67	962	641	
0.75	962	722	
0.83	962	802	
0.92	962	882	
1.00	962	962	
1.08	962	1042	
1.17	962	1122	
1.25	962	1203	
1.33	962	1283	
1.42	962	1363	
1.50	962	1443	**SURFACE OUTLET (2)**
1.58	962	1523	
1.67	962	1603	
1.75	962	1684	
1.83	962	1764	
1.92	962	1844	
2.00	962	1924	

SUB SURFACE STORAGE

Elevation (ft)	Area (ft^2)	Volume (ft^3)	
-1.50	962	289	**Amended Soil Base (0.2 voids)**
-3.50	962	289	**Gravel Base (0.4 voids)**
Gravel & Amended Soil	**TOTAL =**	577	(ft^3)
Surface Total	**TOTAL =**	1443	(ft^3) estimated
BMP	**TOTAL =**	**2020**	**(ft^3)**

(1): The area at this surface elevation corresponds to the area of gravel and amended soil (Biofiltration layer)
(2): Volume at this elevation coresponds with surface volume for WQ purposes (invert of lowest surface outlet)

Effective Depth:	18.00 in

Outlet structure for Discharge of BMP 1a

Discharge vs Elevation Table

Low orifice	1.000 "	Lower slot		Lower Weir	
Number of orif:	0	Number of slots:	0	Number of weirs:	0
Cg-low:	0.62	Invert:	0.00 ft	Invert:	0.00
		B	0.00 ft	B:	0.00
Middle orifice	1 "	h_{slot}	0.000 ft		
Number of orif:	0				
Cg-middle:	0.62	Upper slot		Emergency weir	
invert elev:	0.000 ft	Number of slots:	0	Invert:	0.00 ft
		Invert:	0.00 ft	B:	12.00 ft
		B:	0.00 ft		
		h_{slot}	0.000 ft		

*Note: h = head above the invert of the lowest surface discharge opening.

h* (ft)	H/D-low -	H/D-mid -	Qlow-orif (cfs)	Qlow-weir (cfs)	Qtot-low (cfs)	Qmid-orif (cfs)	Qmid-weir (cfs)	Qtot-med (cfs)	Qslot-low (cfs)	Qslot-upp (cfs)	Qweir (cfs)	Qemerg (cfs)	Qtot (cfs)
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.042	0.500	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.316	0.316
0.083	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.895	0.895
0.125	1.500	1.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.644	1.644
0.167	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.531	2.531
0.208	2.500	2.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.537	3.537
0.250	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.650	4.650
0.292	3.500	3.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.860	5.860
0.333	4.000	4.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.159	7.159
0.375	4.500	4.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.543	8.543
0.417	5.000	5.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.005	10.005
0.458	5.500	5.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	11.543	11.543
0.500	6.000	6.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	13.152	13.152
0.542	6.500	6.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	14.830	14.830
0.583	7.000	7.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	16.574	16.574
0.625	7.500	7.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	18.381	18.381
0.667	8.000	8.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	20.249	20.249
0.708	8.500	8.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	22.177	22.177
0.750	9.000	9.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	24.162	24.162
0.792	9.500	9.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	26.203	26.203
0.833	10.000	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	28.299	28.299
0.875	10.500	10.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	30.448	30.448

0.917	11.000	11.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	32.648	32.648
0.958	11.500	11.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	34.899	34.899
1.000	12.000	12.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	37.200	37.200

Outlet structure for Discharge of BMP 1b

Discharge vs Elevation Table

Low orifice	1.000 "	Lower slot		Lower Weir	
Number of orif:	0	Number of slots:	0	Number of weirs:	0
Cg-low:	0.62	Invert:	0.00 ft	Invert:	0.00
		B	0.00 ft	B:	0.00
Middle orifice	1 "	h_{slot}	0.000 ft		
Number of orif:	0				
Cg-middle:	0.62	Upper slot		Emergency weir	
invert elev:	0.000 ft	Number of slots:	0	Invert:	0.00 ft
		Invert:	0.00 ft	B:	12.00 ft
		B:	0.00 ft		
		h_{slot}	0.000 ft		

*Note: h = head above the invert of the lowest surface discharge opening.

h* (ft)	H/D-low -	H/D-mid -	Qlow-orif (cfs)	Qlow-weir (cfs)	Qtot-low (cfs)	Qmid-orif (cfs)	Qmid-weir (cfs)	Qtot-med (cfs)	Qslot-low (cfs)	Qslot-upp (cfs)	Qweir (cfs)	Qemerg (cfs)	Qtot (cfs)
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.042	0.500	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.316	0.316
0.083	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.895	0.895
0.125	1.500	1.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.644	1.644
0.167	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.531	2.531
0.208	2.500	2.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.537	3.537
0.250	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.650	4.650
0.292	3.500	3.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.860	5.860
0.333	4.000	4.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.159	7.159
0.375	4.500	4.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.543	8.543
0.417	5.000	5.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.005	10.005
0.458	5.500	5.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	11.543	11.543
0.500	6.000	6.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	13.152	13.152

Outlet structure for Discharge of BMP 3a

Discharge vs Elevation Table

Low orifice	1.000 "	Lower slot		Lower Weir	
Number of orif:	0	Number of slots:	1	Number of weirs:	0
Cg-low:	0.62	Invert:	0.00 ft	Invert:	0.00
		B	1.250 ft	B:	0.00
Middle orifice	1 "	h_{slot}	0.750 ft		
Number of orif:	0				
Cg-middle:	0.62	Upper slot		Emergency weir	
invert elev:	0.000 ft	Number of slots:		Invert:	1.50 ft
		Invert:	0.00 ft	B:	12.00 ft
		B:	0.00 ft		
		h_{slot}	0.000 ft		

*Note: h = head above the invert of the lowest surface discharge opening.

h* (ft)	H/D-low -	H/D-mid -	Qlow-orif (cfs)	Qlow-weir (cfs)	Qtot-low (cfs)	Qmid-orif (cfs)	Qmid-weir (cfs)	Qtot-med (cfs)	Qslot-low (cfs)	Qslot-upp (cfs)	Qweir (cfs)	Qemerg (cfs)	Qtot (cfs)
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.042	0.500	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.033	0.000	0.000	0.000	0.033
0.083	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.093	0.000	0.000	0.000	0.093
0.125	1.500	1.500	0.000	0.000	0.000	0.000	0.000	0.000	0.171	0.000	0.000	0.000	0.171
0.167	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.264	0.000	0.000	0.000	0.264
0.208	2.500	2.500	0.000	0.000	0.000	0.000	0.000	0.000	0.368	0.000	0.000	0.000	0.368
0.250	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.484	0.000	0.000	0.000	0.484
0.292	3.500	3.500	0.000	0.000	0.000	0.000	0.000	0.000	0.610	0.000	0.000	0.000	0.610
0.333	4.000	4.000	0.000	0.000	0.000	0.000	0.000	0.000	0.746	0.000	0.000	0.000	0.746
0.375	4.500	4.500	0.000	0.000	0.000	0.000	0.000	0.000	0.890	0.000	0.000	0.000	0.890
0.417	5.000	5.000	0.000	0.000	0.000	0.000	0.000	0.000	1.042	0.000	0.000	0.000	1.042
0.458	5.500	5.500	0.000	0.000	0.000	0.000	0.000	0.000	1.202	0.000	0.000	0.000	1.202
0.500	6.000	6.000	0.000	0.000	0.000	0.000	0.000	0.000	1.370	0.000	0.000	0.000	1.370
0.542	6.500	6.500	0.000	0.000	0.000	0.000	0.000	0.000	1.545	0.000	0.000	0.000	1.545
0.583	7.000	7.000	0.000	0.000	0.000	0.000	0.000	0.000	1.726	0.000	0.000	0.000	1.726
0.625	7.500	7.500	0.000	0.000	0.000	0.000	0.000	0.000	1.915	0.000	0.000	0.000	1.915
0.667	8.000	8.000	0.000	0.000	0.000	0.000	0.000	0.000	2.109	0.000	0.000	0.000	2.109
0.708	8.500	8.500	0.000	0.000	0.000	0.000	0.000	0.000	2.310	0.000	0.000	0.000	2.310
0.750	9.000	9.000	0.000	0.000	0.000	0.000	0.000	0.000	2.517	0.000	0.000	0.000	2.517
0.792	9.500	9.500	0.000	0.000	0.000	0.000	0.000	0.000	2.730	0.000	0.000	0.000	2.730
0.833	10.000	10.000	0.000	0.000	0.000	0.000	0.000	0.000	2.948	0.000	0.000	0.000	2.948
0.875	10.500	10.500	0.000	0.000	0.000	0.000	0.000	0.000	3.172	0.000	0.000	0.000	3.172

0.917	11.000	11.000	0.000	0.000	0.000	0.000	0.000	0.000	3.378	0.000	0.000	0.000	3.378
0.958	11.500	11.500	0.000	0.000	0.000	0.000	0.000	0.000	3.505	0.000	0.000	0.000	3.505
1.000	12.000	12.000	0.000	0.000	0.000	0.000	0.000	0.000	3.628	0.000	0.000	0.000	3.628
1.042	12.500	12.500	0.000	0.000	0.000	0.000	0.000	0.000	3.747	0.000	0.000	0.000	3.747
1.083	13.000	13.000	0.000	0.000	0.000	0.000	0.000	0.000	3.862	0.000	0.000	0.000	3.862
1.125	13.500	13.500	0.000	0.000	0.000	0.000	0.000	0.000	3.974	0.000	0.000	0.000	3.974
1.167	14.000	14.000	0.000	0.000	0.000	0.000	0.000	0.000	4.083	0.000	0.000	0.000	4.083
1.208	14.500	14.500	0.000	0.000	0.000	0.000	0.000	0.000	4.189	0.000	0.000	0.000	4.189
1.250	15.000	15.000	0.000	0.000	0.000	0.000	0.000	0.000	4.293	0.000	0.000	0.000	4.293
1.292	15.500	15.500	0.000	0.000	0.000	0.000	0.000	0.000	4.394	0.000	0.000	0.000	4.394
1.333	16.000	16.000	0.000	0.000	0.000	0.000	0.000	0.000	4.493	0.000	0.000	0.000	4.493
1.375	16.500	16.500	0.000	0.000	0.000	0.000	0.000	0.000	4.589	0.000	0.000	0.000	4.589
1.417	17.000	17.000	0.000	0.000	0.000	0.000	0.000	0.000	4.684	0.000	0.000	0.000	4.684
1.458	17.500	17.500	0.000	0.000	0.000	0.000	0.000	0.000	4.777	0.000	0.000	0.000	4.777
1.500	18.000	18.000	0.000	0.000	0.000	0.000	0.000	0.000	4.868	0.000	0.000	0.000	4.868
1.542	18.500	18.500	0.000	0.000	0.000	0.000	0.000	0.000	4.957	0.000	0.000	0.316	5.273
1.583	19.000	19.000	0.000	0.000	0.000	0.000	0.000	0.000	5.045	0.000	0.000	0.895	5.940
1.625	19.500	19.500	0.000	0.000	0.000	0.000	0.000	0.000	5.131	0.000	0.000	1.644	6.775
1.667	20.000	20.000	0.000	0.000	0.000	0.000	0.000	0.000	5.216	0.000	0.000	2.531	7.747
1.708	20.500	20.500	0.000	0.000	0.000	0.000	0.000	0.000	5.299	0.000	0.000	3.537	8.837
1.750	21.000	21.000	0.000	0.000	0.000	0.000	0.000	0.000	5.381	0.000	0.000	4.650	10.031
1.792	21.500	21.500	0.000	0.000	0.000	0.000	0.000	0.000	5.462	0.000	0.000	5.860	11.322
1.833	22.000	22.000	0.000	0.000	0.000	0.000	0.000	0.000	5.542	0.000	0.000	7.159	12.701
1.875	22.500	22.500	0.000	0.000	0.000	0.000	0.000	0.000	5.621	0.000	0.000	8.543	14.163
1.917	23.000	23.000	0.000	0.000	0.000	0.000	0.000	0.000	5.698	0.000	0.000	10.005	15.703
1.958	23.500	23.500	0.000	0.000	0.000	0.000	0.000	0.000	5.775	0.000	0.000	11.543	17.318
2.000	24.000	24.000	0.000	0.000	0.000	0.000	0.000	0.000	5.850	0.000	0.000	13.152	19.002
2.042	24.500	24.500	0.000	0.000	0.000	0.000	0.000	0.000	5.925	0.000	0.000	14.830	20.755
2.083	25.000	25.000	0.000	0.000	0.000	0.000	0.000	0.000	5.998	0.000	0.000	16.574	22.572
2.125	25.500	25.500	0.000	0.000	0.000	0.000	0.000	0.000	6.071	0.000	0.000	18.381	24.452
2.167	26.000	26.000	0.000	0.000	0.000	0.000	0.000	0.000	6.143	0.000	0.000	20.249	26.392
2.208	26.500	26.500	0.000	0.000	0.000	0.000	0.000	0.000	6.214	0.000	0.000	22.177	28.391
2.250	27.000	27.000	0.000	0.000	0.000	0.000	0.000	0.000	6.284	0.000	0.000	24.162	30.446
2.292	27.500	27.500	0.000	0.000	0.000	0.000	0.000	0.000	6.354	0.000	0.000	26.203	32.557
2.333	28.000	28.000	0.000	0.000	0.000	0.000	0.000	0.000	6.422	0.000	0.000	28.299	34.721
2.375	28.500	28.500	0.000	0.000	0.000	0.000	0.000	0.000	6.490	0.000	0.000	30.448	36.938
2.417	29.000	29.000	0.000	0.000	0.000	0.000	0.000	0.000	6.557	0.000	0.000	32.648	39.206
2.458	29.500	29.500	0.000	0.000	0.000	0.000	0.000	0.000	6.624	0.000	0.000	34.899	41.523
2.500	30.000	30.000	0.000	0.000	0.000	0.000	0.000	0.000	6.690	0.000	0.000	37.200	43.890

Outlet structure for Discharge of BMP 4

Discharge vs Elevation Table

Low orifice	1.000 "	Lower slot		Lower Weir	
Number of orif:	0	Number of slots:	0	Number of weirs:	0
Cg-low:	0.62	Invert:	0.00 ft	Invert:	0.00
		B	0.00 ft	B:	0.00
Middle orifice	1 "	h_{slot}	0.000 ft		
Number of orif:	0				
Cg-middle:	0.62	Upper slot		Emergency weir	
invert elev:	0.000 ft	Number of slots:	0	Invert:	0.00 ft
		Invert:	0.00 ft	B:	12.00 ft
		B:	0.00 ft		
		h_{slot}	0.000 ft		

*Note: h = head above the invert of the lowest surface discharge opening.

h* (ft)	H/D-low -	H/D-mid -	Qlow-orif (cfs)	Qlow-weir (cfs)	Qtot-low (cfs)	Qmid-orif (cfs)	Qmid-weir (cfs)	Qtot-med (cfs)	Qslot-low (cfs)	Qslot-upp (cfs)	Qweir (cfs)	Qemerg (cfs)	Qtot (cfs)
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.042	0.500	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.316	0.316
0.083	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.895	0.895
0.125	1.500	1.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.644	1.644
0.167	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.531	2.531
0.208	2.500	2.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.537	3.537
0.250	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.650	4.650
0.292	3.500	3.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.860	5.860
0.333	4.000	4.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.159	7.159
0.375	4.500	4.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.543	8.543
0.417	5.000	5.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.005	10.005
0.458	5.500	5.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	11.543	11.543
0.500	6.000	6.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	13.152	13.152

Outlet structure for Discharge of BMP 5

Discharge vs Elevation Table

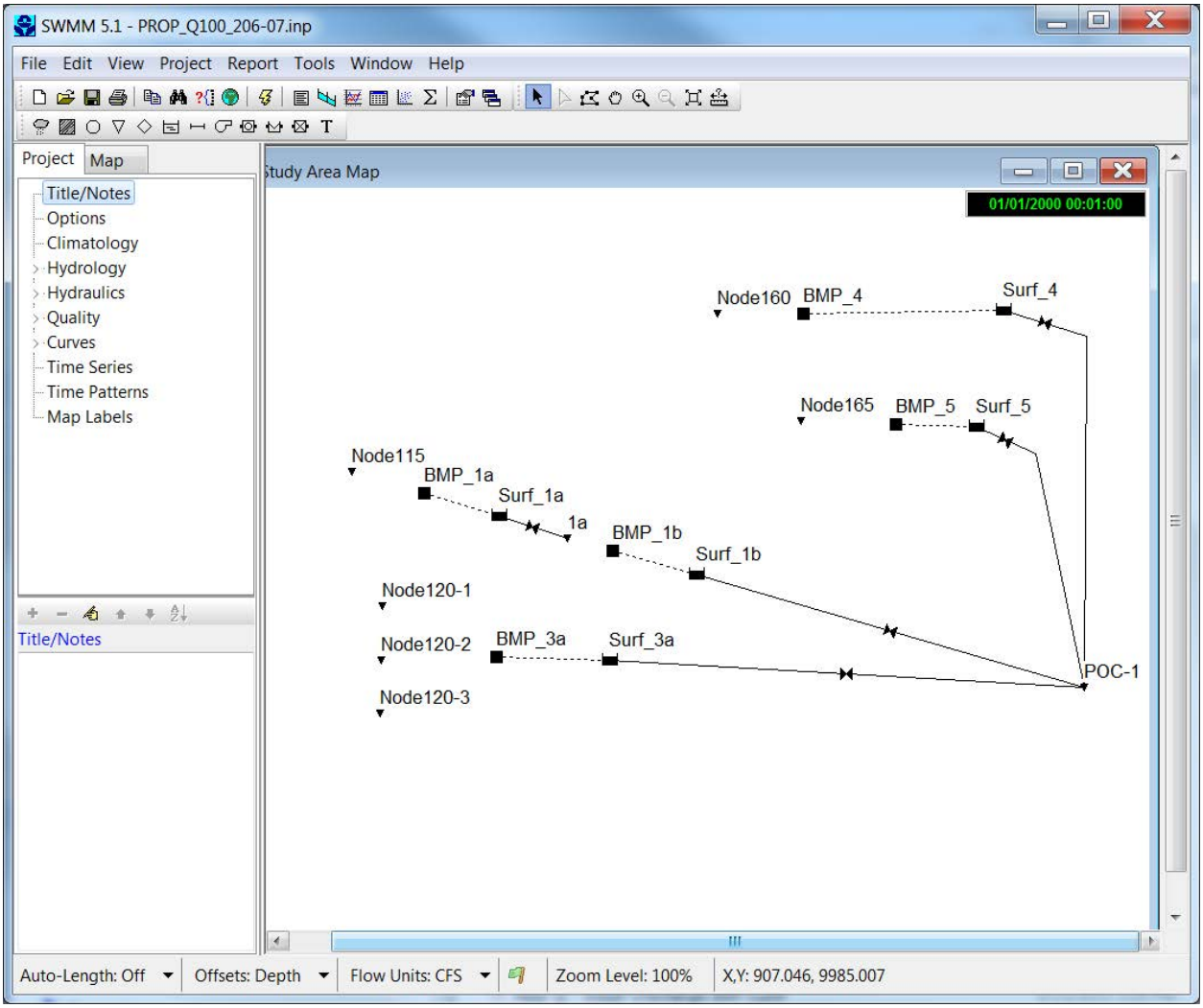
Low orifice	1.000 "	Lower slot		Lower Weir	
Number of orif:	0	Number of slots:	0	Number of weirs:	0
Cg-low:	0.62	Invert:	0.00 ft	Invert:	0.00
		B	0.00 ft	B:	0.00
Middle orifice	1 "	h_{slot}	0.000 ft		
Number of orif:	0				
Cg-middle:	0.62	Upper slot		Emergency weir	
invert elev:	0.000 ft	Number of slots:	0	Invert:	0.00 ft
		Invert:	0.00 ft	B:	12.00 ft
		B:	0.00 ft		
		h_{slot}	0.000 ft		

*Note: h = head above the invert of the lowest surface discharge opening.

h* (ft)	H/D-low -	H/D-mid -	Qlow-orif (cfs)	Qlow-weir (cfs)	Qtot-low (cfs)	Qmid-orif (cfs)	Qmid-weir (cfs)	Qtot-med (cfs)	Qslot-low (cfs)	Qslot-upp (cfs)	Qweir (cfs)	Qemerg (cfs)	Qtot (cfs)
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.042	0.500	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.316	0.316
0.083	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.895	0.895
0.125	1.500	1.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.644	1.644
0.167	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.531	2.531
0.208	2.500	2.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.537	3.537
0.250	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.650	4.650
0.292	3.500	3.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.860	5.860
0.333	4.000	4.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.159	7.159
0.375	4.500	4.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.543	8.543
0.417	5.000	5.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.005	10.005
0.458	5.500	5.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	11.543	11.543
0.500	6.000	6.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	13.152	13.152

Appendix 4:
SWMM Model Input

POST-DEV (POC-1)



```
[TITLE]
;;Project Title/Notes

[OPTIONS]
;;Option             Value
FLOW_UNITS           CFS
INFILTRATION         GREEN_AMPT
FLOW_ROUTING         KINWAVE
LINK_OFFSETS         DEPTH
MIN_SLOPE            0
ALLOW_PONDING        NO
SKIP_STEADY_STATE    NO

START_DATE           01/01/2000
START_TIME           00:00:00
REPORT_START_DATE    01/01/2000
REPORT_START_TIME    00:00:00
END_DATE             01/01/2000
END_TIME             12:00:00
SWEEP_START          01/01
SWEEP_END            12/31
DRY_DAYS             0
REPORT_STEP          00:01:00
WET_STEP             00:01:00
DRY_STEP             00:01:00
ROUTING_STEP         0:00:30

INERTIAL_DAMPING     PARTIAL
NORMAL_FLOW_LIMITED  BOTH
FORCE_MAIN_EQUATION  H-W
VARIABLE_STEP        0.75
LENGTHENING_STEP     0
MIN_SURFAREA         12.557
MAX_TRIALS           8
HEAD_TOLERANCE       0.005
SYS_FLOW_TOL         5
LAT_FLOW_TOL         5
MINIMUM_STEP         0.5
THREADS              1

[EVAPORATION]
;;Data Source    Parameters
;;-------------- ----------------
MONTHLY          0.03   0.05   0.08   0.11   0.13   0.15   0.15   0.13   0.11   0.08   0.04   0.02
DRY_ONLY         NO

[RAINGAGES]
;;Name           Format    Interval SCF      Source
;;-------------- --------- ------ ------ ----------
ZeroRain         INTENSITY 6:00     1.0      TIMESERIES ZeroRain

[SUBCATCHMENTS]
;;Name           Rain Gage        Outlet           Area     %Imperv  Width    %Slope   CurbLen  SnowPack
;;-------------- ---------------- ---------------- -------- -------- -------- -------- -------- ----------------
BMP_1a           ZeroRain         Surf_1a          0.043251 0        10       0.5      0
BMP_1b           ZeroRain         Surf_1b          0.037098 0        10       0.5      0
BMP_3a           ZeroRain         Surf_3a          0.197819 0        10       0.5      0
BMP_4            ZeroRain         Surf_4           0.050298 0        10       0.5      0
```

```
BMP_5            ZeroRain         Surf_5           0.022084 0        10       0.5      0

[SUBAREAS]
;;Subcatchment   N-Imperv   N-Perv     S-Imperv   S-Perv     PctZero    RouteTo    PctRouted
;;-------------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
BMP_1a           0.012      0.08       0.05       0.10       25         OUTLET
BMP_1b           0.012      0.08       0.05       0.10       25         OUTLET
BMP_3a           0.012      0.08       0.05       0.10       25         OUTLET
BMP_4            0.012      0.08       0.05       0.10       25         OUTLET
BMP_5            0.012      0.08       0.05       0.10       25         OUTLET

[INFILTRATION]
;;Subcatchment   Suction    Ksat       IMD
;;-------------- ---------- ---------- ----------
BMP_1a           3          0.15       0.32
BMP_1b           3          0.15       0.32
BMP_3a           5.4        0.0976     0.31
BMP_4            9          0.01875    0.3
BMP_5            9          0.01875    0.3

[LID_CONTROLS]
;;Name           Type/Layer Parameters
;;-------------- ---------- ----------
BMP_1a           BC
BMP_1a           SURFACE    6          0          0          0          5
BMP_1a           SOIL       18         0.4        0.2        0.1        5          5          1.5
BMP_1a           STORAGE    27         0.67       0          0
BMP_1a           DRAIN      0.0690     0.5        3          6

BMP_1b           BC
BMP_1b           SURFACE    6          0          0          0          5
BMP_1b           SOIL       18         0.4        0.2        0.1        5          5          1.5
BMP_1b           STORAGE    27         0.67       0          0
BMP_1b           DRAIN      0.2608     0.5        3          6

BMP_3a           BC
BMP_3a           SURFACE    24         0          0          0          5
BMP_3a           SOIL       18         0.4        0.2        0.1        5          5          1.5
BMP_3a           STORAGE    27         0.67       0          0
BMP_3a           DRAIN      0.0869     0.5        3          6

BMP_4            BC
BMP_4            SURFACE    6          0          0          0          5
BMP_4            SOIL       18         0.4        0.2        0.1        5          5          1.5
BMP_4            STORAGE    15         0.67       0          0
BMP_4            DRAIN      0.2374     0.5        3          6

BMP_5            BC
BMP_5            SURFACE    18         0          0          0          5
BMP_5            SOIL       18         0.4        0.2        0.1        5          5          1.5
BMP_5            STORAGE    27         0.67       0          0
BMP_5            DRAIN      0.2650     0.5        3          6

[LID_USAGE]
;;Subcatchment   LID Process      Number  Area       Width      InitSat    FromImp    ToPerv     RptFile                  DrainTo

;;-------------- ---------------- ------- ---------- ---------- ---------- ---------- ---------- ------------------------
----------------
```

BMP_1a	BMP_1a	1	1884.01	0	0	100	0	*	POC-1
BMP_1b	BMP_1b	1	1615.99	0	0	100	0	*	POC-1
BMP_3a	BMP_3a	1	8617.00	0	0	100	0	*	POC-1
BMP_4	BMP_4	1	2190.98	0	0	100	0	*	POC-1
BMP_5	BMP_5	1	961.98	0	0	100	0	*	POC-1

[OUTFALLS]

;;Name	Elevation	Type	Stage Data	Gated	Route To
POC-1	0	FREE		NO	
1a	0	FREE		NO	BMP_1b
Node115	0	FREE		NO	BMP_1a
Node120-1	0	FREE		NO	BMP_3a
Node120-2	0	FREE		NO	BMP_3a
Node120-3	0	FREE		NO	BMP_3a
Node160	0	FREE		NO	BMP_4
Node165	0	FREE		NO	BMP_5

[STORAGE]

;;Name	Elev.	MaxDepth	InitDepth	Shape	Curve Name/Params	N/A	Fevap	Psi	Ksat	IMD
Surf_1a	0	1.0	0	TABULAR	BMP_1a	0	0			
Surf_1b	0	0.5	0	TABULAR	BMP_1b	0	0			
Surf_3a	0	2.5	0	TABULAR	BMP_3a	0	0			
Surf_4	0	0.5	0	TABULAR	BMP_4	0	0			
Surf_5	0	0.5	0	TABULAR	BMP_5	0	0			

[OUTLETS]

;;Name	From Node	To Node	Offset	Type	QTable/Qcoeff	Qexpon	Gated
1a	Surf_1a	1a	0	TABULAR/HEAD	BMP-1a		NO
1b	Surf_1b	POC-1	0	TABULAR/HEAD	BMP-1b		NO
3a	Surf_3a	POC-1	0	TABULAR/HEAD	BMP-3a		NO
4	Surf_4	POC-1	0	TABULAR/HEAD	BMP-4		NO
5	Surf_5	POC-1	0	TABULAR/HEAD	BMP-5		NO

[INFLOWS]

;;Node	Constituent	Time Series	Type	Mfactor	Sfactor	Baseline	Pattern
Node115	FLOW	Node115	FLOW	1.0	1.0		
Node120-1	FLOW	Node120-1	FLOW	1.0	1.0		
Node120-2	FLOW	Node120-2	FLOW	1.0	1.0		
Node120-3	FLOW	Node120-3	FLOW	1.0	1.0		
Node160	FLOW	Node160	FLOW	1.0	1.0		
Node165	FLOW	Node165	FLOW	1.0	1.0		

[CURVES]

;;Name	Type	X-Value	Y-Value
BMP-1a	Rating	0.000	0.000
BMP-1a		0.042	0.316
BMP-1a		0.083	0.895
BMP-1a		0.125	1.644

```
BMP-1a                      0.167      2.531
BMP-1a                      0.208      3.537
BMP-1a                      0.250      4.650
BMP-1a                      0.292      5.860
BMP-1a                      0.333      7.159
BMP-1a                      0.375      8.543
BMP-1a                      0.417      10.005
BMP-1a                      0.458      11.543
BMP-1a                      0.500      13.152
BMP-1a                      0.542      14.830
BMP-1a                      0.583      16.574
BMP-1a                      0.625      18.381
BMP-1a                      0.667      20.249
BMP-1a                      0.708      22.177
BMP-1a                      0.750      24.162
BMP-1a                      0.792      26.203
BMP-1a                      0.833      28.299
BMP-1a                      0.875      30.448
BMP-1a                      0.917      32.648
BMP-1a                      0.958      34.899
BMP-1a                      1.000      37.200
;
BMP-1b            Rating    0.000      0.000
BMP-1b                      0.042      0.316
BMP-1b                      0.083      0.895
BMP-1b                      0.125      1.644
BMP-1b                      0.167      2.531
BMP-1b                      0.208      3.537
BMP-1b                      0.250      4.650
BMP-1b                      0.292      5.860
BMP-1b                      0.333      7.159
BMP-1b                      0.375      8.543
BMP-1b                      0.417      10.005
BMP-1b                      0.458      11.543
BMP-1b                      0.500      13.152
;
BMP-3a            Rating    0.000      0.000
BMP-3a                      0.042      0.033
BMP-3a                      0.083      0.093
BMP-3a                      0.125      0.171
BMP-3a                      0.167      0.264
BMP-3a                      0.208      0.368
BMP-3a                      0.250      0.484
BMP-3a                      0.292      0.610
BMP-3a                      0.333      0.746
BMP-3a                      0.375      0.890
BMP-3a                      0.417      1.042
BMP-3a                      0.458      1.202
BMP-3a                      0.500      1.370
BMP-3a                      0.542      1.545
BMP-3a                      0.583      1.726
BMP-3a                      0.625      1.915
BMP-3a                      0.667      2.109
BMP-3a                      0.708      2.310
BMP-3a                      0.750      2.517
BMP-3a                      0.792      2.730
BMP-3a                      0.833      2.948
BMP-3a                      0.875      3.172
```

```
BMP-3a                      0.917      3.378
BMP-3a                      0.958      3.505
BMP-3a                      1.000      3.628
BMP-3a                      1.042      3.747
BMP-3a                      1.083      3.862
BMP-3a                      1.125      3.974
BMP-3a                      1.167      4.083
BMP-3a                      1.208      4.189
BMP-3a                      1.250      4.293
BMP-3a                      1.292      4.394
BMP-3a                      1.333      4.493
BMP-3a                      1.375      4.589
BMP-3a                      1.417      4.684
BMP-3a                      1.458      4.777
BMP-3a                      1.500      4.868
BMP-3a                      1.542      5.273
BMP-3a                      1.583      5.940
BMP-3a                      1.625      6.775
BMP-3a                      1.667      7.747
BMP-3a                      1.708      8.837
BMP-3a                      1.750      10.031
BMP-3a                      1.792      11.322
BMP-3a                      1.833      12.701
BMP-3a                      1.875      14.163
BMP-3a                      1.917      15.703
BMP-3a                      1.958      17.318
BMP-3a                      2.000      19.002
BMP-3a                      2.042      20.755
BMP-3a                      2.083      22.572
BMP-3a                      2.125      24.452
BMP-3a                      2.167      26.392
BMP-3a                      2.208      28.391
BMP-3a                      2.250      30.446
BMP-3a                      2.292      32.557
BMP-3a                      2.333      34.721
BMP-3a                      2.375      36.938
BMP-3a                      2.417      39.206
BMP-3a                      2.458      41.523
BMP-3a                      2.500      43.890
;
BMP-4             Rating    0.000      0.000
BMP-4                       0.042      0.316
BMP-4                       0.083      0.895
BMP-4                       0.125      1.644
BMP-4                       0.167      2.531
BMP-4                       0.208      3.537
BMP-4                       0.250      4.650
BMP-4                       0.292      5.860
BMP-4                       0.333      7.159
BMP-4                       0.375      8.543
BMP-4                       0.417      10.005
BMP-4                       0.458      11.543
BMP-4                       0.500      13.152
;
BMP-5             Rating    0.000      0.000
BMP-5                       0.042      0.316
BMP-5                       0.083      0.895
BMP-5                       0.125      1.644
```

```
BMP-5                       0.167      2.531
BMP-5                       0.208      3.537
BMP-5                       0.250      4.650
BMP-5                       0.292      5.860
BMP-5                       0.333      7.159
BMP-5                       0.375      8.543
BMP-5                       0.417      10.005
BMP-5                       0.458      11.543
BMP-5                       0.500      13.152
;
BMP_1a           Storage    0.00       1884
BMP_1a                      1.00       1884
;
BMP_1b           Storage    0.00       1616
BMP_1b                      0.50       1616
;
BMP_3a           Storage    0.00       8617
BMP_3a                      2.50       8617
;
BMP_4            Storage    0.00       2191
BMP_4                       0.50       2191
;
BMP_5            Storage    0.00       962
BMP_5                       0.50       962

[TIMESERIES]
;;Name           Date       Time       Value
;;-------------- ---------- ---------- ----------
Node115                     0:00       0.00
Node115                     0:08       0.20
Node115                     0:16       0.21
Node115                     0:24       0.21
Node115                     0:32       0.22
Node115                     0:40       0.22
Node115                     0:48       0.23
Node115                     0:56       0.24
Node115                     1:04       0.24
Node115                     1:12       0.25
Node115                     1:20       0.25
Node115                     1:28       0.27
Node115                     1:36       0.27
Node115                     1:44       0.28
Node115                     1:52       0.29
Node115                     2:00       0.31
Node115                     2:08       0.32
Node115                     2:16       0.34
Node115                     2:24       0.35
Node115                     2:32       0.37
Node115                     2:40       0.39
Node115                     2:48       0.42
Node115                     2:56       0.44
Node115                     3:04       0.49
Node115                     3:12       0.52
Node115                     3:20       0.59
Node115                     3:28       0.64
Node115                     3:36       0.79
Node115                     3:44       0.90
Node115                     3:52       1.31
```

Node115	4:00	1.85
Node115	4:08	6.82
Node115	4:16	1.05
Node115	4:24	0.71
Node115	4:32	0.55
Node115	4:40	0.46
Node115	4:48	0.40
Node115	4:56	0.36
Node115	5:04	0.33
Node115	5:12	0.30
Node115	5:20	0.28
Node115	5:28	0.26
Node115	5:36	0.24
Node115	5:44	0.23
Node115	5:52	0.22
Node115	6:00	0.21

;

Node120-1	0:00	0.00
Node120-1	0:05	0.28
Node120-1	0:10	0.28
Node120-1	0:15	0.29
Node120-1	0:20	0.29
Node120-1	0:25	0.29
Node120-1	0:30	0.30
Node120-1	0:35	0.30
Node120-1	0:40	0.31
Node120-1	0:45	0.31
Node120-1	0:50	0.32
Node120-1	0:55	0.32
Node120-1	1:00	0.33
Node120-1	1:05	0.34
Node120-1	1:10	0.34
Node120-1	1:15	0.35
Node120-1	1:20	0.35
Node120-1	1:25	0.36
Node120-1	1:30	0.37
Node120-1	1:35	0.38
Node120-1	1:40	0.38
Node120-1	1:45	0.40
Node120-1	1:50	0.40
Node120-1	1:55	0.42
Node120-1	2:00	0.42
Node120-1	2:05	0.44
Node120-1	2:10	0.45
Node120-1	2:15	0.46
Node120-1	2:20	0.47
Node120-1	2:25	0.49
Node120-1	2:30	0.50
Node120-1	2:35	0.53
Node120-1	2:40	0.54
Node120-1	2:45	0.57
Node120-1	2:50	0.59
Node120-1	2:55	0.62
Node120-1	3:00	0.64
Node120-1	3:05	0.69
Node120-1	3:10	0.72
Node120-1	3:15	0.78
Node120-1	3:20	0.82

Node120-1	3:25	0.91
Node120-1	3:30	0.96
Node120-1	3:35	1.10
Node120-1	3:40	1.19
Node120-1	3:45	1.46
Node120-1	3:50	1.66
Node120-1	3:55	2.44
Node120-1	4:00	3.44
Node120-1	4:05	12.40
Node120-1	4:10	1.96
Node120-1	4:15	1.31
Node120-1	4:20	1.03
Node120-1	4:25	0.86
Node120-1	4:30	0.75
Node120-1	4:35	0.67
Node120-1	4:40	0.61
Node120-1	4:45	0.56
Node120-1	4:50	0.52
Node120-1	4:55	0.48
Node120-1	5:00	0.45
Node120-1	5:05	0.43
Node120-1	5:10	0.41
Node120-1	5:15	0.39
Node120-1	5:20	0.37
Node120-1	5:25	0.36
Node120-1	5:30	0.34
Node120-1	5:35	0.33
Node120-1	5:40	0.32
Node120-1	5:45	0.31
Node120-1	5:50	0.30
Node120-1	5:55	0.29
Node120-1	6:00	0.28
;		
Node120-2	0:00	0.00
Node120-2	0:08	0.43
Node120-2	0:16	0.43
Node120-2	0:24	0.45
Node120-2	0:32	0.45
Node120-2	0:40	0.47
Node120-2	0:48	0.48
Node120-2	0:56	0.49
Node120-2	1:04	0.50
Node120-2	1:12	0.52
Node120-2	1:20	0.53
Node120-2	1:28	0.55
Node120-2	1:36	0.57
Node120-2	1:44	0.59
Node120-2	1:52	0.61
Node120-2	2:00	0.64
Node120-2	2:08	0.66
Node120-2	2:16	0.70
Node120-2	2:24	0.72
Node120-2	2:32	0.78
Node120-2	2:40	0.81
Node120-2	2:48	0.88
Node120-2	2:56	0.92
Node120-2	3:04	1.02
Node120-2	3:12	1.08

Node120-2	3:20	1.24
Node120-2	3:28	1.34
Node120-2	3:36	1.64
Node120-2	3:44	1.87
Node120-2	3:52	2.75
Node120-2	4:00	3.87
Node120-2	4:08	14.93
Node120-2	4:16	2.20
Node120-2	4:24	1.47
Node120-2	4:32	1.15
Node120-2	4:40	0.97
Node120-2	4:48	0.84
Node120-2	4:56	0.75
Node120-2	5:04	0.68
Node120-2	5:12	0.63
Node120-2	5:20	0.58
Node120-2	5:28	0.54
Node120-2	5:36	0.51
Node120-2	5:44	0.48
Node120-2	5:52	0.46
Node120-2	6:00	0.44
;		
Node120-3	0:00	0.00
Node120-3	0:05	0.07
Node120-3	0:10	0.07
Node120-3	0:15	0.07
Node120-3	0:20	0.07
Node120-3	0:25	0.07
Node120-3	0:30	0.08
Node120-3	0:35	0.08
Node120-3	0:40	0.08
Node120-3	0:45	0.08
Node120-3	0:50	0.08
Node120-3	0:55	0.08
Node120-3	1:00	0.08
Node120-3	1:05	0.09
Node120-3	1:10	0.09
Node120-3	1:15	0.09
Node120-3	1:20	0.09
Node120-3	1:25	0.09
Node120-3	1:30	0.09
Node120-3	1:35	0.10
Node120-3	1:40	0.10
Node120-3	1:45	0.10
Node120-3	1:50	0.10
Node120-3	1:55	0.11
Node120-3	2:00	0.11
Node120-3	2:05	0.11
Node120-3	2:10	0.11
Node120-3	2:15	0.12
Node120-3	2:20	0.12
Node120-3	2:25	0.12
Node120-3	2:30	0.13
Node120-3	2:35	0.13
Node120-3	2:40	0.14
Node120-3	2:45	0.14
Node120-3	2:50	0.15
Node120-3	2:55	0.16

Node120-3	3:00	0.16
Node120-3	3:05	0.17
Node120-3	3:10	0.18
Node120-3	3:15	0.20
Node120-3	3:20	0.21
Node120-3	3:25	0.23
Node120-3	3:30	0.24
Node120-3	3:35	0.28
Node120-3	3:40	0.30
Node120-3	3:45	0.37
Node120-3	3:50	0.42
Node120-3	3:55	0.62
Node120-3	4:00	0.87
Node120-3	4:05	2.46
Node120-3	4:10	0.50
Node120-3	4:15	0.33
Node120-3	4:20	0.26
Node120-3	4:25	0.22
Node120-3	4:30	0.19
Node120-3	4:35	0.17
Node120-3	4:40	0.15
Node120-3	4:45	0.14
Node120-3	4:50	0.13
Node120-3	4:55	0.12
Node120-3	5:00	0.12
Node120-3	5:05	0.11
Node120-3	5:10	0.10
Node120-3	5:15	0.10
Node120-3	5:20	0.09
Node120-3	5:25	0.09
Node120-3	5:30	0.09
Node120-3	5:35	0.08
Node120-3	5:40	0.08
Node120-3	5:45	0.08
Node120-3	5:50	0.08
Node120-3	5:55	0.07
Node120-3	6:00	0.07
;		
Node160	0:00	0.00
Node160	0:05	0.13
Node160	0:10	0.13
Node160	0:15	0.14
Node160	0:20	0.14
Node160	0:25	0.14
Node160	0:30	0.14
Node160	0:35	0.15
Node160	0:40	0.15
Node160	0:45	0.15
Node160	0:50	0.15
Node160	0:55	0.16
Node160	1:00	0.16
Node160	1:05	0.16
Node160	1:10	0.16
Node160	1:15	0.17
Node160	1:20	0.17
Node160	1:25	0.17
Node160	1:30	0.18
Node160	1:35	0.18

Node160	1:40	0.18
Node160	1:45	0.19
Node160	1:50	0.19
Node160	1:55	0.20
Node160	2:00	0.20
Node160	2:05	0.21
Node160	2:10	0.21
Node160	2:15	0.22
Node160	2:20	0.23
Node160	2:25	0.24
Node160	2:30	0.24
Node160	2:35	0.25
Node160	2:40	0.26
Node160	2:45	0.27
Node160	2:50	0.28
Node160	2:55	0.30
Node160	3:00	0.31
Node160	3:05	0.33
Node160	3:10	0.34
Node160	3:15	0.37
Node160	3:20	0.39
Node160	3:25	0.43
Node160	3:30	0.46
Node160	3:35	0.53
Node160	3:40	0.57
Node160	3:45	0.70
Node160	3:50	0.80
Node160	3:55	1.17
Node160	4:00	1.65
Node160	4:05	5.68
Node160	4:10	0.94
Node160	4:15	0.63
Node160	4:20	0.49
Node160	4:25	0.41
Node160	4:30	0.36
Node160	4:35	0.32
Node160	4:40	0.29
Node160	4:45	0.27
Node160	4:50	0.25
Node160	4:55	0.23
Node160	5:00	0.22
Node160	5:05	0.21
Node160	5:10	0.20
Node160	5:15	0.19
Node160	5:20	0.18
Node160	5:25	0.17
Node160	5:30	0.16
Node160	5:35	0.16
Node160	5:40	0.15
Node160	5:45	0.15
Node160	5:50	0.14
Node160	5:55	0.14
Node160	6:00	0.14
;		
Node165	0:00	0.00
Node165	0:06	0.11
Node165	0:12	0.11
Node165	0:18	0.11

Node165	0:24	0.12
Node165	0:30	0.12
Node165	0:36	0.12
Node165	0:42	0.12
Node165	0:48	0.12
Node165	0:54	0.13
Node165	1:00	0.13
Node165	1:06	0.13
Node165	1:12	0.14
Node165	1:18	0.14
Node165	1:24	0.14
Node165	1:30	0.15
Node165	1:36	0.15
Node165	1:42	0.15
Node165	1:48	0.16
Node165	1:54	0.16
Node165	2:00	0.17
Node165	2:06	0.17
Node165	2:12	0.18
Node165	2:18	0.19
Node165	2:24	0.19
Node165	2:30	0.20
Node165	2:36	0.21
Node165	2:42	0.22
Node165	2:48	0.23
Node165	2:54	0.24
Node165	3:00	0.25
Node165	3:06	0.28
Node165	3:12	0.29
Node165	3:18	0.32
Node165	3:24	0.34
Node165	3:30	0.39
Node165	3:36	0.42
Node165	3:42	0.52
Node165	3:48	0.59
Node165	3:54	0.86
Node165	4:00	1.22
Node165	4:06	4.55
Node165	4:12	0.69
Node165	4:18	0.46
Node165	4:24	0.36
Node165	4:30	0.30
Node165	4:36	0.26
Node165	4:42	0.24
Node165	4:48	0.21
Node165	4:54	0.20
Node165	5:00	0.18
Node165	5:06	0.17
Node165	5:12	0.16
Node165	5:18	0.15
Node165	5:24	0.14
Node165	5:30	0.14
Node165	5:36	0.13
Node165	5:42	0.13
Node165	5:48	0.12
Node165	5:54	0.12
Node165	6:00	0.11

;

```
ZeroRain                    0:00       0
ZeroRain                    6:00       0

[REPORT]
;;Reporting Options
INPUT      NO
CONTROLS   NO
SUBCATCHMENTS ALL
NODES ALL
LINKS ALL

[TAGS]

[MAP]
DIMENSIONS 0.000 0.000 10000.000 10000.000
Units      None

[COORDINATES]
;;Node           X-Coord            Y-Coord
;;-------------- ------------------ ------------------
POC-1            10230.179          3375.959
1a               3363.171           5358.056
Node115          507.020            6240.250
Node120-1        912.637            4446.178
Node120-2        897.036            3728.549
Node120-3        881.435            3026.521
Node160          5358.814           8330.733
Node165          6466.459           6911.076
Surf_1a          2455.243           5652.174
Surf_1b          5076.726           4872.123
Surf_3a          3925.831           3734.015
Surf_4           9156.010           8375.959
Surf_5           8797.954           6841.432

[VERTICES]
;;Link           X-Coord            Y-Coord
;;-------------- ------------------ ------------------
4                10268.542          8043.478
5                9590.793           6470.588

[Polygons]
;;Subcatchment   X-Coord            Y-Coord
;;-------------- ------------------ ------------------
BMP_1a           1457.801           5959.079
BMP_1b           3958.869           5179.949
BMP_3a           2416.452           3778.920
BMP_4            6503.856           8341.902
BMP_5            7723.785           6867.008

[SYMBOLS]
;;Gage           X-Coord            Y-Coord
;;-------------- ------------------ ------------------
ZeroRain         11692.668          8970.359
```

Appendix 5:
SWMM Model Results

```
EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.012)
--------------------------------------------------------------

*******************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
*******************************************************

****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... YES
  Ponding Allowed ........ NO
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Flow Routing Method ...... KINWAVE
Starting Date ............ 01/01/2000 00:00:00
Ending Date .............. 01/01/2000 12:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 00:01:00
Wet Time Step ............ 00:01:00
Dry Time Step ............ 00:01:00
Routing Time Step ........ 30.00 sec


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Initial LID Storage ......         0.053         1.800
Total Precipitation ......         0.000         0.000
Outfall Runon ............         1.898        64.980
Evaporation Loss .........         0.000         0.013
Infiltration Loss ........         0.000         0.000
Surface Runoff ...........         0.870        29.786
LID Drainage .............         0.245         8.396
Final Storage ............         0.835        28.597
Continuity Error (%) .....        -0.018


**************************        Volume        Volume
Flow Routing Continuity        acre-feet      10^6 gal
**************************     ---------     ---------
Dry Weather Inflow .......         0.000         0.000
Wet Weather Inflow .......         1.115         0.363
Groundwater Inflow .......         0.000         0.000
RDII Inflow ..............         0.000         0.000
External Inflow ..........         1.701         0.554
External Outflow .........         2.811         0.916
Flooding Loss ............         0.000         0.000
```

Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.004	0.001
Continuity Error (%)	0.037	

****
Highest Flow Instability Indexes
****
All links are stable.

****
Routing Time Step Summary
****

Minimum Time Step	:	30.00 sec
Average Time Step	:	30.00 sec
Maximum Time Step	:	30.00 sec
Percent in Steady State	:	0.00
Average Iterations per Step	:	1.00
Percent Not Converging	:	0.00

****
Subcatchment Runoff Summary
****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
BMP_1a	0.00	78.63	0.01	0.00	59.20	0.07	6.64	0.753
BMP_1b	0.00	63.70	0.01	0.00	51.91	0.05	6.03	0.815
BMP_3a	0.00	65.48	0.01	0.00	29.40	0.16	23.53	0.449
BMP_4	0.00	43.79	0.01	0.00	34.25	0.05	5.44	0.782
BMP_5	0.00	84.20	0.01	0.00	61.61	0.04	4.39	0.732

****
LID Performance Summary
****

Subcatchment	LID Control	Total Inflow in	Evap Loss in	Infil Loss in	Surface Outflow in	Drain Outflow in	Initial Storage in	Final Storage in	Continuity Error %
BMP_1a	BMP_1a	78.63	0.01	0.00	54.60	4.60	1.80	21.21	-0.01
BMP_1b	BMP_1b	63.70	0.01	0.00	41.22	10.69	1.80	13.60	-0.03
BMP_3a	BMP_3a	65.48	0.01	0.00	22.89	6.51	1.80	37.88	-0.02
BMP_4	BMP_4	43.79	0.01	0.00	21.43	12.81	1.80	11.35	-0.04
BMP_5	BMP_5	84.20	0.01	0.00	42.80	18.81	1.80	24.40	-0.04

****
Node Depth Summary
****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
POC-1	OUTFALL	0.00	0.00	0.00	0 00:00	0.00
1a	OUTFALL	0.00	0.00	0.00	0 00:00	0.00
Node115	OUTFALL	0.00	0.00	0.00	0 00:00	0.00
Node120-1	OUTFALL	0.00	0.00	0.00	0 00:00	0.00
Node120-2	OUTFALL	0.00	0.00	0.00	0 00:00	0.00
Node120-3	OUTFALL	0.00	0.00	0.00	0 00:00	0.00
Node160	OUTFALL	0.00	0.00	0.00	0 00:00	0.00
Node165	OUTFALL	0.00	0.00	0.00	0 00:00	0.00
Surf_1a	STORAGE	0.02	0.31	0.31	0 04:11	0.31
Surf_1b	STORAGE	0.01	0.29	0.29	0 04:14	0.29
Surf_3a	STORAGE	0.15	0.86	0.86	0 04:22	0.86
Surf_4	STORAGE	0.01	0.26	0.26	0 04:08	0.26
Surf_5	STORAGE	0.01	0.23	0.23	0 04:09	0.23

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
POC-1	OUTFALL	0.34	12.71	0 04:09	0.0798	0.297	0.000
1a	OUTFALL	0.00	6.32	0 04:11	0	0.0642	0.000
Node115	OUTFALL	6.82	6.82	0 04:08	0.0923	0.0923	0.000
Node120-1	OUTFALL	12.40	12.40	0 04:05	0.126	0.126	0.000
Node120-2	OUTFALL	14.93	14.93	0 04:08	0.195	0.195	0.000
Node120-3	OUTFALL	2.46	2.46	0 04:05	0.0304	0.0304	0.000
Node160	OUTFALL	5.68	5.68	0 04:05	0.0598	0.0598	0.000
Node165	OUTFALL	4.55	4.55	0 04:06	0.0505	0.0505	0.000
Surf_1a	STORAGE	6.62	6.62	0 04:10	0.0641	0.0641	-0.068
Surf_1b	STORAGE	6.02	6.02	0 04:12	0.0415	0.0415	0.039
Surf_3a	STORAGE	23.39	23.39	0 04:08	0.123	0.123	0.246
Surf_4	STORAGE	5.37	5.37	0 04:07	0.0293	0.0293	0.153
Surf_5	STORAGE	4.34	4.34	0 04:08	0.0257	0.0257	0.076

****
Node Flooding Summary
****

No nodes were flooded.

****
Storage Volume Summary
****

Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
Surf_1a	0.031	2	0	0	0.581	31	0 04:11	6.32
Surf_1b	0.015	2	0	0	0.474	59	0 04:13	5.86
Surf_3a	1.247	6	0	0	7.403	34	0 04:21	3.09
Surf_4	0.017	2	0	0	0.564	51	0 04:08	4.82
Surf_5	0.007	1	0	0	0.225	47	0 04:08	4.20

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
POC-1	91.81	1.00	12.71	0.297
1a	25.21	0.79	6.32	0.064
Node115	49.93	0.57	6.82	0.092
Node120-1	49.93	0.78	12.40	0.126
Node120-2	49.93	1.21	14.93	0.195
Node120-3	49.93	0.19	2.46	0.030
Node160	49.93	0.37	5.68	0.060
Node165	49.93	0.31	4.55	0.050
System	52.07	5.23	52.78	0.916

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
1a	DUMMY	6.32	0 04:11			
1b	DUMMY	5.86	0 04:14			
3a	DUMMY	3.09	0 04:22			
4	DUMMY	4.82	0 04:08			
5	DUMMY	4.20	0 04:09			

****
Conduit Surcharge Summary
****

No conduits were surcharged.

Analysis begun on: Tue Sep 19 14:35:38 2017
Analysis ended on: Tue Sep 19 14:35:38 2017
Total elapsed time: < 1 sec

APPENDIX A

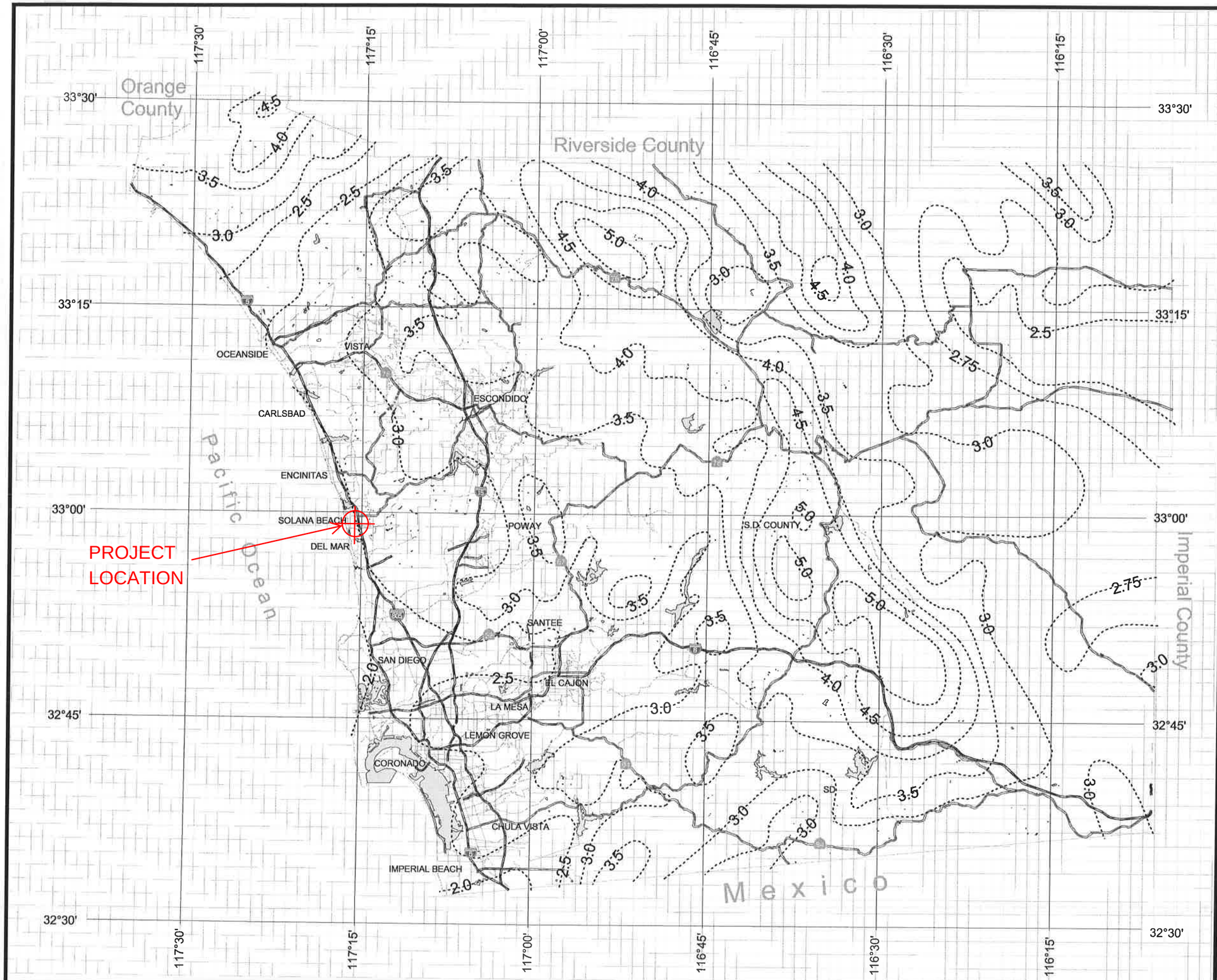
County of San Diego Hydrology Manual

Rainfall Isopluvials

100 Year Rainfall Event - 6 Hours

Isopluvial (inches)

PROJECT LOCATION:
N 32 59' 06"
W 117 15' 40"
P6=2.5"



DPW GIS
Department of Public Works Geographic Information Services

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3 0 3 Miles

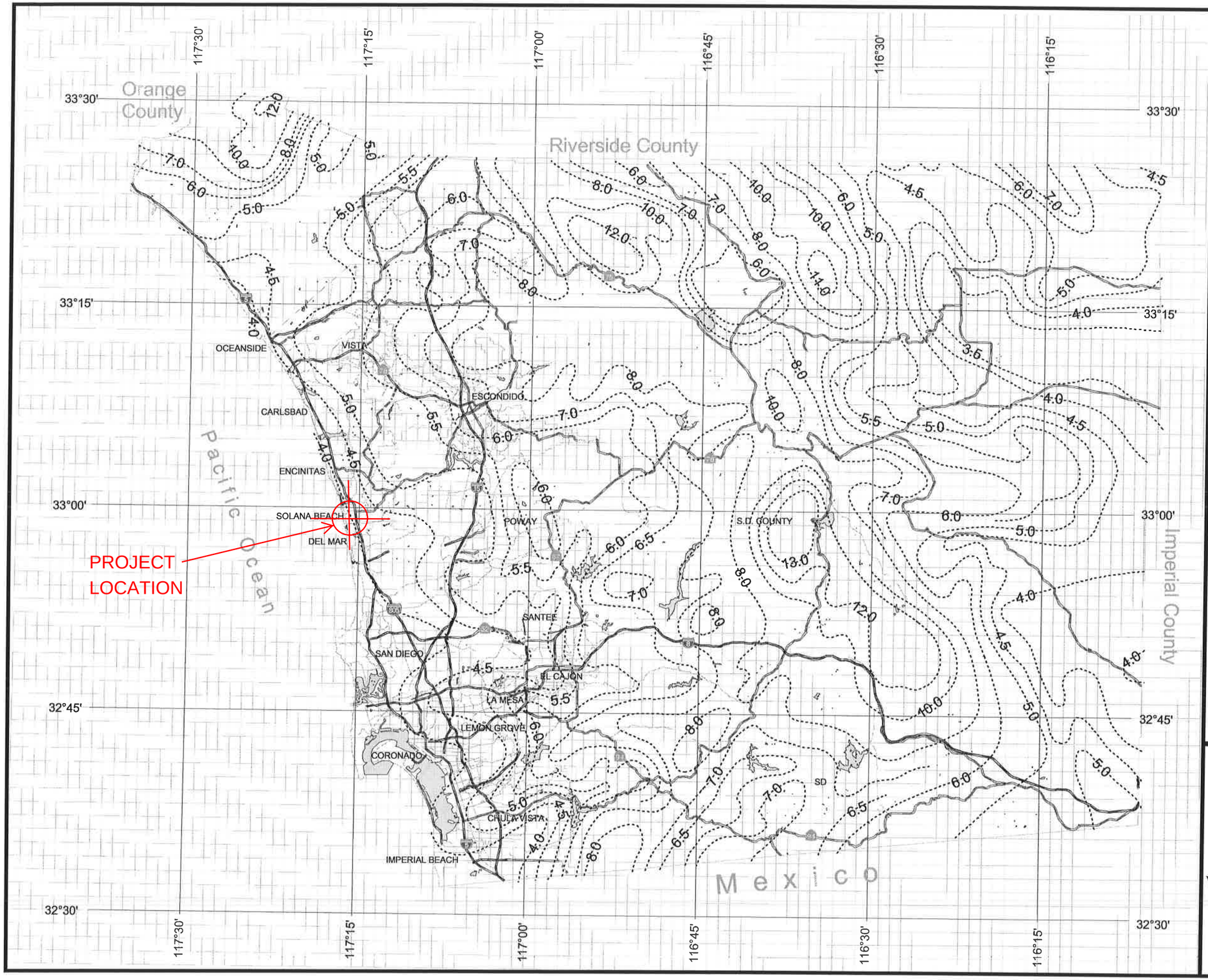
County of San Diego Hydrology Manual

Rainfall Isopluvials

100 Year Rainfall Event - 24 Hours

Isopluvial (inches)

PROJECT LOCATION:
N 32 59'06"
W 117 15' 45"
P24 = 4.0"



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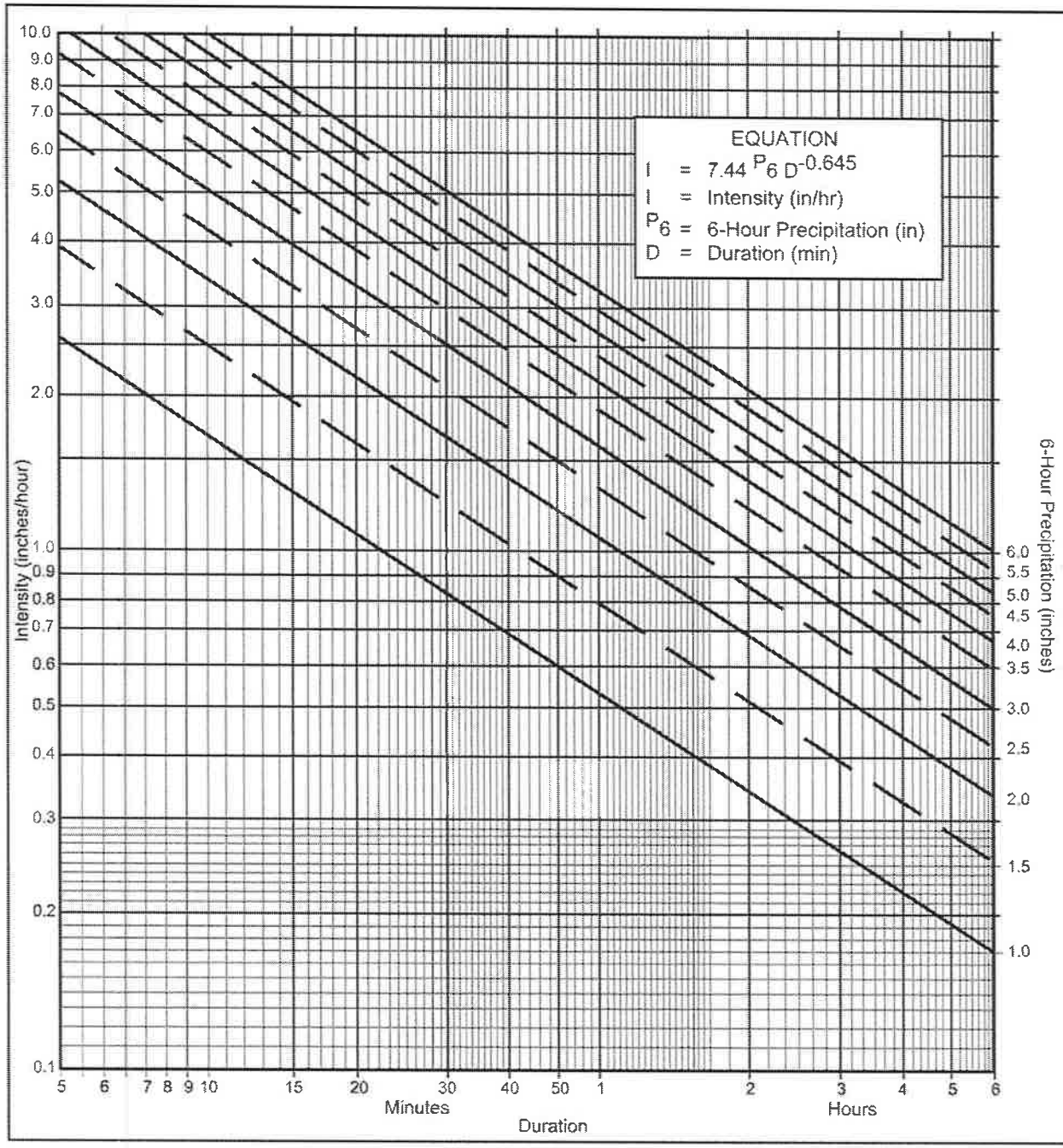
3 0 3 Miles

Table 3-1
RUNOFF COEFFICIENTS FOR URBAN AREAS

Land Use		Runoff Coefficient "C"				
			Soil Type			
NRCS Elements	County Elements	% IMPER.	A	B	C	D
Undisturbed Natural Terrain (Natural)	Permanent Open Space	0*	0.20	0.25	0.30	0.35
Low Density Residential (LDR)	Residential, 1.0 DU/A or less	10	0.27	0.32	0.36	0.41
Low Density Residential (LDR)	Residential, 2.0 DU/A or less	20	0.34	0.38	0.42	0.46
Low Density Residential (LDR)	Residential, 2.9 DU/A or less	25	0.38	0.41	0.45	0.49
Medium Density Residential (MDR)	Residential, 4.3 DU/A or less	30	0.41	0.45	0.48	0.52
Medium Density Residential (MDR)	Residential, 7.3 DU/A or less	40	0.48	0.51	0.54	0.57
Medium Density Residential (MDR)	Residential, 10.9 DU/A or less	45	0.52	0.54	0.57	0.60
Medium Density Residential (MDR)	Residential, 14.5 DU/A or less	50	0.55	0.58	0.60	0.63
High Density Residential (HDR)	Residential, 24.0 DU/A or less	65	0.66	0.67	0.69	0.71
High Density Residential (HDR)	Residential, 43.0 DU/A or less	80	0.76	0.77	0.78	0.79
Commercial/Industrial (N. Com)	Neighborhood Commercial	80	0.76	0.77	0.78	0.79
Commercial/Industrial (G. Com)	General Commercial	85	0.80	0.80	0.81	0.82
Commercial/Industrial (O.P. Com)	Office Professional/Commercial	90	0.83	0.84	0.84	0.85
Commercial/Industrial (Limited I.)	Limited Industrial	90	0.83	0.84	0.84	0.85
Commercial/Industrial (General I.)	General Industrial	95	0.87	0.87	0.87	0.87 .90*

*The values associated with 0% impervious may be used for direct calculation of the runoff coefficient as described in Section 3.1.2 (representing the pervious runoff coefficient, Cp, for the soil type), or for areas that will remain undisturbed in perpetuity. Justification must be given that the area will remain natural forever (e.g., the area is located in Cleveland National Forest).
DU/A = dwelling units per acre
NRCS = National Resources Conservation Service

* "C" VALUE OF 0.90 WAS CHOSEN FOR ALL IMPERVIOUS AREAS, TO BE CONSERVATIVE.



Directions for Application:

(1) From precipitation maps determine 6 hr and 24 hr amounts for the selected frequency. These maps are included in the County Hydrology Manual (10, 50, and 100 yr maps included in the Design and Procedure Manual).

(2) Adjust 6 hr precipitation (if necessary) so that it is within the range of 45% to 65% of the 24 hr precipitation (not applicaple to Desert).

(3) Plot 6 hr precipitation on the right side of the chart.

(4) Draw a line through the point parallel to the plotted lines.

(5) This line is the intensity-duration curve for the location being analyzed.

Application Form:

(a) Selected frequency 100 year

(b) P_6 = 2.5" in., P_{24} = 4.0", $\frac{P_6}{P_{24}}$ = 62.5 %(2)

(c) Adjusted P_6(2) = 2.5" in.

(d) t_x = 7.49 min.

(e) I = 5.08 in./hr.

Note: This chart replaces the Intensity-Duration-Frequency curves used since 1965.

P6	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
Duration	I	I	I	I	I	I	I	I	I	I	I
5	2.63	3.95	5.27	6.59	7.90	9.22	10.54	11.86	13.17	14.49	15.81
7	2.12	3.18	4.24	5.30	6.36	7.42	8.48	9.54	10.60	11.66	12.72
10	1.68	2.53	3.37	4.21	5.05	5.90	6.74	7.58	8.42	9.27	10.11
15	1.30	1.95	2.59	3.24	3.89	4.54	5.19	5.84	6.49	7.13	7.78
20	1.08	1.62	2.15	2.69	3.23	3.77	4.31	4.85	5.39	5.93	6.46
25	0.93	1.40	1.87	2.33	2.80	3.27	3.73	4.20	4.67	5.13	5.60
30	0.83	1.24	1.66	2.07	2.49	2.90	3.32	3.73	4.15	4.56	4.98
40	0.69	1.03	1.38	1.72	2.07	2.41	2.76	3.10	3.45	3.79	4.13
50	0.60	0.90	1.19	1.49	1.79	2.09	2.39	2.69	2.98	3.28	3.58
60	0.53	0.80	1.06	1.33	1.59	1.86	2.12	2.39	2.65	2.92	3.18
90	0.41	0.61	0.82	1.02	1.23	1.43	1.63	1.84	2.04	2.25	2.45
120	0.34	0.51	0.68	0.85	1.02	1.19	1.36	1.53	1.70	1.87	2.04
150	0.29	0.44	0.59	0.73	0.88	1.03	1.18	1.32	1.47	1.62	1.76
180	0.26	0.39	0.52	0.65	0.78	0.91	1.04	1.18	1.31	1.44	1.57
240	0.22	0.33	0.43	0.54	0.65	0.76	0.87	0.98	1.08	1.19	1.30
300	0.19	0.28	0.38	0.47	0.56	0.66	0.75	0.85	0.94	1.03	1.13
360	0.17	0.25	0.33	0.42	0.50	0.58	0.67	0.75	0.84	0.92	1.00

Intensity-Duration Design Chart - Template

FIGURE

3-1

APPENDIX B

Map Scale: 1:2,270 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 30 60 120 180

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Diego County Area, California
Survey Area Data: Version 10, Sep 12, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 3, 2014—Nov 22, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — San Diego County Area, California (CA638)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
LvF3	Loamy alluvial land-Huerhuero complex, 9 to 50 percent slopes, severely eroded	D	5.7	42.5%
MIC	Marina loamy coarse sand, 2 to 9 percent slopes	B	0.3	2.4%
MIE	Marina loamy coarse sand, 9 to 30 percent slopes	B	7.4	55.1%
Totals for Area of Interest			**13.5**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

APPENDIX K

Water Quality Technical Report

A.1 PDP WQTR

CITY OF SOLANA BEACH
PRIORITY DEVELOPMENT PROJECT (PDP) **WATER QUALITY TECHNICAL REPORT (WQTR)** **FOR** **REVITALIZING SOLANA HIGHLANDS** **17-14-29 DRP/SDP** **701 SOUTH NARDO AVENUE** **SOLANA BEACH, CA 92075** **ASSESSOR'S PARCEL NUMBER(S):** **298-260-33, 298-281-10 and 298-164-22**
ENGINEER OF WORK: **Michael H. Smith, RCE 65090**

PREPARED FOR:
HG Fenton Company
7577 Mission Valley Road, Suite 200
San Diego, CA 92108
619-400-0181

PDP WQTR PREPARED BY:
Pasco Laret Suiter & Associates
535 N. Highway 101, Suite A
Solana Beach, CA 92075
858-259-8211

DATE OF WQTR:
September 2017

PLANS PREPARED BY:
Pasco Laret Suiter & Associates
535 N. Highway 101, Suite A
Solana Beach, CA 92075
858-259-8211

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Submittal Record
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FORM 2 Source Control BMP Checklist for All Development Projects
FORM 3 Site Design/LID BMP Checklist for All Development Projects
FORM 4 Summary of PDP Structural BMPs
FORM 5 Harvest and Use Feasibility Checklist
FORM 6 Categorization of Infiltration Feasibility Condition
FORM 7 Factor of Safety and Design Infiltration Rate Worksheet
FORM 8 Downstream Systems Requirements for Preservation of Coarse Sediment Supply

Attachment 1: Backup for PDP Pollutant Control BMPs
- Attachment 1a: DMA Exhibit
- Attachment 1b: Tabular Summary of DMAs and Design Capture Volume Calculations (Worksheet 1.b)
- Attachment 1c: Harvest and Use Feasibility Screening (when applicable)
- Attachment 1d: Categorization of Infiltration Feasibility Condition (when applicable)
- Attachment 1e: Pollutant Control BMP Design Worksheets / Calculations

Attachment 2: Backup for PDP Hydromodification Control Measures
- Attachment 2a: Hydromodification Management Exhibit
- Attachment 2b: Management of Critical Coarse Sediment Yield Areas
- Attachment 2c: Geomorphic Assessment of Receiving Channels
- Attachment 2d: Flow Control Facility Design

Attachment 3: Structural BMP Maintenance Plan
- Attachment 3a: B Structural BMP Maintenance Thresholds and Actions
- Attachment 3b: Draft Maintenance Agreement (when applicable)

Attachment 4: Copy of Plan Sheets Showing Permanent Storm Water BMPs

ACRONYMS

APN	Assessor's Parcel Number
BMP	Best Management Practice
HMP	Hydromodification Management Plan
HSG	Hydrologic Soil Group
MS4	Municipal Separate Storm Sewer System
N/A	Not Applicable
NRCS	Natural Resources Conservation Service
PDP	Priority Development Project
PE	Professional Engineer
SC	Source Control
SD	Site Design
SDRWQCB	San Diego Regional Water Quality Control Board
SIC	Standard Industrial Classification
WQTR	Water Quality Technical Report

PDP WQTR PREPARER'S CERTIFICATION PAGE

Project Name: REVITALIZING SOLANA HIGHLANDS
Permit Application Number: 17-14-29 DRP/SDP

PREPARER'S CERTIFICATION

I hereby declare that I am the Engineer in Responsible Charge of design of storm water best management practices (BMPs) for this project, and that I have exercised responsible charge over the design of the BMPs as defined in Section 6703 of the Business and Professions Code, and that the design is consistent with the PDP requirements of the City of Solana Beach BMP Design Manual, which is a design manual for compliance with the City of Solana Beach and the MS4 Permit (California Regional Water Quality Control Board San Diego Region Order No. R9-2015-0100) requirements for storm water management.

I have read and understand that the City Engineer has adopted minimum requirements for managing urban runoff, including storm water, from land development activities, as described in the BMP Design Manual. I certify that this PDP WQTR has been completed to the best of my ability and accurately reflects the project being proposed and the applicable BMPs proposed to minimize the potentially negative impacts of this project's land development activities on water quality. I understand and acknowledge that the plan check review of this PDP WQTR by the City Engineer is confined to a review and does not relieve me, as the Engineer in Responsible Charge of design of storm water BMPs for this project, of my responsibilities for project design.

exp. 9-30-2019

Engineer of Work's Signature, PE Number & Expiration Date

Michael H. Smith, RCE 65090
Print Name

Pasco Laret Suiter & Associates
Company

September 2017
Date

DocuSign Envelope ID: 4A8C404E-E18D-442D-89C4-7912D70D2244

PDP WQTR PROJECT OWNER'S CERTIFICATION PAGE

Project Name: REVITALIZING SOLANA HIGHLANDS
Permit Application Number: 17-14-29 DRP/SDP

PROJECT OWNER'S CERTIFICATION

This PDP WQTR has been prepared for HG Fenton Company by Pasco Laret Suiter & Associates. The PDP WQTR is intended to comply with the PDP requirements of the City of Solana Beach BMP Design Manual, which is a design manual for compliance with the City of Solana Beach and the MS4 Permit (California Regional Water Quality Control Board San Diego Region Order No. R9-2015-0100) requirements for storm water management.

The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan. Once the undersigned transfers its interests in the property, its successor-in-interest shall bear the aforementioned responsibility to implement the best management practices (BMPs) described within this plan, including ensuring on-going operation and maintenance of structural BMPs. A signed copy of this document shall be available on the subject property into perpetuity.

DocuSigned by:
John LaRaia
203AD95936A24BA...
Project Owner's Signature

John LaRaia, Sr. Director, Development
Print Name

HG Fenton Company
Company

9/21/2017
Date

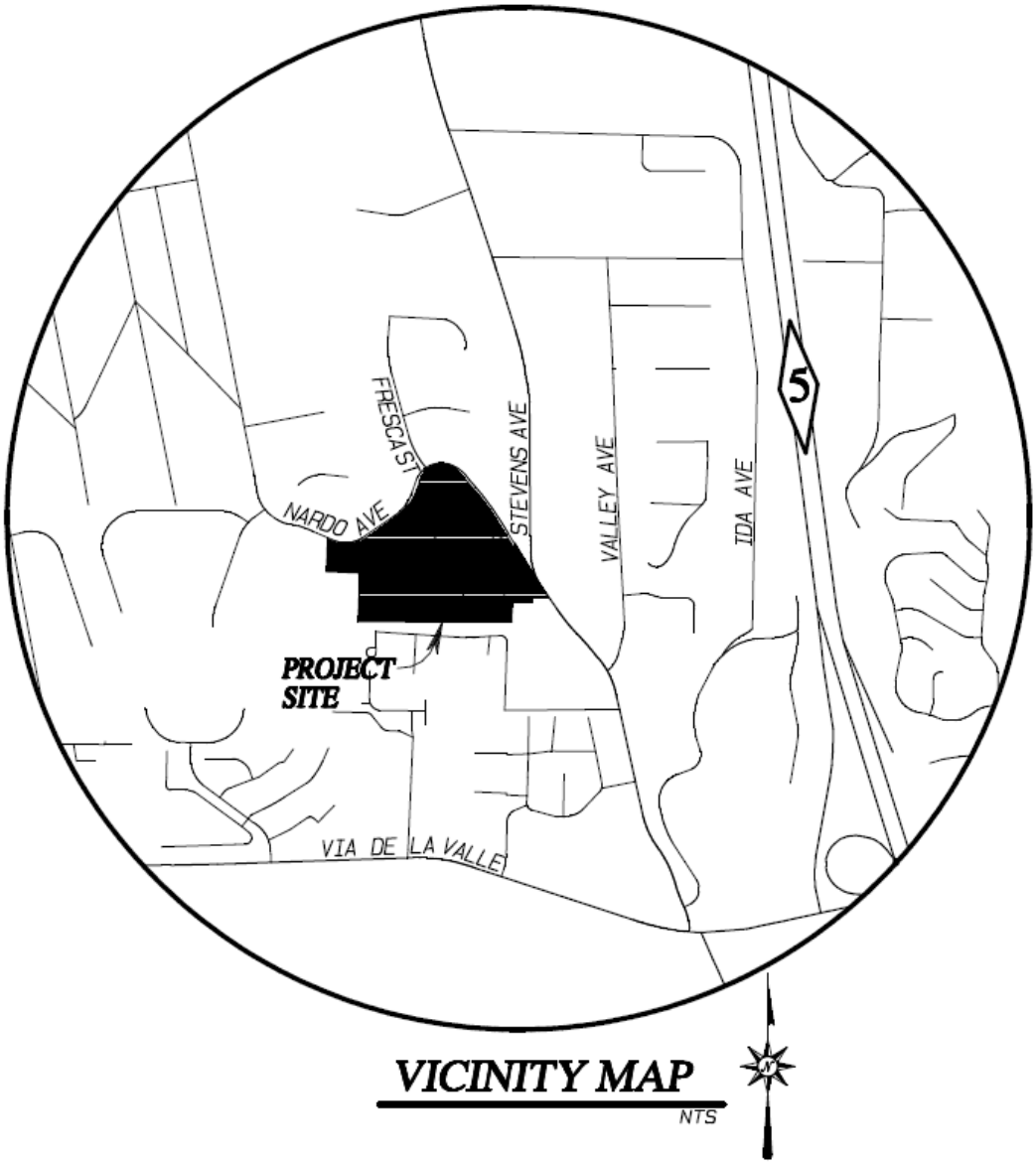
SUBMITTAL RECORD

Use this Table to keep a record of submittals of this PDP WQTR. Each time the PDP WQTR is re-submitted, provide the date and status of the project. In column 4 summarize the changes that have been made or indicate if response to plancheck comments is included. When applicable, insert response to plancheck comments behind this page.

Submittal Number	Date	Project Status	Summary of Changes
1	May 2015	✓ Preliminary Design / Planning/ CEQA ☐ Final Design	Initial Submittal
2	September 2017	✓ Preliminary Design / Planning/ CEQA ☐ Final Design	Second Submittal
3		☐ Preliminary Design / Planning/ CEQA ☐ Final Design	
4		☐ Preliminary Design / Planning/ CEQA ☐ Final Design	

PROJECT VICINITY MAP

Project Name: REVITALIZING SOLANA HIGHLANDS
Permit Application Number: 17-14-29 DRP/SDP



Site Information Checklist For PDPs	Form 1 (PDPs) City of Solana Beach BMP Design Manual
Project Summary Information:	
Project Name:	Revitalizing Solana Highlands
Project Address:	701 South Nardo Avenue Solana Beach, CA 92075
Assessor's Parcel Number(s) (APN(s))	298-260-33, 298-281-10 and 298-164-22
Permit Application Number	17-14-29 DRP/SDP
Project Hydrologic Unit	Select One: ✓ San Dieguito (HA Solana Beach, HSA Rancho Santa Fe) 905.11 ☐ Los Peñasquitos (HA Escondido Creek, HAS San Elijo) 904.61
Project Watershed (Complete Hydrologic Unit, Area, and Subarea Name with Numeric Identifier)	San Dieguito HU, Solana Beach HA, Rancho Santa Fe HSA, 905.11
Parcel Area (total area of Assessor's Parcel(s) associated with the project)	13.4112 Acres (584,192 Square Feet)
Area to be Disturbed by the Project (Project Area)	13.4 Acres (583,704 Square Feet)
Project Proposed Impervious Area (subset of Project Area)	8.14 Acres (354,735 Square Feet)
Project Proposed Pervious Area (subset of Project Area)	5.26 Acres (228,969 Square Feet)

Note: Proposed Impervious Area + Proposed Pervious Area = Area to be Disturbed by the Project.

This may be less than the Parcel Area.

Form 1

Description of Existing Site Condition

Current Status of the Site (select all that apply):

✓ Existing development
☐ Previously graded but not built out
☐ Demolition completed without new construction
☐ Agricultural or other non-impervious use
☐ Vacant, undeveloped/natural

Description / Additional Information:

Existing Land Cover Includes (select all that apply):

✓ Vegetative Cover
☐ Non-Vegetated Pervious Areas
✓ Impervious Areas

Description / Additional Information:

Underlying Soil belongs to Hydrologic Soil Group (select all that apply):

☐ NRCS Type A
✓ NRCS Type B
☐ NRCS Type C
✓ NRCS Type D

Approximate Depth to Groundwater (GW):
☐ GW Depth < 5 feet ☐ 5 feet < GW Depth < 10 feet ☐ 10 feet < GW Depth < 20 feet ✓ GW Depth > 20 feet
Form 1

Existing Natural Hydrologic Features (select all that apply):

☐ Watercourses
☐ Seeps
☐ Springs
☐ Wetlands
✓ None

Description / Additional Information:

Description of Existing Site Drainage Patterns
How is storm water runoff conveyed from the site? At a minimum, this description should answer: (1) whether existing drainage conveyance is natural or urban; (2) Is runoff from offsite conveyed through the site? if yes, quantify all offsite drainage areas, design flows, and locations where offsite flows enter the project site, and summarize how such flows are conveyed through the site; (3)Provide details regarding existing project site drainage conveyance network, including any existing storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, natural or constructed channels; and (4) Identify all discharge locations from the existing project site along with a summary of conveyance system size and capacity for each of the discharge locations. Provide summary of the pre-project drainage areas and design flows to each of the existing runoff discharge locations. Describe existing site drainage patterns: The existing project site consists of an apartment complex, asphalt access driveway and parking, two tennis courts, a pool and associated hardscape improvements. Onsite storm water currently flows in two directions. Runoff flows overland from the northwestern portion of the site south eventually being conveyed in two concrete brow ditches that ultimately outlet onto the adjacent property (Turfwood). The majority of the eastern region of the site flows east overland where it enters an existing storm drain system which flows north in Stevens Avenue and ultimately ties into the box culvert running south toward Via De La Valle and outlets on the Race Track property into Stevens Creek. A small area near the southeast corner of the site flows overland to Stevens Avenue. All storm water originating on the subject property eventually enters Stevens Creek where it is conveyed to the Pacific Ocean via the San Dieguito River Lagoon. Refer to the drainage report for the project titled “Preliminary Hydrology Study for Revitalizing Solana Highlands” prepared by Pasco Laret Suiter & Associates dated September 2017 for detailed hydrologic calculations.

Form 1
Description of Proposed Site Development
Project Description / Proposed Land Use and/or Activities: The intent of the proposed project is to demolish the existing apartment complex, asphalt access driveway and parking, tennis courts, pool and associated hardscape improvements and construct a new apartment complex, paved driveways and parking, pool and associated hardscape, and Hydromodification (HMP) Biofiltration basins to provide storm water pollutant control, hydromodification flow control and detention for the 100-year storm event peak discharge.
List/describe proposed impervious features of the project (e.g., buildings, roadways, parking lots, courtyards, athletic courts, other impervious features): Proposed impervious features include buildings, driveways, parking areas, community pool area, and associated hardscape.
List/describe proposed pervious features of the project (e.g., landscape areas): Proposed pervious features include landscape and open space areas and HMP biofiltration basins.
Form 1
Does the project include grading and changes to site topography? ✓ Yes ☐ No Description / Additional Information:

Form 1
Description of Proposed Site Drainage Patterns

Does the project include changes to site drainage (e.g., installation of new storm water conveyance systems)?

✓ Yes
☐ No

If yes, provide details regarding the proposed project site drainage conveyance network, including storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, natural or constructed channels, and the method for conveying offsite flows through or around the proposed project site. Identify all discharge locations from the proposed project site along with a summary of the conveyance system size and capacity for each of the discharge locations. Provide a summary of pre- and post-project drainage areas and design flows to each of the runoff discharge locations. Reference the drainage study for detailed calculations.

Describe proposed site drainage patterns:

This design proposes to re-route the storm water originating onsite such that it does not flow south into the Turfwood property as it does in the existing condition. Runoff generated from the proposed development will be conveyed in a storm drain system that will pass through proposed HMP Biofiltration basins and ultimately discharge into the existing storm drain located on the eastern boundary of the site at the intersection of South Nardo Avenue and Stevens Avenue. The proposed HMP Biofiltration basins will provide pollutant control, hydromodification management, as well as detention of the 100-year storm event peak runoff such that it doesn't exceed the existing flows entering the Solana Beach MS4 system at that location. Storm flows will continue as in the existing condition to the existing box culvert located north east of the project site between Valley and Stevens. In the proposed condition, only a very small area will remain tributary to the concrete down drain that releases storm flows onto the Turfwood property.

Refer to the drainage report for the project titled "Preliminary Hydrology Study for Revitalizing Solana Highlands" prepared by Pasco Laret Suiter & Associates dated September 2017 for detailed hydrologic calculations.

Form 1

Identify whether any of the following features, activities, and/or pollutant source areas will be present (select all that apply):

✓ On-site storm drain inlets
☐ Interior floor drains and elevator shaft sump pumps
☐ Interior parking garages
☐ Need for future indoor & structural pest control
✓ Landscape/Outdoor Pesticide Use
✓ Pools, spas, ponds, decorative fountains, and other water features
☐ Food service
✓ Refuse areas
☐ Industrial processes
☐ Outdoor storage of equipment or materials
☐ Vehicle and Equipment Cleaning
☐ Vehicle/Equipment Repair and Maintenance
☐ Fuel Dispensing Areas
☐ Loading Docks
✓ Fire Sprinkler Test Water
☐ Miscellaneous Drain or Wash Water
✓ Plazas, sidewalks, and parking lots

Description / Additional Information:

Form 1
Identification and Narrative of Receiving Water and Pollutants of Concern
Describe flow path of storm water from the project site discharge location(s), through urban storm conveyance systems as applicable, to receiving creeks, rivers, and lagoons as applicable, and ultimate discharge to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable): The proposed project will discharge to the existing storm drain located on the eastern boundary of the site at the intersection of South Nardo Avenue and Stevens Avenue. From there storm water flows north and ultimately ties into the box culvert running south toward Via De La Valle and outlets on the Race Track property into Steven's Creek. All storm water originating on the subject property eventually enters Stevens Creek where it is conveyed to the Pacific Ocean via the San Dieguito River Lagoon.
List any 303(d) impaired water bodies within the path of storm water from the project site to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable), identify the pollutant(s)/stressor(s) causing impairment, and identify any TMDLs and/or Highest Priority Pollutants from the WQIP for the impaired water bodies:

303(d) Impaired Water Body	Pollutant(s)/Stressor(s)	TMDLs / WQIP Highest Priority Pollutant
San Dieguito River	Enterococcus, Fecal Coliform, Nitrogen, Phosphorus, Total Dissolved Solids, Toxicity	TMDLs
Pacific Ocean Shoreline at San Dieguito Lagoon Mouth	Total Coliform	TMDL / WQIP Highest Priority Pollutant

Identification of Project Site Pollutants*

***Identification of project site pollutants is only required if flow-through treatment BMPs are implemented onsite in lieu of retention or biofiltration BMPs (note the project must also participate in an alternative compliance program unless prior lawful approval to meet earlier PDP requirements is demonstrated)**

Identify pollutants expected from the project site based on all proposed use(s) of the site (see BMP Design Manual Appendix B.6):

Form 1			
Pollutant	**Not Applicable to the Project Site**	**Expected from the Project Site**	**Also a Receiving Water Pollutant of Concern**
Sediment			
Nutrients			
Heavy Metals			
Organic Compounds			
Trash & Debris			
Oxygen Demanding Substances			
Oil & Grease			
Bacteria & Viruses			
Pesticides			

Form 1
Hydromodification Management Requirements

Do hydromodification management requirements apply (see Section 1.6 of the BMP Design Manual)?

✓ Yes, hydromodification management flow control structural BMPs required.

☐ No, the project will discharge runoff directly to existing underground storm drains discharging directly to an exempt receiving water such as the Pacific Ocean, and exempt river reach, or a tidally-influenced area.

☐ No, the project will discharge runoff directly to conveyance channels whose bed and bank are concrete-lined all the way from the point of discharge to the Pacific Ocean, a tidally-influenced area, or an exempt river reach.

☐ No, the project will discharge runoff directly to an area identified as appropriate for an exemption by the WMAA for the watershed in which the project resides.

Description / Additional Information (to be provided if a 'No' answer has been selected above):

Form 1
Critical Coarse Sediment Yield Areas* ***This Section only required if hydromodification management requirements apply**

Based on the maps provided within the WMAA, do potential critical coarse sediment yield areas exist within the project drainage boundaries?

☐ Yes
✓ No, No critical coarse sediment yield areas to be protected based on WMAA maps

If yes, have any of the optional analyses presented in Section 6.2 of the BMP Design Manual been performed?

☐ 6.2.1 Verification of Geomorphic Landscape Units (GLUs) Onsite
☐ 6.2.2 Downstream Systems Sensitivity to Coarse Sediment
☐ 6.2.3 Optional Additional Analysis of Potential Critical Coarse Sediment Yield Areas Onsite
☐ No optional analyses performed, the project will avoid critical coarse sediment yield areas identified based on WMAA maps

If optional analyses were performed, what is the final result?

☐ No critical coarse sediment yield areas to be protected based on verification of GLUs onsite
☐ Critical coarse sediment yield areas exist but additional analysis has determined that protection is not required. Documentation attached in Attachment 2.b of the WQTR.
☐ Critical coarse sediment yield areas exist and require protection. The project will implement management measures described in Sections 6.2.4 and 6.2.5 as applicable, and the areas are identified on the WQTR Exhibit.

Discussion / Additional Information:

Form 1
Flow Control for Post-Project Runoff*   ***This Section only required if hydromodification management requirements apply**
List and describe point(s) of compliance (POCs) for flow control for hydromodification management (see Section 6.3.1). For each POC, provide a POC identification name or number correlating to the project's HMP Exhibit and a receiving channel identification name or number correlating to the project's HMP Exhibit.   There is one POC for the project, POC-1, located southeast of the project site. Refer to Attachment 2 for the location of the POC.
Has a geomorphic assessment been performed for the receiving channel(s)?   ✓ No, the low flow threshold is 0.1Q2 (default low flow threshold)   ☐ Yes, the result is the low flow threshold is 0.1Q2   ☐ Yes, the result is the low flow threshold is 0.3Q2   ☐ Yes, the result is the low flow threshold is 0.5Q2   If a geomorphic assessment has been performed, provide title, date, and preparer: Discussion / Additional Information: (optional)

Form 1
Other Site Requirements and Constraints
When applicable, list other site requirements or constraints that will influence storm water management design, such as zoning requirements including setbacks and open space, or local codes governing minimum street width, sidewalk construction, allowable pavement types, and drainage requirements.

Form 1
Optional Additional Information or Continuation of Previous Sections As Needed
This space provided for additional information or continuation of information from previous sections as needed.

Source Control BMP Checklist for All Development Projects	Form 2 (PDPs) City of Solana Beach BMP Design Manual

Project Identification

Project Name: Revitalizing Solana Highlands

Permit Application Number: 17-14-29 DRP/SDP

Source Control BMPs

All development projects must implement source control BMPs SC-1 through SC-6 where applicable and feasible. See Chapter 4 and Appendix E of the BMP Design Manual for information to implement source control BMPs shown in this checklist.

Answer each category below pursuant to the following.

- "Yes" means the project will implement the source control BMP as described in Chapter 4 and/or Appendix E of the City of Solana Beach BMP Design Manual. Discussion / justification is not required.
- "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided.
- "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project has no outdoor materials storage areas). Discussion / justification may be provided.

Source Control Requirement	Applied?		
SC-1 Prevention of Illicit Discharges into the MS4	✓ Yes	☐ No	☐ N/A
Discussion / justification if SC-1 not implemented:			
SC-2 Storm Drain Stenciling or Signage	✓ Yes	☐ No	☐ N/A
Discussion / justification if SC-2 not implemented:			

Form 2			
Source Control Requirement	**Applied?**		
SC-3 Protect Outdoor Materials Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☐ Yes	☐ No	✓ N/A
Discussion / justification if SC-3 not implemented:			
SC-4 Protect Materials Stored in Outdoor Work Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☐ Yes	☐ No	✓ N/A
Discussion / justification if SC-4 not implemented:			
SC-5 Protect Trash Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	✓ Yes	☐ No	☐ N/A
Discussion / justification if SC-5 not implemented:			

Form 2			
Source Control Requirement	**Applied?**		
SC-6 Additional BMPs Based on Potential Sources of Runoff Pollutants (must answer for each source listed below)			
✓ Onsite storm drain inlets	✓ Yes	☐ No	☐ N/A
☐ Interior floor drains and elevator shaft sump pumps drain to sewer	☐ Yes	☐ No	✓ N/A
☐ Interior parking garages drain to sewer	☐ Yes	☐ No	✓ N/A
☐ Need for future indoor & structural pest control	☐ Yes	☐ No	✓ N/A
✓ Landscape/outdoor pesticide use	✓ Yes	☐ No	☐ N/A
✓ Pools, spas, ponds, decorative fountains, and other water features	✓ Yes	☐ No	☐ N/A
☐ Food service	☐ Yes	☐ No	✓ N/A
☐ Refuse/Trash areas must be covered	☐ Yes	☐ No	✓ N/A
☐ Industrial processes	☐ Yes	☐ No	✓ N/A
☐ Outdoor storage of equipment or materials must be covered	☐ Yes	☐ No	✓ N/A
☐ Vehicle and equipment cleaning	☐ Yes	☐ No	✓ N/A
☐ Vehicle/equipment repair and maintenance	☐ Yes	☐ No	✓ N/A
☐ Fuel dispensing areas	☐ Yes	☐ No	✓ N/A
☐ Loading docks	☐ Yes	☐ No	✓ N/A
✓ Fire sprinkler test water	✓ Yes	☐ No	☐ N/A
☐ Miscellaneous drain or wash water	☐ Yes	☐ No	✓ N/A
✓ Plazas, sidewalks, and parking lots	✓ Yes	☐ No	☐ N/A
Discussion / justification if SC-6 not implemented. Clearly identify which sources of runoff pollutants are discussed. Justification must be provided for all "No" answers shown above.			

Site Design/LID BMP Checklist for All Development Projects	Form 3 (PDPs) City of Solana Beach BMP Design Manual

Project Identification

Project Name: Revitalizing Solana Highlands

Permit Application Number: 17-14-29 DRP/SDP

Site Design/LID BMPs

All development projects must implement site design/LID BMPs SD-1 through SD-8 where applicable and feasible. See Chapter 4 and Appendix E of the BMP Design Manual for information to implement site design BMPs shown in this checklist.

Answer each category below pursuant to the following.

- "Yes" means the project will implement the site design/LID BMP as described in Chapter 4 and/or Appendix E of the City of Solana Beach BMP Design Manual. Discussion / justification is not required.
- "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided.
- "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project site has no existing natural areas to conserve). Discussion / justification may be provided.

Site Design Requirement	Applied?		
SD-1 Maintain Natural Drainage Pathways and Hydrologic Features	☐ Yes	✓ No	N/A
Discussion / justification if SD-1 not implemented: The grading required to achieve the necessary lowered pad elevations necessitated grading nearly the entire site, so any natural drainage pathways could not be maintained. Also, in the current state of development, the drainage that originates on and discharges from the site poses a flooding problem to adjacent downstream neighbors.			
SD-2 Conserve Natural Areas, Soils, and Vegetation	☐ Yes	✓ No	N/A
Discussion / justification if SD-2 not implemented: Since the proposed final pad elevations of the proposed site are required to be much lower than the existing grade of the site, there are no opportunities to conserve natural areas, soils or vegetation.			

Form 3			
Source Control Requirement	**Applied?**		
SD-3 Minimize Impervious Area	✓ Yes	☐ No	☐ N/A
Discussion / justification if SD-3 not implemented:			
SD-4 Minimize Soil Compaction	✓ Yes	☐ No	☐ N/A
Discussion / justification if SD-4 not implemented:			
SD-5 Impervious Area Dispersion	✓ Yes	☐ No	☐ N/A
Discussion / justification if SD-5 not implemented:			
SD-6 Runoff Collection	✓ Yes	☐ No	☐ N/A
Discussion / justification if SD-6 not implemented:			
SD-7 Landscaping with Native or Drought Tolerant Species	✓ Yes	☐ No	☐ N/A
Discussion / justification if SD-7 not implemented:			
SD-8 Harvesting and Using Precipitation	☐ Yes	✓ No	☐ N/A
Discussion / justification if SD-8 not implemented: Harvesting and using precipitation is not a feasible BMP to implement. Refer to Attachment 1c.			

Summary of PDP Structural BMPs	Form 4 (PDPs) City of Solana Beach BMP Design Manual
Project Identification	
Project Name: Revitalizing Solana Highlands	
Permit Application Number: 17-14-29 DRP/SDP	
PDP Structural BMPs	
All PDPs must implement structural BMPs for storm water pollutant control (see Chapter 5 of the BMP Design Manual). Selection of PDP structural BMPs for storm water pollutant control must be based on the selection process described in Chapter 5. PDPs subject to hydromodification management requirements must also implement structural BMPs for flow control for hydromodification management (see Chapter 6 of the BMP Design Manual). Both storm water pollutant control and flow control for hydromodification management can be achieved within the same structural BMP(s). PDP structural BMPs must be verified by the local jurisdiction at the completion of construction. This may include requiring the project owner or project owner's representative and engineer of record to certify construction of the structural BMPs (see Section 1.12 of the BMP Design Manual). PDP structural BMPs must be maintained into perpetuity, and the local jurisdiction must confirm the maintenance (see Section 7 of the BMP Design Manual). Use this form to provide narrative description of the general strategy for structural BMP implementation at the project site in the box below. Then complete the PDP structural BMP summary information sheet (page 3 of this form) for each structural BMP within the project (copy the BMP summary information page as many times as needed to provide summary information for each individual structural BMP).	
Form 4	

Describe the general strategy for structural BMP implementation at the site. This information must describe how the steps for selecting and designing storm water pollutant control BMPs presented in Section 5.1 of the BMP Design Manual were followed, and the results (type of BMPs selected). For projects requiring hydromodification flow control BMPs, indicate whether pollutant control and flow control BMPs are integrated or separate.

Step 1A: The DMAs draining to the structural BMPs are not self-mitigating, de minimus, or self-retaining.

Step 1B: There are no site design BMPs proposed for the project for which the runoff factor can be adjusted.

Step 2: Harvest and use is not feasible. Refer to Attachment 1c.

Step 3: Infiltration is not feasible. Refer to Attachment 1d.

Step 3C: Biofiltration BMPs have been selected and sized per the design criteria to meet both pollutant control and hydromodification management flow control requirements.

Form 4 (Copy as many as needed)
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**
Structural BMP ID No. 1
Construction Plan Sheet No.
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ✓ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-through treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-through treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ✓ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)

Form 4 (Copy as many as needed)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the City Engineer (See Section 1.12 of the BMP Design Manual).	Michael H. Smith, RCE 65090 Pasco Laret Suiter & Associates 535 North Highway 101, Suite A Solana Beach, CA 92075 858-259-8212
Who will be the final owner of this BMP?	HG Fenton Company
Who will maintain this BMP into perpetuity?	HG Fenton Company
What is the funding mechanism for maintenance?	HG Fenton Company

Form 4 (Copy as many as needed)
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**
Structural BMP ID No. 2
Construction Plan Sheet No.
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ✓ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-through treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-through treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ✓ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)

Form 4 (Copy as many as needed)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the City Engineer (See Section 1.12 of the BMP Design Manual).	Michael H. Smith, RCE 65090 Pasco Laret Suiter & Associates 535 North Highway 101, Suite A Solana Beach, CA 92075 858-259-8212
Who will be the final owner of this BMP?	HG Fenton Company
Who will maintain this BMP into perpetuity?	HG Fenton Company
What is the funding mechanism for maintenance?	HG Fenton Company

Form 4 (Copy as many as needed)
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**
Structural BMP ID No. 3
Construction Plan Sheet No.
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ✓ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-through treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-through treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ✓ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)

Form 4 (Copy as many as needed)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the City Engineer (See Section 1.12 of the BMP Design Manual).	Michael H. Smith, RCE 65090 Pasco Laret Suiter & Associates 535 North Highway 101, Suite A Solana Beach, CA 92075 858-259-8212
Who will be the final owner of this BMP?	HG Fenton Company
Who will maintain this BMP into perpetuity?	HG Fenton Company
What is the funding mechanism for maintenance?	HG Fenton Company

Form 4 (Copy as many as needed)
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**
Structural BMP ID No. 4
Construction Plan Sheet No.
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ✓ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-through treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-through treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ✓ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)

Form 4 (Copy as many as needed)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the City Engineer (See Section 1.12 of the BMP Design Manual).	Michael H. Smith, RCE 65090 Pasco Laret Suiter & Associates 535 North Highway 101, Suite A Solana Beach, CA 92075 858-259-8212
Who will be the final owner of this BMP?	HG Fenton Company
Who will maintain this BMP into perpetuity?	HG Fenton Company
What is the funding mechanism for maintenance?	HG Fenton Company

Form 4 (Copy as many as needed)
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**
Structural BMP ID No. 5
Construction Plan Sheet No.
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ✓ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-through treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-through treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ✓ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)

Form 4 (Copy as many as needed)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the City Engineer (See Section 1.12 of the BMP Design Manual).	Michael H. Smith, RCE 65090 Pasco Laret Suiter & Associates 535 North Highway 101, Suite A Solana Beach, CA 92075 858-259-8212
Who will be the final owner of this BMP?	HG Fenton Company
Who will maintain this BMP into perpetuity?	HG Fenton Company
What is the funding mechanism for maintenance?	HG Fenton Company

Harvest and Use Feasibility Checklist	Form 5 (PDPs) City of Solana Beach BMP Design Manual

1. Is there a demand for harvested water (check all that apply) at the project site that is reliably present during the wet season?

✓ Toilet and urinal flushing

✓ Landscape irrigation

Other:_____

2. If there is a demand; estimate the anticipated average wet season demand over a period of 36 hours. Guidance for planning level demand calculations for toilet/urinal flushing and landscape irrigation is provided in Section B.3.2.

Toilet/Urinal Flushing

(9.3 gal/person-day) x (0.13368 cuft/gal) x (1.5 days) = 1.86 cuft/person-36hr

Assume (2.5 people per apartment x 260 apartments) x (1.86 cuft/person-36 hr) = 1,209 cuft/36hr

Landscape Irrigation

(5.26 ac irrigated) x (1,470 gal/ac-36hr) x (0.13368 cuft/gal) = 1,034 cuft/36hr

Total = 1,209 + 1,034 = 2,243 cuft/36hr

3. Calculate the DCV using worksheet B-2.1.

DCV = 13,242 (cubic feet)

3a. Is the 36 hour demand greater than or equal to the DCV?	3b. Is the 36 hour demand greater than 0.25DCV but less than the full DCV?	3c. Is the 36 hour demand less than 0.25DCV?
☐ Yes / ✓ No ⇨ ⇩	☐ Yes / ✓ No ⇨ ⇩	✓ Yes ⇩
Harvest and use appears to be feasible. Conduct more detailed evaluation and sizing calculations to confirm that DCV can be used at an adequate rate to meet drawdown criteria.	Harvest and use may be feasible. Conduct more detailed evaluation and sizing calculations to determine feasibility. Harvest and use may only be able to be used for a portion of the site, or (optionally) the storage may need to be upsized to meet long term capture targets while draining in longer than 36 hours.	Harvest and use is considered to be infeasible.

Is harvest and use feasible based on further evaluation?

☐ Yes, refer to Appendix E to select and size harvest and use BMPs.

✓ No, select alternate BMPs.

Categorization of Infiltration Feasibility Condition		Form 6 (PDPs) City of Solana Beach BMP Design Manual	
<u>Part 1 - Full Infiltration Feasibility Screening Criteria</u> **Would infiltration of the full design volume be feasible from a physical perspective without any undesirable consequences that cannot be reasonably mitigated?**			
Criteri	Screening Question	**Yes**	**No**
1	**Is the estimated reliable infiltration rate below proposed facility locations greater than 0.5 inches per hour?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.		
Provide basis: Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
2	**Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.		
Provide basis: Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			

Form 6			
Criteria	Screening Question	**Yes**	**No**
3	**Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of groundwater contamination (shallow water table, storm water pollutants or other factors) that cannot be mitigated to an acceptable level?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		
Provide basis: Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
4	**Can infiltration greater than 0.5 inches per hour be allowed without causing potential water balance issues such as change of seasonality of ephemeral streams or increased discharge of contaminated groundwater to surface waters?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		
Provide basis: Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
Part 1 Result *	If all answers to rows 1 - 4 are "**Yes**" a full infiltration design is potentially feasible. The feasibility screening category is **Full Infiltration** If any answer from row 1-4 is "**No**", infiltration may be possible to some extent but would not generally be feasible or desirable to achieve a "full infiltration" design. Proceed to Part 2		

*To be completed using gathered site information and best professional judgment considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by Agency/Jurisdictions to substantiate findings

Form 6			
<u>Part 2 – Partial Infiltration vs. No Infiltration Feasibility Screening Criteria</u> **Would infiltration of water in any appreciable amount be physically feasible without any negative consequences that cannot be reasonably mitigated?**			
Criteria	Screening Question	**Yes**	**No**
5	**Do soil and geologic conditions allow for infiltration in any appreciable rate or volume?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.		
Provide basis: Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			
6	**Can Infiltration in any appreciable quantity be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level**? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.		
Provide basis: Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			

Form 6			
Criteria	Screening Question	**Yes**	**No**
7	**Can Infiltration in any appreciable quantity be allowed without posing significant risk for groundwater related concerns (shallow water table, storm water pollutants or other factors)?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		
Provide basis: Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			
8	**Can infiltration be allowed without violating downstream water rights**? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		
Provide basis: Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			
Part 2 Result*	If all answers from row 1-4 are yes then partial infiltration design is potentially feasible. The feasibility screening category is **Partial Infiltration.** If any answer from row 5-8 is no, then infiltration of any volume is considered to be **infeasible** within the drainage area. The feasibility screening category is **No Infiltration.**		

*To be completed using gathered site information and best professional judgment considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by Agency/Jurisdictions to substantiate findings

Factor of Safety and Design Infiltration Rate Worksheet				Form 7 (PDPs) City of Solana Beach BMP Design Manual	
Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = w x v
A	Suitability Assessment	Soil assessment methods	0.25		
		Predominant soil texture	0.25		
		Site soil variability	0.25		
		Depth to groundwater / impervious layer	0.25		
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			
B	Design	Level of pretreatment/ expected sediment loads	0.5		
		Redundancy/resiliency	0.25		
		Compaction during construction	0.25		
		Design Safety Factor, $S_B = \Sigma p$			
Combined Safety Factor, $S_{total} = S_A \times S_B$					
Observed Infiltration Rate, inch/hr, $K_{observed}$ (corrected for test-specific bias)					
Design Infiltration Rate, in/hr, $K_{design} = K_{observed} / S_{total}$					
Supporting Data					
Briefly describe infiltration test and provide reference to test forms:					

Downstream Systems Requirements for Preservation of Coarse Sediment Supply		Form 8 (PDPs) City of Solana Beach BMP Design Manual	
When it has been determined that potential critical coarse sediment yield areas exist within the project site, the next step is to determine whether downstream systems would be sensitive to reduction of coarse sediment yield from the project site. Use this form to document the evaluation of downstream systems requirements for preservation of coarse sediment supply.			
Project Name:			
Project Tracking Number / Permit Application Number:			
1	Will the project discharge runoff to a hardened MS4 system (pipe or lined channel) or an un-lined channel?	☐ Hardened MS4 system	Go to 2
		☐ Un-lined channel	Go to 4
2	Will the hardened MS4 system convey sediment (e.g., a concrete-lined channel with steep slope and cleansing velocity) or sink sediment (e.g., flat slopes, constrictions, treatment BMPs, or ponds with restricted outlets within the system will trap sediment and not allow conveyance of coarse sediment from the project site to an un-lined system).	☐ Convey	Go to 3
		☐ Sink	Go to 7
3	What kind of receiving water will the hardened MS4 system convey the sediment to?	☐ Un-lined channel	Go to 4
		☐ Lake ☐ Reservoir ☐ Bay	Go to 7
		☐ Lagoon ☐ Ocean	Go to 6
4	Is the un-lined channel impacted by deposition of sediment? This condition must be documented by the local agency.	☐ Yes	Go to 7
		☐ No	Go to 5

Form 8	
5	End – Preserve coarse sediment supply to protect un-lined channels from accelerated erosion due to reduction of coarse sediment yield from the project site unless further investigation determines the sediment is not critical to the receiving stream. Sediment that is critical to receiving streams is the sediment that is a significant source of bed material to the receiving stream (bed sediment supply) (see Section 6.2.3 and Appendix H.2 of the manual).
6	End – Provide management measures for preservation of coarse sediment supply (protect beach sand supply).
7	End – Downstream system does not warrant preservation of coarse sediment supply, no measures for protection of critical coarse sediment yield areas onsite are necessary. Use the space below to describe the basis for this finding for the project.

ATTACHMENT 1
BACKUP FOR PDP POLLUTANT CONTROL BMPS

This is the cover sheet for Attachment 1.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	**Contents**	**Checklist**
Attachment 1a	DMA Exhibit (Required) See DMA Exhibit Checklist on the back of this Attachment cover sheet.	✓ Included
Attachment 1b	Tabular Summary of DMAs Showing DMA ID matching DMA Exhibit, DMA Area, and DMA Type (Required)* *Provide table in this Attachment OR on DMA Exhibit in Attachment 1.a	☐ Included on DMA Exhibit in Attachment 1.a ☐ Included as Attachment 1.b, separate from DMA Exhibit
Attachment 1c	Form 5, Harvest and Use Feasibility Screening Checklist (Required unless the entire project will use infiltration BMPs) Refer to Appendix B.3-1 of the BMP Design Manual to complete Form 5.	✓ Included ☐ Not included because the entire project will use infiltration BMPs
Attachment 1d	Form 6, Categorization of Infiltration Feasibility Condition (Required unless the project will use harvest and use BMPs) Refer to Appendices C and D of the BMP Design Manual to complete Form 6.	✓ Included ☐ Not included because the entire project will use harvest and use BMPs
Attachment 1e	Pollutant Control BMP Design Worksheets / Calculations (Required) Refer to Appendices B and E of the BMP Design Manual for structural pollutant control BMP design guidelines	✓ Included

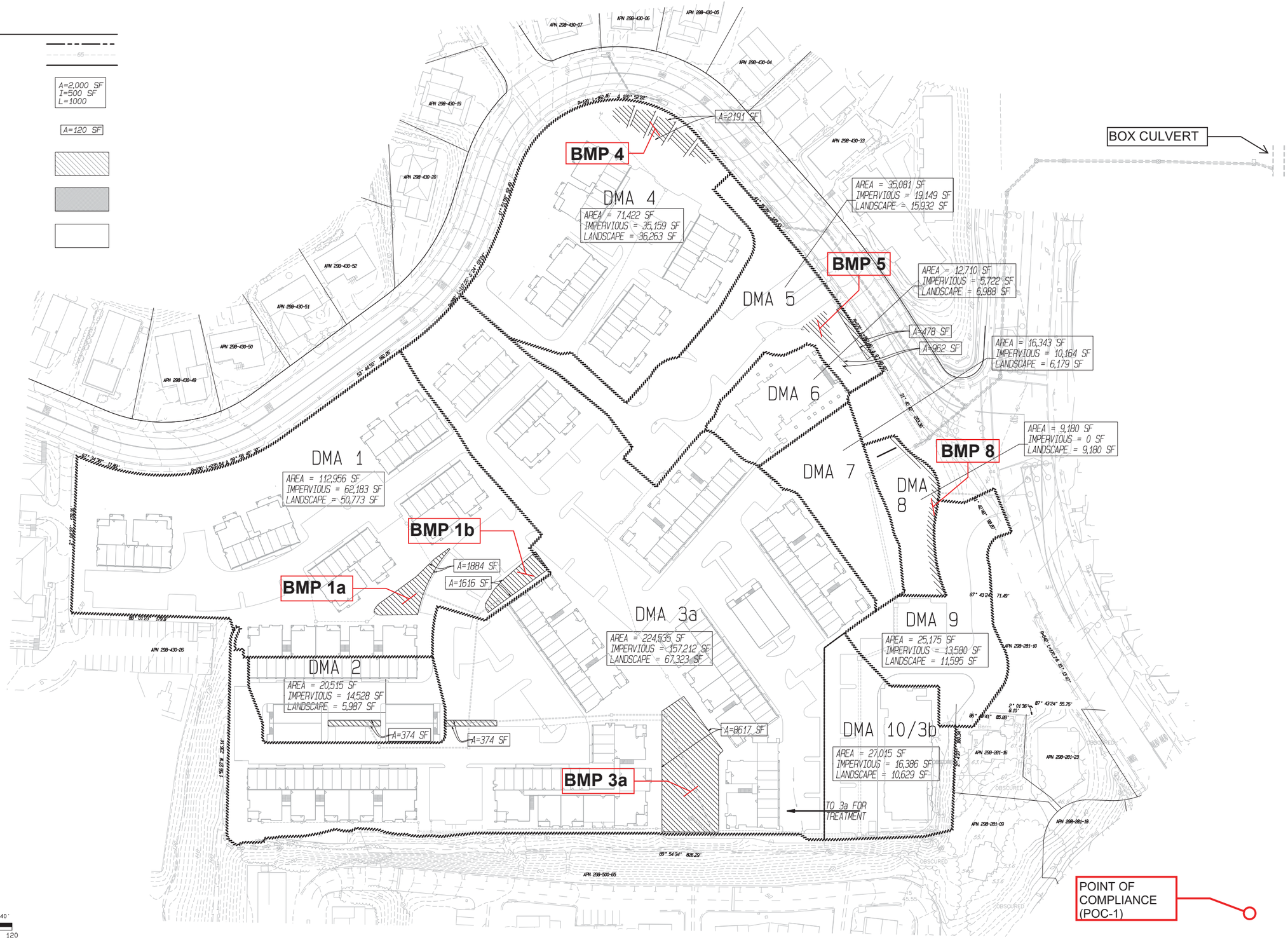
Use this checklist to ensure the required information has been included on the DMA Exhibit:

The DMA Exhibit must identify:

- ☐ Underlying hydrologic soil group
- ☐ Approximate depth to groundwater
- ☐ Existing natural hydrologic features (watercourses, seeps, springs, wetlands)
- ☐ Critical coarse sediment yield areas to be protected
- ☐ Existing topography and impervious areas
- ☐ Existing and proposed site drainage network and connections to drainage offsite
- ☐ Proposed demolition
- ☐ Proposed grading
- ☐ Proposed impervious features
- ☐ Proposed design features and surface treatments used to minimize imperviousness
- ☐ Drainage management area (DMA) boundaries, DMA ID numbers, and DMA areas (square footage or acreage), and DMA type (i.e., drains to BMP, self-retaining, or self-mitigating)
- ☐ Potential pollutant source areas and corresponding required source controls (see Chapter 4, Appendix E.1, and Form 1)
- ☐ Structural BMPs (identify location, type of BMP, and size/detail)

LEGEND:

PROPERTY LINE	
EXIST. CONTOUR	65
LIMIT OF DRAINAGE BASIN	
DRAINAGE MANAGEMENT AREA PROPOSED IMPERVIOUS AREA PROPOSED LANDSCAPING AREA (PERVIOUS)	A=2,000 SF I=500 SF L=1000
PROPOSED BIORETENTION BMP AREA	A=120 SF
PROPOSED BIORETENTION BMP AREA	
PROPOSED IMPERVIOUS AREA	
PROPOSED PERVIOUS AREA	



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REVITALIZING SOLANA HIGHLANDS

STORM WATER TREATMENT AND DMA MAP

DEVELOPMENT REVIEW PERMIT
SUBMITTAL 2
12/17/14

G 4.1

TECHNICAL MEMORANDUM:

SWMM Modeling for Hydromodification Compliance of:

Solana Highlands

Solana Beach, CA

Prepared for:

Pasco Laret Suiter & Associates

September 19, 2017

Tory R. Walker, R.C.E. 45005
President

REGISTERED PROFESSIONAL ENGINEER
TORY R WALKER
No. 45005
Exp. 3-31-2018
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STATE OF CALIFORNIA

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TORY R. WALKER ENGINEERING
RELIABLE SOLUTIONS IN WATER RESOURCES

TECHNICAL MEMORANDUM

TO: Pasco Laret Suiter & Associates
Attention: Michael Smith
535 N Highway 101, STE A
Solana Beach, CA, 92075

FROM: Tory Walker, PE, CFM, LEED GA

DATE: September 19, 2017

RE: Summary of SWMM Modeling for Hydromodification Compliance of Solana Highlands, City of Solana Beach, CA.

INTRODUCTION

This Technical Memorandum summarizes the approach used to model the proposed Solana Highlands redevelopment project in the city of Solana Beach, CA, using the Environmental Protection Agency (EPA) Storm Water Management Model (SWMM). SWMM analyses were prepared for the pre- and post-developed conditions at the project site to determine if the proposed biofiltration basins meet Hydromodification Management Plan (HMP) requirements. The City of Solana Beach established these requirements in the City of Solana Beach BMP Design Manual[1] (BMPDM).

SWMM MODEL DEVELOPMENT

The Solana Highlands project proposes to redevelop an existing apartment complex located just west of the intersection of Stevens Avenue and South Nardo Avenue in the City of Solana Beach. Two (2) SWMM scenarios were prepared for this study, one for the pre-developed and another for the post-developed conditions. One Point of Compliance (POC-1) has been identified for the project site, as shown on the Point of Compliance Exhibit in Attachment 5. For both SWMM scenarios, flow duration curves were prepared for POC-1 to determine if the proposed biofiltration Best Management Practices (BMPs) are sufficient to meet the current HMP requirements.

The input data required to develop SWMM analyses include rainfall, watershed characteristics, and BMP configurations. The Oceanside gauge from the Project Clean Water website was used for this study, since it is the most representative of the site precipitation due to elevation and proximity to the project site.

Evaporation for the site was modeled using average monthly values from the County hourly dataset. The site was modeled with Type B and D hydrologic soil, as determined from the Natural Resources Conservation Service (NRCS) Web Soil Survey. In existing conditions, soils are assumed to be compacted to represent the current developed condition of the site. Soils are also assumed to be compacted in proposed conditions. Other SWMM inputs for the subareas are discussed in Attachment 7, where the

selection of the parameters is explained in detail based on the BMPDM and the HMP Review and Analysis prepared for the Cities of San Marcos, Oceanside, and Vista[2].

HMP MODELING

POC-1 is located to the southeast of the project site in the box culvert that ultimately discharges to Steven's Creek (see Point of Compliance Exhibit and DMA maps in Attachment 5). One POC was used for HMP analysis because, although runoff leaves the project site at several locations, all flows discharge to hardened drainage systems that eventually confluence in the aforementioned box culvert. In existing conditions, DMA 1 drains southeasterly to POC-1. Though the current site is developed as an apartment complex, the existing site was modeled as completely pervious, as required by RWQCB Order No. R9-2013-0001[3]. In proposed conditions, the developed area tributary to POC-1 is drained to six receiving BMP biofiltration basins (BMPs 1a, 1b, 3a, 4, 5, and 8). DMA-1 drains to BMP 1a and BMP 1b. DMAs 2, 3a, and 10/3b drain to BMP 3a (note that DMA 2 drains to a small biofiltration basin prior to draining into BMP 3a; the small biofiltration basin was conservatively ignored for this HMP study). DMA 4 drains to BMP 4, DMAs 5 and 6 drain to BMP 5, and DMAs 7 and 8 drain to BMP 8. Once flows are routed via the proposed BMPs, all flows are then conveyed via storm drain to POC-1. The remaining DMA 9 was assumed to discharge directly to POC-1. Tables 1.1 and 1.2 summarize data for POC-1 DMAs.

The BMP biofiltration basins are responsible for handling hydromodification requirements for POC-1. Each BMP is comprised of an 18-inch layer of amended soil (a highly sandy, organic rich compost with an infiltration capacity of at least 5 in/hr), and a layer of gravel for additional detention, and to accommodate the French drain system. Below the gravel layer, the basins are lined to prevent infiltration into the underlying soil. Flows will discharge from each basin via a low-flow orifice outlet within the gravel layer to the receiving storm drain system. A riser structure will be constructed within each BMP with an emergency overflow, such that peak flows can be safely discharged to the receiving storm drain system (see dimensions in Tables 2 and 3).

TABLE 1.1 – SUMMARY OF EXISTING CONDITIONS FOR POC-1

DMA	Tributary Area, A (ac)	Impervious Percentage, Ip
DMA 1	12.74	0.0%
TOTAL	12.74	–

TABLE 1.2 – SUMMARY OF PROPOSED CONDITIONS FOR POC-1

DMA	Tributary Area, A (ac)	Impervious Percentage, Ip
DMA_1	2.51	56.8%
DMA_2	0.47	70.8%
DMA_3a	4.96	72.8%
DMA_4	1.59	50.8%
DMA_5	0.78	56.1%
DMA_6	0.29	45.0%
DMA_7	0.38	62.2%
DMA_8	0.17	0.0%

DMA_9	0.58	53.9%
DMA_10/3b	0.62	60.7%
BMP 1a	0.04	0.0%
BMP 1b	0.04	0.0%
BMP 3a	0.20	0.0%
BMP 4	0.05	0.0%
BMP 5	0.02	0.0%
BMP 8	0.04	0.0%
TOTAL	12.74	–

General Considerations

All biofiltration basins were modeled using the biofiltration LID module within SWMM. The biofiltration module can model the underground gravel storage layer, underdrain with an orifice plate, amended soil layer, and a surface storage pond up to the elevation of the invert of the lowest surface discharge opening in the basin riser structure. Ponding above the invert of the lowest surface discharge opening in the basin riser structure is modeled as a detention basin: elevation vs. area, and elevation vs. discharge tables, are needed by SWMM for Modified Puls routing purposes. Detailed outlet structure locations and elevations should be shown on the construction plans based on the recommendations of this study.

The overflow from BMP 1a is routed differently than the other BMPs. Rather than flowing directly to the storm drain system, overflows from BMP 1a that pass through the riser structure will enter a pipe that discharges to the surface of BMP-1b. This was modeled in SWMM by connecting the surface storage element of BMP 1a to an outfall (Outfall 1a). Outfall 1a was then routed to BMP 1b.

It is assumed that stormwater quality requirements for the project will be met by the proposed biofiltration basins. However, detailed water quality requirements are not discussed within this Technical Memo. For further information regarding stormwater quality requirements for the project, please refer to the project's Storm Water Quality Management Plan (SWQMP).

BMP MODELING FOR HMP PURPOSES

Modeling HMP BMPs

Biofiltration basins are proposed for hydromodification conformance for the project site. Tables 2 and 3 illustrate the dimensions required for HMP compliance according to the SWMM models that were undertaken for the project.

TABLE 2 – SUMMARY OF DUAL PURPOSE BMPs: BIOFILTRATION WITH SURFACE PONDING

BMP	IMP DIMENSIONS FOR POC-1					
	Gravel Area(1) (ft^2)	Gravel Depth(2) (in)	Underdrain Orif. D (in)(3)	Surface Bottom Area (ft^2)	Surface Area at Top of Basin(4) (ft^2)	Surface Depth(5) (ft)
1a	1,884	24	0.625	1,884	1,884	1.50
1b	1,616	24	1.125	1,616	1,616	1.00
3a	8,617	24	1.5	8,617	8,617	4.50
4	2,191	12	1.25	2,191	2,191	1.00
5	962	24	0.875	962	962	2.00
8	1,620	12	0.5	1,620	1,620	1.00

(1) Gravel area = amended soil area. Amended soil depth is equal to 18-inches for all BMPs.
(2) Gravel depth above underdrain invert.
(3) Diameter of orifice in gravel layer; tied with hydromod min threshold (10%Q_2).
(4) Vertical walls were assumed for the surface storage of all BMPs. Therefore, bottom area is approximately equal to top area.
(5) The total surface depth from the bottom of the pond to the top of the pond berm or wall (pond spill crest).

TABLE 3 – SUMMARY OF HMP RISER SURFACE DISCHARGE STRUCTURES

BMP	RISER DIMENSIONS FOR POC-1				
	LOWER OUTLET			EMERGENCY WEIR	
	Outlet Type(1)	Invert Elevation (ft)(2)	Dimensions (# - h x w) (3)	Invert Elevation (ft) (4)	Weir Length (ft)(5)
1a	n/a	n/a	n/a	0.50	12.0
1b	n/a	n/a	n/a	0.50	12.0
3a	slot orifice	2.00	1 – 9-in x 15-in	3.50	12.0
4	n/a	n/a	n/a	0.50	12.0
5	n/a	n/a	n/a	1.50	12.0
8	n/a	n/a	n/a	0.50	12.0

(1) Type of opening in riser structure.
(2) Depth from bottom of pond to invert of lower outlet.
(3) Number of lower outlets – outlet dimensions. For example, for BMP 3a: 1 slot orifice with 9-in high by 15-in wide opening.
(4) Depth from bottom of pond to invert of emergency overflow weir.
(5) Weir length = the internal perimeter of the riser structure. For all BMPs a square riser structure is assumed with 3-ft x 3-ft internal dimensions, therefore the emergency weir length = 12-ft.

FLOW DURATION CURVE COMPARISON

Flow Duration Curves (FDC) were compared at the project's POC by exporting the hourly runoff time series results from SWMM to a spreadsheet. The FDC was compared between 10% of the existing condition Q_2 up to the existing condition Q_{10}. The Q_2 and Q_{10} were determined with a partial duration statistical analysis of the runoff time series in an Excel spreadsheet using the Cunnane plotting position method (which is the preferred plotting methodology in the HMP Permit). As the SWMM Model includes a statistical analysis based on the Weibull Plotting Position Method, the Weibull Method was also used within the spreadsheet to ensure that the results were similar to those obtained by the SWMM Model.

The range from 10% of Q_2 up to Q_{10} was divided into 100 equal time intervals; the number of hours that each flow rate was exceeded was counted from the hourly series. Additionally, the intermediate peaks with a return period "i" were obtained (Q_i with i=3 to 9). For the purpose of the plot, the values were presented as percentage of time exceeded for each flow rate. FDC comparison for POC-1 is illustrated in Figure 1 in both normal and logarithmic scale.

As can be seen in Figure 1, the FDC for the proposed condition with the HMP facilities is within 110% of the curve for the existing condition in both peak flow and duration. The additional runoff volume generated from developing the site will be released to the storm drain system at a flow rate below the 10% Q_2 lower threshold. Additionally, the project will not increase peak flow rates between the Q_2 and the Q_{10}, as shown in the graphics and also in the peak flow tables in Attachment 1.

DRAWDOWN TIME

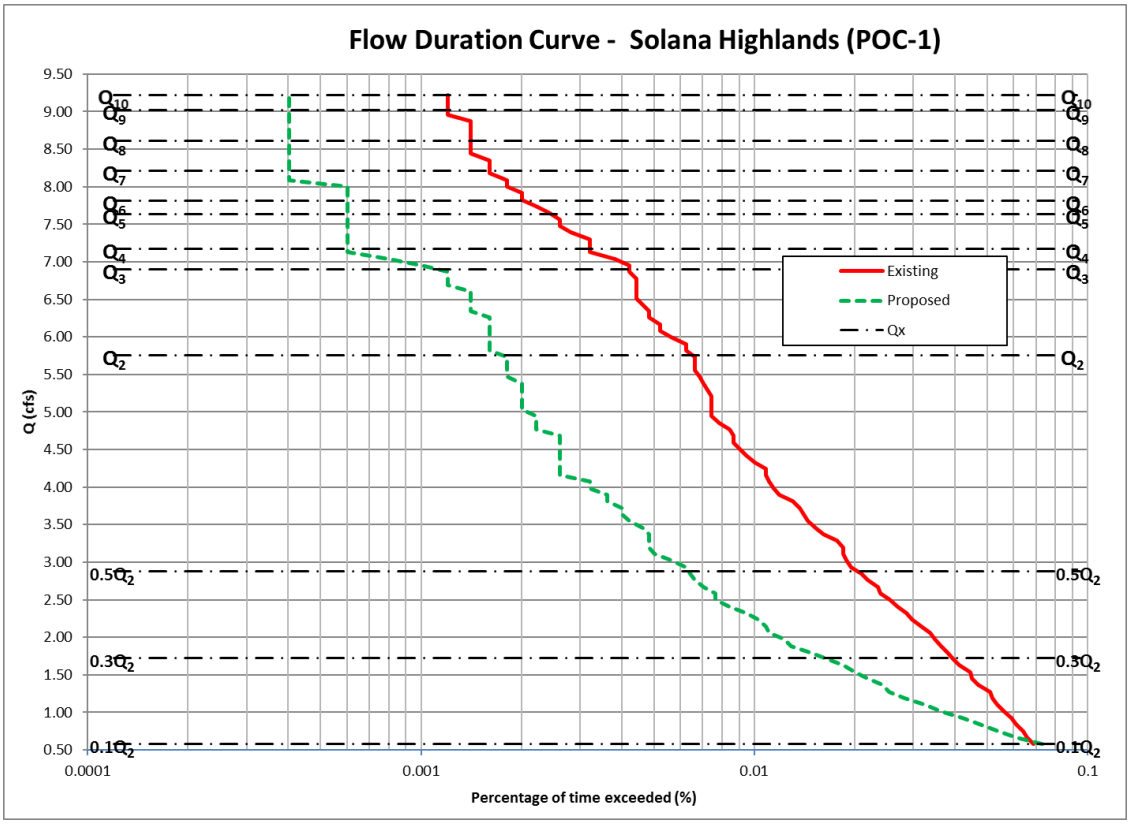
To ensure compliance with the 24 hour and 96 hour drawdown requirements (per Section 6.3.7 of the BMPDM), drawdown calculations are provided in Attachment 10 of this report.

SUMMARY

This study has demonstrated that the proposed biofiltration basins provided within the Solana Highlands project are sufficient to meet the current HMP criteria if the cross-sectional area and volume recommended within this Technical Memorandum, and the respective orifices and outlet structures, are incorporated as specified within the proposed project site.

KEY ASSUMPTIONS

1. Types B and D soils are representative of both the existing and developed conditions site per the NRCS Web Soil Survey.
2. The biofiltration basins are lined to prevent infiltration into the underlying soil.



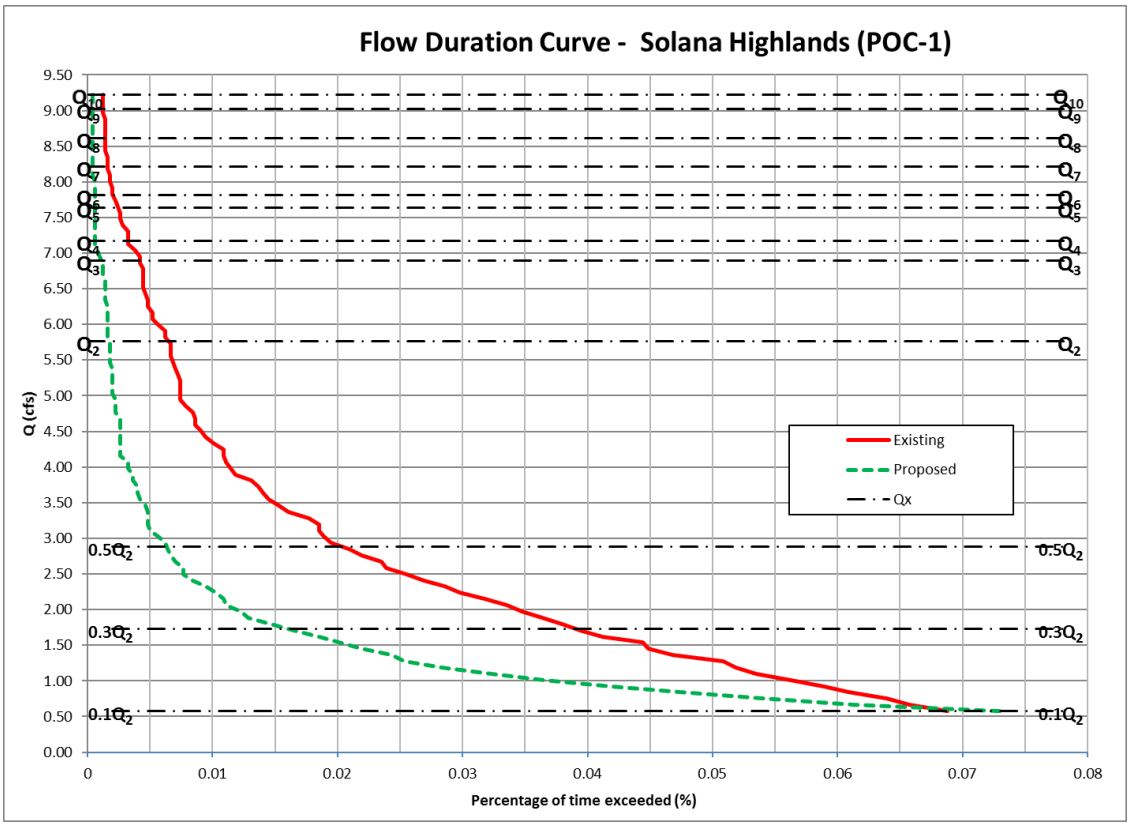


Figure 1. Flow Duration Curve Comparison for POC-1 (Logarithmic and Normal "x" Scale).

REFERENCES

[1] – *"City of Solana Beach BMP Design Manual",* February 2016, City of Solana Beach.

[2] – *"Review and Analysis of San Diego County Hydromodification Management Plan (HMP): Assumptions, Criteria, Methods, & Modeling Tools – Prepared for the Cities of San Marcos, Oceanside & Vista",* May 2012, Tory R. Walker Engineering.

[3] – Order R9-2013-001, California Regional Water Quality Control Board San Diego Region (SDRWQCB).

[4] – "*Handbook of Hydrology*", David R. Maidment, Editor in Chief. 1992, McGraw Hill.

ATTACHMENTS

1. Q_2 to Q_{10} Comparison Tables
2. FDC Plots (Log and Natural "x" Scale) and Flow Duration Tables
3. List of the "n" Largest Peaks: Existing and Proposed Conditions
4. Elevation vs. Area Curves and Elevation vs. Discharge Curves to be used in SWMM
5. Point of Compliance Exhibit, DMA Maps, Project Plan and Detention Section Sketches
6. SWMM Input Data in Input Format (Existing and Proposed Models)
7. SWMM Screens and Explanation of Significant Variables
8. Soil Map
9. Summary Files from the SWMM Model
10. Drawdown Calculations

ATTACHMENT 1

Q_2 to Q_{10} Comparison Tables

ATTACHMENT 1

Q_2 to Q_{10} Comparison Table – POC-1

Return Period	Existing Condition (cfs)	Mitigated Condition (cfs)	Reduction, Exist - Mitigated (cfs)
2-year	5.76	2.33	3.43
3-year	6.89	3.23	3.67
4-year	7.18	3.85	3.32
5-year	7.64	4.22	3.42
6-year	7.82	5.03	2.79
7-year	8.21	5.57	2.63
8-year	8.61	5.99	2.62
9-year	9.02	6.40	2.62
10-year	9.22	6.59	2.63

ATTACHMENT 2

FDC Plots (Log and Natural “x” Scale) and Flow Duration Tables

ATTACHMENT 2

FLOW DURATION CURVE ANALYSIS

1) Flow duration curve shall not exceed the existing conditions by more than 10%, neither in peak flow nor duration.

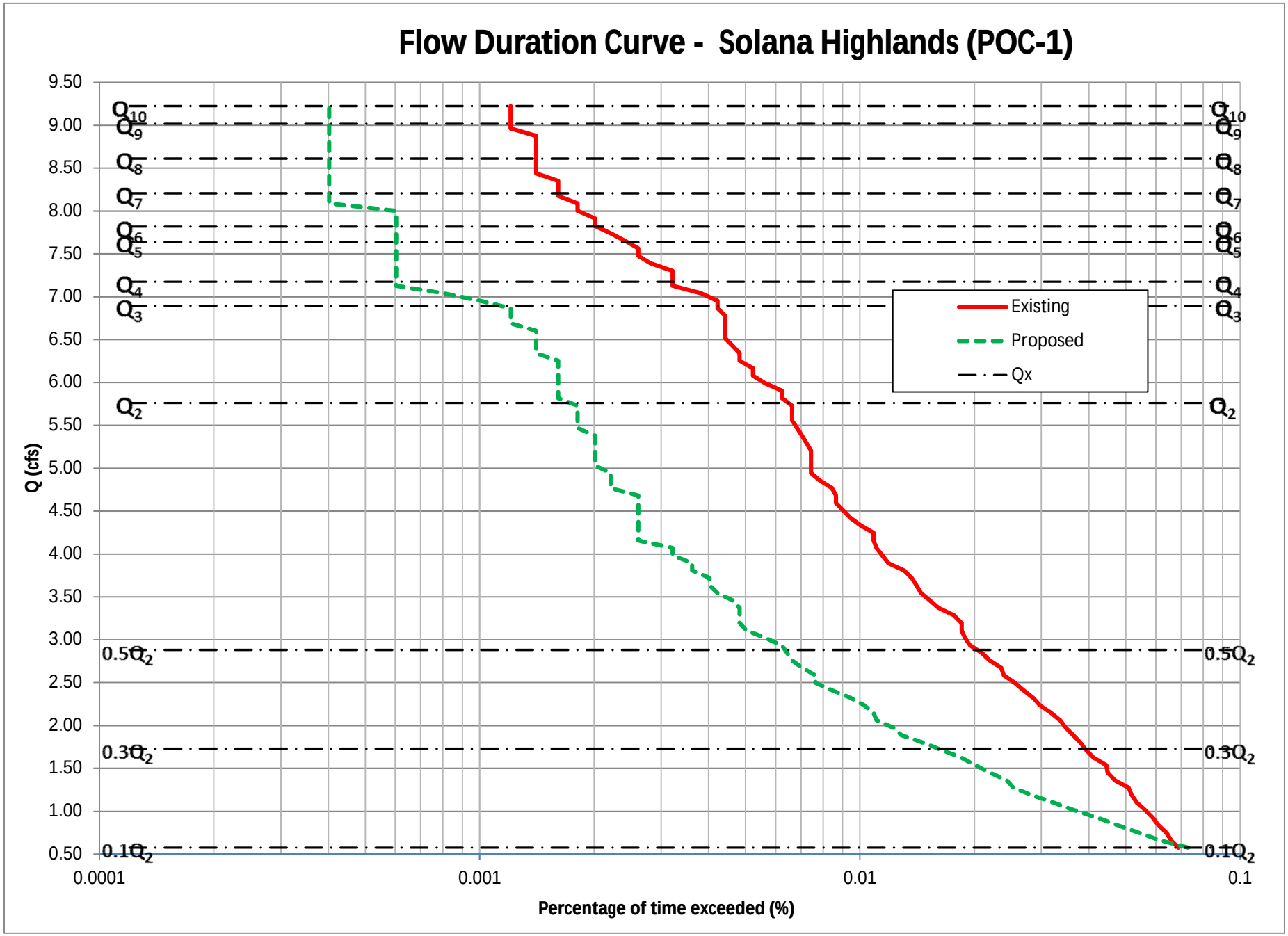
The figures on the following pages illustrate that, for the project's POC, the flow duration curve in post-developed conditions with the proposed BMPs is within 110% of the existing flow duration curve. The flow duration curve table following the curve shows that if the interval $0.10Q_2 – Q_{10}$ is divided in 100 sub-intervals, then the post developed divided by pre-developed durations are never larger than 110% (the permit allows up to 110%).

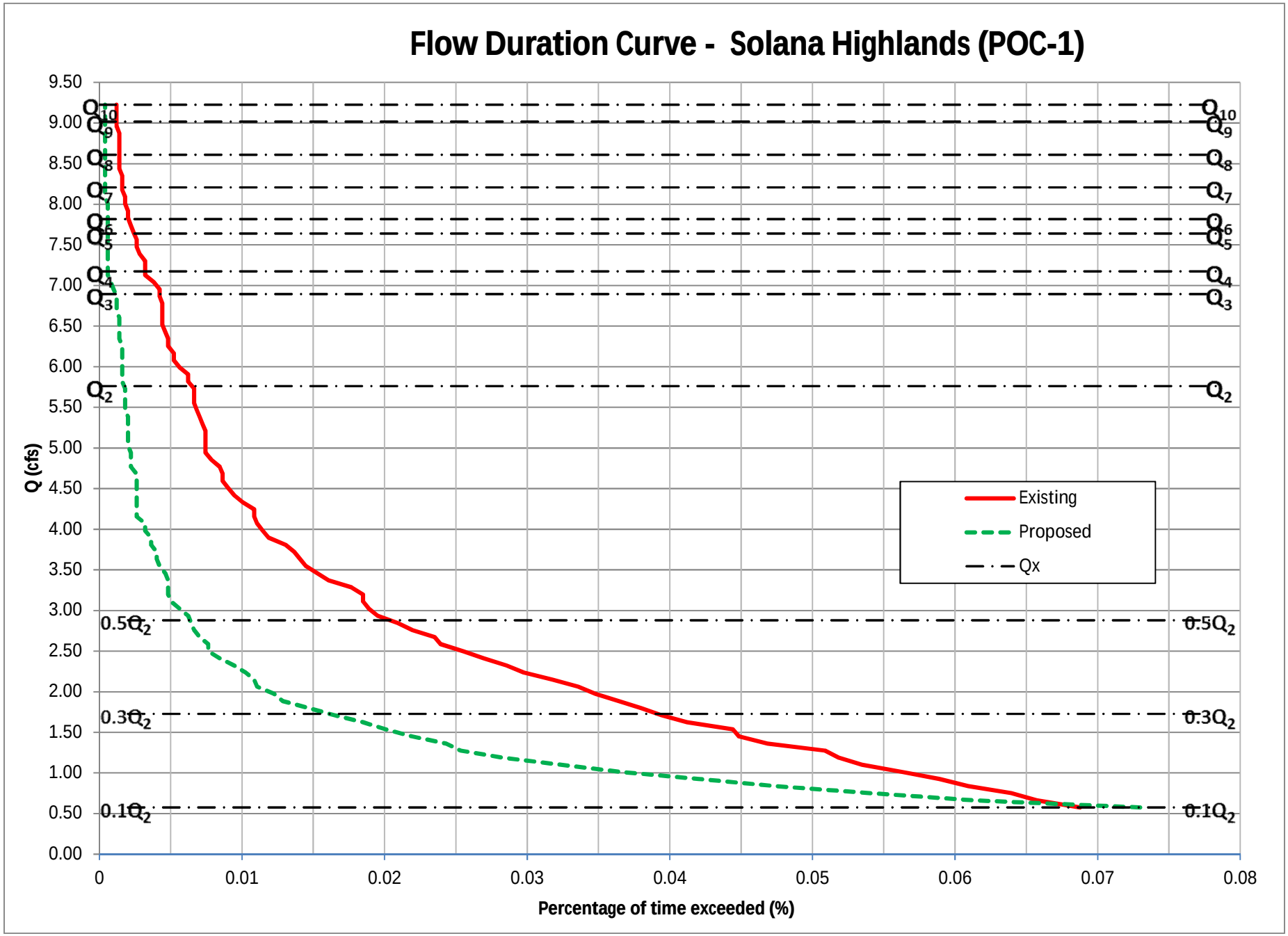
Consequently, the design passes the hydromodification test.

It is important to note that the flow duration curve can be expressed in the "x" axis as percentage of time, hours per year, total number of hours, or any other similar time variable. As those variables only differ by a multiplying constant, their plot in logarithmic scale is going to look exactly the same, and compliance can be observed regardless of the variable selected. However, for this project, % of time exceeded is the variable of choice in the flow duration curve. The selection of a logarithmic scale in lieu of the normal scale is preferred, as differences between the pre-developed and post-developed curves can be seen more clearly in the entire range of analysis. Both graphics are presented just to prove the difference.

In terms of the "y" axis, the peak flow value is the variable of choice. As an additional analysis performed by TRWE, not only the range of analysis is clearly depicted (10% of Q_2 to Q_{10}), but also all intermediate flows are shown (Q_2, Q_3, Q_4, Q_5, Q_6, Q_7, Q_8 and Q_9) in order to demonstrate compliance at any range $Q_x – Q_{x+1}$. One of the limitations of both the SWMM and SDHM models is that the intermediate analysis is not performed (to obtain Q_i from i = 2 to 10). TRWE performed the analysis using the Cunnane Plotting position Method (the preferred method in the HMP permit) from the "n" largest independent peak flows obtained from the continuous time series.

The largest "n" peak flows are attached in this appendix, as well as the values of Q_i with a return period "i", from i=2 to 10. The Q_i values are also added into the flow-duration plot.


Flow Duration Curve - Solana Highlands (POC-1)
Q (cfs)
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.0001
0.001
0.01
0.1
Percentage of time exceeded (%)
Q10
Q9
Q8
Q7
Q6
Q5
Q4
Q3
Q2
0.5Q2
0.3Q2
0.1Q2
Existing
Proposed
Qx


Flow Duration Curve - Solana Highlands (POC-1)
Q (cfs)
Percentage of time exceeded (%)
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
Q10
Q9
Q8
Q7
Q6
Q5
Q4
Q3
Q2
0.5Q2
0.3Q2
0.1Q2
Existing
Proposed
Qx

Flow Duration Curve Data for Solana Highlands (POC-1)

Q2 =	5.76	cfs	Fraction	10 %
Q10 =	9.22	cfs		
Step =	0.0874	cfs		
Count =	497370	hours		
	56.74	years		

Interval	Existing Condition			Detention Optimized			Pass or Fail?
	Q (cfs)	Hours > Q	% time	Hours>Q	% time	Post/Pre	
1	0.576	342	6.88E-02	363	7.30E-02	106%	Pass
2	0.663	327	6.57E-02	305	6.13E-02	93%	Pass
3	0.751	318	6.39E-02	269	5.41E-02	85%	Pass
4	0.838	303	6.09E-02	236	4.74E-02	78%	Pass
5	0.925	293	5.89E-02	209	4.20E-02	71%	Pass
6	1.013	280	5.63E-02	182	3.66E-02	65%	Pass
7	1.100	266	5.35E-02	161	3.24E-02	61%	Pass
8	1.188	258	5.19E-02	141	2.83E-02	55%	Pass
9	1.275	253	5.09E-02	126	2.53E-02	50%	Pass
10	1.362	233	4.68E-02	121	2.43E-02	52%	Pass
11	1.450	223	4.48E-02	109	2.19E-02	49%	Pass
12	1.537	221	4.44E-02	100	2.01E-02	45%	Pass
13	1.624	205	4.12E-02	92	1.85E-02	45%	Pass
14	1.712	196	3.94E-02	82	1.65E-02	42%	Pass
15	1.799	189	3.80E-02	73	1.47E-02	39%	Pass
16	1.886	181	3.64E-02	64	1.29E-02	35%	Pass
17	1.974	173	3.48E-02	61	1.23E-02	35%	Pass
18	2.061	167	3.36E-02	55	1.11E-02	33%	Pass
19	2.148	158	3.18E-02	54	1.09E-02	34%	Pass
20	2.236	148	2.98E-02	51	1.03E-02	34%	Pass
21	2.323	142	2.86E-02	47	9.45E-03	33%	Pass
22	2.411	134	2.69E-02	42	8.44E-03	31%	Pass
23	2.498	127	2.55E-02	38	7.64E-03	30%	Pass
24	2.585	119	2.39E-02	38	7.64E-03	32%	Pass
25	2.673	117	2.35E-02	35	7.04E-03	30%	Pass
26	2.760	109	2.19E-02	33	6.63E-03	30%	Pass
27	2.847	104	2.09E-02	32	6.43E-03	31%	Pass
28	2.935	97	1.95E-02	31	6.23E-03	32%	Pass
29	3.022	94	1.89E-02	28	5.63E-03	30%	Pass
30	3.109	92	1.85E-02	25	5.03E-03	27%	Pass
31	3.197	92	1.85E-02	24	4.83E-03	26%	Pass
32	3.284	88	1.77E-02	24	4.83E-03	27%	Pass
33	3.372	80	1.61E-02	24	4.83E-03	30%	Pass
34	3.459	76	1.53E-02	23	4.62E-03	30%	Pass
35	3.546	72	1.45E-02	21	4.22E-03	29%	Pass
36	3.634	70	1.41E-02	20	4.02E-03	29%	Pass

Interval	Existing Condition			Detention Optimized			Pass or Fail?
	Q (cfs)	Hours > Q	% time	Hours>Q	% time	Post/Pre	
37	3.721	68	1.37E-02	20	4.02E-03	29%	Pass
38	3.808	65	1.31E-02	18	3.62E-03	28%	Pass
39	3.896	59	1.19E-02	18	3.62E-03	31%	Pass
40	3.983	57	1.15E-02	16	3.22E-03	28%	Pass
41	4.070	55	1.11E-02	16	3.22E-03	29%	Pass
42	4.158	54	1.09E-02	13	2.61E-03	24%	Pass
43	4.245	54	1.09E-02	13	2.61E-03	24%	Pass
44	4.333	50	1.01E-02	13	2.61E-03	26%	Pass
45	4.420	47	9.45E-03	13	2.61E-03	28%	Pass
46	4.507	45	9.05E-03	13	2.61E-03	29%	Pass
47	4.595	43	8.65E-03	13	2.61E-03	30%	Pass
48	4.682	43	8.65E-03	13	2.61E-03	30%	Pass
49	4.769	42	8.44E-03	11	2.21E-03	26%	Pass
50	4.857	39	7.84E-03	11	2.21E-03	28%	Pass
51	4.944	37	7.44E-03	11	2.21E-03	30%	Pass
52	5.031	37	7.44E-03	10	2.01E-03	27%	Pass
53	5.119	37	7.44E-03	10	2.01E-03	27%	Pass
54	5.206	37	7.44E-03	10	2.01E-03	27%	Pass
55	5.293	36	7.24E-03	10	2.01E-03	28%	Pass
56	5.381	35	7.04E-03	10	2.01E-03	29%	Pass
57	5.468	34	6.84E-03	9	1.81E-03	26%	Pass
58	5.556	33	6.63E-03	9	1.81E-03	27%	Pass
59	5.643	33	6.63E-03	9	1.81E-03	27%	Pass
60	5.730	33	6.63E-03	9	1.81E-03	27%	Pass
61	5.818	31	6.23E-03	8	1.61E-03	26%	Pass
62	5.905	31	6.23E-03	8	1.61E-03	26%	Pass
63	5.992	28	5.63E-03	8	1.61E-03	29%	Pass
64	6.080	26	5.23E-03	8	1.61E-03	31%	Pass
65	6.167	26	5.23E-03	8	1.61E-03	31%	Pass
66	6.254	24	4.83E-03	8	1.61E-03	33%	Pass
67	6.342	24	4.83E-03	7	1.41E-03	29%	Pass
68	6.429	23	4.62E-03	7	1.41E-03	30%	Pass
69	6.517	22	4.42E-03	7	1.41E-03	32%	Pass
70	6.604	22	4.42E-03	7	1.41E-03	32%	Pass
71	6.691	22	4.42E-03	6	1.21E-03	27%	Pass
72	6.779	22	4.42E-03	6	1.21E-03	27%	Pass
73	6.866	21	4.22E-03	6	1.21E-03	29%	Pass
74	6.953	21	4.22E-03	5	1.01E-03	24%	Pass
75	7.041	19	3.82E-03	4	8.04E-04	21%	Pass
76	7.128	16	3.22E-03	3	6.03E-04	19%	Pass
77	7.215	16	3.22E-03	3	6.03E-04	19%	Pass
78	7.303	16	3.22E-03	3	6.03E-04	19%	Pass
79	7.390	14	2.81E-03	3	6.03E-04	21%	Pass
80	7.477	13	2.61E-03	3	6.03E-04	23%	Pass
81	7.565	13	2.61E-03	3	6.03E-04	23%	Pass

Interval	Existing Condition			Detention Optimized			Pass or Fail?
	Q (cfs)	Hours > Q	% time	Hours>Q	% time	Post/Pre	
82	7.652	12	2.41E-03	3	6.03E-04	25%	Pass
83	7.740	11	2.21E-03	3	6.03E-04	27%	Pass
84	7.827	10	2.01E-03	3	6.03E-04	30%	Pass
85	7.914	10	2.01E-03	3	6.03E-04	30%	Pass
86	8.002	9	1.81E-03	3	6.03E-04	33%	Pass
87	8.089	9	1.81E-03	2	4.02E-04	22%	Pass
88	8.176	8	1.61E-03	2	4.02E-04	25%	Pass
89	8.264	8	1.61E-03	2	4.02E-04	25%	Pass
90	8.351	8	1.61E-03	2	4.02E-04	25%	Pass
91	8.438	7	1.41E-03	2	4.02E-04	29%	Pass
92	8.526	7	1.41E-03	2	4.02E-04	29%	Pass
93	8.613	7	1.41E-03	2	4.02E-04	29%	Pass
94	8.701	7	1.41E-03	2	4.02E-04	29%	Pass
95	8.788	7	1.41E-03	2	4.02E-04	29%	Pass
96	8.875	7	1.41E-03	2	4.02E-04	29%	Pass
97	8.963	6	1.21E-03	2	4.02E-04	33%	Pass
98	9.050	6	1.21E-03	2	4.02E-04	33%	Pass
99	9.137	6	1.21E-03	2	4.02E-04	33%	Pass
100	9.225	6	1.21E-03	2	4.02E-04	33%	Pass

Peak Flows calculated with Cunnane Plotting Position

Return Period (years)	Pre-dev. Q (cfs)	Post-Dev. Q (cfs)	Reduction (cfs)
10	9.225	6.590	2.635
9	9.018	6.402	2.616
8	8.611	5.991	2.620
7	8.208	5.574	2.634
6	7.818	5.029	2.789
5	7.639	4.219	3.419
4	7.175	3.855	3.321
3	6.895	3.229	3.666
2	5.760	2.333	3.427

ATTACHMENT 3

List of the “n” Largest Peaks: Existing and Proposed Conditions

ATTACHMENT 3

List of the "n" Largest Peaks: Existing and Proposed Conditions

Basic Probabilistic Equation:

R = 1/P R: Return period (years).

P: Probability of a flow to be equaled or exceeded any given year (dimensionless).

Cunnane Equation:

$$P = \frac{i-0.4}{n+0.2}$$

Weibull Equation:

$$P = \frac{i}{n+1}$$

i: Position of the peak whose probability is desired (sorted from large to small)

n: number of years analyzed.

Explanation of Variables for the Tables in this Attachment

Peak: Refers to the peak flow at the date given, taken from the continuous simulation hourly results of the n year analyzed.

Posit: If all peaks are sorted from large to small, the position of the peak in a sorting analysis is included under the variable Posit.

Date: Date of the occurrence of the peak at the outlet from the continuous simulation.

Note: All peaks are not annual maxima; instead they are defined as event maxima, with a threshold to separate peaks of at least 12 hours. In other words, any peak P in a time series is defined as a value where dP/dt = 0, and the peak is the largest value in 25 hours (12 hours before the hour of occurrence and 12 hours after the occurrence, so it is in essence a daily peak).

List of Peak Events and Determination of Q2 and Q10 (Existing Conditions)
Solana Highlands (POC-1)

T (Year)	Cunnane (cfs)	Weibull (cfs)	Peaks (cfs)	Date	Posit	Period of Return (Years)	
10	**9.22**	**9.44**				Weibull	Cunnane
9	**9.02**	**9.11**	3.782	2/19/1993	57	1.02	1.01
8	**8.61**	**8.79**	3.852	1/11/2005	56	1.04	1.03
7	**8.21**	**8.29**	3.871	2/22/2008	55	1.05	1.05
6	**7.82**	**7.89**	3.873	2/22/2005	54	1.07	1.07
5	**7.64**	**7.65**	3.874	2/23/2005	53	1.09	1.09
4	**7.18**	**7.23**	3.888	12/10/1965	52	1.12	1.11
3	**6.89**	**6.91**	3.912	9/18/1963	51	1.14	1.13
2	**5.76**	**5.76**	3.92	2/12/1992	50	1.16	1.15
			3.985	3/15/1952	49	1.18	1.18
			4.123	3/15/1986	48	1.21	1.20
			4.258	2/22/1998	47	1.23	1.23
			4.258	2/12/2003	46	1.26	1.25
			4.264	11/8/2002	45	1.29	1.28
			4.285	1/29/1980	44	1.32	1.31
			4.341	2/6/1969	43	1.35	1.34
			4.345	2/4/1994	42	1.38	1.38
			4.35	3/1/1991	41	1.41	1.41
			4.471	2/15/1986	40	1.45	1.44
			4.499	11/11/1985	39	1.49	1.48
			4.541	12/2/1961	38	1.53	1.52
			4.759	3/2/1980	37	1.57	1.56
			4.771	2/14/1998	36	1.61	1.61
			4.795	1/16/1978	35	1.66	1.65
			4.834	3/11/1995	34	1.71	1.70
			5.244	1/18/1993	33	1.76	1.75
			5.306	1/6/2008	32	1.81	1.81
			5.418	1/29/1983	31	1.87	1.87
			5.544	2/17/1998	30	1.93	1.93
			5.76	12/30/1991	29	2.00	2.00
			5.813	2/16/1980	28	2.07	2.07
			5.928	2/23/1998	27	2.15	2.15
			5.966	2/27/1983	26	2.23	2.23
			6.072	1/27/2008	25	2.32	2.33
			6.222	11/22/1965	24	2.42	2.42
			6.241	2/10/1978	23	2.52	2.53
			6.424	10/20/2004	22	2.64	2.65
			6.437	2/3/1998	21	2.76	2.78
			6.821	3/1/1978	20	2.90	2.92
			6.963	10/27/2004	19	3.05	3.08
			6.986	3/17/1982	18	3.22	3.25
			7.073	1/16/1952	17	3.41	3.45
			7.09	11/15/1952	16	3.63	3.67
			7.101	12/19/1970	15	3.87	3.92
			7.362	10/29/2000	14	4.14	4.21
			7.436	4/1/1958	13	4.46	4.54
			7.633	2/20/1980	12	4.83	4.93
			7.672	1/14/1993	11	5.27	5.40
			7.8	2/18/2005	10	5.80	5.96
			8.101	2/4/1958	9	6.44	6.65
			8.37	2/25/1969	8	7.25	7.53
			8.949	9/23/1986	7	8.29	8.67
			9.269	2/25/2003	6	9.67	10.21
			10.244	1/15/1979	5	11.60	12.43
			11.078	1/4/1995	4	14.50	15.89
			12.273	1/4/1978	3	19.33	22.00
			12.484	10/1/1983	2	29.00	35.75
			14.117	4/14/2003	1	58.00	95.33

Note:
Cunnane is the preferred method by the HMP permit.

List of Peak Events and Determination of Q2 and Q10 (Proposed Conditions)
Solana Highlands (POC-1)

T (Year)	Cunnane (cfs)	Weibull (cfs)
10	**6.59**	**6.67**
9	**6.40**	**6.49**
8	**5.99**	**6.17**
7	**5.57**	**5.66**
6	**5.03**	**5.14**
5	**4.22**	**4.36**
4	**3.85**	**3.89**
3	**3.23**	**3.27**
2	**2.33**	**2.33**

Note:
Cunnane is the preferred method by the HMP permit.

Peaks (cfs)	Date	Posit	Period of Return (Years)	
			Weibull	Cunnane
1.378	3/1/1983	57	1.02	1.01
1.39	2/13/1992	56	1.04	1.03
1.418	11/16/1965	55	1.05	1.05
1.424	12/24/1971	54	1.07	1.07
1.434	2/2/1960	53	1.09	1.09
1.436	1/13/1957	52	1.12	1.11
1.5	12/25/1983	51	1.14	1.13
1.517	1/18/1993	50	1.16	1.15
1.535	10/29/2000	49	1.18	1.18
1.555	3/11/1995	48	1.21	1.20
1.627	1/18/1952	47	1.23	1.23
1.628	2/17/1998	46	1.26	1.25
1.647	1/16/1972	45	1.29	1.28
1.724	3/5/1995	44	1.32	1.31
1.742	1/14/1993	43	1.35	1.34
1.751	3/2/1980	42	1.38	1.38
1.76	1/20/1962	41	1.41	1.41
1.867	1/13/1997	40	1.45	1.44
1.879	11/30/2007	39	1.49	1.48
1.987	2/18/1980	38	1.53	1.52
1.999	1/11/2005	37	1.57	1.56
2.021	1/11/1980	36	1.61	1.61
2.168	1/25/1969	35	1.66	1.65
2.2	2/18/2005	34	1.71	1.70
2.271	2/3/1998	33	1.76	1.75
2.294	1/15/1978	32	1.81	1.81
2.32	12/5/1966	31	1.87	1.87
2.327	9/23/1986	30	1.93	1.93
2.333	12/30/1991	29	2.00	2.00
2.355	8/17/1977	28	2.07	2.07
2.625	11/22/1996	27	2.15	2.15
2.778	10/27/2004	26	2.23	2.23
2.891	1/16/1952	25	2.32	2.33
2.985	2/10/1978	24	2.42	2.42
2.997	3/1/1991	23	2.52	2.53
3.036	2/23/1998	22	2.64	2.65
3.053	2/22/2008	21	2.76	2.78
3.057	1/16/1993	20	2.90	2.92
3.387	1/9/2005	19	3.05	3.08
3.524	2/15/1986	18	3.22	3.25
3.579	2/23/2005	17	3.41	3.45
3.802	1/16/1978	16	3.63	3.67
3.808	3/8/1968	15	3.87	3.92
3.972	11/22/1965	14	4.14	4.21
4.127	1/6/1979	13	4.46	4.54
4.13	2/4/1958	12	4.83	4.93
4.733	2/25/2003	11	5.27	5.40
5.001	3/17/1982	10	5.80	5.96
5.462	1/29/1980	9	6.44	6.65
5.743	2/20/1980	8	7.25	7.53
6.339	1/4/1978	7	8.29	8.67
6.63	10/1/1983	6	9.67	10.21
6.879	3/1/1978	5	11.60	12.43
7.002	1/15/1979	4	14.50	15.89
7.11	2/25/1969	3	19.33	22.00
10.778	1/4/1995	2	29.00	35.75
11.175	4/14/2003	1	58.00	95.33

ATTACHMENT 4

Elevation vs. Area Curves and Elevation vs. Discharge Curves to be used in SWMM

ATTACHMENT 4

ELEVATION vs. AREA

The elevation vs. area curves in the model are calculated in Excel and imported into the model. The summary of elevation vs. area for each BMP has been provided on the following pages.

The LID surface storage depth beneath the lowest surface discharge structure is accounted for in the LID module as illustrated in Attachment 7.

ELEVATION vs. DISCHARGE

The total elevation vs. discharge curve is imported from an Excel spreadsheet that calculates the elevation vs. discharge of the outlet system. Elevation vs. discharge relationships are provided for the surface discharge of the biofiltration basins as this is where a Modified Puls routing procedure will be taken into account in the continuous simulation model.

The orifice sizes have been selected to maximize their size while still restricting flows to conform with the required 10% of the Q2 event flow as mandated in the BMP Design Manual. While TRWE acknowledges that these orifices are small, to increase the size of these outlets would impact the basin's ability to restrict flows beneath the HMP thresholds, thus preventing the BMP from conforming with HMP requirements.

In order to further reduce the risk of blockage of the orifices, regular maintenance of the riser and orifices must be performed to ensure potential blockages are minimized. A detail of the orifice and riser structures is provided in Attachment 5 of this memorandum.

DISCHARGE EQUATIONS

1) Weir:

$$Q_W = C_W \cdot L \cdot H^{3/2} \quad (1)$$

2) Slot:

As an orifice: $$Q_s = B_s \cdot h_s \cdot c_g \cdot \sqrt{2g\left(H - \frac{h_s}{2}\right)} \quad (2.a)$$

As a weir: $$Q_s = C_W \cdot B_s \cdot H^{3/2} \quad (2.b)$$

For H > h_s slot works as weir until orifice equation provides a smaller discharge. The elevation such that equation (2.a) = equation (2.b) is the elevation at which the behavior changes from weir to orifice.

3) Vertical Orifices

As an orifice: $$Q_o = 0.25 \cdot \pi D^2 \cdot c_g \cdot \sqrt{2g\left(H - \frac{D}{2}\right)} \quad (3.a)$$

As a weir: Critical depth and geometric family of circular sector must be solved to determine Q as a function of H:

$$\frac{Q_O^2}{g} = \frac{A_{cr}^3}{T_{cr}}; \quad H = y_{cr} + \frac{A_{cr}}{2 \cdot T_{cr}}; \; T_{cr} = 2\sqrt{y_{cr}(D - y_{cr})}; \quad A_{cr} = \frac{D^2}{8}[\alpha_{cr} - sin(\alpha_{cr})];$$

$$y_{cr} = \frac{D}{2}[1 - sin(0.5 \cdot \alpha_{cr})] \quad \text{(3.b.1, 3.b.2, 3.b.3, 3.b.4 and 3.b.5)}$$

There is a value of H (approximately H = 110% D) from which orifices no longer work as weirs as critical depth is not possible at the entrance of the orifice. This value of H is obtained equaling the discharge using critical equations and equations (3.b).

A mathematical model is prepared with the previous equations depending on the type of discharge.

The following are the variables used above:

Q_W, Q_S, Q_O = Discharge of weir, slot or orifice (cfs)

C_W, c_g : Coefficients of discharge of weir (typically 3.1) and orifice (0.61 to 0.62)

L, B_S, D, h_S : Length of weir, width of slot, diameter of orifice and height of slot, respectively; (ft)

H: Level of water in the pond over the invert of slot, weir or orifice (ft)

A_{cr}, T_{cr}, y_{cr}, α_{cr}: Critical variables for circular sector: area (ft^2), top width (ft), critical depth (ft), and angle to the center, respectively.

Stage-Area for BMP 1a

Depth (ft)	Area (ft^2)	Volume (ft^3)	
0.00	1884	0	**BIOFILTRATION (1)**
0.08	1884	157	
0.17	1884	314	
0.25	1884	471	
0.33	1884	628	
0.42	1884	785	
0.50	1884	942	**SURFACE OUTLET (2)**
0.58	1884	1099	
0.67	1884	1256	
0.75	1884	1413	
0.83	1884	1570	
0.92	1884	1727	
1.00	1884	1884	
1.08	1884	2041	
1.17	1884	2198	
1.25	1884	2355	
1.33	1884	2512	
1.42	1884	2669	
1.50	1884	2826	

SUB SURFACE STORAGE

Elevation (ft)	Area (ft^2)	Volume (ft^3)	
-1.50	1884	565	**Amended Soil Base (0.2 voids)**
-3.50	1884	754	**Gravel Base (0.4 voids)**
Gravel & Amended Soil	**TOTAL =**	1319	(ft^3)
Surface Total	**TOTAL =**	942	(ft^3) estimated
BMP	**TOTAL =**	**2261**	**(ft^3)**

(1): The area at this surface elevation corresponds to the area of gravel and amended soil (Biofiltration layer)
(2): Volume at this elevation coresponds with surface volume for WQ purposes (invert of lowest surface outlet)

Effective Depth:	6.00 in

Stage-Area for BMP 1b

Depth (ft)	Area (ft^2)	Volume (ft^3)	
0.00	1616	0	**BIOFILTRATION (1)**
0.08	1616	135	
0.17	1616	269	
0.25	1616	404	
0.33	1616	539	
0.42	1616	673	
0.50	1616	808	**SURFACE OUTLET (2)**
0.58	1616	943	
0.67	1616	1077	
0.75	1616	1212	
0.83	1616	1347	
0.92	1616	1481	
1.00	1616	1616	

SUB SURFACE STORAGE

Elevation (ft)	Area (ft^2)	Volume (ft^3)	
-1.50	1616	485	**Amended Soil Base (0.2 voids)**
-3.50	1616	646	**Gravel Base (0.4 voids)**
Gravel & Amended Soil	**TOTAL =**	1131	(ft^3)
Surface Total	**TOTAL =**	808	(ft^3) estimated
BMP	**TOTAL =**	**1939**	**(ft^3)**

(1): The area at this surface elevation corresponds to the area of gravel and amended soil (Biofiltration layer)
(2): Volume at this elevation coresponds with surface volume for WQ purposes (invert of lowest surface outlet)

Effective Depth:	6.00 in

Stage-Area for BMP 3a

Depth (ft)	Area (ft^2)	Volume (ft^3)	
0.00	8617	0	**BIOFILTRATION (1)**
0.08	8617	718	
0.17	8617	1436	
0.25	8617	2154	
0.33	8617	2872	
0.42	8617	3590	
0.50	8617	4309	
0.58	8617	5027	
0.67	8617	5745	
0.75	8617	6463	
0.83	8617	7181	
0.92	8617	7899	
1.00	8617	8617	
1.08	8617	9335	
1.17	8617	10053	
1.25	8617	10771	
1.33	8617	11489	
1.42	8617	12207	
1.50	8617	12926	
1.58	8617	13644	
1.67	8617	14362	
1.75	8617	15080	
1.83	8617	15798	
1.92	8617	16516	
2.00	8617	17234	**SURFACE OUTLET (2)**
2.08	8617	17952	
2.17	8617	18670	
2.25	8617	19388	
2.33	8617	20106	
2.42	8617	20824	
2.50	8617	21543	
2.58	8617	22261	
2.67	8617	22979	
2.75	8617	23697	
2.83	8617	24415	
2.92	8617	25133	
3.00	8617	25851	
3.08	8617	26569	
3.17	8617	27287	
3.25	8617	28005	
3.33	8617	28723	
3.42	8617	29441	
3.50	8617	30160	
3.58	8617	30878	

3.67	8617	31596
3.75	8617	32314
3.83	8617	33032
3.92	8617	33750
4.00	8617	34468
4.08	8617	35186
4.17	8617	35904
4.25	8617	36622
4.33	8617	37340
4.42	8617	38058
4.50	8617	38777

SUB SURFACE STORAGE

Elevation (ft)	Area (ft^2)	Volume (ft^3)	
-1.50	8617	2585	**Amended Soil Base (0.2 voids)**
-3.50	8617	3447	**Gravel Base (0.4 voids)**
Gravel & Amended Soil	**TOTAL =**	6032	(ft^3)
Surface Total	**TOTAL =**	17234	(ft^3) estimated
BMP	**TOTAL =**	**23266**	**(ft^3)**

(1): The area at this surface elevation corresponds to the area of gravel and amended soil (Biofiltration layer)
(2): Volume at this elevation coresponds with surface volume for WQ purposes (invert of lowest surface outlet)

Effective Depth:	24.00 in

Stage-Area for BMP 4

Depth (ft)	Area (ft^2)	Volume (ft^3)	
0.00	2191	0	**BIOFILTRATION (1)**
0.08	2191	183	
0.17	2191	365	
0.25	2191	548	
0.33	2191	730	
0.42	2191	913	
0.50	2191	1096	**SURFACE OUTLET (2)**
0.58	2191	1278	
0.67	2191	1461	
0.75	2191	1643	
0.83	2191	1826	
0.92	2191	2008	
1.00	2191	2191	

SUB SURFACE STORAGE

Elevation (ft)	Area (ft^2)	Volume (ft^3)	
-1.50	2191	657	**Amended Soil Base (0.2 voids)**
-2.50	2191	657	**Gravel Base (0.4 voids)**
Gravel & Amended Soil	**TOTAL =**	1315	(ft^3)
Surface Total	**TOTAL =**	1096	(ft^3) estimated
BMP	**TOTAL =**	**2410**	**(ft^3)**

(1): The area at this surface elevation corresponds to the area of gravel and amended soil (Biofiltration layer)
(2): Volume at this elevation coresponds with surface volume for WQ purposes (invert of lowest surface outlet)

Effective Depth:	6.00 in

Stage-Area for BMP 5

Depth (ft)	Area (ft^2)	Volume (ft^3)	
0.00	962	0	**BIOFILTRATION (1)**
0.08	962	80	
0.17	962	160	
0.25	962	241	
0.33	962	321	
0.42	962	401	
0.50	962	481	
0.58	962	561	
0.67	962	641	
0.75	962	722	
0.83	962	802	
0.92	962	882	
1.00	962	962	
1.08	962	1042	
1.17	962	1122	
1.25	962	1203	
1.33	962	1283	
1.42	962	1363	
1.50	962	1443	**SURFACE OUTLET (2)**
1.58	962	1523	
1.67	962	1603	
1.75	962	1684	
1.83	962	1764	
1.92	962	1844	
2.00	962	1924	

SUB SURFACE STORAGE

Elevation (ft)	Area (ft^2)	Volume (ft^3)	
-1.50	962	289	**Amended Soil Base (0.2 voids)**
-3.50	962	289	**Gravel Base (0.4 voids)**
Gravel & Amended Soil	**TOTAL =**	577	(ft^3)
Surface Total	**TOTAL =**	1443	(ft^3) estimated
BMP	**TOTAL =**	**2020**	**(ft^3)**

(1): The area at this surface elevation corresponds to the area of gravel and amended soil (Biofiltration layer)
(2): Volume at this elevation coresponds with surface volume for WQ purposes (invert of lowest surface outlet)

Effective Depth:	18.00 in

Stage-Area for BMP 8

Depth (ft)	Area (ft^2)	Volume (ft^3)	
0.00	1620	0	**BIOFILTRATION (1)**
0.08	1620	135	
0.17	1620	270	
0.25	1620	405	
0.33	1620	540	
0.42	1620	675	
0.50	1620	810	**SURFACE OUTLET (2)**
0.58	1620	945	
0.67	1620	1080	
0.75	1620	1215	
0.83	1620	1350	
0.92	1620	1485	
1.00	1620	1620	

SUB SURFACE STORAGE

Elevation (ft)	Area (ft^2)	Volume (ft^3)	
-1.50	1620	486	**Amended Soil Base (0.2 voids)**
-2.50	1620	648	**Gravel Base (0.4 voids)**
Gravel & Amended Soil	**TOTAL =**	1134	(ft^3)
Surface Total	**TOTAL =**	810	(ft^3) estimated
BMP	**TOTAL =**	**1944**	**(ft^3)**

(1): The area at this surface elevation corresponds to the area of gravel and amended soil (Biofiltration layer)
(2): Volume at this elevation coresponds with surface volume for WQ purposes (invert of lowest surface outlet)

Effective Depth:	6.00 in

Outlet Structure for Discharge of BMP 1a

Discharge vs Elevation Table

Low orifice	1.000 "	Lower slot		Lower Weir	
Number of orif:	0	Number of slots:	0	Number of weirs:	0
Cg-low:	0.62	Invert:	0.00 ft	Invert:	0.00
		B	0.00 ft	B:	0.00
Middle orifice	1 "	h_{slot}	0.000 ft		
Number of orif:	0				
Cg-middle:	0.62	Upper slot		Emergency weir	
invert elev:	0.000 ft	Number of slots:	0	Invert:	0.00 ft
		Invert:	0.00 ft	B:	12.00 ft
		B:	0.00 ft		
		h_{slot}	0.000 ft		

*Note: h = head above the invert of the lowest surface discharge opening.

h* (ft)	H/D-low -	H/D-mid -	Qlow-orif (cfs)	Qlow-weir (cfs)	Qtot-low (cfs)	Qmid-orif (cfs)	Qmid-weir (cfs)	Qtot-med (cfs)	Qslot-low (cfs)	Qslot-upp (cfs)	Qweir (cfs)	Qemerg (cfs)	Qtot (cfs)
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.042	0.500	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.316	0.316
0.083	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.895	0.895
0.125	1.500	1.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.644	1.644
0.167	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.531	2.531
0.208	2.500	2.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.537	3.537
0.250	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.650	4.650
0.292	3.500	3.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.860	5.860
0.333	4.000	4.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.159	7.159
0.375	4.500	4.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.543	8.543
0.417	5.000	5.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.005	10.005
0.458	5.500	5.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	11.543	11.543
0.500	6.000	6.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	13.152	13.152
0.542	6.500	6.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	14.830	14.830
0.583	7.000	7.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	16.574	16.574
0.625	7.500	7.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	18.381	18.381
0.667	8.000	8.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	20.249	20.249
0.708	8.500	8.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	22.177	22.177
0.750	9.000	9.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	24.162	24.162
0.792	9.500	9.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	26.203	26.203
0.833	10.000	10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	28.299	28.299
0.875	10.500	10.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	30.448	30.448

0.917	11.000	11.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	32.648	32.648
0.958	11.500	11.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	34.899	34.899
1.000	12.000	12.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	37.200	37.200

Outlet Structure for Discharge of BMP 1b

Discharge vs Elevation Table

Low orifice	1.000 "	Lower slot		Lower Weir	
Number of orif:	0	Number of slots:	0	Number of weirs:	0
Cg-low:	0.62	Invert:	0.00 ft	Invert:	0.00
		B	0.00 ft	B:	0.00
Middle orifice	1 "	h_{slot}	0.000 ft		
Number of orif:	0				
Cg-middle:	0.62	Upper slot		Emergency weir	
invert elev:	0.000 ft	Number of slots:	0	Invert:	0.00 ft
		Invert:	0.00 ft	B:	12.00 ft
		B:	0.00 ft		
		h_{slot}	0.000 ft		

*Note: h = head above the invert of the lowest surface discharge opening.

h* (ft)	H/D-low -	H/D-mid -	Qlow-orif (cfs)	Qlow-weir (cfs)	Qtot-low (cfs)	Qmid-orif (cfs)	Qmid-weir (cfs)	Qtot-med (cfs)	Qslot-low (cfs)	Qslot-upp (cfs)	Qweir (cfs)	Qemerg (cfs)	Qtot (cfs)
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.042	0.500	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.316	0.316
0.083	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.895	0.895
0.125	1.500	1.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.644	1.644
0.167	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.531	2.531
0.208	2.500	2.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.537	3.537
0.250	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.650	4.650
0.292	3.500	3.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.860	5.860
0.333	4.000	4.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.159	7.159
0.375	4.500	4.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.543	8.543
0.417	5.000	5.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.005	10.005
0.458	5.500	5.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	11.543	11.543
0.500	6.000	6.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	13.152	13.152

Outlet Structure for Discharge of BMP 3a

Discharge vs Elevation Table

Low orifice	1.000 "	Lower slot		Lower Weir	
Number of orif:	0	Number of slots:	1	Number of weirs:	0
Cg-low:	0.62	Invert:	0.00 ft	Invert:	0.00
		B	1.250 ft	B:	0.00
Middle orifice	1 "	h_{slot}	0.750 ft		
Number of orif:	0				
Cg-middle:	0.62	Upper slot		Emergency weir	
invert elev:	0.000 ft	Number of slots:		Invert:	1.50 ft
		Invert:	0.00 ft	B:	12.00 ft
		B:	0.00 ft		
		h_{slot}	0.000 ft		

*Note: h = head above the invert of the lowest surface discharge opening.

h* (ft)	H/D-low -	H/D-mid -	Qlow-orif (cfs)	Qlow-weir (cfs)	Qtot-low (cfs)	Qmid-orif (cfs)	Qmid-weir (cfs)	Qtot-med (cfs)	Qslot-low (cfs)	Qslot-upp (cfs)	Qweir (cfs)	Qemerg (cfs)	Qtot (cfs)
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.042	0.500	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.033	0.000	0.000	0.000	0.033
0.083	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.093	0.000	0.000	0.000	0.093
0.125	1.500	1.500	0.000	0.000	0.000	0.000	0.000	0.000	0.171	0.000	0.000	0.000	0.171
0.167	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.264	0.000	0.000	0.000	0.264
0.208	2.500	2.500	0.000	0.000	0.000	0.000	0.000	0.000	0.368	0.000	0.000	0.000	0.368
0.250	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.484	0.000	0.000	0.000	0.484
0.292	3.500	3.500	0.000	0.000	0.000	0.000	0.000	0.000	0.610	0.000	0.000	0.000	0.610
0.333	4.000	4.000	0.000	0.000	0.000	0.000	0.000	0.000	0.746	0.000	0.000	0.000	0.746
0.375	4.500	4.500	0.000	0.000	0.000	0.000	0.000	0.000	0.890	0.000	0.000	0.000	0.890
0.417	5.000	5.000	0.000	0.000	0.000	0.000	0.000	0.000	1.042	0.000	0.000	0.000	1.042
0.458	5.500	5.500	0.000	0.000	0.000	0.000	0.000	0.000	1.202	0.000	0.000	0.000	1.202
0.500	6.000	6.000	0.000	0.000	0.000	0.000	0.000	0.000	1.370	0.000	0.000	0.000	1.370
0.542	6.500	6.500	0.000	0.000	0.000	0.000	0.000	0.000	1.545	0.000	0.000	0.000	1.545
0.583	7.000	7.000	0.000	0.000	0.000	0.000	0.000	0.000	1.726	0.000	0.000	0.000	1.726
0.625	7.500	7.500	0.000	0.000	0.000	0.000	0.000	0.000	1.915	0.000	0.000	0.000	1.915
0.667	8.000	8.000	0.000	0.000	0.000	0.000	0.000	0.000	2.109	0.000	0.000	0.000	2.109
0.708	8.500	8.500	0.000	0.000	0.000	0.000	0.000	0.000	2.310	0.000	0.000	0.000	2.310
0.750	9.000	9.000	0.000	0.000	0.000	0.000	0.000	0.000	2.517	0.000	0.000	0.000	2.517
0.792	9.500	9.500	0.000	0.000	0.000	0.000	0.000	0.000	2.730	0.000	0.000	0.000	2.730
0.833	10.000	10.000	0.000	0.000	0.000	0.000	0.000	0.000	2.948	0.000	0.000	0.000	2.948
0.875	10.500	10.500	0.000	0.000	0.000	0.000	0.000	0.000	3.172	0.000	0.000	0.000	3.172

0.917	11.000	11.000	0.000	0.000	0.000	0.000	0.000	0.000	3.378	0.000	0.000	0.000	3.378
0.958	11.500	11.500	0.000	0.000	0.000	0.000	0.000	0.000	3.505	0.000	0.000	0.000	3.505
1.000	12.000	12.000	0.000	0.000	0.000	0.000	0.000	0.000	3.628	0.000	0.000	0.000	3.628
1.042	12.500	12.500	0.000	0.000	0.000	0.000	0.000	0.000	3.747	0.000	0.000	0.000	3.747
1.083	13.000	13.000	0.000	0.000	0.000	0.000	0.000	0.000	3.862	0.000	0.000	0.000	3.862
1.125	13.500	13.500	0.000	0.000	0.000	0.000	0.000	0.000	3.974	0.000	0.000	0.000	3.974
1.167	14.000	14.000	0.000	0.000	0.000	0.000	0.000	0.000	4.083	0.000	0.000	0.000	4.083
1.208	14.500	14.500	0.000	0.000	0.000	0.000	0.000	0.000	4.189	0.000	0.000	0.000	4.189
1.250	15.000	15.000	0.000	0.000	0.000	0.000	0.000	0.000	4.293	0.000	0.000	0.000	4.293
1.292	15.500	15.500	0.000	0.000	0.000	0.000	0.000	0.000	4.394	0.000	0.000	0.000	4.394
1.333	16.000	16.000	0.000	0.000	0.000	0.000	0.000	0.000	4.493	0.000	0.000	0.000	4.493
1.375	16.500	16.500	0.000	0.000	0.000	0.000	0.000	0.000	4.589	0.000	0.000	0.000	4.589
1.417	17.000	17.000	0.000	0.000	0.000	0.000	0.000	0.000	4.684	0.000	0.000	0.000	4.684
1.458	17.500	17.500	0.000	0.000	0.000	0.000	0.000	0.000	4.777	0.000	0.000	0.000	4.777
1.500	18.000	18.000	0.000	0.000	0.000	0.000	0.000	0.000	4.868	0.000	0.000	0.000	4.868
1.542	18.500	18.500	0.000	0.000	0.000	0.000	0.000	0.000	4.957	0.000	0.000	0.316	5.273
1.583	19.000	19.000	0.000	0.000	0.000	0.000	0.000	0.000	5.045	0.000	0.000	0.895	5.940
1.625	19.500	19.500	0.000	0.000	0.000	0.000	0.000	0.000	5.131	0.000	0.000	1.644	6.775
1.667	20.000	20.000	0.000	0.000	0.000	0.000	0.000	0.000	5.216	0.000	0.000	2.531	7.747
1.708	20.500	20.500	0.000	0.000	0.000	0.000	0.000	0.000	5.299	0.000	0.000	3.537	8.837
1.750	21.000	21.000	0.000	0.000	0.000	0.000	0.000	0.000	5.381	0.000	0.000	4.650	10.031
1.792	21.500	21.500	0.000	0.000	0.000	0.000	0.000	0.000	5.462	0.000	0.000	5.860	11.322
1.833	22.000	22.000	0.000	0.000	0.000	0.000	0.000	0.000	5.542	0.000	0.000	7.159	12.701
1.875	22.500	22.500	0.000	0.000	0.000	0.000	0.000	0.000	5.621	0.000	0.000	8.543	14.163
1.917	23.000	23.000	0.000	0.000	0.000	0.000	0.000	0.000	5.698	0.000	0.000	10.005	15.703
1.958	23.500	23.500	0.000	0.000	0.000	0.000	0.000	0.000	5.775	0.000	0.000	11.543	17.318
2.000	24.000	24.000	0.000	0.000	0.000	0.000	0.000	0.000	5.850	0.000	0.000	13.152	19.002
2.042	24.500	24.500	0.000	0.000	0.000	0.000	0.000	0.000	5.925	0.000	0.000	14.830	20.755
2.083	25.000	25.000	0.000	0.000	0.000	0.000	0.000	0.000	5.998	0.000	0.000	16.574	22.572
2.125	25.500	25.500	0.000	0.000	0.000	0.000	0.000	0.000	6.071	0.000	0.000	18.381	24.452
2.167	26.000	26.000	0.000	0.000	0.000	0.000	0.000	0.000	6.143	0.000	0.000	20.249	26.392
2.208	26.500	26.500	0.000	0.000	0.000	0.000	0.000	0.000	6.214	0.000	0.000	22.177	28.391
2.250	27.000	27.000	0.000	0.000	0.000	0.000	0.000	0.000	6.284	0.000	0.000	24.162	30.446
2.292	27.500	27.500	0.000	0.000	0.000	0.000	0.000	0.000	6.354	0.000	0.000	26.203	32.557
2.333	28.000	28.000	0.000	0.000	0.000	0.000	0.000	0.000	6.422	0.000	0.000	28.299	34.721
2.375	28.500	28.500	0.000	0.000	0.000	0.000	0.000	0.000	6.490	0.000	0.000	30.448	36.938
2.417	29.000	29.000	0.000	0.000	0.000	0.000	0.000	0.000	6.557	0.000	0.000	32.648	39.206
2.458	29.500	29.500	0.000	0.000	0.000	0.000	0.000	0.000	6.624	0.000	0.000	34.899	41.523
2.500	30.000	30.000	0.000	0.000	0.000	0.000	0.000	0.000	6.690	0.000	0.000	37.200	43.890

Outlet Structure for Discharge of BMP 4

Discharge vs Elevation Table

Low orifice	1.000 "	Lower slot		Lower Weir	
Number of orif:	0	Number of slots:	0	Number of weirs:	0
Cg-low:	0.62	Invert:	0.00 ft	Invert:	0.00
		B	0.00 ft	B:	0.00
Middle orifice	1 "	h_{slot}	0.000 ft		
Number of orif:	0				
Cg-middle:	0.62	Upper slot		Emergency weir	
invert elev:	0.000 ft	Number of slots:	0	Invert:	0.00 ft
		Invert:	0.00 ft	B:	12.00 ft
		B:	0.00 ft		
		h_{slot}	0.000 ft		

*Note: h = head above the invert of the lowest surface discharge opening.

h* (ft)	H/D-low -	H/D-mid -	Qlow-orif (cfs)	Qlow-weir (cfs)	Qtot-low (cfs)	Qmid-orif (cfs)	Qmid-weir (cfs)	Qtot-med (cfs)	Qslot-low (cfs)	Qslot-upp (cfs)	Qweir (cfs)	Qemerg (cfs)	Qtot (cfs)
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.042	0.500	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.316	0.316
0.083	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.895	0.895
0.125	1.500	1.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.644	1.644
0.167	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.531	2.531
0.208	2.500	2.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.537	3.537
0.250	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.650	4.650
0.292	3.500	3.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.860	5.860
0.333	4.000	4.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.159	7.159
0.375	4.500	4.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.543	8.543
0.417	5.000	5.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.005	10.005
0.458	5.500	5.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	11.543	11.543
0.500	6.000	6.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	13.152	13.152

Outlet Structure for Discharge of BMP 5

Discharge vs Elevation Table

Low orifice	1.000 "	Lower slot		Lower Weir	
Number of orif:	0	Number of slots:	0	Number of weirs:	0
Cg-low:	0.62	Invert:	0.00 ft	Invert:	0.00
		B	0.00 ft	B:	0.00
Middle orifice	1 "	h_{slot}	0.000 ft		
Number of orif:	0				
Cg-middle:	0.62	Upper slot		Emergency weir	
invert elev:	0.000 ft	Number of slots:	0	Invert:	0.00 ft
		Invert:	0.00 ft	B:	12.00 ft
		B:	0.00 ft		
		h_{slot}	0.000 ft		

*Note: h = head above the invert of the lowest surface discharge opening.

h* (ft)	H/D-low -	H/D-mid -	Qlow-orif (cfs)	Qlow-weir (cfs)	Qtot-low (cfs)	Qmid-orif (cfs)	Qmid-weir (cfs)	Qtot-med (cfs)	Qslot-low (cfs)	Qslot-upp (cfs)	Qweir (cfs)	Qemerg (cfs)	Qtot (cfs)
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.042	0.500	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.316	0.316
0.083	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.895	0.895
0.125	1.500	1.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.644	1.644
0.167	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.531	2.531
0.208	2.500	2.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.537	3.537
0.250	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.650	4.650
0.292	3.500	3.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.860	5.860
0.333	4.000	4.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.159	7.159
0.375	4.500	4.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.543	8.543
0.417	5.000	5.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.005	10.005
0.458	5.500	5.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	11.543	11.543
0.500	6.000	6.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	13.152	13.152

Outlet Structure for Discharge of BMP 8

Discharge vs Elevation Table

Low orifice	1.000 "	Lower slot		Lower Weir	
Number of orif:	0	Number of slots:	0	Number of weirs:	0
Cg-low:	0.62	Invert:	0.00 ft	Invert:	0.00
		B	0.00 ft	B:	0.00
Middle orifice	1 "	h_{slot}	0.000 ft		
Number of orif:	0				
Cg-middle:	0.62	Upper slot		Emergency weir	
invert elev:	0.000 ft	Number of slots:	0	Invert:	0.00 ft
		Invert:	0.00 ft	B:	12.00 ft
		B:	0.00 ft		
		h_{slot}	0.000 ft		

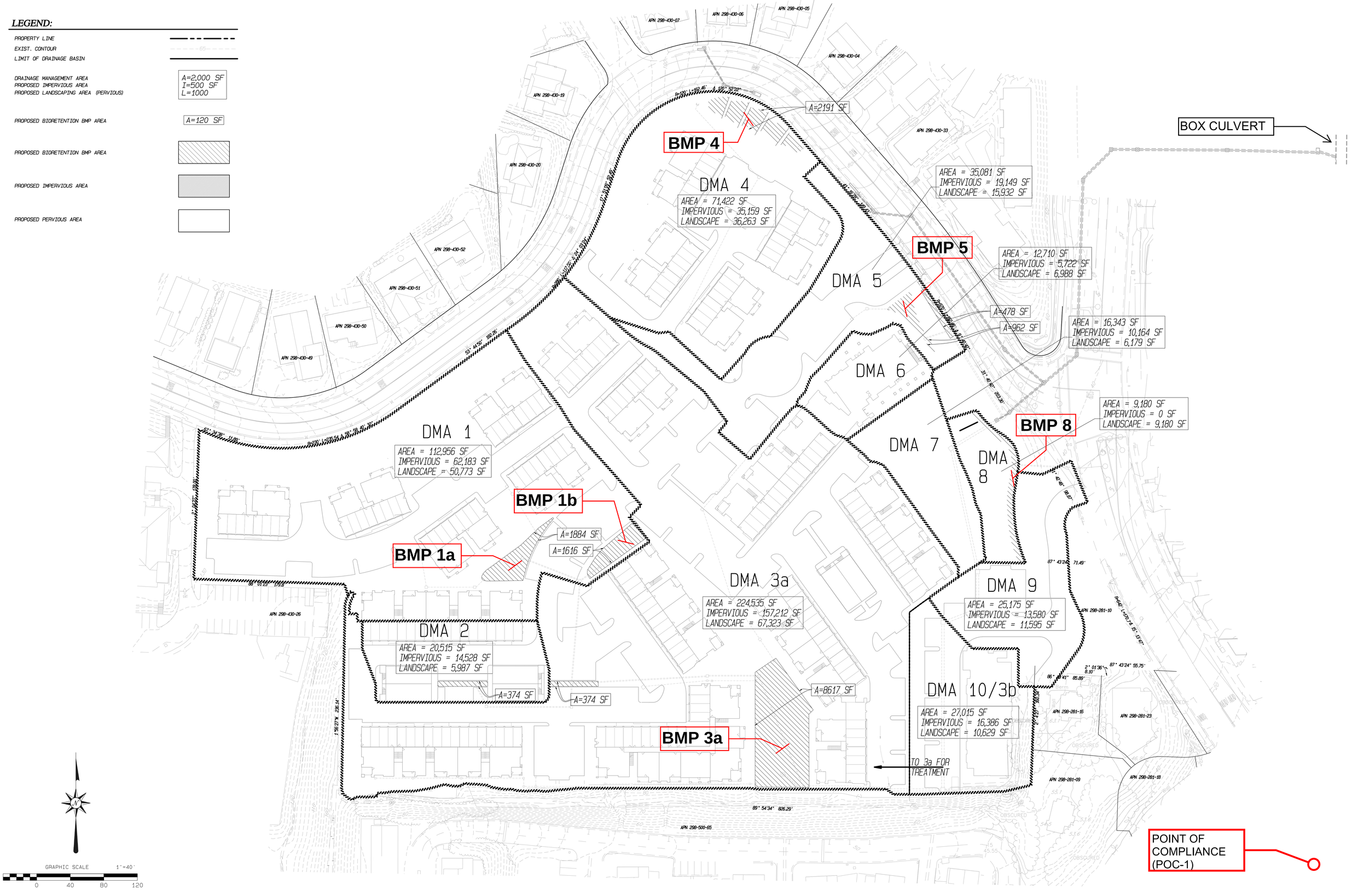
*Note: h = head above the invert of the lowest surface discharge opening.

h* (ft)	H/D-low -	H/D-mid -	Qlow-orif (cfs)	Qlow-weir (cfs)	Qtot-low (cfs)	Qmid-orif (cfs)	Qmid-weir (cfs)	Qtot-med (cfs)	Qslot-low (cfs)	Qslot-upp (cfs)	Qweir (cfs)	Qemerg (cfs)	Qtot (cfs)
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.042	0.500	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.316	0.316
0.083	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.895	0.895
0.125	1.500	1.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.644	1.644
0.167	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.531	2.531
0.208	2.500	2.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.537	3.537
0.250	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.650	4.650
0.292	3.500	3.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.860	5.860
0.333	4.000	4.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.159	7.159
0.375	4.500	4.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.543	8.543
0.417	5.000	5.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.005	10.005
0.458	5.500	5.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	11.543	11.543
0.500	6.000	6.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	13.152	13.152

ATTACHMENT 5

Point of Compliance Exhibit, DMA Maps, Project Plan and Detention Section Sketches

POINT OF COMPLIANCE (POC)



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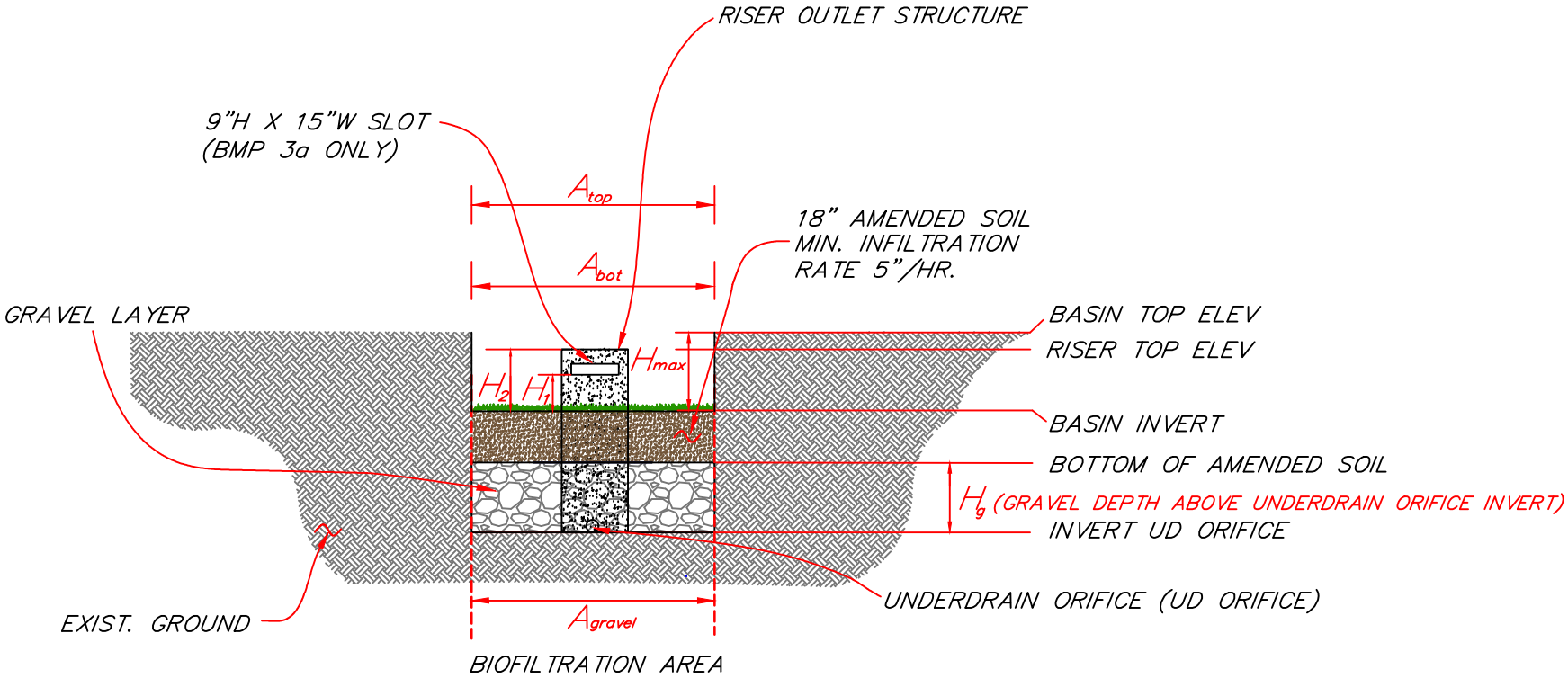
REVITALIZING SOLANA HIGHLANDS

STORM WATER TREATMENT AND DMA MAP

DEVELOPMENT REVIEW PERMIT
SUBMITTAL 2
12/17/14

G 4.1

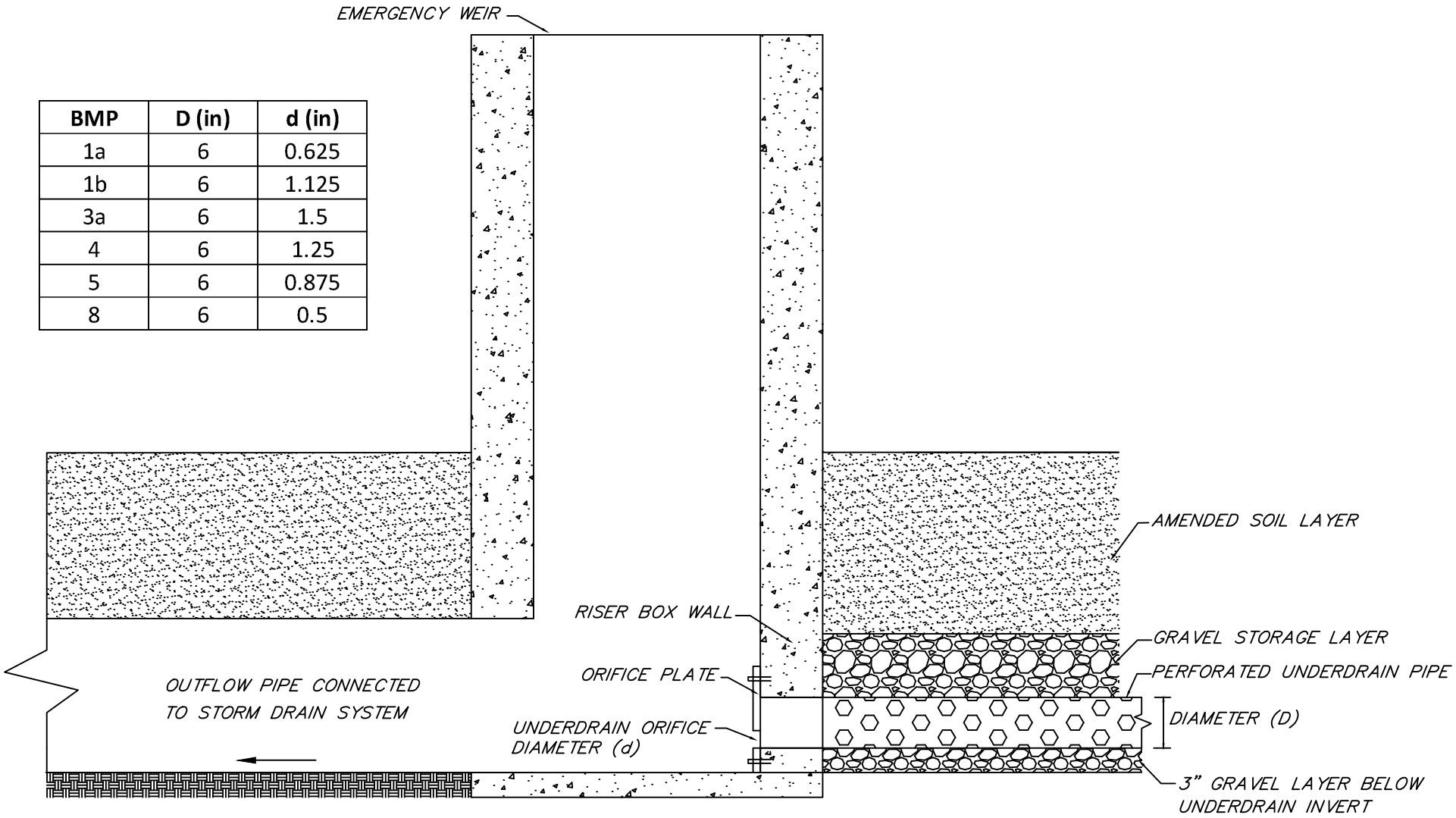


BIOFILTRATION BASIN CROSS SECTION

NOT TO SCALE

BMP	H_1 (FT)	H_2 (FT)	Hmax (FT)	Hg (FT)	UD Orifice (IN)	Ag (FT^2)	Abot (FT^2)	Atop (FT^2)
1a	n/a	0.50	1.50	2.00	0.625	1,884	1,884	1,884
1b	n/a	0.50	1.00	2.00	1.125	1,616	1,616	1,616
3a	2.00	3.50	4.50	2.00	1.5	8,617	8,617	8,617
4	n/a	0.50	1.00	1.00	1.25	2,191	2,191	2,191
5	n/a	1.50	2.00	2.00	0.875	962	962	962
8	n/a	0.50	1.00	1.00	0.5	1,620	1,620	1,620

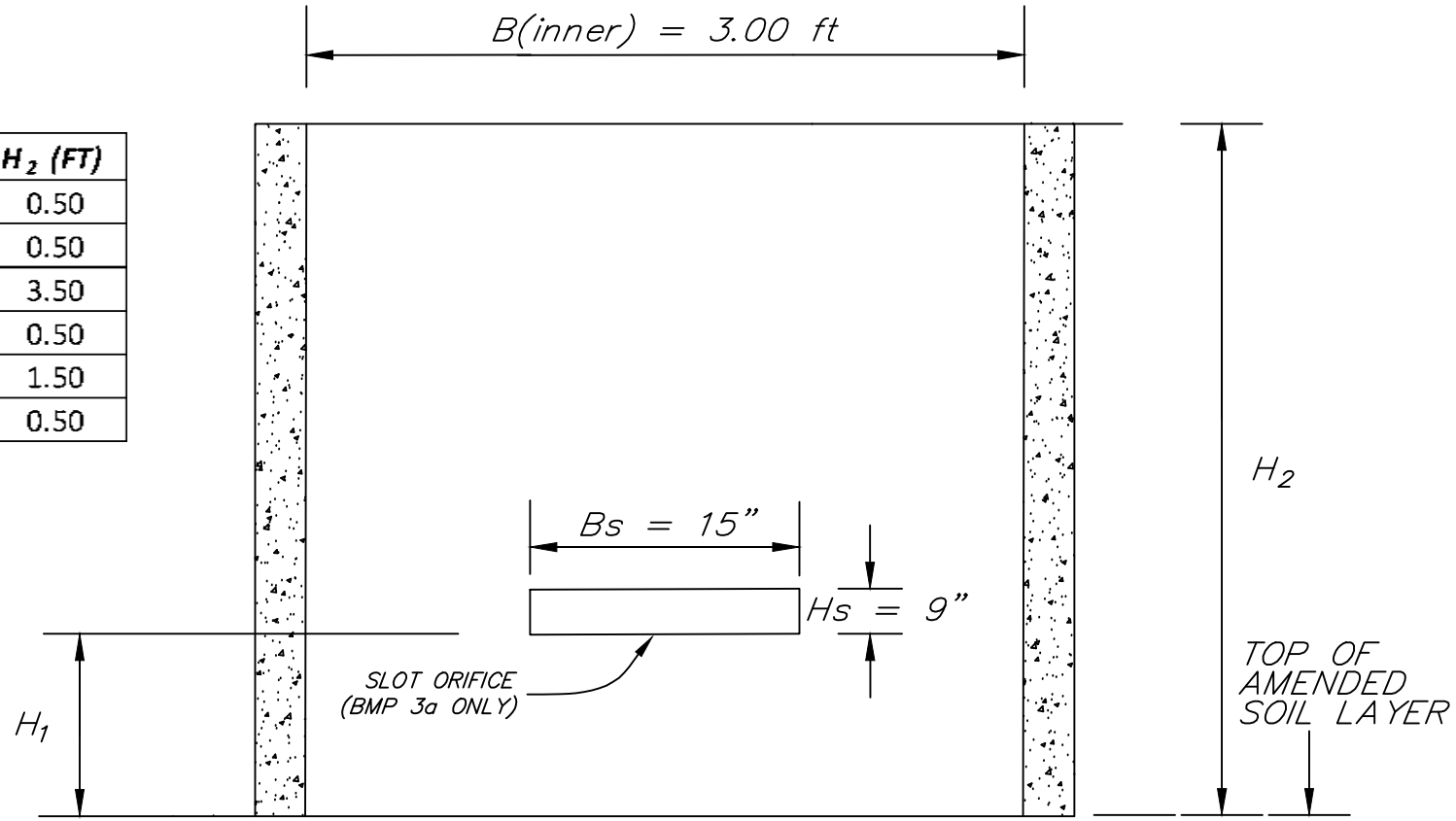
BMP	D (in)	d (in)
1a	6	0.625
1b	6	1.125
3a	6	1.5
4	6	1.25
5	6	0.875
8	6	0.5



UNDERDRAIN DETAIL (TYPICAL)

NOT TO SCALE

BMP	H_1 (FT)	H_2 (FT)
1a	n/a	0.50
1b	n/a	0.50
3a	2.00	3.50
4	n/a	0.50
5	n/a	1.50
8	n/a	0.50



RISER OUTLET STRUCTURE DETAIL - SECTION (TYP)

NOT TO SCALE

NOTE: SQUARE RISER STRUCTURE WITH 3' X 3' INTERNAL DIMENSIONS

ATTACHMENT 6

SWMM Input Data in Input Format
(Existing & Proposed Models)

```
[TITLE]
;;Project Title/Notes

[OPTIONS]
;;Option             Value
FLOW_UNITS           CFS
INFILTRATION         GREEN_AMPT
FLOW_ROUTING         KINWAVE
LINK_OFFSETS         DEPTH
MIN_SLOPE            0
ALLOW_PONDING        NO
SKIP_STEADY_STATE    NO

START_DATE           08/28/1951
START_TIME           05:00:00
REPORT_START_DATE    08/28/1951
REPORT_START_TIME    05:00:00
END_DATE             05/23/2008
END_TIME             23:00:00
SWEEP_START          01/01
SWEEP_END            12/31
DRY_DAYS             0
REPORT_STEP          01:00:00
WET_STEP             00:15:00
DRY_STEP             04:00:00
ROUTING_STEP         0:01:00

INERTIAL_DAMPING     PARTIAL
NORMAL_FLOW_LIMITED  BOTH
FORCE_MAIN_EQUATION  H-W
VARIABLE_STEP        0.75
LENGTHENING_STEP     0
MIN_SURFAREA         12.557
MAX_TRIALS           8
HEAD_TOLERANCE       0.005
SYS_FLOW_TOL         5
LAT_FLOW_TOL         5
MINIMUM_STEP         0.5
THREADS              1

[EVAPORATION]
;;Data Source    Parameters
;;-------------- ----------------
MONTHLY          0.03   0.05   0.08   0.11   0.13   0.15   0.15   0.13   0.11   0.08   0.04   0.02
DRY_ONLY         NO

[RAINGAGES]
;;Name           Format    Interval SCF      Source
;;-------------- --------- ------ ------ ----------
OCEANSIDE        INTENSITY 1:00     1.0      TIMESERIES OCEANSIDE

[SUBCATCHMENTS]
;;Name           Rain Gage        Outlet           Area     %Imperv  Width    %Slope   CurbLen  SnowPack
;;-------------- ---------------- ---------------- -------- -------- -------- -------- -------- ----------------
DMA_1            OCEANSIDE        POC-1            12.739   0        6166     9.8      0

[SUBAREAS]
;;Subcatchment   N-Imperv   N-Perv     S-Imperv   S-Perv     PctZero    RouteTo    PctRouted
```

```
;;-------------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
DMA_1            0.012      0.04       0.05       0.10       25         OUTLET

[INFILTRATION]
;;Subcatchment   Suction    Ksat       IMD
;;-------------- ---------- ---------- ----------
DMA_1            5.5        0.0963     0.31

[OUTFALLS]
;;Name           Elevation  Type       Stage Data       Gated    Route To
;;-------------- ---------- ---------- ---------------- -------- ----------------
POC-1            0          FREE                        NO

[TIMESERIES]
;;Name           Date       Time       Value
;;-------------- ---------- ---------- ----------
OCEANSIDE        FILE "X:\ENGR\HMP\SWMM\Rain Gages\Oceanside\Oside_HOURLY.prn"

[REPORT]
;;Reporting Options
INPUT      NO
CONTROLS   NO
SUBCATCHMENTS ALL
NODES ALL
LINKS ALL

[TAGS]

[MAP]
DIMENSIONS 0.000 0.000 10000.000 10000.000
Units      None

[COORDINATES]
;;Node           X-Coord            Y-Coord
;;-------------- ------------------ ------------------
POC-1            4498.069           3577.864

[VERTICES]
;;Link           X-Coord            Y-Coord
;;-------------- ------------------ ------------------

[Polygons]
;;Subcatchment   X-Coord            Y-Coord
;;-------------- ------------------ ------------------
DMA_1            4485.199           6499.356

[SYMBOLS]
;;Gage           X-Coord            Y-Coord
;;-------------- ------------------ ------------------
OCEANSIDE        4446.589           8198.198
```

```
[TITLE]
;;Project Title/Notes

[OPTIONS]
;;Option             Value
FLOW_UNITS           CFS
INFILTRATION         GREEN_AMPT
FLOW_ROUTING         KINWAVE
LINK_OFFSETS         DEPTH
MIN_SLOPE            0
ALLOW_PONDING        NO
SKIP_STEADY_STATE    NO

START_DATE           08/28/1951
START_TIME           05:00:00
REPORT_START_DATE    08/28/1951
REPORT_START_TIME    05:00:00
END_DATE             05/23/2008
END_TIME             23:00:00
SWEEP_START          01/01
SWEEP_END            12/31
DRY_DAYS             0
REPORT_STEP          01:00:00
WET_STEP             00:15:00
DRY_STEP             04:00:00
ROUTING_STEP         0:01:00

INERTIAL_DAMPING     PARTIAL
NORMAL_FLOW_LIMITED  BOTH
FORCE_MAIN_EQUATION  H-W
VARIABLE_STEP        0.75
LENGTHENING_STEP     0
MIN_SURFAREA         12.557
MAX_TRIALS           8
HEAD_TOLERANCE       0.005
SYS_FLOW_TOL         5
LAT_FLOW_TOL         5
MINIMUM_STEP         0.5
THREADS              1

[EVAPORATION]
;;Data Source    Parameters
;;-------------- ----------------
MONTHLY          0.03   0.05   0.08   0.11   0.13   0.15   0.15   0.13   0.11   0.08   0.04   0.02
DRY_ONLY         NO

[RAINGAGES]
;;Name           Format    Interval SCF      Source
;;-------------- --------- ------ ------ ----------
OCEANSIDE        INTENSITY 1:00     1.0      TIMESERIES OCEANSIDE

[SUBCATCHMENTS]
;;Name           Rain Gage        Outlet           Area     %Imperv  Width    %Slope   CurbLen  SnowPack
;;-------------- ---------------- ---------------- -------- -------- -------- -------- -------- ----------------
BMP_1a           OCEANSIDE        Surf_1a          0.043251 0        10       0.5      0
BMP_1b           OCEANSIDE        Surf_1b          0.037098 0        10       0.5      0
BMP_3a           OCEANSIDE        Surf_3a          0.197819 0        10       0.5      0
BMP_4            OCEANSIDE        Surf_4           0.050298 0        10       0.5      0
```

BMP_5	OCEANSIDE	Surf_5	0.022084	0	10	0.5	0
BMP_8	OCEANSIDE	Surf_8	0.037190	0	10	0.5	0
DMA_1	OCEANSIDE	BMP_1a	2.513	56.8	1883	1.4	0
DMA_2	OCEANSIDE	BMP_3a	0.471	70.8	342	1.6	0
DMA_3a	OCEANSIDE	BMP_3a	4.957	72.8	3742	1.9	0
DMA_4	OCEANSIDE	BMP_4	1.589	50.8	1190	1.6	0
DMA_5	OCEANSIDE	BMP_5	0.783	56.1	585	7.0	0
DMA_6	OCEANSIDE	BMP_5	0.292	45.0	318	1.1	0
DMA_7	OCEANSIDE	BMP_8	0.375	62.2	409	1.2	0
DMA_8	OCEANSIDE	BMP_8	0.174	0	230	50.0	0
DMA_9	OCEANSIDE	POC-1	0.578	53.9	629	5.0	0
DMA_10_3b	OCEANSIDE	BMP_3a	0.620	60.7	540	2.0	0

[SUBAREAS]

;;Subcatchment	N-Imperv	N-Perv	S-Imperv	S-Perv	PctZero	RouteTo	PctRouted
BMP_1a	0.012	0.08	0.05	0.10	25	OUTLET	
BMP_1b	0.012	0.08	0.05	0.10	25	OUTLET	
BMP_3a	0.012	0.08	0.05	0.10	25	OUTLET	
BMP_4	0.012	0.08	0.05	0.10	25	OUTLET	
BMP_5	0.012	0.08	0.05	0.10	25	OUTLET	
BMP_8	0.012	0.08	0.05	0.10	25	OUTLET	
DMA_1	0.012	0.08	0.05	0.10	25	OUTLET	
DMA_2	0.012	0.08	0.05	0.10	25	OUTLET	
DMA_3a	0.012	0.08	0.05	0.10	25	OUTLET	
DMA_4	0.012	0.08	0.05	0.10	25	OUTLET	
DMA_5	0.012	0.08	0.05	0.10	25	OUTLET	
DMA_6	0.012	0.08	0.05	0.10	25	OUTLET	
DMA_7	0.012	0.08	0.05	0.10	25	OUTLET	
DMA_8	0.012	0.08	0.05	0.10	25	OUTLET	
DMA_9	0.012	0.08	0.05	0.10	25	OUTLET	
DMA_10_3b	0.012	0.08	0.05	0.10	25	OUTLET	

[INFILTRATION]

;;Subcatchment	Suction	Ksat	IMD
BMP_1a	3	0.15	0.32
BMP_1b	3	0.15	0.32
BMP_3a	5.4	0.0976	0.31
BMP_4	9	0.01875	0.3
BMP_5	9	0.01875	0.3
BMP_8	4.5	0.1173	0.32
DMA_1	3	0.15	0.32
DMA_2	3	0.15	0.32
DMA_3a	5.4	0.0976	0.31
DMA_4	9	0.01875	0.3
DMA_5	9	0.01875	0.3
DMA_6	9	0.01875	0.3
DMA_7	7.9	0.0434	0.3
DMA_8	4.5	0.1173	0.32
DMA_9	3	0.15	0.32
DMA_10_3b	3	0.15	0.32

[LID_CONTROLS]

;;Name	Type/Layer	Parameters				
BMP_1a	BC					
BMP_1a	SURFACE	6	0	0	0	5

```
BMP_1a          SOIL       18         0.4        0.2        0.1        5          5          1.5
BMP_1a          STORAGE    27         0.67       0          0
BMP_1a          DRAIN      0.0690     0.5        3          6

BMP_1b          BC
BMP_1b          SURFACE    6          0          0          0          5
BMP_1b          SOIL       18         0.4        0.2        0.1        5          5          1.5
BMP_1b          STORAGE    27         0.67       0          0
BMP_1b          DRAIN      0.2608     0.5        3          6

BMP_3a          BC
BMP_3a          SURFACE    24         0          0          0          5
BMP_3a          SOIL       18         0.4        0.2        0.1        5          5          1.5
BMP_3a          STORAGE    27         0.67       0          0
BMP_3a          DRAIN      0.0869     0.5        3          6

BMP_4           BC
BMP_4           SURFACE    6          0          0          0          5
BMP_4           SOIL       18         0.4        0.2        0.1        5          5          1.5
BMP_4           STORAGE    15         0.67       0          0
BMP_4           DRAIN      0.2374     0.5        3          6

BMP_5           BC
BMP_5           SURFACE    18         0          0          0          5
BMP_5           SOIL       18         0.4        0.2        0.1        5          5          1.5
BMP_5           STORAGE    27         0.67       0          0
BMP_5           DRAIN      0.2650     0.5        3          6

BMP_8           BC
BMP_8           SURFACE    6          0          0          0          5
BMP_8           SOIL       18         0.4        0.2        0.1        5          5          1.5
BMP_8           STORAGE    15         0.67       0          0
BMP_8           DRAIN      0.0514     0.5        3          6

[LID_USAGE]
;;Subcatchment   LID Process      Number  Area       Width      InitSat    FromImp    ToPerv     RptFile                  DrainTo

;;-------------- ---------------- ------- ---------- ---------- ---------- ---------- ---------- ------------------------
----------------
BMP_1a          BMP_1a           1       1884.01    0          0          100        0          *                        POC-1

BMP_1b          BMP_1b           1       1615.99    0          0          100        0          *                        POC-1

BMP_3a          BMP_3a           1       8617.00    0          0          100        0          *                        POC-1

BMP_4           BMP_4            1       2190.98    0          0          100        0          *                        POC-1

BMP_5           BMP_5            1       961.98     0          0          100        0          *                        POC-1

BMP_8           BMP_8            1       1620.00    0          0          100        0          *                        POC-1


[OUTFALLS]
;;Name           Elevation  Type       Stage Data       Gated    Route To
;;-------------- ---------- ---------- ---------------- -------- ----------------
POC-1           0          FREE                        NO
1a              0          FREE                        NO       BMP_1b
```

[STORAGE]

;;Name	Elev.	MaxDepth	InitDepth	Shape	Curve Name/Params	N/A	Fevap	Psi	Ksat	IMD
Surf_1a	0	1.0	0	TABULAR	BMP_1a	0	1			
Surf_1b	0	0.5	0	TABULAR	BMP_1b	0	1			
Surf_3a	0	2.5	0	TABULAR	BMP_3a	0	1			
Surf_4	0	0.5	0	TABULAR	BMP_4	0	1			
Surf_5	0	0.5	0	TABULAR	BMP_5	0	1			
Surf_8	0	0.5	0	TABULAR	BMP_8	0	1			

[OUTLETS]

;;Name	From Node	To Node	Offset	Type	QTable/Qcoeff	Qexpon	Gated
1a	Surf_1a	1a	0	TABULAR/HEAD	BMP-1a		NO
1b	Surf_1b	POC-1	0	TABULAR/HEAD	BMP-1b		NO
3a	Surf_3a	POC-1	0	TABULAR/HEAD	BMP-3a		NO
4	Surf_4	POC-1	0	TABULAR/HEAD	BMP-4		NO
5	Surf_5	POC-1	0	TABULAR/HEAD	BMP-5		NO
8	Surf_8	POC-1	0	TABULAR/HEAD	BMP-8		NO

[CURVES]

;;Name	Type	X-Value	Y-Value
BMP-1a	Rating	0.000	0.000
BMP-1a		0.042	0.316
BMP-1a		0.083	0.895
BMP-1a		0.125	1.644
BMP-1a		0.167	2.531
BMP-1a		0.208	3.537
BMP-1a		0.250	4.650
BMP-1a		0.292	5.860
BMP-1a		0.333	7.159
BMP-1a		0.375	8.543
BMP-1a		0.417	10.005
BMP-1a		0.458	11.543
BMP-1a		0.500	13.152
BMP-1a		0.542	14.830
BMP-1a		0.583	16.574
BMP-1a		0.625	18.381
BMP-1a		0.667	20.249
BMP-1a		0.708	22.177
BMP-1a		0.750	24.162
BMP-1a		0.792	26.203
BMP-1a		0.833	28.299
BMP-1a		0.875	30.448
BMP-1a		0.917	32.648
BMP-1a		0.958	34.899
BMP-1a		1.000	37.200
;			
BMP-1b	Rating	0.000	0.000
BMP-1b		0.042	0.316
BMP-1b		0.083	0.895
BMP-1b		0.125	1.644
BMP-1b		0.167	2.531
BMP-1b		0.208	3.537
BMP-1b		0.250	4.650
BMP-1b		0.292	5.860
BMP-1b		0.333	7.159

```
BMP-1b                      0.375      8.543
BMP-1b                      0.417      10.005
BMP-1b                      0.458      11.543
BMP-1b                      0.500      13.152
;
BMP-3a            Rating    0.000      0.000
BMP-3a                      0.042      0.033
BMP-3a                      0.083      0.093
BMP-3a                      0.125      0.171
BMP-3a                      0.167      0.264
BMP-3a                      0.208      0.368
BMP-3a                      0.250      0.484
BMP-3a                      0.292      0.610
BMP-3a                      0.333      0.746
BMP-3a                      0.375      0.890
BMP-3a                      0.417      1.042
BMP-3a                      0.458      1.202
BMP-3a                      0.500      1.370
BMP-3a                      0.542      1.545
BMP-3a                      0.583      1.726
BMP-3a                      0.625      1.915
BMP-3a                      0.667      2.109
BMP-3a                      0.708      2.310
BMP-3a                      0.750      2.517
BMP-3a                      0.792      2.730
BMP-3a                      0.833      2.948
BMP-3a                      0.875      3.172
BMP-3a                      0.917      3.378
BMP-3a                      0.958      3.505
BMP-3a                      1.000      3.628
BMP-3a                      1.042      3.747
BMP-3a                      1.083      3.862
BMP-3a                      1.125      3.974
BMP-3a                      1.167      4.083
BMP-3a                      1.208      4.189
BMP-3a                      1.250      4.293
BMP-3a                      1.292      4.394
BMP-3a                      1.333      4.493
BMP-3a                      1.375      4.589
BMP-3a                      1.417      4.684
BMP-3a                      1.458      4.777
BMP-3a                      1.500      4.868
BMP-3a                      1.542      5.273
BMP-3a                      1.583      5.940
BMP-3a                      1.625      6.775
BMP-3a                      1.667      7.747
BMP-3a                      1.708      8.837
BMP-3a                      1.750      10.031
BMP-3a                      1.792      11.322
BMP-3a                      1.833      12.701
BMP-3a                      1.875      14.163
BMP-3a                      1.917      15.703
BMP-3a                      1.958      17.318
BMP-3a                      2.000      19.002
BMP-3a                      2.042      20.755
BMP-3a                      2.083      22.572
BMP-3a                      2.125      24.452
BMP-3a                      2.167      26.392
```

```
BMP-3a                      2.208      28.391
BMP-3a                      2.250      30.446
BMP-3a                      2.292      32.557
BMP-3a                      2.333      34.721
BMP-3a                      2.375      36.938
BMP-3a                      2.417      39.206
BMP-3a                      2.458      41.523
BMP-3a                      2.500      43.890
;
BMP-4            Rating     0.000      0.000
BMP-4                       0.042      0.316
BMP-4                       0.083      0.895
BMP-4                       0.125      1.644
BMP-4                       0.167      2.531
BMP-4                       0.208      3.537
BMP-4                       0.250      4.650
BMP-4                       0.292      5.860
BMP-4                       0.333      7.159
BMP-4                       0.375      8.543
BMP-4                       0.417      10.005
BMP-4                       0.458      11.543
BMP-4                       0.500      13.152
;
BMP-5            Rating     0.000      0.000
BMP-5                       0.042      0.316
BMP-5                       0.083      0.895
BMP-5                       0.125      1.644
BMP-5                       0.167      2.531
BMP-5                       0.208      3.537
BMP-5                       0.250      4.650
BMP-5                       0.292      5.860
BMP-5                       0.333      7.159
BMP-5                       0.375      8.543
BMP-5                       0.417      10.005
BMP-5                       0.458      11.543
BMP-5                       0.500      13.152
;
BMP-8            Rating     0.000      0.000
BMP-8                       0.042      0.316
BMP-8                       0.083      0.895
BMP-8                       0.125      1.644
BMP-8                       0.167      2.531
BMP-8                       0.208      3.537
BMP-8                       0.250      4.650
BMP-8                       0.292      5.860
BMP-8                       0.333      7.159
BMP-8                       0.375      8.543
BMP-8                       0.417      10.005
BMP-8                       0.458      11.543
BMP-8                       0.500      13.152
;
BMP_1a           Storage    0.00       1884
BMP_1a                      1.00       1884
;
BMP_1b           Storage    0.00       1616
BMP_1b                      0.50       1616
;
BMP_3a           Storage    0.00       8617
```

```
BMP_3a                      2.50       8617
;
BMP_4            Storage    0.00       2191
BMP_4                       0.50       2191
;
BMP_5            Storage    0.00       962
BMP_5                       0.50       962
;
BMP_8            Storage    0.00       1620
BMP_8                       0.50       1620

[TIMESERIES]
;;Name           Date       Time       Value
;;-------------- ---------- ---------- ----------
OCEANSIDE        FILE "X:\ENGR\HMP\SWMM\Rain Gages\Oceanside\Oside_HOURLY.prn"

[REPORT]
;;Reporting Options
INPUT      NO
CONTROLS   NO
SUBCATCHMENTS ALL
NODES ALL
LINKS ALL

[TAGS]

[MAP]
DIMENSIONS 0.000 0.000 10000.000 10000.000
Units      None

[COORDINATES]
;;Node           X-Coord            Y-Coord
;;-------------- ------------------ ------------------
POC-1            10230.179          3375.959
1a               3363.171           5358.056
Surf_1a          2455.243           5652.174
Surf_1b          5076.726           4872.123
Surf_3a          3925.831           3734.015
Surf_4           9156.010           8375.959
Surf_5           8797.954           6841.432
Surf_8           8503.836           4820.972

[VERTICES]
;;Link           X-Coord            Y-Coord
;;-------------- ------------------ ------------------
4                10268.542          8043.478
5                9590.793           6470.588

[Polygons]
;;Subcatchment   X-Coord            Y-Coord
;;-------------- ------------------ ------------------
BMP_1a           1457.801           5959.079
BMP_1b           3958.869           5179.949
BMP_3a           2416.452           3778.920
BMP_4            6503.856           8341.902
BMP_5            7723.785           6867.008
BMP_8            7902.813           5370.844
DMA_1            489.060            6267.696
```

```
DMA_2            475.578            4627.249
DMA_3a           437.018            3778.920
DMA_4            4730.077           8393.316
DMA_5            6278.772           7250.639
DMA_6            6317.136           6496.164
DMA_7            6632.391           5655.527
DMA_8            6619.537           4987.147
DMA_9            7493.573           2107.969
DMA_10_3b        462.725            3071.979

[SYMBOLS]
;;Gage           X-Coord            Y-Coord
;;-------------- ------------------ ------------------
OCEANSIDE        4177.378           9203.085
```

ATTACHMENT 7

SWMM Screens and Explanation of Significant Variables

ATTACHMENT 7

EPA SWMM FIGURES AND EXPLANATIONS

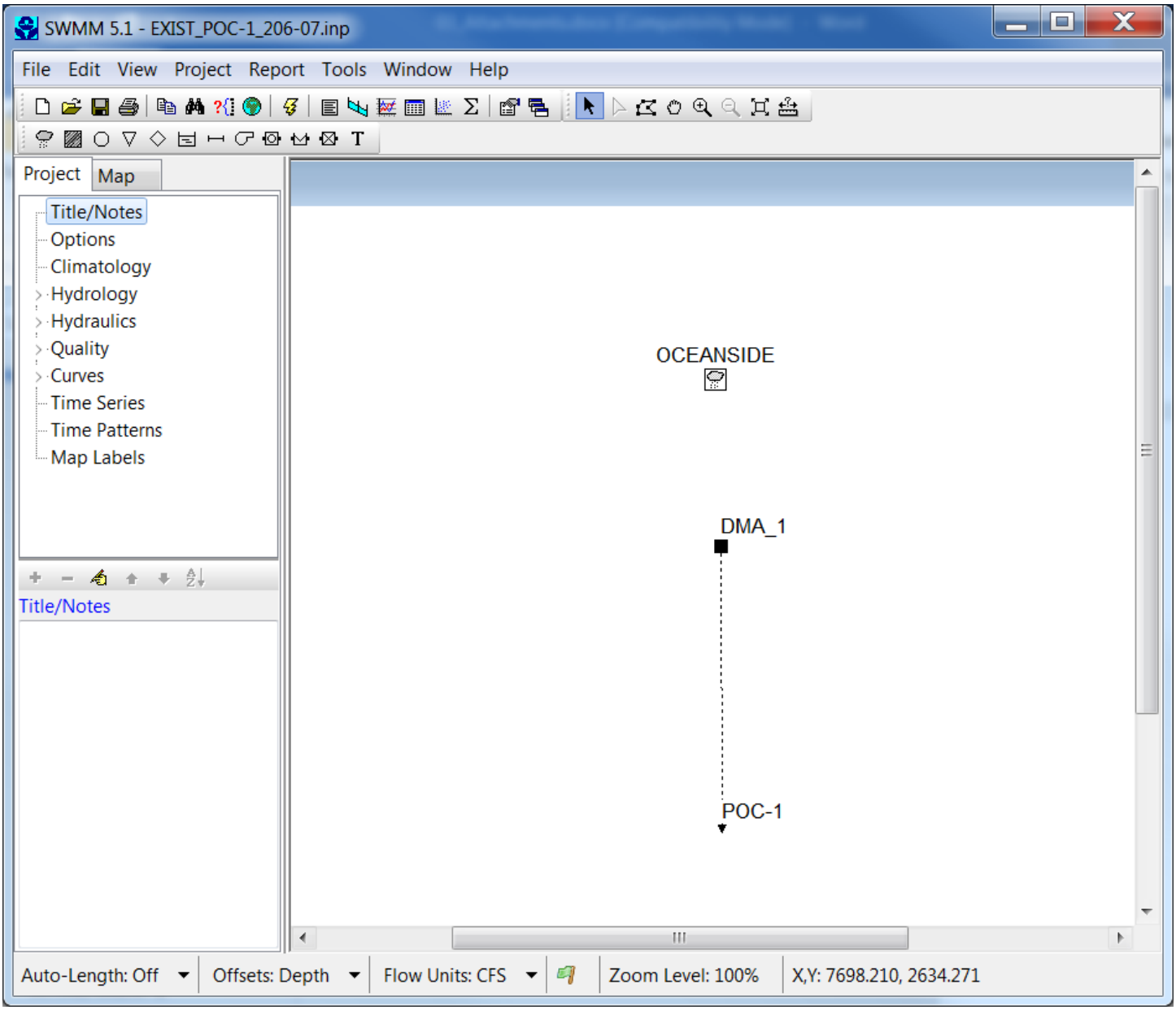
Per the attached, the reader can see the screens associated with the EPA-SWMM Model in both pre-development and post-development conditions. Each portion, i.e., sub-catchments, outfalls, storage units, weirs and orifices as a discharge, and outfalls (points of compliance), are also shown.

Variables for modeling are associated with typical recommended values by the EPA-SWMM model, the BMP Design Manual, and TRWE's professional experience.

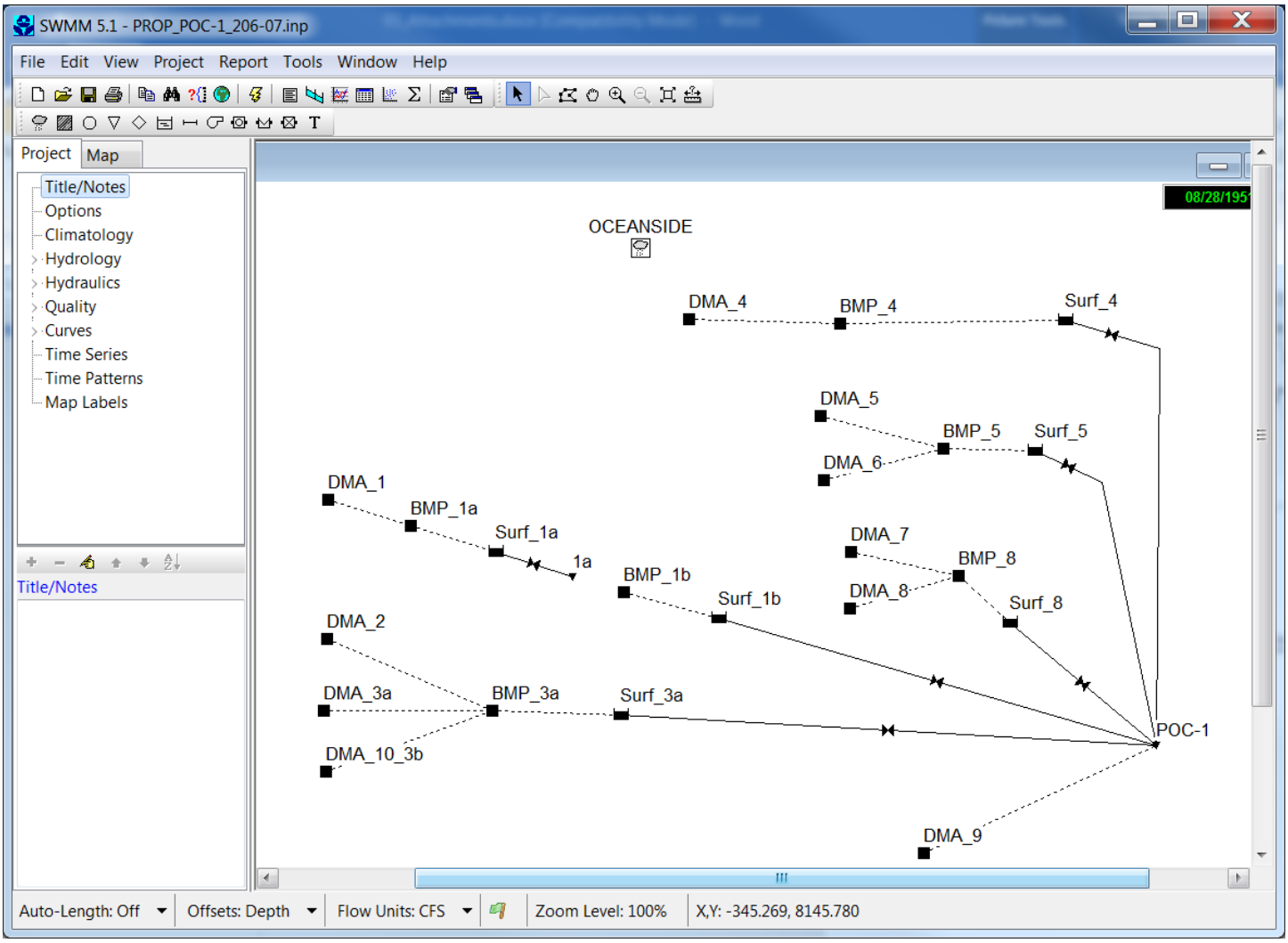
Soil characteristics of the existing soils were determined from the site specific NRCS Web Soil Survey.

Some values incorporated within the SWMM model have been determined from the professional experience of TRWE using conservative assumptions that have a tendency to increase the size of the needed BMP and also generate a long-term runoff as a percentage of rainfall similar to those measured in gage stations in Southern California by the USGS.

EXISTING CONDITION (POC-1)



PROPOSED CONDITION (POC-1)



EXPLANATION OF SELECTED VARIABLES

Sub Catchment Areas:

Please refer to the attached diagrams that indicate the DMA and biofiltration BMP sub-areas modeled within the project site for both the existing and proposed conditions draining to the POC.

Selection of a Kinematic Approach: As the continuous model is based on hourly rainfall, and the time of concentration for the pre-development and post-development conditions is significantly smaller than 60 minutes, precise routing of the flows through the impervious surfaces, the underdrain pipe system, and the discharge pipe was considered unnecessary. The truncation error of the precipitation into hourly steps is much more significant than the precise routing in a system where the time of concentration is much smaller than 1 hour.

Parameters for the existing and proposed models include Soil Type B and Type D per the NRCS Web Soil Survey. In existing conditions, soils are assumed to be compacted to represent the current developed condition of the site. Soils are also assumed to be compacted in proposed conditions. Suction head, conductivity, and initial deficit correspond to average values expected for each soil type, according to the BMP Design Manual (BMPDM). In proposed conditions, DMAs 1, 2, 10/3b, and 9 are 100% Soil Type B, and DMAs 4, 5, and 6 are 100% Soil Type D. For DMAs that contain multiple soil types, area weighted values were used to model the existing and proposed sites. The tables below show the breakdown of the soil types and the weighted values that were used for each DMA.

Existing Condition Weighted Infiltration Parameters:

DMA_1

Soil Type	Area (sq-ft)	Percent Area
A	0	0.0%
B	328025	59.1%
C	0	0.0%
D	226907	40.9%
Total Area	554932	100.0%

Green_Ampt Value	Type A (1)	Type B (1)	Type C (1)	Type D (1)	Weighted Values
Suction Head	1.5	3	6	9	**5.5**
Undeveloped Conductivity	0.3	0.2	0.1	0.025	0.128
Developed Conductivity	0.225	0.15	0.075	0.01875	**0.0963**
Initial deficit	0.33	0.32	0.31	0.30	**0.31**

Proposed Condition Weighted Infiltration Parameters:

DMA_3a

Soil Type	Area (sq-ft)	Percent Area
A	0	0.0%
B	134843	60.1%
C	0	0.0%
D	89692	39.9%
Total Area	224535	100.0%

Green_Ampt Value	Type A [1]	Type B [1]	Type C [1]	Type D [1]	Weighted Values
Suction Head	1.5	3	6	9	**5.4**
Undeveloped Conductivity	0.3	0.2	0.1	0.025	0.130
Developed Conductivity	0.225	0.15	0.075	0.01875	**0.0976**
Initial deficit	0.33	0.32	0.31	0.30	**0.31**

DMA_7

Soil Type	Area (sq-ft)	Percent Area
A	0	0.0%
B	3072	18.8%
C	0	0.0%
D	13271	81.2%
Total Area	16343	100.0%

Green_Ampt Value	Type A [1]	Type B [1]	Type C [1]	Type D [1]	Weighted Values
Suction Head	1.5	3	6	9	**7.9**
Undeveloped Conductivity	0.3	0.2	0.1	0.025	0.058
Developed Conductivity	0.225	0.15	0.075	0.01875	**0.0434**
Initial deficit	0.33	0.32	0.31	0.30	**0.30**

DMA_8

Soil Type	Area (sq-ft)	Percent Area
A	0	0.0%
B	6892	75.1%
C	0	0.0%
D	2288	24.9%
Total Area	9180	100.0%

Green_Ampt Value	Type A [1]	Type B [1]	Type C [1]	Type D [1]	Weighted Values
Suction Head	1.5	3	6	9	**4.5**
Undeveloped Conductivity	0.3	0.2	0.1	0.025	0.156
Developed Conductivity	0.225	0.15	0.075	0.01875	**0.1173**
Initial deficit	0.33	0.32	0.31	0.30	**0.32**

[1] Typical Values used for SWMM modeling.

Sub-catchment BMP:

The area of biofiltration must be equal to the area of the development tributary to the biofiltration facility (area that drains into the biofiltration, equal external area plus biofiltration itself). At least five (5) decimal places were given regarding the areas of the biofiltration to insure that the area used by the program for the LID subroutine corresponds exactly with this tributary.

LID Control Editor: Explanation of Significant Variables

Storage Depth:

The storage depth variable within the SWMM model is representative of the storage volume provided beneath the lowest surface outlet within the biofiltration basin. This is the volume that can only discharge from the facility via the LID portion of the basin.

In those cases where the surface storage has a variable area that is also different to the area of the gravel and amended soil, the SWMM model needs to be calibrated as the LID module will use the storage depth multiplied by the BMP area as the amount of volume stored at the surface.

Let A_{BMP} be the area of the BMP (area of amended soil and area of gravel). The proper value of the storage depth S_D to be included in the LID module can be calculated by using geometric properties of the surface volume. Let A_0 be the surface area at the bottom of the surface pond, and let A_i be the surface area at the elevation of the invert of the first row of orifices (or at the invert of the riser if not surface orifices are included). Finally, let h_i be the difference in elevation between A_0 and A_i. By volumetric definition:

$$A_{BMP} \cdot S_D = \frac{(A_0 + A_i)}{2} h_i \qquad (1)$$

Equation (1) allows the determination of S_D to be included as Storage Depth in the LID module.

Porosity: A porosity value of 0.4 has been selected for the model. The amended soil is to be highly sandy in content in order to have a saturated hydraulic conductivity of approximately 5 in/hr.

TRWE considers such a value to be slightly high; however, in order to comply with the HMP Permit, the value recommended by the Copermittees for the porosity of amended soil is 0.4, per the BMP Design Manual. Such porosity is equal to the porosity of the gravel per the same document.

Void Ratio: The ratio of the void volume divided by the soil volume is directly related to porosity as n/(1-n). As the underdrain layer is composed of gravel, a porosity value of 0.4 has been selected (also per the BMP Design Manual), which results in a void ratio of 0.4/(1-0.4) = 0.67 for the gravel detention layer.

Conductivity: Due to the natural soil and geotechnical conditions existing on site, infiltration may not be a viable addition to the LID design. As the BMP's are to be lined, the conductivity value was set to 0 to represent zero infiltration.

Clogging factor: A clogging factor was not used (0 indicates that there is no clogging assumed within the model). The reason for this is related to the fairness of a comparison with the SDHM model and the HMP sizing tables: a clogging factor was not considered.

Flow Coefficient (for underdrain orifice): The flow coefficient (C) in the SWMM Model is the coefficient needed to transform the orifice equation into a general power law equation of the form:

$$q = C(H - H_D)^n \tag{2}$$

where q is the peak flow in in/hr, n is the exponent (typically 0.5 for orifice equation), H_D is the elevation of the centroid of the orifice in inches (assumed equal to the invert of the orifice for small orifices and in our design equal to 0) and H is the depth of the water in inches.

The general orifice equation can be expressed as:

$$Q = \frac{\pi}{4} c_g \frac{D^2}{144} \sqrt{2g \frac{(H - H_D)}{12}} \tag{3}$$

where Q is the peak flow in cfs, D is the diameter in inches, c_g is the typical discharge coefficient for orifices (0.61-0.63 for thin walls and around 0.75-0.8 for thick walls), g is the acceleration of gravity in ft/s^2, and H and H_D are defined above and are also used in inches in Equation (3).

It is clear that:

$$q \left(\frac{in}{hr}\right) X \frac{A_{BMP}}{12\ X\ 3600} = Q\ (cfs) \tag{4}$$

$$C = \frac{c_g \frac{\pi D^2}{4 \cdot 144} \sqrt{2g \cdot 12} \cdot 3600}{A_{BMP}} \tag{5}$$

Flow Coefficient Calculations:

BMP_1a			
A_{BMP}		1884.0	sq-ft
C_g		0.61	
D_{orif}		0.625	in
A_{orif}		0.00213	sq-ft
C_{SWMM}		0.0690	s-(in)^0.5/hr2

BMP_1b			
A_{BMP}		1616.0	sq-ft
C_g		0.61	
D_{orif}		1.125	in
A_{orif}		0.00690	sq-ft
C_{SWMM}		0.2608	s-(in)^0.5/hr2

BMP_3a				BMP_4			
A_{BMP}		**8617.0**	sq-ft	A_{BMP}		**2191.0**	sq-ft
C_g		**0.61**		C_g		**0.61**	
D_{orif}		**1.5**	in	D_{orif}		**1.25**	in
A_{orif}		0.01227	sq-ft	A_{orif}		0.00852	sq-ft
C_{SWMM}		0.0869	s-(in)^0.5/hr2	C_{SWMM}		0.2374	s-(in)^0.5/hr2

BMP_5				BMP_8			
A_{BMP}		**962.0**	sq-ft	A_{BMP}		**1620.0**	sq-ft
C_g		**0.61**		C_g		**0.61**	
D_{orif}		**0.875**	in	D_{orif}		**0.5**	in
A_{orif}		0.00418	sq-ft	A_{orif}		0.00136	sq-ft
C_{SWMM}		0.2650	s-(in)^0.5/hr2	C_{SWMM}		0.0514	s-(in)^0.5/hr2

ATTACHMENT 8

Soil Map

Hydrologic Soil Group—San Diego County Area, California
(Solana Highlands)

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Diego County Area, California
Survey Area Data: Version 8, Sep 17, 2014

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 3, 2014—Nov 22, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — San Diego County Area, California (CA638)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
CsB	Corralitos loamy sand, 0 to 5 percent slopes	A	0.7	3.6%
CsC	Corralitos loamy sand, 5 to 9 percent slopes	A	0.2	1.0%
LvF3	Loamy alluvial land-Huerhuero complex, 9 to 50 percent slopes, severely eroded	D	6.9	34.6%
Md	Made land		0.0	0.2%
MlC	Marina loamy coarse sand, 2 to 9 percent slopes	B	0.5	2.7%
MlE	Marina loamy coarse sand, 9 to 30 percent slopes	B	11.5	57.8%
TeF	Terrace escarpments		0.0	0.1%
Totals for Area of Interest			**19.9**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: *None Specified*

Tie-break Rule: Higher

ATTACHMENT 9

Summary Files from the SWMM Model

```
EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.012)
--------------------------------------------------------------

*********************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
*********************************************************

****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... NO
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Starting Date ............ 08/28/1951 05:00:00
Ending Date .............. 05/23/2008 23:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:15:00
Dry Time Step ............ 04:00:00


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Total Precipitation ......       716.834       675.250
Evaporation Loss .........         3.980         3.749
Infiltration Loss ........       660.827       622.492
Surface Runoff ...........        58.020        54.654
Final Storage ............         0.000         0.000
Continuity Error (%) .....        -0.836


**************************        Volume        Volume
Flow Routing Continuity        acre-feet      10^6 gal
**************************     ---------     ---------
Dry Weather Inflow .......         0.000         0.000
Wet Weather Inflow .......        58.020        18.907
Groundwater Inflow .......         0.000         0.000
RDII Inflow ..............         0.000         0.000
External Inflow ..........         0.000         0.000
External Outflow .........        58.020        18.907
Flooding Loss ............         0.000         0.000
Evaporation Loss .........         0.000         0.000
Exfiltration Loss ........         0.000         0.000
Initial Stored Volume ....         0.000         0.000
Final Stored Volume ......         0.000         0.000
Continuity Error (%) .....         0.000
```

****
Subcatchment Runoff Summary
****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
DMA_1	675.25	0.00	3.75	622.49	54.65	18.91	14.12	0.081

Analysis begun on: Wed Aug 30 14:56:30 2017
Analysis ended on: Wed Aug 30 14:56:48 2017
Total elapsed time: 00:00:18

```
EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.012)
--------------------------------------------------------------

*********************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
*********************************************************

****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... YES
  Ponding Allowed ........ NO
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Flow Routing Method ...... KINWAVE
Starting Date ............ 08/28/1951 05:00:00
Ending Date .............. 05/23/2008 23:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:15:00
Dry Time Step ............ 04:00:00
Routing Time Step ........ 60.00 sec


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Initial LID Storage ......         0.058         0.055
Total Precipitation ......       716.876       675.250
Outfall Runon ............        26.143        24.625
Evaporation Loss .........        77.855        73.334
Infiltration Loss ........       228.678       215.400
Surface Runoff ...........        78.381        73.830
LID Drainage .............       367.024       345.713
Final Storage ............         0.111         0.105
Continuity Error (%) .....        -1.208


**************************        Volume        Volume
Flow Routing Continuity        acre-feet      10^6 gal
**************************     ---------     ---------
Dry Weather Inflow .......         0.000         0.000
Wet Weather Inflow .......       445.405       145.142
Groundwater Inflow .......         0.000         0.000
RDII Inflow ..............         0.000         0.000
External Inflow ..........         0.000         0.000
External Outflow .........       445.333       145.119
Flooding Loss ............         0.000         0.000
```

Evaporation Loss	0.059	0.019
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.000	0.000
Continuity Error (%)	0.003	

****
Highest Flow Instability Indexes
****
All links are stable.

****
Routing Time Step Summary
****

Minimum Time Step	:	60.00 sec
Average Time Step	:	60.00 sec
Maximum Time Step	:	60.00 sec
Percent in Steady State	:	0.00
Average Iterations per Step	:	1.00
Percent Not Converging	:	0.00

****
Subcatchment Runoff Summary
****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
BMP_1a	675.25	20975.54	840.24	0.00	20808.50	24.44	2.92	0.961
BMP_1b	675.25	8456.33	512.60	0.00	8618.73	8.68	2.92	0.944
BMP_3a	675.25	13688.40	803.80	0.00	13558.49	72.83	7.34	0.944
BMP_4	675.25	12720.12	776.94	0.00	12617.35	17.23	1.93	0.942
BMP_5	675.25	20149.10	817.69	0.00	20004.91	12.00	1.29	0.961
BMP_8	675.25	4498.65	697.30	0.00	4476.12	4.52	0.67	0.865
DMA_1	675.25	0.00	45.96	275.83	361.01	24.63	2.86	0.535
DMA_2	675.25	0.00	57.03	186.28	440.72	5.64	0.55	0.653
DMA_3a	675.25	0.00	58.78	169.25	456.39	61.43	5.84	0.676
DMA_4	675.25	0.00	47.57	234.02	402.65	17.37	1.87	0.596
DMA_5	675.25	0.00	50.59	208.06	426.94	9.08	0.92	0.632
DMA_6	675.25	0.00	43.70	261.41	379.06	3.01	0.34	0.561
DMA_7	675.25	0.00	52.08	210.25	422.07	4.30	0.44	0.625
DMA_8	675.25	0.00	2.25	626.52	51.89	0.25	0.19	0.077
DMA_9	675.25	0.00	43.15	293.84	346.24	5.43	0.66	0.513
DMA_10_3b	675.25	0.00	48.82	250.72	383.78	6.46	0.71	0.568

****
LID Performance Summary
****

	Total Inflow	Evap Loss	Infil Loss	Surface Outflow	Drain Outflow	Initial Storage	Final Storage	Continuity Error

Subcatchment	LID Control	in	in	in	in	in	in	in	%
BMP_1a	BMP_1a	21650.79	840.27	0.00	7256.74	13552.56	1.80	3.14	-0.00
BMP_1b	BMP_1b	9131.58	512.61	0.00	2834.24	5784.80	1.80	1.89	-0.00
BMP_3a	BMP_3a	14363.65	803.83	0.00	746.13	12812.85	1.80	2.71	-0.00
BMP_4	BMP_4	13395.37	776.96	0.00	2165.02	10452.80	1.80	2.51	-0.00
BMP_5	BMP_5	20824.35	817.72	0.00	2365.67	17639.96	1.80	2.91	-0.00
BMP_8	BMP_8	5173.90	697.32	0.00	342.27	4134.00	1.80	2.13	-0.00

****
Node Depth Summary
****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
POC-1	OUTFALL	0.00	0.00	0.00	0 00:00	0.00
1a	OUTFALL	0.00	0.00	0.00	0 00:00	0.00
Surf_1a	STORAGE	0.00	0.18	0.18	18857 11:35	0.18
Surf_1b	STORAGE	0.00	0.18	0.18	18857 12:03	0.17
Surf_3a	STORAGE	0.00	1.52	1.52	15835 16:18	1.42
Surf_4	STORAGE	0.00	0.14	0.14	18857 11:35	0.13
Surf_5	STORAGE	0.00	0.10	0.10	18857 11:33	0.10
Surf_8	STORAGE	0.00	0.07	0.07	18857 11:50	0.07

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
POC-1	OUTFALL	1.02	11.48	18857 12:11	125	137	0.000
1a	OUTFALL	0.00	2.92	18857 11:35	0	8.52	0.000
Surf_1a	STORAGE	2.90	2.90	18857 11:46	8.52	8.52	-0.013
Surf_1b	STORAGE	2.85	2.85	18857 12:01	2.85	2.85	0.048
Surf_3a	STORAGE	7.20	7.20	18857 11:46	4.01	4.01	0.116
Surf_4	STORAGE	1.85	1.85	18857 12:01	2.96	2.96	0.007
Surf_5	STORAGE	1.24	1.24	18857 12:01	1.42	1.42	-0.052
Surf_8	STORAGE	0.66	0.66	18857 12:01	0.346	0.346	-0.006

****
Node Flooding Summary
****

No nodes were flooded.

****
Storage Volume Summary
****

Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
Surf_1a	0.000	0	0	0	0.347	18	18857 11:34	2.92
Surf_1b	0.000	0	0	0	0.296	37	18857 12:02	2.89
Surf_3a	0.001	0	0	0	13.072	61	15835 16:17	5.02
Surf_4	0.000	0	0	0	0.300	27	18857 11:34	1.88
Surf_5	0.000	0	0	0	0.101	21	18857 11:32	1.27
Surf_8	0.000	0	0	0	0.109	13	18857 11:48	0.67

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
POC-1	11.82	0.09	11.48	136.589
1a	0.37	0.17	2.92	8.518
System	6.10	0.26	14.36	145.108

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
1a	DUMMY	2.92	18857 11:35			
1b	DUMMY	2.89	18857 12:03			
3a	DUMMY	5.02	15835 16:18			
4	DUMMY	1.88	18857 11:35			
5	DUMMY	1.27	18857 11:33			
8	DUMMY	0.67	18857 11:50			

****
Conduit Surcharge Summary
****

No conduits were surcharged.

Analysis begun on: Mon Sep 18 17:01:59 2017
Analysis ended on: Mon Sep 18 17:02:50 2017
Total elapsed time: 00:00:51

ATTACHMENT 10

Drawdown Calculations

TORY R. WALKER ENGINEERING
RELIABLE SOLUTIONS IN WATER RESOURCES

Project Name..... Solana Highlands
Project No..... 206-07
Date..... 9/18/2017

Drawdown Calculation for BMP 1a

Total Drawdown Time:	13.0 hours

Note: Drawdown time is calculated assuming an initial water surface depth equal to the invert of the lowest surface discharge opening in the basin outlet structure.

Underdrain Orifice Diameter:	0.625	in
C:	0.61	
Amended Soil Depth:	1.50	ft
Gravel Depth:	2.00	ft

Surface Depth (ft)	Volume (cu-ft)	$Q_{orifice}$ (cfs)	ΔT (hr)	Total Time (hr)
0.50	942	0.021	0.000	0.0
0.42	785	0.021	2.109	2.1
0.33	628	0.020	2.131	4.2
0.25	471	0.020	2.155	6.4
0.17	314	0.020	2.179	8.6
0.08	157	0.020	2.204	10.8
0.00	0	0.019	2.230	13.0

TORY R. WALKER ENGINEERING
RELIABLE SOLUTIONS IN WATER RESOURCES

Project Name..... Solana Highlands
Project No..... 206-07
Date..... 9/18/2017

Drawdown Calculation for BMP 1b

Total Drawdown Time:	3.5 hours

Note: Drawdown time is calculated assuming an initial water surface depth equal to the invert of the lowest surface discharge opening in the basin outlet structure.

Underdrain Orifice Diameter:	1.125	in
C:	0.61	
Amended Soil Depth:	1.50	ft
Gravel Depth:	2.00	ft

Surface Depth (ft)	Volume (cu-ft)	$Q_{orifice}$ (cfs)	ΔT (hr)	Total Time (hr)
0.50	808	0.067	0.000	0.0
0.42	673	0.066	0.560	0.6
0.33	539	0.066	0.566	1.1
0.25	404	0.065	0.572	1.7
0.17	269	0.064	0.579	2.3
0.08	135	0.064	0.585	2.9
0.00	0	0.063	0.592	3.5

TORY R. WALKER ENGINEERING
RELIABLE SOLUTIONS IN WATER RESOURCES

Project Name..... Solana Highlands
Project No..... 206-07
Date..... 9/18/2017

Drawdown Calculation for BMP 3a

Total Drawdown Time:	23.4 hours

Note: Drawdown time is calculated assuming an initial water surface depth equal to the invert of the lowest surface discharge opening in the basin outlet structure.

Underdrain Orifice Diameter: 1.500 in
C: 0.61

Amended Soil Depth: 1.50 ft
Gravel Depth: 2.00 ft

Surface Depth (ft)	Volume (cu-ft)	$Q_{orifice}$ (cfs)	ΔT (hr)	Total Time (hr)
2.00	17234	0.219	0.000	0.0
1.92	16516	0.218	0.913	0.9
1.83	15798	0.217	0.917	1.8
1.75	15080	0.216	0.922	2.8
1.67	14362	0.215	0.927	3.7
1.58	13644	0.214	0.931	4.6
1.50	12926	0.212	0.936	5.5
1.42	12207	0.211	0.941	6.5
1.33	11489	0.210	0.946	7.4
1.25	10771	0.209	0.951	8.4
1.17	10053	0.208	0.957	9.3
1.08	9335	0.207	0.962	10.3
1.00	8617	0.206	0.968	11.3
0.92	7899	0.204	0.973	12.2
0.83	7181	0.203	0.979	13.2
0.75	6463	0.202	0.985	14.2
0.67	5745	0.201	0.991	15.2
0.58	5027	0.199	0.997	16.2
0.50	4309	0.198	1.003	17.2
0.42	3590	0.197	1.010	18.2
0.33	2872	0.196	1.016	19.2
0.25	2154	0.194	1.023	20.2
0.17	1436	0.193	1.030	21.3
0.08	718	0.192	1.037	22.3
0.00	0	0.190	1.044	23.4

TORY R. WALKER ENGINEERING
RELIABLE SOLUTIONS IN WATER RESOURCES

Project Name..... Solana Highlands
Project No..... 206-07
Date..... 9/18/2017

Drawdown Calculation for BMP 4

Total Drawdown Time:	4.4 hours

Note: Drawdown time is calculated assuming an initial water surface depth equal to the invert of the lowest surface discharge opening in the basin outlet structure.

Underdrain Orifice Diameter: 1.250 in
C: 0.61

Amended Soil Depth: 1.50 ft
Gravel Depth: 1.00 ft

Surface Depth (ft)	Volume (cu-ft)	$Q_{orifice}$ (cfs)	ΔT (hr)	Total Time (hr)
0.50	1096	0.072	0.000	0.0
0.42	913	0.071	0.713	0.7
0.33	730	0.070	0.724	1.4
0.25	548	0.069	0.735	2.2
0.17	365	0.067	0.746	2.9
0.08	183	0.066	0.758	3.7
0.00	0	0.065	0.771	4.4

TORY R. WALKER ENGINEERING
RELIABLE SOLUTIONS IN WATER RESOURCES

Project Name..... Solana Highlands
Project No..... 206-07
Date..... 9/18/2017

Drawdown Calculation for BMP 5

Total Drawdown Time:	9.6 hours

Note: Drawdown time is calculated assuming an initial water surface depth equal to the invert of the lowest surface discharge opening in the basin outlet structure.

Underdrain Orifice Diameter: 0.875 in
C: 0.61

Amended Soil Depth: 1.50 ft
Gravel Depth: 2.00 ft

Surface Depth (ft)	Volume (cu-ft)	$Q_{orifice}$ (cfs)	ΔT (hr)	Total Time (hr)
1.50	1443	0.046	0.000	0.0
1.42	1363	0.045	0.491	0.5
1.33	1283	0.045	0.495	1.0
1.25	1203	0.044	0.500	1.5
1.17	1122	0.044	0.504	2.0
1.08	1042	0.044	0.509	2.5
1.00	962	0.043	0.513	3.0
0.92	882	0.043	0.518	3.5
0.83	802	0.042	0.523	4.1
0.75	722	0.042	0.528	4.6
0.67	641	0.042	0.533	5.1
0.58	561	0.041	0.539	5.7
0.50	481	0.041	0.544	6.2
0.42	401	0.040	0.550	6.7
0.33	321	0.040	0.556	7.3
0.25	241	0.039	0.562	7.9
0.17	160	0.039	0.569	8.4
0.08	80	0.038	0.575	9.0
0.00	0	0.038	0.582	9.6

TORY R. WALKER ENGINEERING
RELIABLE SOLUTIONS IN WATER RESOURCES

Project Name..... Solana Highlands
Project No..... 206-07
Date..... 9/18/2017

Drawdown Calculation for BMP 8

Total Drawdown Time:	20.4 hours

Note: Drawdown time is calculated assuming an initial water surface depth equal to the invert of the lowest surface discharge opening in the basin outlet structure.

Underdrain Orifice Diameter:	0.500	in
C:	0.61	
Amended Soil Depth:	1.50	ft
Gravel Depth:	1.00	ft

Surface Depth (ft)	Volume (cu-ft)	$Q_{orifice}$ (cfs)	ΔT (hr)	Total Time (hr)
0.50	810	0.012	0.000	0.0
0.42	675	0.011	3.278	3.3
0.33	540	0.011	3.326	6.6
0.25	405	0.011	3.375	10.0
0.17	270	0.011	3.427	13.4
0.08	135	0.011	3.482	16.9
0.00	0	0.011	3.539	20.4

ATTACHMENT 2
BACKUP FOR PDP HYDROMODIFICATION CONTROL MEASURES

This is the cover sheet for Attachment 2.

☐ Mark this box if this attachment is empty because the project is exempt from PDP hydromodification management requirements.

Indicate which Items are Included behind this cover sheet:

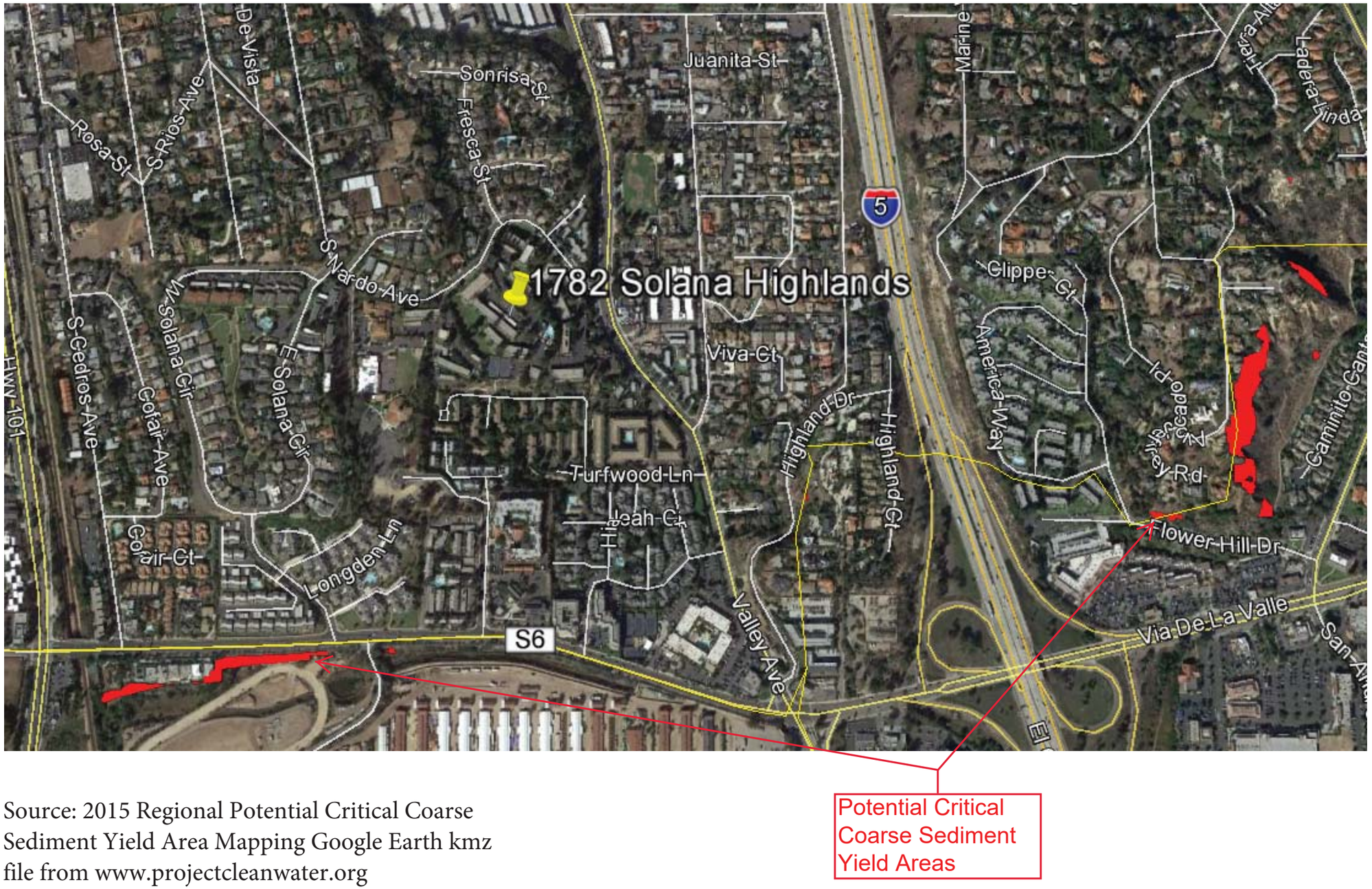
Attachment Sequence	Contents	Checklist
Attachment 2a	Hydromodification Management Exhibit (Required)	✓ Included See Hydromodification Management Exhibit Checklist on the back of this Attachment cover sheet.
Attachment 2b	Management of Critical Coarse Sediment Yield Areas (WMAA Exhibit is required, additional analyses are optional) See Section 6.2 of the BMP Design Manual.	✓ Exhibit showing project drainage boundaries marked on WMAA Critical Coarse Sediment Yield Area Map (Required) Optional analyses for Critical Coarse Sediment Yield Area Determination ☐ 6.2.1 Verification of Geomorphic Landscape Units Onsite ☐ 6.2.2 Downstream Systems Sensitivity to Coarse Sediment ☐ 6.2.3 Optional Additional Analysis of Potential Critical Coarse Sediment Yield Areas Onsite
Attachment 2c	Geomorphic Assessment of Receiving Channels (Optional) See Section 6.3.4 of the BMP Design Manual.	✓ Not performed ☐ Included ☐ Submitted as separate stand-alone document
Attachment 2d	Flow Control Facility Design, including Structural BMP Drawdown Calculations and Overflow Design Summary (Required) See Chapter 6 and Appendix G of the BMP Design Manual	✓ Included ☐ Submitted as separate stand-alone document
Attachment 2e	Vector Control Plan (Required when structural BMPs will not drain in 96 hours)	☐ Included ✓ Not required because BMPs will drain in less than 96 hours

Use this checklist to ensure the required information has been included on the Hydromodification Management Exhibit:

The Hydromodification Management Exhibit must identify:

- ☐ Underlying hydrologic soil group
- ☐ Approximate depth to groundwater
- ☐ Existing natural hydrologic features (watercourses, seeps, springs, wetlands)
- ☐ Critical coarse sediment yield areas to be protected
- ☐ Existing topography
- ☐ Existing and proposed site drainage network and connections to drainage offsite
- ☐ Proposed grading
- ☐ Proposed impervious features
- ☐ Proposed design features and surface treatments used to minimize imperviousness
- ☐ Point(s) of Compliance (POC) for Hydromodification Management
- ☐ Existing and proposed drainage boundary and drainage area to each POC (when necessary, create separate exhibits for pre-development and post-project conditions)
- ☐ Structural BMPs for hydromodification management (identify location, type of BMP, and size/detail)

Potential Critical Coarse Sediment Yield Areas Regional San Diego County Watersheds



Source: 2015 Regional Potential Critical Coarse Sediment Yield Area Mapping Google Earth kmz file from www.projectcleanwater.org

ATTACHMENT 3
Structural BMP Maintenance Information

This is the cover sheet for Attachment 3.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	**Contents**	**Checklist**
Attachment 3a	Structural BMP Maintenance Thresholds and Actions (Required)	✓ Included See Structural BMP Maintenance Information Checklist on the back of this Attachment cover sheet.
Attachment 3b	Draft Maintenance Agreement (when applicable)	☐ Included ☐ Not Applicable

Use this checklist to ensure the required information has been included in the Structural BMP Maintenance Information Attachment:

- ☐ **Preliminary Design / Planning / CEQA level submittal:**

  Attachment 3a must identify:

  - ☐ Typical maintenance indicators and actions for proposed structural BMP(s) based on Section 7.7 of the BMP Design Manual

  Attachment 3b is not required for preliminary design / planning / CEQA level submittal.

- ☐ **Final Design level submittal:**

  Attachment 3a must identify:

  - ☐ Specific maintenance indicators and actions for proposed structural BMP(s). This shall be based on Section 7.7 of the BMP Design Manual and enhanced to reflect actual proposed components of the structural BMP(s)
  - ☐ How to access the structural BMP(s) to inspect and perform maintenance
  - ☐ Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)
  - ☐ Manufacturer and part number for proprietary parts of structural BMP(s) when applicable
  - ☐ Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)
  - ☐ Recommended equipment to perform maintenance
  - ☐ When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management

  Attachment 3b: For private entity operation and maintenance, Attachment 3b shall include a draft maintenance agreement in the local jurisdiction's standard format (PDP applicant to contact the City Engineer to obtain the current maintenance agreement forms).

ATTACHMENT 4
Copy of Plan Sheets Showing Permanent Storm Water BMPs

This is the cover sheet for Attachment 4.

Use this checklist to ensure the required information has been included on the plans:

The plans must identify:

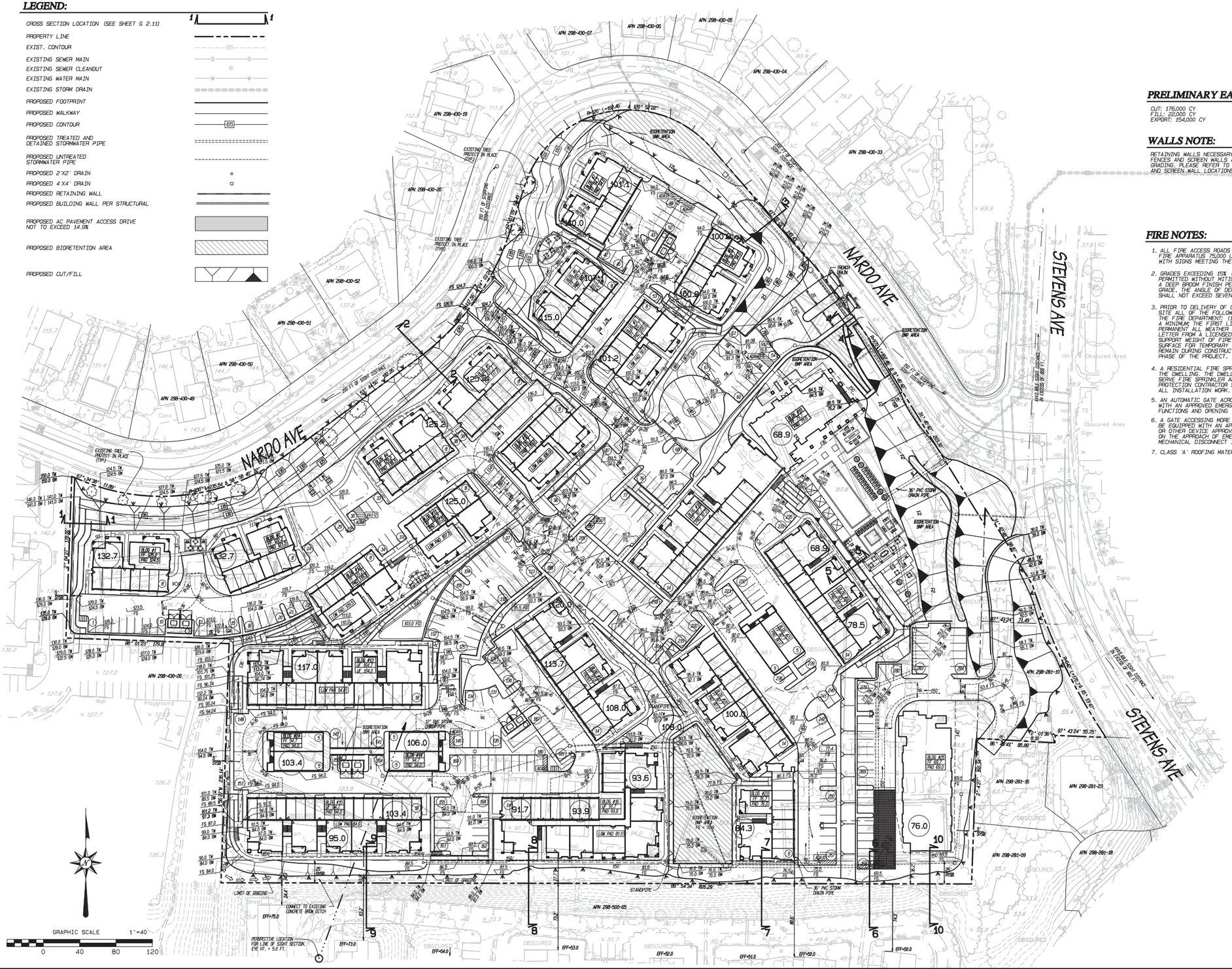
- ☐ Structural BMP(s) with ID numbers matching Form 4 Summary of PDP Structural BMPs
- ☐ The grading and drainage design shown on the plans must be consistent with the delineation of DMAs shown on the DMA exhibit
- ☐ Details and specifications for construction of structural BMP(s)
- ☐ Signage indicating the location and boundary of structural BMP(s) as required by the City Engineer
- ☐ How to access the structural BMP(s) to inspect and perform maintenance
- ☐ Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)
- ☐ Manufacturer and part number for proprietary parts of structural BMP(s) when applicable
- ☐ Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)
- ☐ Recommended equipment to perform maintenance
- ☐ When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management
- ☐ Include landscaping plan sheets showing vegetation requirements for vegetated structural BMP(s)
- ☐ All BMPs must be fully dimensioned on the plans
- ☐ When proprietary BMPs are used, site-specific cross section with outflow, inflow, and model number shall be provided. Photocopies of general brochures are not acceptable.
- ☐ A single plan BMP sheet for each construction drawing highlighting only those BMPs included in the referenced construction drawing. (See Section 5.5.2 of the City's JRMP for further detail.)

ATTACHMENT 4

PROJECT PLANS

LEGEND:

- CROSS SECTION LOCATION (SEE SHEET G 2.11)
- PROPERTY LINE
- EXIST. CONTOUR
- EXISTING SEWER MAIN
- EXISTING SEWER CLEANOUT
- EXISTING WATER MAIN
- EXISTING STORM DRAIN
- PROPOSED FOOTPRINT
- PROPOSED WALKWAY
- PROPOSED CONTOUR
- PROPOSED TREATED AND DETAINED STORMWATER PIPE
- PROPOSED UNTREATED STORMWATER PIPE
- PROPOSED 2'X2' DRAIN
- PROPOSED 4'X4' DRAIN
- PROPOSED RETAINING WALL
- PROPOSED BUILDING WALL PER STRUCTURAL
- PROPOSED AC PAVEMENT ACCESS DRIVE NOT TO EXCEED 14.5%
- PROPOSED BIORETENTION AREA
- PROPOSED CUT/FILL



PRELIMINARY EARTHWORK QUANTITIES

CUT: 176,000 CY
FILL: 22,000 CY
EXPORT: 154,000 CY

WALLS NOTE:

RETAINING WALLS NECESSARY TO FACILITATE SITE GRADING ARE SHOWN ON THIS SHEET. FENCES AND SCREEN WALLS ARE NOT SHOWN TO PROVIDE CLARITY FOR DEPICTING THE GRADING. PLEASE REFER TO ARCHITECTS AND LANDSCAPE ARCHITECTS PLANS FOR FENCING AND SCREEN WALL LOCATIONS AND HEIGHTS.

FIRE NOTES:

1. ALL FIRE ACCESS ROADS SHALL BE AN ALL WEATHER SURFACE, SUPPORT THE IMPOSED LOAD OF FIRE APPARATUS 75,000 LB. LOAD, MEET GRADE REQUIREMENTS AND POSTED AS FIRE LANES WITH SIGNS MEETING THE REQUIREMENT OF CA VEHICLE CODE.
2. GRADES EXCEEDING 15% (INCLINE OR DECLINE) ON FIRE APPARATUS ROADS SHALL NOT BE PERMITTED WITHOUT MITIGATION. A SURFACE OF PORTLAND CEMENT CONCRETE (PCC) WITH A DEEP BROOM FINISH PERPENDICULAR TO THE ENTIRE DIRECTION/LENGTH OF TRAVEL AND GRADE, THE ANGLE OF DEPARTURE AND APPROACH OF FIRE DEPARTMENT ACCESS ROADWAYS SHALL NOT EXCEED SEVEN DEGREES (12%). SEE SHEET G 3.1 FOR FIRE AND UTILITY PLAN.
3. PRIOR TO DELIVERY OF COMBUSTIBLE BUILDING CONSTRUCTION MATERIALS TO THE PROJECT SITE ALL OF THE FOLLOWING CONDITIONS SHALL BE COMPLETED TO THE SATISFACTION OF THE FIRE DEPARTMENT: (1) FIRE LANE OR ACCESS ROADS SHALL HAVE THE FOLLOWING AS A MINIMUM: THE FIRST LIFT OF ASPHALT PAVING SHALL BE IN PLACE TO PROVIDE A PERMANENT ALL WEATHER SURFACE FOR EMERGENCY VEHICLES; OR PROVIDE A LETTER FROM A LICENSED CIVIL ENGINEER THAT STATES OTHER ROAD SURFACE WILL SUPPORT WEIGHT OF FIRE APPARATUS (75,000 LBS) AND IS CONSIDERED AN ALL-WEATHER SURFACE FOR TEMPORARY USE NOT TO EXCEED THE 60 DAYS. IF EXISTING ROADS ARE TO REMAIN DURING CONSTRUCTION SHOW PROPER ACCESS/LOAD REQUIREMENTS FOR EACH PHASE OF THE PROJECT.
4. A RESIDENTIAL FIRE SPRINKLER SYSTEM SHALL BE INSTALLED IN ALL LIVING AREAS OF THE DWELLING. THE DWELLING SHALL HAVE A MINIMUM 1-INCH WATER METERS TO SERVE FIRE SPRINKLER AND DOMESTIC WATER SUPPLY. A C-16 LICENSED FIRE PROTECTION CONTRACTOR SHALL SUBMIT PLANS FOR APPROVAL AND PERFORM ALL INSTALLATION WORK.
5. AN AUTOMATIC GATE ACROSS A FIRE ACCESS ROADWAY OR DRIVEWAY SHALL BE EQUIPPED WITH AN APPROVED EMERGENCY KEY-OPERATED SWITCH OVERRIDING ALL COMMAND FUNCTIONS AND OPENING THE GATE.
6. A GATE ACCESSING MORE THAN FOUR RESIDENCES OR RESIDENTIAL LOTS SHALL ALSO BE EQUIPPED WITH AN APPROVED TRAFFIC CONTROL-ACTIVATING STROBE LIGHT SENSOR OR OTHER DEVICE APPROVED BY THE FIRE CODE OFFICIAL, WHICH WILL ACTIVATE THE GATE ON THE APPROACH OF EMERGENCY APPARATUS WITH BATTERY BACKUP OR MANUAL MECHANICAL DISCONNECT IN CASE OF POWER FAILURE.
7. CLASS 'A' ROOFING MATERIAL IS REQUIRED FOR ALL NEW ROOFS.

STEPHEN DALTON ARCHITECTS
www.SDArchitects.net
444 S. CEDROS AVE, STUDIO 190
SOLANA BEACH, CA 92075

H.G. FENTON COMPANY
TRUST, SERVICE AND TRADITION SINCE 1906

PASCO LARET SUITER & ASSOCIATES
CIVIL ENGINEERING + LAND PLANNING + LAND SURVEYING
535 North Highway 101, Ste A, Solana Beach, CA 92075
ph 858.259.8212 | fx 858.259.4812 | plsaengineering.com

REVITALIZING SOLANA HIGHLANDS

PRELIMINARY GRADING PLAN

DEVELOPMENT REVIEW PERMIT

10 / 26 / 2017

G 2.1

APPENDIX L

Noise Measurements and Modelling

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Solana Highlands
PROJECT #: 8607
SITE ID: M1 - Turfwood Res
SITE ADDRESS: 471 Bay Meadows Way, Solana Beach 92075
OBSERVER(S): Stephanie Tang
START DATE: 12/23/14 END DATE: 12/23/14
START TIME: 1354 END TIME: 1404

METEOROLOGICAL CONDITIONS

TEMP: 65 F HUMIDITY: 100 % R.H. WIND: (CALM) LIGHT MODERATE
WINDSPD: 0 MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY
SKY: (SUNNY) (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo SLM TYPE 1 (2) SERIAL # 130625005
CALIBRATOR: BSWA CA114 SERIAL # 49015
CALIBRATION CHECK PRE-TEST 94.0 dBA SPL POST-TEST 94.0 dBA SPL WINDSCRN ✓

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
M1	1354	1404	57.0	64.4	52.4				

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: DIST. TO RDWY C/L OR EOP: ~50'

TRAFFIC COUNT DURATION: ___ MIN

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	SPEED NB/EB	SPEED SB/WB
AUTOS				
MED TRKS				
HVY TRKS				
BUSES				
MOTRCLS				

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ___

___ MIN

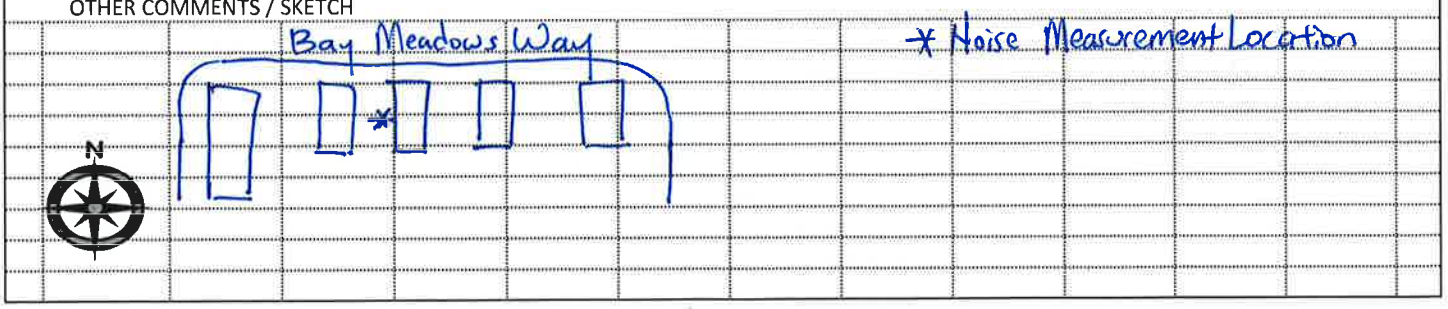
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	SPEED NB/EB	SPEED SB/WB

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES (DIST. BARKING DOGS) (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING (DIST. CONVRSTNS) / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) (DIST. GARDENERS/LANDSCAPING NOISE)
OTHER: Car honking; 3 cars passing by (~10mph)

DESCRIPTION / SKETCH

TERRAIN (HARD) SOFT MIXED (FLAT) OTHER:
PHOTOS: See Attached
OTHER COMMENTS / SKETCH



M1 - Turfwood Res; 471 Bay Meadows Way Solana Beach, CA 92075
Photo Taken 12/23/14

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Solana Highlands
PROJECT #: 8607
SITE ID: M2 - Solana Highlands Apt Bldg L
SITE ADDRESS: 765 S. Nardo Avenue Solana Beach 92075
OBSERVER(S): Stephanie Tang
START DATE: 12/23/14 END DATE: 12/23/14
START TIME: 1414 END TIME: 1424

METEOROLOGICAL CONDITIONS

TEMP: 65 F HUMIDITY: 100 % R.H. WIND: (CALM) LIGHT MODERATE
WINDSPD: ~~0~~ MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY
SKY: (SUNNY) (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo SLM TYPE 1 (2) SERIAL # 13062500 5
CALIBRATOR: BSWA CA114 SERIAL # 490151
CALIBRATION CHECK PRE-TEST 94.0 dBA SPL POST-TEST 94.0 dBA SPL WINDSCRN ✓

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
M2	1414	1424	61.9	71.1	57.9				

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: S. Nardo Avenue DIST. TO RDWY C/L OR EOP: ~110'
TRAFFIC COUNT DURATION: 10 MIN ___ MIN

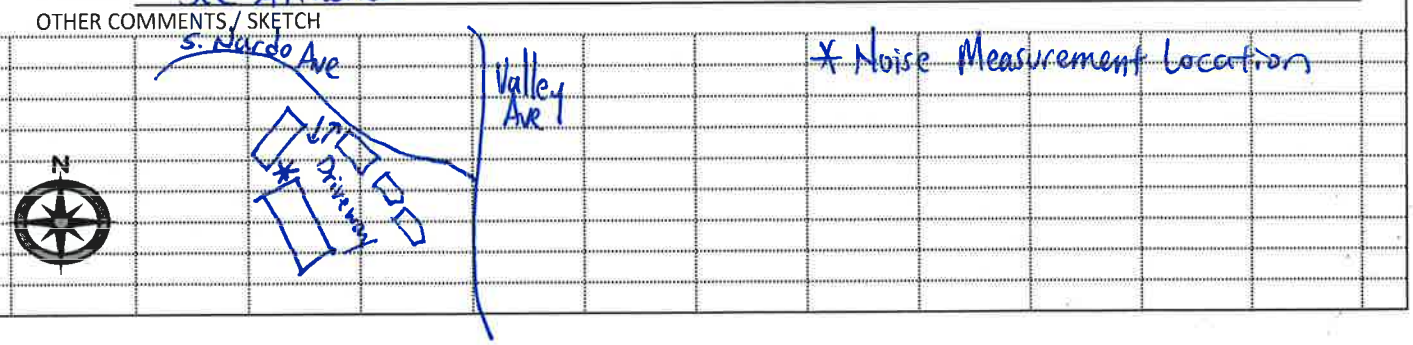
COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE	COUNT 2 (OR RDWY 2) NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	15	19							
MED TRKS	~~0~~	~~0~~							
HVY TRKS	~~0~~	~~0~~							
BUSES	~~0~~	~~0~~							
MOTRCLS	~~0~~	~~0~~							

SPEED (NB/EB, SB/WB): SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
SPEED (NB/EB, SB/WB): POSTED SPEED LIMIT SIGNS SAY: 25mph

OTHER NOISE SOURCES (BACKGROUND): ~~DIST. AIRCRAFT~~ RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING (DIST. CONVRSTNS / YELLING) (DIST. TRAFFIC (LIST RDWYS BELOW)) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: Valley Avenue; Cars going in and out of complex (5); Vacuum

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT MIXED (FLAT) OTHER: Walkway
PHOTOS: See Attached
OTHER COMMENTS / SKETCH



M2 - Solana Highlands Apt; 765 S. Nardo Avenue Solana Beach, CA 92075

Photo Taken 12/23/14

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Solana Highlands
PROJECT #: 8607
SITE ID: M3 - SFR
SITE ADDRESS: 638 S. Nardo Avenue Solana Beach 92075
OBSERVER(S): Stephanie Tang
START DATE: 12/23/14 END DATE: 12/23/14
START TIME: 1443 END TIME: 1453

METEOROLOGICAL CONDITIONS

TEMP: 65 F HUMIDITY: 100 % R.H. WIND: CALM (LIGHT) MODERATE
WINDSPD: 4 MPH DIR. N NE S SE S SW (W) NW VARIABLE STEADY GUSTY
SKY: (SUNNY) (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo SLM TYPE 1 (2) SERIAL # 130625005
CALIBRATOR: BSWA CA 114 SERIAL # 49015
CALIBRATION CHECK PRE-TEST 94.0 dBA SPL POST-TEST 94.0 dBA SPL WINDSCRN ✓

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
M3	1443	1453	58.2	75.8	52.0				

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: S. Nardo Avenue DIST. TO RDWY C/L OR EOP: ~65'

TRAFFIC COUNT DURATION: 10 MIN ___ MIN

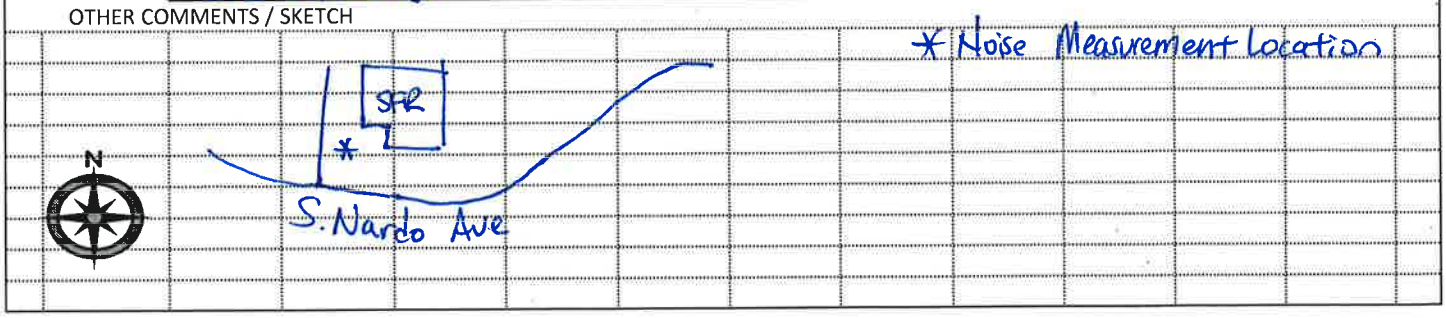
COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	SPEED NB/EB	SPEED SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ___	COUNT 2 (OR RDWY 2) NB/EB	SB/WB	SPEED NB/EB	SPEED SB/WB
AUTOS	11	14							
MED TRKS	0	2							
HVY TRKS	0	0							
BUSES	0	0							
MOTRCLS	0	0							

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY: 25mph

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING (DIST. CONVRSTNS) YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: Dist. Music; School Bell; Car Start-Up

DESCRIPTION / SKETCH

TERRAIN (HARD) SOFT MIXED (FLAT) OTHER: Driveway
PHOTOS: See Attached
OTHER COMMENTS / SKETCH



M3 - SFR; 638 S. Nardo Avenue Solana Beach, CA 92075

Photo taken 12/23/14

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Solana Highlands — PROJECT #: 8607
SITE ID: M4 - St. James Catholic Church
SITE ADDRESS: 625 S. Nardo Avenue Solana Beach 92075 — OBSERVER(S): Stephanie Tang
START DATE: 12/23/14 — END DATE: 12/23/14
START TIME: 1658 — END TIME: 1708

METEOROLOGICAL CONDITIONS

TEMP: 65 F — HUMIDITY: 95 % R.H. — WIND: (CALM) LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD: 0 MPH — DIR. N NE S SE S SW W NW
SKY: SUNNY (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo SLM — TYPE 1 (2) — SERIAL #: 130625005
CALIBRATOR: BSWA CA114 — SERIAL #: 490151
CALIBRATION CHECK — PRE-TEST: 94.0 dBA SPL — POST-TEST: 94.0 dBA SPL — WINDSCRN: ✓

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
M4	1658	1708	60.4	72.9	56.7				

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: S. Nardo Avenue — DIST. TO RDWY C/L OR EOP: ~93'

TRAFFIC COUNT DURATION: ___ MIN — SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	12	13		
MED TRKS	0	0		
HVY TRKS	0	0		
BUSES	0	0		
MOTRCLS	0	0		

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ___

___ MIN — SPEED

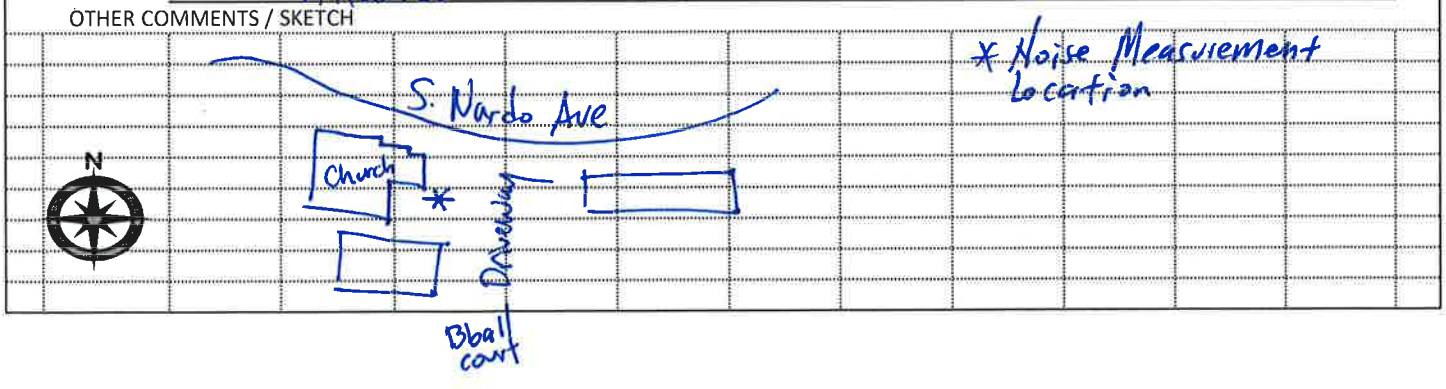
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY: 25mph

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) (RUSTLING LEAVES) (DIST. BARKING DOGS) (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING (DIST. TRAFFIC DIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: Teenagers playing basketball; Crickets; Car engine start; Car passing by leaving site

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT MIXED (FLAT) OTHER:
PHOTOS: See Attached
OTHER COMMENTS / SKETCH



M4 - St. James Catholic Church
625 S. Nardo Avenue Solana Beach, CA 92075

Photo Taken 12/23/14

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Solana Highlands — PROJECT #: 8607
SITE ID: M5 – St. James Academy Playground Parking Lot
SITE ADDRESS: 623 S. Nardo Avenue Solana Beach 92075 — OBSERVER(S): Stephanie Tang
START DATE: 12/23/14 — END DATE: 12/23/14
START TIME: 1713 — END TIME: 1723

METEOROLOGICAL CONDITIONS

TEMP: 64 F — HUMIDITY: 99 % R.H. — WIND: (CALM) LIGHT MODERATE
WINDSPD: ~~0~~ MPH — DIR. N NE S SE S SW W NW — VARIABLE STEADY GUSTY
SKY: SUNNY (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Piccolo — TYPE 1 (2) — SERIAL # 130625008
CALIBRATOR: BSWA CA 114 — SERIAL # 490151
CALIBRATION CHECK — PRE-TEST 94.0 dBA SPL — POST-TEST 94.0 dBA SPL — WINDSCRN ✓

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
M5	1713	1723	62.4	69.8	59.9				

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: — DIST. TO RDWY C/L OR EOP:

TRAFFIC COUNT DURATION: ___ MIN

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	SPEED NB/EB	SPEED SB/WB
AUTOS				
MED TRKS				
HVY TRKS				
BUSES				
MOTRCLS				

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ___

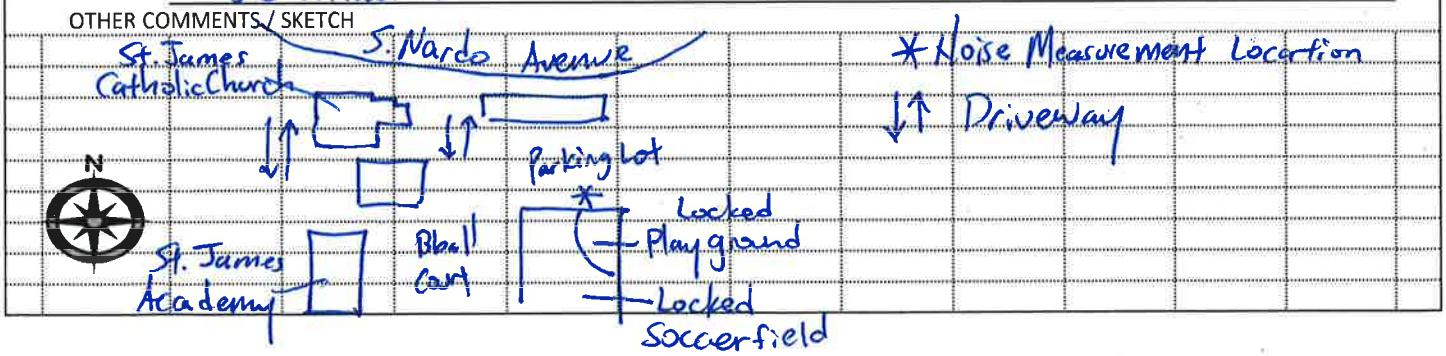
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	SPEED NB/EB	SPEED SB/WB
___ MIN				

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING (DIST. CONVRSTNS/YELLING) (DIST. TRAFFIC (DIST RDWYS BELOW)) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: S. Nardo Avenue; Teenagers Playing basketball; Door slam; Car start, Car honk

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT MIXED (FLAT) OTHER: Parking Lot
PHOTOS: See Attached
OTHER COMMENTS / SKETCH



M5- St. James Academy Playground Parking Lot
623 S. Nardo Avenue Solana Beach, CA 92075
Photo taken 12/23/14

Dudek 4 December 2017
MG TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Cal Run

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Stevens/ValleyAve - S of Nardo Ave	70.0	point1	1	10,000.0	110.0	100.00				Average	
		point5	5	10,000.0	5,050.0	100.00					
S. Nardo Ave	40.0	point3	3	9,990.0	5,000.0	100.00				Average	
		point4	4	5,050.0	5,000.0	100.00					
Stevens Avenue - N of Nardo Ave	70.0	point6	6	10,000.0	5,050.0	100.00				Average	
		point2	2	10,000.0	9,950.0	100.00					
Via de la Valle- E of Stevens/Valley Ave	60.0	point7	7	14,950.0	100.0	100.00				Average	
		point9	9	10,000.0	100.0	100.00					
Via de la Valle- w of Stevens/Valley Ave	60.0	point10	10	10,000.0	100.0	100.00				Average	
		point8	8	1,000.0	100.0	100.00					
Camino del Mar - S of Via de la Valle	40.0	point11	11	1,000.0	-5,000.0	100.00				Average	
		point13	13	1,000.0	100.0	100.00					
Camino del Mar- Lomas Santa Fe Dr to	40.0	point14	14	1,000.0	100.0	100.00				Average	
		point36	36	1,000.0	10,000.0	100.00					
I-5 SB-N of Lomas Santa Fe Dr	105.0	point15	15	15,000.0	15,000.0	100.00				Average	
		point32	32	15,000.0	10,000.0	100.00					
I-5 NB-S of Via de la Valle	105.0	point17	17	15,080.0	-5,000.0	100.00				Average	
		point24	24	15,080.0	100.0	100.00					
Via de la Valle E of I-5	100.0	point19	19	15,100.0	100.0	100.00				Average	
		point20	20	18,000.0	100.0	100.00					
E. Solana Circle	35.0	point21	21	5,000.0	5,000.0	100.00				Average	
		point22	22	5,000.0	2,000.0	100.00					
I-5 NB--Lomas Santa Fe Dr to VDLV	105.0	point25	25	15,080.0	100.0	100.00				Average	
		point31	31	15,080.0	10,000.0	100.00					
I-5 SB-S of Via de la Valle	105.0	point26	26	15,000.0	100.0	100.00				Average	

		point16	16	15,000.0	-5,000.0	100.00					
Jimmy Durante Blvd.	60.0	point27	27	10,000.0	90.0	100.00				Average	
		point28	28	10,000.0	-5,000.0	100.00					
Lomas Santa Fe Dr - Stvns Dr to I-5	80.0	point29	29	15,000.0	10,000.0	100.00				Average	
		point33	33	10,000.0	10,000.0	100.00					
I-5 SB-Lomas Santa Fe Dr to VDLV	105.0	point34	34	15,000.0	10,000.0	100.00				Average	
		point23	23	15,000.0	100.0	100.00					
I-5 NB-N of Lomas Santa Fe Dr	105.0	point35	35	15,080.0	10,000.0	100.00				Average	
		point18	18	15,080.0	15,000.0	100.00					
Camino del Mar- N of Lomas Santa Fe	40.0	point37	37	1,000.0	10,000.0	100.00				Average	
		point12	12	1,000.0	15,000.0	100.00					
LmsSntaFeDr-Cmno delMar toStevens	80.0	point38	38	10,000.0	10,000.0	100.00				Average	
		point30	30	1,050.0	10,000.0	100.00					

Dudek 4 December 2
MG TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Percentages
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Cal Run

Roadway	Points												
Name	Name	No.	Segment										
			Total	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			Volume	P	S	P	S	P	S	P	S	P	S
			veh/hr	%	mph	%	mph	%	mph	%	mph	%	mph
Stevens/ValleyAve - S of Nardo Ave	point1	1	1024	99	40	1	40	0	0	0	0	0	0
	point5	5											
S. Nardo Ave	point3	3	210	99	35	1	35	0	0	0	0	0	0
	point4	4											
Stevens Avenue - N of Nardo Ave	point6	6	974	99	40	1	40	0	0	0	0	0	0
	point2	2											
Via de la Valle- E of Stevens/Valley Ave	point7	7	0	0	0	0	0	0	0	0	0	0	0
	point9	9											
Via de la Valle- w of Stevens/Valley Ave	point10	10	0	0	0	0	0	0	0	0	0	0	0
	point8	8											
Camino del Mar - S of Via de la Valle	point11	11	0	0	0	0	0	0	0	0	0	0	0
	point13	13											
Camino del Mar- Lomas Santa Fe Dr to	point14	14	0	0	0	0	0	0	0	0	0	0	0
	point36	36											
I-5 SB-N of Lomas Santa Fe Dr	point15	15	0	0	0	0	0	0	0	0	0	0	0
	point32	32											
I-5 NB-S of Via de la Valle	point17	17	0	0	0	0	0	0	0	0	0	0	0
	point24	24											
Via de la Valle E of I-5	point19	19	0	0	0	0	0	0	0	0	0	0	0
	point20	20											
E. Solana Circle	point21	21	65	99	25	1	25	0	0	0	0	0	0
	point22	22											
I-5 NB--Lomas Santa Fe Dr to VDLV	point25	25	0	0	0	0	0	0	0	0	0	0	0

	point31	31											
I-5 SB-S of Via de la Valle	point26	26	0	0	0	0	0	0	0	0	0	0	0
	point16	16											
Jimmy Durante Blvd.	point27	27	0	0	0	0	0	0	0	0	0	0	0
	point28	28											
Lomas Santa Fe Dr - Stvns Dr to I-5	point29	29	0	0	0	0	0	0	0	0	0	0	0
	point33	33											
I-5 SB-Lomas Santa Fe Dr to VDLV	point34	34	0	0	0	0	0	0	0	0	0	0	0
	point23	23											
I-5 NB-N of Lomas Santa Fe Dr	point35	35	0	0	0	0	0	0	0	0	0	0	0
	point18	18											
Camino del Mar- N of Lomas Santa Fe	point37	37	0	0	0	0	0	0	0	0	0	0	0
	point12	12											
LmsSntaFeDr-Cmno delMar toStevens	point38	38	0	0	0	0	0	0	0	0	0	0	0
	point30	30											

Dudek 4 December 2017
MG TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Cal Run

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M2 On Site	1	1	9,850.0	4,900.0	100.00	5.00	61.90	66	10.0	8.0	Y
M3 SF Resi N of Project	3	1	6,500.0	5,055.0	100.00	5.00	58.20	66	10.0	8.0	Y
M4 St James Catholic Church	5	1	5,385.0	4,965.0	100.00	5.00	60.40	66	10.0	8.0	Y

Dudek
MG

4 December 2017
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Cal Run
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M2 On Site	1	1	61.9	60.6	66	-1.3	10	----	60.6	0.0	8	-8.0
M3 SF Resi N of Project	3	1	58.2	56.3	66	-1.9	10	----	56.3	0.0	8	-8.0
M4 St James Catholic Church	5	1	60.4	58.5	66	-1.9	10	----	58.5	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min dB	Avg dB	Max dB
All Selected	3	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek 4 December 2017
MG TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Existing

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Stevens/ValleyAve - S of Nardo Ave	70.0	point1	1	10,000.0	110.0	100.00				Average	
		point5	5	10,000.0	5,050.0	100.00					
S. Nardo Ave-w of Stevens Ave	40.0	point3	3	9,990.0	5,000.0	100.00				Average	
		point47	47	7,520.0	5,000.0	100.00					
Stevens Avenue - N of Nardo Ave	70.0	point6	6	10,000.0	5,050.0	100.00				Average	
		point2	2	10,000.0	9,950.0	100.00					
Via de la Valle- E of Stevens/Valley Ave	60.0	point7	7	14,950.0	100.0	100.00				Average	
		point9	9	10,000.0	100.0	100.00					
Via de la Valle- w of Stevens/Valley Ave	60.0	point10	10	10,000.0	100.0	100.00				Average	
		point8	8	1,000.0	100.0	100.00					
Camino del Mar - S of Via de la Valle	40.0	point11	11	1,000.0	-5,000.0	100.00				Average	
		point13	13	1,000.0	100.0	100.00					
Camino del Mar- Lomas Santa Fe Dr to	40.0	point14	14	1,000.0	100.0	100.00				Average	
		point36	36	1,000.0	10,000.0	100.00					
I-5 SB-N of Lomas Santa Fe Dr	105.0	point15	15	15,000.0	15,000.0	100.00				Average	
		point32	32	15,000.0	10,000.0	100.00					
I-5 NB-S of Via de la Valle	105.0	point17	17	15,080.0	-5,000.0	100.00				Average	
		point24	24	15,080.0	100.0	100.00					
Via de la Valle E of I-5	100.0	point19	19	15,100.0	100.0	100.00				Average	
		point20	20	18,000.0	100.0	100.00					
E. Solana Circle	35.0	point21	21	5,000.0	5,000.0	100.00				Average	
		point22	22	5,000.0	110.0	100.00					
I-5 NB--Lomas Santa Fe Dr to VDLV	105.0	point25	25	15,080.0	100.0	100.00				Average	
		point31	31	15,080.0	10,000.0	100.00					
I-5 SB-S of Via de la Valle	105.0	point26	26	15,000.0	100.0	100.00				Average	

		point16	16	15,000.0	-5,000.0	100.00					
Jimmy Durante Blvd.	60.0	point27	27	10,000.0	90.0	100.00				Average	
		point28	28	10,000.0	-5,000.0	100.00					
Lomas Santa Fe Dr - Stvns Dr to I-5	80.0	point29	29	15,000.0	10,000.0	100.00				Average	
		point33	33	10,000.0	10,000.0	100.00					
I-5 SB-Lomas Santa Fe Dr to VDLV	105.0	point34	34	15,000.0	10,000.0	100.00				Average	
		point23	23	15,000.0	100.0	100.00					
I-5 NB-N of Lomas Santa Fe Dr	105.0	point35	35	15,080.0	10,000.0	100.00				Average	
		point18	18	15,080.0	15,000.0	100.00					
Camino del Mar- N of Lomas Santa Fe	40.0	point37	37	1,000.0	10,000.0	100.00				Average	
		point12	12	1,000.0	15,000.0	100.00					
LmsSntaFeDr-SNardoAve toStevens	80.0	point38	38	10,000.0	10,000.0	100.00				Average	
		point45	45	5,050.0	10,000.0	100.00					
S Nardo Ave S of Lomas Santa Fe	40.0	point43	43	5,050.0	5,010.0	100.00				Average	
		point44	44	5,050.0	9,950.0	100.00					
LmsSntaFeDr-CmnodelMartoSNardoAv	80.0	point46	46	5,050.0	10,000.0	100.00				Average	
		point30	30	1,050.0	10,000.0	100.00					
S. Nardo Ave-e of Solana Circle	40.0	point49	49	7,520.0	5,000.0	100.00				Average	
		point4	4	5,050.0	5,000.0	100.00					

Dudek 4 December 2
MG TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Percentages
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Existing

Roadway	Points												
Name	Name	No.	Segment										
			Total	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			Volume	P	S	P	S	P	S	P	S	P	S
			veh/hr	%	mph	%	mph	%	mph	%	mph	%	mph
Stevens/ValleyAve - S of Nardo Ave	point1	1	921	97	40	2	40	1	40	0	0	0	0
	point5	5											
S. Nardo Ave-w of Stevens Ave	point3	3	362	97	25	2	25	1	25	0	0	0	0
	point47	47											
Stevens Avenue - N of Nardo Ave	point6	6	906	97	40	2	40	1	40	0	0	0	0
	point2	2											
Via de la Valle- E of Stevens/Valley Ave	point7	7	0	0	0	0	0	0	0	0	0	0	0
	point9	9											
Via de la Valle- w of Stevens/Valley Ave	point10	10	1213	97	45	2	45	1	45	0	0	0	0
	point8	8											
Camino del Mar - S of Via de la Valle	point11	11	0	0	0	0	0	0	0	0	0	0	0
	point13	13											
Camino del Mar- Lomas Santa Fe Dr to	point14	14	0	0	0	0	0	0	0	0	0	0	0
	point36	36											
I-5 SB-N of Lomas Santa Fe Dr	point15	15	0	0	0	0	0	0	0	0	0	0	0
	point32	32											
I-5 NB-S of Via de la Valle	point17	17	0	0	0	0	0	0	0	0	0	0	0
	point24	24											
Via de la Valle E of I-5	point19	19	0	0	0	0	0	0	0	0	0	0	0
	point20	20											
E. Solana Circle	point21	21	66	97	25	2	25	1	25	0	0	0	0
	point22	22											
I-5 NB--Lomas Santa Fe Dr to VDLV	point25	25	0	0	0	0	0	0	0	0	0	0	0

	point31	31											
I-5 SB-S of Via de la Valle	point26	26	0	0	0	0	0	0	0	0	0	0	0
	point16	16											
Jimmy Durante Blvd.	point27	27	0	0	0	0	0	0	0	0	0	0	0
	point28	28											
Lomas Santa Fe Dr - Stvns Dr to I-5	point29	29	2126	97	35	2	35	1	35	0	0	0	0
	point33	33											
I-5 SB-Lomas Santa Fe Dr to VDLV	point34	34	0	0	0	0	0	0	0	0	0	0	0
	point23	23											
I-5 NB-N of Lomas Santa Fe Dr	point35	35	0	0	0	0	0	0	0	0	0	0	0
	point18	18											
Camino del Mar- N of Lomas Santa Fe	point37	37	0	0	0	0	0	0	0	0	0	0	0
	point12	12											
LmsSntaFeDr-SNardoAve toStevens	point38	38	1630	97	35	2	35	1	35	0	0	0	0
	point45	45											
S Nardo Ave S of Lomas Santa Fe	point43	43	165	97	25	2	25	1	25	0	0	0	0
	point44	44											
LmsSntaFeDr-CmnodelMartoSNardoAv	point46	46	1251	97	35	2	35	1	35	0	0	0	0
	point30	30											
S. Nardo Ave-e of Solana Circle	point49	49	266	97	25	2	25	1	25	0	0	0	0
	point4	4											

Dudek 4 December 2017
MG TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Existing

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1 - Resi s of Project	1	1	9,450.0	4,350.0	100.00	5.00	0.00	66	10.0	8.0	Y
M2 On Site	3	1	9,850.0	4,900.0	100.00	5.00	0.00	66	10.0	8.0	Y
M3 SF Resi N of Project	5	1	6,500.0	5,055.0	100.00	5.00	0.00	66	10.0	8.0	Y
M4 St James Catholic Church	7	1	5,385.0	4,965.0	100.00	5.00	0.00	66	10.0	8.0	Y
M5 - St James Academy Schoolyard	10	1	5,650.0	4,750.0	100.00	5.00	0.00	66	10.0	8.0	Y
R1 - Stevens Ave	12	1	9,930.0	7,500.0	100.00	5.00	0.00	66	10.0	8.0	Y
R2 - MF Resi N of Project	14	1	9,500.0	5,050.0	100.00	5.00	0.00	66	10.0	8.0	Y
R3 - Resi on S Nardo Ave s of Lomas	15	1	4,995.0	8,000.0	100.00	5.00	0.00	66	10.0	8.0	Y
R4 - Resi on LSF w of S Nardo Ave	17	1	4,500.0	10,075.0	100.00	5.00	0.00	66	10.0	8.0	Y
R5 - Resi on LSF e of Stevens Ave	19	1	11,250.0	10,100.0	100.00	5.00	0.00	66	10.0	8.0	Y
R6 - Resi on VDLV w of Solana Cir	20	1	4,900.0	200.0	100.00	5.00	0.00	66	10.0	8.0	Y
R7 - Resi on StevensAv n of VDLV	22	1	9,900.0	2,600.0	100.00	5.00	0.00	66	10.0	8.0	Y
R8 - Resi on E Solana Cir	24	1	4,950.0	3,200.0	100.00	5.00	0.00	66	10.0	8.0	Y

Dudek
MG

4 December 2017
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Existing
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1 - Resi s of Project	1	1	0.0	48.5	66	48.5	10	----	48.5	0.0	8	-8.0
M2 On Site	3	1	0.0	60.8	66	60.8	10	----	60.8	0.0	8	-8.0
M3 SF Resi N of Project	5	1	0.0	54.9	66	54.9	10	----	54.9	0.0	8	-8.0
M4 St James Catholic Church	7	1	0.0	57.1	66	57.1	10	----	57.1	0.0	8	-8.0
M5 - St James Academy Schoolyard	10	1	0.0	45.1	66	45.1	10	----	45.1	0.0	8	-8.0
R1 - Stevens Ave	12	1	0.0	64.0	66	64.0	10	----	64.0	0.0	8	-8.0
R2 - MF Resi N of Project	14	1	0.0	57.4	66	57.4	10	----	57.4	0.0	8	-8.0
R3 - Resi on S Nardo Ave s of Lomas	15	1	0.0	52.9	66	52.9	10	----	52.9	0.0	8	-8.0
R4 - Resi on LSF w of S Nardo Ave	17	1	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0
R5 - Resi on LSF e of Stevens Ave	19	1	0.0	64.3	66	64.3	10	----	64.3	0.0	8	-8.0
R6 - Resi on VDLV w of Solana Cir	20	1	0.0	64.9	66	64.9	10	----	64.9	0.0	8	-8.0
R7 - Resi on StevensAv n of VDLV	22	1	0.0	62.2	66	62.2	10	----	62.2	0.0	8	-8.0
R8 - Resi on E Solana Cir	24	1	0.0	49.4	66	49.4	10	----	49.4	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	13	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek 4 December 2017
MG TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Ex w Prj

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Stevens/ValleyAve - S of Nardo Ave	70.0	point1	1	10,000.0	110.0	100.00				Average	
		point5	5	10,000.0	5,050.0	100.00					
S. Nardo Ave-w of Stevens Ave	40.0	point3	3	9,990.0	5,000.0	100.00				Average	
		point47	47	7,520.0	5,000.0	100.00					
Stevens Avenue - N of Nardo Ave	70.0	point6	6	10,000.0	5,050.0	100.00				Average	
		point2	2	10,000.0	9,950.0	100.00					
Via de la Valle- E of Stevens/Valley Ave	60.0	point7	7	14,950.0	100.0	100.00				Average	
		point9	9	10,000.0	100.0	100.00					
Via de la Valle- w of Stevens/Valley Ave	60.0	point10	10	10,000.0	100.0	100.00				Average	
		point8	8	1,000.0	100.0	100.00					
Camino del Mar - S of Via de la Valle	40.0	point11	11	1,000.0	-5,000.0	100.00				Average	
		point13	13	1,000.0	100.0	100.00					
Camino del Mar- Lomas Santa Fe Dr to	40.0	point14	14	1,000.0	100.0	100.00				Average	
		point36	36	1,000.0	10,000.0	100.00					
I-5 SB-N of Lomas Santa Fe Dr	105.0	point15	15	15,000.0	15,000.0	100.00				Average	
		point32	32	15,000.0	10,000.0	100.00					
I-5 NB-S of Via de la Valle	105.0	point17	17	15,080.0	-5,000.0	100.00				Average	
		point24	24	15,080.0	100.0	100.00					
Via de la Valle E of I-5	100.0	point19	19	15,100.0	100.0	100.00				Average	
		point20	20	18,000.0	100.0	100.00					
E. Solana Circle	35.0	point21	21	5,000.0	5,000.0	100.00				Average	
		point22	22	5,000.0	110.0	100.00					
I-5 NB--Lomas Santa Fe Dr to VDLV	105.0	point25	25	15,080.0	100.0	100.00				Average	
		point31	31	15,080.0	10,000.0	100.00					
I-5 SB-S of Via de la Valle	105.0	point26	26	15,000.0	100.0	100.00				Average	

		point16	16	15,000.0	-5,000.0	100.00					
Jimmy Durante Blvd.	60.0	point27	27	10,000.0	90.0	100.00				Average	
		point28	28	10,000.0	-5,000.0	100.00					
Lomas Santa Fe Dr - Stvns Dr to I-5	80.0	point29	29	15,000.0	10,000.0	100.00				Average	
		point33	33	10,000.0	10,000.0	100.00					
I-5 SB-Lomas Santa Fe Dr to VDLV	105.0	point34	34	15,000.0	10,000.0	100.00				Average	
		point23	23	15,000.0	100.0	100.00					
I-5 NB-N of Lomas Santa Fe Dr	105.0	point35	35	15,080.0	10,000.0	100.00				Average	
		point18	18	15,080.0	15,000.0	100.00					
Camino del Mar- N of Lomas Santa Fe	40.0	point37	37	1,000.0	10,000.0	100.00				Average	
		point12	12	1,000.0	15,000.0	100.00					
LmsSntaFeDr-SNardoAve toStevens	80.0	point38	38	10,000.0	10,000.0	100.00				Average	
		point45	45	5,050.0	10,000.0	100.00					
S Nardo Ave S of Lomas Santa Fe	40.0	point43	43	5,050.0	5,010.0	100.00				Average	
		point44	44	5,050.0	9,950.0	100.00					
LmsSntaFeDr-CmnodelMartoSNardoAv	80.0	point46	46	5,050.0	10,000.0	100.00				Average	
		point30	30	1,050.0	10,000.0	100.00					
S. Nardo Ave-e of Solana Circle	40.0	point49	49	7,520.0	5,000.0	100.00				Average	
		point4	4	5,050.0	5,000.0	100.00					

Dudek 4 December 2
MG TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Percentages
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Ex w Prj

Roadway	Points												
Name	Name	No.	Segment										
			Total	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			Volume	P	S	P	S	P	S	P	S	P	S
			veh/hr	%	mph	%	mph	%	mph	%	mph	%	mph
Stevens/ValleyAve - S of Nardo Ave	point1	1	942	97	40	2	40	1	40	0	0	0	0
	point5	5											
S. Nardo Ave-w of Stevens Ave	point3	3	396	97	25	2	25	1	25	0	0	0	0
	point47	47											
Stevens Avenue - N of Nardo Ave	point6	6	918	97	40	2	40	1	40	0	0	0	0
	point2	2											
Via de la Valle- E of Stevens/Valley Ave	point7	7	0	0	0	0	0	0	0	0	0	0	0
	point9	9											
Via de la Valle- w of Stevens/Valley Ave	point10	10	1217	97	45	2	45	1	45	0	0	0	0
	point8	8											
Camino del Mar - S of Via de la Valle	point11	11	0	0	0	0	0	0	0	0	0	0	0
	point13	13											
Camino del Mar- Lomas Santa Fe Dr to	point14	14	0	0	0	0	0	0	0	0	0	0	0
	point36	36											
I-5 SB-N of Lomas Santa Fe Dr	point15	15	0	0	0	0	0	0	0	0	0	0	0
	point32	32											
I-5 NB-S of Via de la Valle	point17	17	0	0	0	0	0	0	0	0	0	0	0
	point24	24											
Via de la Valle E of I-5	point19	19	0	0	0	0	0	0	0	0	0	0	0
	point20	20											
E. Solana Circle	point21	21	70	97	25	2	25	1	25	0	0	0	0
	point22	22											
I-5 NB--Lomas Santa Fe Dr to VDLV	point25	25	0	0	0	0	0	0	0	0	0	0	0

	point31	31											
I-5 SB-S of Via de la Valle	point26	26	0	0	0	0	0	0	0	0	0	0	0
	point16	16											
Jimmy Durante Blvd.	point27	27	0	0	0	0	0	0	0	0	0	0	0
	point28	28											
Lomas Santa Fe Dr - Stvns Dr to I-5	point29	29	2138	97	35	2	35	1	35	0	0	0	0
	point33	33											
I-5 SB-Lomas Santa Fe Dr to VDLV	point34	34	0	0	0	0	0	0	0	0	0	0	0
	point23	23											
I-5 NB-N of Lomas Santa Fe Dr	point35	35	0	0	0	0	0	0	0	0	0	0	0
	point18	18											
Camino del Mar- N of Lomas Santa Fe	point37	37	0	0	0	0	0	0	0	0	0	0	0
	point12	12											
LmsSntaFeDr-SNardoAve toStevens	point38	38	1706	97	35	2	35	1	35	0	0	0	0
	point45	45											
S Nardo Ave S of Lomas Santa Fe	point43	43	169	97	25	2	25	1	25	0	0	0	0
	point44	44											
LmsSntaFeDr-CmnodelMartoSNardoAv	point46	46	1255	97	35	2	35	1	35	0	0	0	0
	point30	30											
S. Nardo Ave-e of Solana Circle	point49	49	266	97	25	2	25	1	25	0	0	0	0
	point4	4											

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MG TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Ex w Prj

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1 - Resi s of Project	1	1	9,450.0	4,350.0	100.00	5.00	0.00	66	10.0	8.0	Y
M2 On Site	3	1	9,850.0	4,900.0	100.00	5.00	0.00	66	10.0	8.0	Y
M3 SF Resi N of Project	5	1	6,500.0	5,055.0	100.00	5.00	0.00	66	10.0	8.0	Y
M4 St James Catholic Church	7	1	5,385.0	4,965.0	100.00	5.00	0.00	66	10.0	8.0	Y
M5 - St James Academy Schoolyard	10	1	5,650.0	4,750.0	100.00	5.00	0.00	66	10.0	8.0	Y
R1 - Stevens Ave	12	1	9,930.0	7,500.0	100.00	5.00	0.00	66	10.0	8.0	Y
R2 - MF Resi N of Project	14	1	9,500.0	5,050.0	100.00	5.00	0.00	66	10.0	8.0	Y
R3 - Resi on S Nardo Ave s of Lomas	15	1	4,995.0	8,000.0	100.00	5.00	0.00	66	10.0	8.0	Y
R4 - Resi on LSF w of S Nardo Ave	17	1	4,500.0	10,075.0	100.00	5.00	0.00	66	10.0	8.0	Y
R5 - Resi on LSF e of Stevens Ave	19	1	11,250.0	10,100.0	100.00	5.00	0.00	66	10.0	8.0	Y
R6 - Resi on VDLV w of Solana Cir	20	1	4,900.0	200.0	100.00	5.00	0.00	66	10.0	8.0	Y
R7 - Resi on StevensAv n of VDLV	22	1	9,900.0	2,600.0	100.00	5.00	0.00	66	10.0	8.0	Y
R8 - Resi on E Solana Cir	24	1	4,950.0	3,200.0	100.00	5.00	0.00	66	10.0	8.0	Y

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4 December 2017
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Ex w Prj
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1 - Resi s of Project	1	1	0.0	48.6	66	48.6	10	----	48.6	0.0	8	-8.0
M2 On Site	3	1	0.0	60.9	66	60.9	10	----	60.9	0.0	8	-8.0
M3 SF Resi N of Project	5	1	0.0	54.9	66	54.9	10	----	54.9	0.0	8	-8.0
M4 St James Catholic Church	7	1	0.0	57.1	66	57.1	10	----	57.1	0.0	8	-8.0
M5 - St James Academy Schoolyard	10	1	0.0	45.1	66	45.1	10	----	45.1	0.0	8	-8.0
R1 - Stevens Ave	12	1	0.0	64.0	66	64.0	10	----	64.0	0.0	8	-8.0
R2 - MF Resi N of Project	14	1	0.0	57.7	66	57.7	10	----	57.7	0.0	8	-8.0
R3 - Resi on S Nardo Ave s of Lomas	15	1	0.0	53.0	66	53.0	10	----	53.0	0.0	8	-8.0
R4 - Resi on LSF w of S Nardo Ave	17	1	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0
R5 - Resi on LSF e of Stevens Ave	19	1	0.0	64.3	66	64.3	10	----	64.3	0.0	8	-8.0
R6 - Resi on VDLV w of Solana Cir	20	1	0.0	64.9	66	64.9	10	----	64.9	0.0	8	-8.0
R7 - Resi on StevensAv n of VDLV	22	1	0.0	62.3	66	62.3	10	----	62.3	0.0	8	-8.0
R8 - Resi on E Solana Cir	24	1	0.0	49.7	66	49.7	10	----	49.7	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	13	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

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MG TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Future

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Stevens/ValleyAve - S of Nardo Ave	70.0	point1	1	10,000.0	110.0	100.00				Average	
		point5	5	10,000.0	5,050.0	100.00					
S. Nardo Ave-w of Stevens Ave	40.0	point3	3	9,990.0	5,000.0	100.00				Average	
		point47	47	7,520.0	5,000.0	100.00					
Stevens Avenue - N of Nardo Ave	70.0	point6	6	10,000.0	5,050.0	100.00				Average	
		point2	2	10,000.0	9,950.0	100.00					
Via de la Valle- E of Stevens/Valley Ave	60.0	point7	7	14,950.0	100.0	100.00				Average	
		point9	9	10,000.0	100.0	100.00					
Via de la Valle- w of Stevens/Valley Ave	60.0	point10	10	10,000.0	100.0	100.00				Average	
		point8	8	1,000.0	100.0	100.00					
Camino del Mar - S of Via de la Valle	40.0	point11	11	1,000.0	-5,000.0	100.00				Average	
		point13	13	1,000.0	100.0	100.00					
Camino del Mar- Lomas Santa Fe Dr to	40.0	point14	14	1,000.0	100.0	100.00				Average	
		point36	36	1,000.0	10,000.0	100.00					
I-5 SB-N of Lomas Santa Fe Dr	105.0	point15	15	15,000.0	15,000.0	100.00				Average	
		point32	32	15,000.0	10,000.0	100.00					
I-5 NB-S of Via de la Valle	105.0	point17	17	15,080.0	-5,000.0	100.00				Average	
		point24	24	15,080.0	100.0	100.00					
Via de la Valle E of I-5	100.0	point19	19	15,100.0	100.0	100.00				Average	
		point20	20	18,000.0	100.0	100.00					
E. Solana Circle	35.0	point21	21	5,000.0	5,000.0	100.00				Average	
		point22	22	5,000.0	110.0	100.00					
I-5 NB--Lomas Santa Fe Dr to VDLV	105.0	point25	25	15,080.0	100.0	100.00				Average	
		point31	31	15,080.0	10,000.0	100.00					
I-5 SB-S of Via de la Valle	105.0	point26	26	15,000.0	100.0	100.00				Average	

		point16	16	15,000.0	-5,000.0	100.00					
Jimmy Durante Blvd.	60.0	point27	27	10,000.0	90.0	100.00				Average	
		point28	28	10,000.0	-5,000.0	100.00					
Lomas Santa Fe Dr - Stvns Dr to I-5	80.0	point29	29	15,000.0	10,000.0	100.00				Average	
		point33	33	10,000.0	10,000.0	100.00					
I-5 SB-Lomas Santa Fe Dr to VDLV	105.0	point34	34	15,000.0	10,000.0	100.00				Average	
		point23	23	15,000.0	100.0	100.00					
I-5 NB-N of Lomas Santa Fe Dr	105.0	point35	35	15,080.0	10,000.0	100.00				Average	
		point18	18	15,080.0	15,000.0	100.00					
Camino del Mar- N of Lomas Santa Fe	40.0	point37	37	1,000.0	10,000.0	100.00				Average	
		point12	12	1,000.0	15,000.0	100.00					
LmsSntaFeDr-SNardoAve toStevens	80.0	point38	38	10,000.0	10,000.0	100.00				Average	
		point45	45	5,050.0	10,000.0	100.00					
S Nardo Ave S of Lomas Santa Fe	40.0	point43	43	5,050.0	5,010.0	100.00				Average	
		point44	44	5,050.0	9,950.0	100.00					
LmsSntaFeDr-CmnodelMartoSNardoAv	80.0	point46	46	5,050.0	10,000.0	100.00				Average	
		point30	30	1,050.0	10,000.0	100.00					
S. Nardo Ave-e of Solana Circle	40.0	point49	49	7,520.0	5,000.0	100.00				Average	
		point4	4	5,050.0	5,000.0	100.00					

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MG TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Percentages
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Future

Roadway	Points												
Name	Name	No.	Segment										
			Total	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			Volume	P	S	P	S	P	S	P	S	P	S
			veh/hr	%	mph	%	mph	%	mph	%	mph	%	mph
Stevens/ValleyAve - S of Nardo Ave	point1	1	1039	97	40	2	40	1	40	0	0	0	0
	point5	5											
S. Nardo Ave-w of Stevens Ave	point3	3	399	97	25	2	25	1	25	0	0	0	0
	point47	47											
Stevens Avenue - N of Nardo Ave	point6	6	1090	97	40	2	40	1	40	0	0	0	0
	point2	2											
Via de la Valle- E of Stevens/Valley Ave	point7	7	0	0	0	0	0	0	0	0	0	0	0
	point9	9											
Via de la Valle- w of Stevens/Valley Ave	point10	10	1403	97	45	2	45	1	45	0	0	0	0
	point8	8											
Camino del Mar - S of Via de la Valle	point11	11	0	0	0	0	0	0	0	0	0	0	0
	point13	13											
Camino del Mar- Lomas Santa Fe Dr to	point14	14	0	0	0	0	0	0	0	0	0	0	0
	point36	36											
I-5 SB-N of Lomas Santa Fe Dr	point15	15	0	0	0	0	0	0	0	0	0	0	0
	point32	32											
I-5 NB-S of Via de la Valle	point17	17	0	0	0	0	0	0	0	0	0	0	0
	point24	24											
Via de la Valle E of I-5	point19	19	0	0	0	0	0	0	0	0	0	0	0
	point20	20											
E. Solana Circle	point21	21	71	97	25	2	25	1	25	0	0	0	0
	point22	22											
I-5 NB--Lomas Santa Fe Dr to VDLV	point25	25	0	0	0	0	0	0	0	0	0	0	0

	point31	31											
I-5 SB-S of Via de la Valle	point26	26	0	0	0	0	0	0	0	0	0	0	0
	point16	16											
Jimmy Durante Blvd.	point27	27	0	0	0	0	0	0	0	0	0	0	0
	point28	28											
Lomas Santa Fe Dr - Stvns Dr to I-5	point29	29	2417	97	35	2	35	1	35	0	0	0	0
	point33	33											
I-5 SB-Lomas Santa Fe Dr to VDLV	point34	34	0	0	0	0	0	0	0	0	0	0	0
	point23	23											
I-5 NB-N of Lomas Santa Fe Dr	point35	35	0	0	0	0	0	0	0	0	0	0	0
	point18	18											
Camino del Mar- N of Lomas Santa Fe	point37	37	0	0	0	0	0	0	0	0	0	0	0
	point12	12											
LmsSntaFeDr-SNardoAve toStevens	point38	38	1894	97	35	2	35	1	35	0	0	0	0
	point45	45											
S Nardo Ave S of Lomas Santa Fe	point43	43	283	97	25	2	25	1	25	0	0	0	0
	point44	44											
LmsSntaFeDr-CmnodelMartoSNardoAv	point46	46	1470	97	35	2	35	1	35	0	0	0	0
	point30	30											
S. Nardo Ave-e of Solana Circle	point49	49	272	97	25	2	25	1	25	0	0	0	0
	point4	4											

Dudek 4 December 2017
MG TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Future

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1 - Resi s of Project	1	1	9,450.0	4,350.0	100.00	5.00	0.00	66	10.0	8.0	Y
M2 On Site	3	1	9,850.0	4,900.0	100.00	5.00	0.00	66	10.0	8.0	Y
M3 SF Resi N of Project	5	1	6,500.0	5,055.0	100.00	5.00	0.00	66	10.0	8.0	Y
M4 St James Catholic Church	7	1	5,385.0	4,965.0	100.00	5.00	0.00	66	10.0	8.0	Y
M5 - St James Academy Schoolyard	10	1	5,650.0	4,750.0	100.00	5.00	0.00	66	10.0	8.0	Y
R1 - Stevens Ave	12	1	9,930.0	7,500.0	100.00	5.00	0.00	66	10.0	8.0	Y
R2 - MF Resi N of Project	14	1	9,500.0	5,050.0	100.00	5.00	0.00	66	10.0	8.0	Y
R3 - Resi on S Nardo Ave s of Lomas	15	1	4,995.0	8,000.0	100.00	5.00	0.00	66	10.0	8.0	Y
R4 - Resi on LSF w of S Nardo Ave	17	1	4,500.0	10,075.0	100.00	5.00	0.00	66	10.0	8.0	Y
R5 - Resi on LSF e of Stevens Ave	19	1	11,250.0	10,100.0	100.00	5.00	0.00	66	10.0	8.0	Y
R6 - Resi on VDLV w of Solana Cir	20	1	4,900.0	200.0	100.00	5.00	0.00	66	10.0	8.0	Y
R7 - Resi on StevensAv n of VDLV	22	1	9,900.0	2,600.0	100.00	5.00	0.00	66	10.0	8.0	Y
R8 - Resi on E Solana Cir	24	1	4,950.0	3,200.0	100.00	5.00	0.00	66	10.0	8.0	Y

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4 December 2017
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Future
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1 - Resi s of Project	1	1	0.0	49.0	66	49.0	10	----	49.0	0.0	8	-8.0
M2 On Site	3	1	0.0	61.3	66	61.3	10	----	61.3	0.0	8	-8.0
M3 SF Resi N of Project	5	1	0.0	55.0	66	55.0	10	----	55.0	0.0	8	-8.0
M4 St James Catholic Church	7	1	0.0	57.2	66	57.2	10	----	57.2	0.0	8	-8.0
M5 - St James Academy Schoolyard	10	1	0.0	45.3	66	45.3	10	----	45.3	0.0	8	-8.0
R1 - Stevens Ave	12	1	0.0	64.8	66	64.8	10	----	64.8	0.0	8	-8.0
R2 - MF Resi N of Project	14	1	0.0	57.8	66	57.8	10	----	57.8	0.0	8	-8.0
R3 - Resi on S Nardo Ave s of Lomas	15	1	0.0	55.2	66	55.2	10	----	55.2	0.0	8	-8.0
R4 - Resi on LSF w of S Nardo Ave	17	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
R5 - Resi on LSF e of Stevens Ave	19	1	0.0	64.8	66	64.8	10	----	64.8	0.0	8	-8.0
R6 - Resi on VDLV w of Solana Cir	20	1	0.0	65.5	66	65.5	10	----	65.5	0.0	8	-8.0
R7 - Resi on StevensAv n of VDLV	22	1	0.0	62.7	66	62.7	10	----	62.7	0.0	8	-8.0
R8 - Resi on E Solana Cir	24	1	0.0	49.8	66	49.8	10	----	49.8	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	13	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek 4 December 2017
MG TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Fut w Prj

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Stevens/ValleyAve - S of Nardo Ave	70.0	point1	1	10,000.0	110.0	100.00				Average	
		point5	5	10,000.0	5,050.0	100.00					
S. Nardo Ave-w of Stevens Ave	40.0	point3	3	9,990.0	5,000.0	100.00				Average	
		point47	47	7,520.0	5,000.0	100.00					
Stevens Avenue - N of Nardo Ave	70.0	point6	6	10,000.0	5,050.0	100.00				Average	
		point2	2	10,000.0	9,950.0	100.00					
Via de la Valle- E of Stevens/Valley Ave	60.0	point7	7	14,950.0	100.0	100.00				Average	
		point9	9	10,000.0	100.0	100.00					
Via de la Valle- w of Stevens/Valley Ave	60.0	point10	10	10,000.0	100.0	100.00				Average	
		point8	8	1,000.0	100.0	100.00					
Camino del Mar - S of Via de la Valle	40.0	point11	11	1,000.0	-5,000.0	100.00				Average	
		point13	13	1,000.0	100.0	100.00					
Camino del Mar- Lomas Santa Fe Dr to	40.0	point14	14	1,000.0	100.0	100.00				Average	
		point36	36	1,000.0	10,000.0	100.00					
I-5 SB-N of Lomas Santa Fe Dr	105.0	point15	15	15,000.0	15,000.0	100.00				Average	
		point32	32	15,000.0	10,000.0	100.00					
I-5 NB-S of Via de la Valle	105.0	point17	17	15,080.0	-5,000.0	100.00				Average	
		point24	24	15,080.0	100.0	100.00					
Via de la Valle E of I-5	100.0	point19	19	15,100.0	100.0	100.00				Average	
		point20	20	18,000.0	100.0	100.00					
E. Solana Circle	35.0	point21	21	5,000.0	5,000.0	100.00				Average	
		point22	22	5,000.0	110.0	100.00					
I-5 NB--Lomas Santa Fe Dr to VDLV	105.0	point25	25	15,080.0	100.0	100.00				Average	
		point31	31	15,080.0	10,000.0	100.00					
I-5 SB-S of Via de la Valle	105.0	point26	26	15,000.0	100.0	100.00				Average	

		point16	16	15,000.0	-5,000.0	100.00					
Jimmy Durante Blvd.	60.0	point27	27	10,000.0	90.0	100.00				Average	
		point28	28	10,000.0	-5,000.0	100.00					
Lomas Santa Fe Dr - Stvns Dr to I-5	80.0	point29	29	15,000.0	10,000.0	100.00				Average	
		point33	33	10,000.0	10,000.0	100.00					
I-5 SB-Lomas Santa Fe Dr to VDLV	105.0	point34	34	15,000.0	10,000.0	100.00				Average	
		point23	23	15,000.0	100.0	100.00					
I-5 NB-N of Lomas Santa Fe Dr	105.0	point35	35	15,080.0	10,000.0	100.00				Average	
		point18	18	15,080.0	15,000.0	100.00					
Camino del Mar- N of Lomas Santa Fe	40.0	point37	37	1,000.0	10,000.0	100.00				Average	
		point12	12	1,000.0	15,000.0	100.00					
LmsSntaFeDr-SNardoAve toStevens	80.0	point38	38	10,000.0	10,000.0	100.00				Average	
		point45	45	5,050.0	10,000.0	100.00					
S Nardo Ave S of Lomas Santa Fe	40.0	point43	43	5,050.0	5,010.0	100.00				Average	
		point44	44	5,050.0	9,950.0	100.00					
LmsSntaFeDr-CmnodelMartoSNardoAv	80.0	point46	46	5,050.0	10,000.0	100.00				Average	
		point30	30	1,050.0	10,000.0	100.00					
S. Nardo Ave-e of Solana Circle	40.0	point49	49	7,520.0	5,000.0	100.00				Average	
		point4	4	5,050.0	5,000.0	100.00					

Dudek 4 December 2
MG TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Percentages
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Fut w Prj

Roadway	Points												
Name	Name	No.	Segment										
			Total	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			Volume	P	S	P	S	P	S	P	S	P	S
			veh/hr	%	mph	%	mph	%	mph	%	mph	%	mph
Stevens/ValleyAve - S of Nardo Ave	point1	1	1060	97	40	2	40	1	40	0	0	0	0
	point5	5											
S. Nardo Ave-w of Stevens Ave	point3	3	432	97	25	2	25	1	25	0	0	0	0
	point47	47											
Stevens Avenue - N of Nardo Ave	point6	6	1102	97	40	2	40	1	40	0	0	0	0
	point2	2											
Via de la Valle- E of Stevens/Valley Ave	point7	7	0	0	0	0	0	0	0	0	0	0	0
	point9	9											
Via de la Valle- w of Stevens/Valley Ave	point10	10	1615	97	45	2	45	1	45	0	0	0	0
	point8	8											
Camino del Mar - S of Via de la Valle	point11	11	0	0	0	0	0	0	0	0	0	0	0
	point13	13											
Camino del Mar- Lomas Santa Fe Dr to	point14	14	0	0	0	0	0	0	0	0	0	0	0
	point36	36											
I-5 SB-N of Lomas Santa Fe Dr	point15	15	0	0	0	0	0	0	0	0	0	0	0
	point32	32											
I-5 NB-S of Via de la Valle	point17	17	0	0	0	0	0	0	0	0	0	0	0
	point24	24											
Via de la Valle E of I-5	point19	19	0	0	0	0	0	0	0	0	0	0	0
	point20	20											
E. Solana Circle	point21	21	77	97	25	2	25	1	25	0	0	0	0
	point22	22											
I-5 NB--Lomas Santa Fe Dr to VDLV	point25	25	0	0	0	0	0	0	0	0	0	0	0

	point31	31											
I-5 SB-S of Via de la Valle	point26	26	0	0	0	0	0	0	0	0	0	0	0
	point16	16											
Jimmy Durante Blvd.	point27	27	0	0	0	0	0	0	0	0	0	0	0
	point28	28											
Lomas Santa Fe Dr - Stvns Dr to I-5	point29	29	2429	97	35	2	35	1	35	0	0	0	0
	point33	33											
I-5 SB-Lomas Santa Fe Dr to VDLV	point34	34	0	0	0	0	0	0	0	0	0	0	0
	point23	23											
I-5 NB-N of Lomas Santa Fe Dr	point35	35	0	0	0	0	0	0	0	0	0	0	0
	point18	18											
Camino del Mar- N of Lomas Santa Fe	point37	37	0	0	0	0	0	0	0	0	0	0	0
	point12	12											
LmsSntaFeDr-SNardoAve toStevens	point38	38	1904	97	35	2	35	1	35	0	0	0	0
	point45	45											
S Nardo Ave S of Lomas Santa Fe	point43	43	287	97	25	2	25	1	25	0	0	0	0
	point44	44											
LmsSntaFeDr-CmnodelMartoSNardoAv	point46	46	1474	97	35	2	35	1	35	0	0	0	0
	point30	30											
S. Nardo Ave-e of Solana Circle	point49	49	280	97	25	2	25	1	25	0	0	0	0
	point4	4											

Dudek 4 December 2017
MG TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Fut w Prj

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1 - Resi s of Project	1	1	9,450.0	4,350.0	100.00	5.00	0.00	66	10.0	8.0	Y
M2 On Site	3	1	9,850.0	4,900.0	100.00	5.00	0.00	66	10.0	8.0	Y
M3 SF Resi N of Project	5	1	6,500.0	5,055.0	100.00	5.00	0.00	66	10.0	8.0	Y
M4 St James Catholic Church	7	1	5,385.0	4,965.0	100.00	5.00	0.00	66	10.0	8.0	Y
M5 - St James Academy Schoolyard	10	1	5,650.0	4,750.0	100.00	5.00	0.00	66	10.0	8.0	Y
R1 - Stevens Ave	12	1	9,930.0	7,500.0	100.00	5.00	0.00	66	10.0	8.0	Y
R2 - MF Resi N of Project	14	1	9,500.0	5,050.0	100.00	5.00	0.00	66	10.0	8.0	Y
R3 - Resi on S Nardo Ave s of Lomas	15	1	4,995.0	8,000.0	100.00	5.00	0.00	66	10.0	8.0	Y
R4 - Resi on LSF w of S Nardo Ave	17	1	4,500.0	10,075.0	100.00	5.00	0.00	66	10.0	8.0	Y
R5 - Resi on LSF e of Stevens Ave	19	1	11,250.0	10,100.0	100.00	5.00	0.00	66	10.0	8.0	Y
R6 - Resi on VDLV w of Solana Cir	20	1	4,900.0	200.0	100.00	5.00	0.00	66	10.0	8.0	Y
R7 - Resi on StevensAv n of VDLV	22	1	9,900.0	2,600.0	100.00	5.00	0.00	66	10.0	8.0	Y
R8 - Resi on E Solana Cir	24	1	4,950.0	3,200.0	100.00	5.00	0.00	66	10.0	8.0	Y

Dudek
MG

4 December 2017
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 8607
RUN: Solana Highlands Resi Project Fut w Prj
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1 - Resi s of Project	1	1	0.0	49.1	66	49.1	10	----	49.1	0.0	8	-8.0
M2 On Site	3	1	0.0	61.4	66	61.4	10	----	61.4	0.0	8	-8.0
M3 SF Resi N of Project	5	1	0.0	55.1	66	55.1	10	----	55.1	0.0	8	-8.0
M4 St James Catholic Church	7	1	0.0	57.4	66	57.4	10	----	57.4	0.0	8	-8.0
M5 - St James Academy Schoolyard	10	1	0.0	45.5	66	45.5	10	----	45.5	0.0	8	-8.0
R1 - Stevens Ave	12	1	0.0	64.8	66	64.8	10	----	64.8	0.0	8	-8.0
R2 - MF Resi N of Project	14	1	0.0	58.1	66	58.1	10	----	58.1	0.0	8	-8.0
R3 - Resi on S Nardo Ave s of Lomas	15	1	0.0	55.3	66	55.3	10	----	55.3	0.0	8	-8.0
R4 - Resi on LSF w of S Nardo Ave	17	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
R5 - Resi on LSF e of Stevens Ave	19	1	0.0	64.9	66	64.9	10	----	64.9	0.0	8	-8.0
R6 - Resi on VDLV w of Solana Cir	20	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
R7 - Resi on StevensAv n of VDLV	22	1	0.0	62.8	66	62.8	10	----	62.8	0.0	8	-8.0
R8 - Resi on E Solana Cir	24	1	0.0	50.1	66	50.1	10	----	50.1	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	13	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek **4 December 2017**
MG **TNM 2.5**

INPUT: ROADWAYS
PROJECT/CONTRACT: **8607**
RUN: **Solana HghInds Resi Fut w Prj On-Site**

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Stevens/ValleyAve - S of Nardo Ave	70.0	point1	1	10,000.0	110.0	100.00				Average	
		point5	5	10,000.0	5,050.0	100.00					
S. Nardo Ave-w of Stevens Ave	40.0	point3	3	9,990.0	5,051.0	100.00				Average	
		point50	50	9,500.0	6,200.0	100.00				Average	
		point47	47	7,000.0	6,200.0	100.00					
Stevens Avenue - N of Nardo Ave	70.0	point6	6	10,000.0	5,050.0	100.00				Average	
		point2	2	10,000.0	9,950.0	100.00					

Dudek 4 December 2
MG TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Percentages
PROJECT/CONTRACT: 8607
RUN: Solana HghInds Resi Fut w Prj On-Site

Roadway	Points												
Name	Name	No.	Segment										
			Total	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			Volume	P	S	P	S	P	S	P	S	P	S
			veh/hr	%	mph	%	mph	%	mph	%	mph	%	mph
Stevens/ValleyAve - S of Nardo Ave	point1	1	1060	97	40	2	40	1	40	0	0	0	0
	point5	5											
S. Nardo Ave-w of Stevens Ave	point3	3	432	97	25	2	25	1	25	0	0	0	0
	point50	50	432	97	25	2	25	1	25	0	0	0	0
	point47	47											
Stevens Avenue - N of Nardo Ave	point6	6	1102	97	40	2	40	1	40	0	0	0	0
	point2	2											

Dudek 4 December 2017
MG TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: 8607
RUN: Solana HghInds Resi Fut w Prj On-Site

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
R1 Bldg 1 1st Flr Facade	26	1	7,500.0	6,120.0	100.00	5.00	0.00	66	10.0	8.0	Y
R2 Bldg 1 2nd Flr Facade	27	1	7,505.0	6,120.0	100.00	15.00	0.00	66	10.0	8.0	Y
R3 Bldg 1 3rd Flr Facade	28	1	7,510.0	6,120.0	100.00	20.00	0.00	66	10.0	8.0	Y
R4 Bldg 1 1st Flr Patio	29	1	7,510.0	6,127.0	100.00	5.00	0.00	66	10.0	8.0	Y
R5 Bldg 1 2nd Floor Balcony	30	1	7,515.0	6,127.0	100.00	15.00	0.00	66	10.0	8.0	Y
R6 Bldg 1 3rd Floor Balcony	31	1	7,520.0	6,127.0	100.00	20.00	0.00	66	10.0	8.0	Y
R7 Park S Nardo Ave	32	1	7,600.0	6,116.0	100.00	5.00	0.00	66	10.0	8.0	Y
R8 Bldg 4 1st Floor Facade	33	1	7,800.0	6,120.0	100.00	5.00	0.00	66	10.0	8.0	Y
R9 Bldg 4 2nd Floor Facade	34	1	7,805.0	6,120.0	100.00	15.00	0.00	66	10.0	8.0	Y
R10 Bldg 4 3rd Floor Facade	35	1	7,810.0	6,120.0	100.00	20.00	0.00	66	10.0	8.0	Y
R11 Bldg 4 1st Flr Patio	36	1	7,810.0	6,113.0	100.00	5.00	0.00	66	10.0	8.0	Y
R12 Bldg 4 2nd Flr Balcony	37	1	7,805.0	6,113.0	100.00	15.00	0.00	66	10.0	8.0	Y
R13 Bldg 4 3rd Flr Balcony	38	1	7,810.0	6,113.0	100.00	20.00	0.00	66	10.0	8.0	Y
R14 Outdoor Dining Area 2 S Nardo Ave	39	1	8,200.0	6,120.0	100.00	5.00	0.00	66	10.0	8.0	Y
R15 Bldg 8 1st Floor Facade&Patio	40	1	9,718.0	5,497.0	100.00	5.00	0.00	66	10.0	8.0	Y
R16 Bldg 8 2nd Floor Facade&Balcony	41	1	9,719.0	5,493.0	100.00	15.00	0.00	66	10.0	8.0	Y
R17 Bldg 8 3rd Floor Facade&Balcony	44	1	9,720.0	5,490.0	100.00	20.00	0.00	66	10.0	8.0	Y
R18 Outdoor Lobby/Lounge	45	1	9,772.0	5,282.0	100.00	5.00	0.00	66	10.0	8.0	Y
R19 Pool / Rec Area	46	1	9,800.0	5,137.0	100.00	5.00	0.00	66	10.0	8.0	Y
R20 Bldg 22 1st Floor Facade&Patio	47	1	9,760.0	5,013.0	100.00	5.00	0.00	66	10.0	8.0	Y
R21 Bldg 22 2nd Floor Facade&Balcony	48	1	9,761.0	5,009.0	100.00	15.00	0.00	66	10.0	8.0	Y
R22 Bldg 22 3rd Floor Facade&Balcony	49	1	9,760.0	5,005.0	100.00	20.00	0.00	66	10.0	8.0	Y

Dudek
MG

4 December 2017
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 8607
RUN: Solana Hghlnds Resi Fut w Prj On-Site
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
R1 Bldg 1 1st Flr Facade	26	1	0.0	55.1	66	55.1	10	----	55.1	0.0	8	-8.0
R2 Bldg 1 2nd Flr Facade	27	1	0.0	55.4	66	55.4	10	----	55.4	0.0	8	-8.0
R3 Bldg 1 3rd Flr Facade	28	1	0.0	55.3	66	55.3	10	----	55.3	0.0	8	-8.0
R4 Bldg 1 1st Flr Patio	29	1	0.0	55.6	66	55.6	10	----	55.6	0.0	8	-8.0
R5 Bldg 1 2nd Floor Balcony	30	1	0.0	55.8	66	55.8	10	----	55.8	0.0	8	-8.0
R6 Bldg 1 3rd Floor Balcony	31	1	0.0	55.7	66	55.7	10	----	55.7	0.0	8	-8.0
R7 Park S Nardo Ave	32	1	0.0	54.9	66	54.9	10	----	54.9	0.0	8	-8.0
R8 Bldg 4 1st Floor Facade	33	1	0.0	55.2	66	55.2	10	----	55.2	0.0	8	-8.0
R9 Bldg 4 2nd Floor Facade	34	1	0.0	55.5	66	55.5	10	----	55.5	0.0	8	-8.0
R10 Bldg 4 3rd Floor Facade	35	1	0.0	55.4	66	55.4	10	----	55.4	0.0	8	-8.0
R11 Bldg 4 1st Flr Patio	36	1	0.0	54.8	66	54.8	10	----	54.8	0.0	8	-8.0
R12 Bldg 4 2nd Flr Balcony	37	1	0.0	55.0	66	55.0	10	----	55.0	0.0	8	-8.0
R13 Bldg 4 3rd Flr Balcony	38	1	0.0	55.1	66	55.1	10	----	55.1	0.0	8	-8.0
R14 Outdoor Dining Area 2 S Nardo Ave	39	1	0.0	55.2	66	55.2	10	----	55.2	0.0	8	-8.0
R15 Bldg 8 1st Floor Facade&Patio	40	1	0.0	59.4	66	59.4	10	----	59.4	0.0	8	-8.0
R16 Bldg 8 2nd Floor Facade&Balcony	41	1	0.0	59.7	66	59.7	10	----	59.7	0.0	8	-8.0
R17 Bldg 8 3rd Floor Facade&Balcony	44	1	0.0	59.7	66	59.7	10	----	59.7	0.0	8	-8.0
R18 Outdoor Lobby/Lounge	45	1	0.0	59.6	66	59.6	10	----	59.6	0.0	8	-8.0
R19 Pool / Rec Area	46	1	0.0	59.9	66	59.9	10	----	59.9	0.0	8	-8.0
R20 Bldg 22 1st Floor Facade&Patio	47	1	0.0	58.3	66	58.3	10	----	58.3	0.0	8	-8.0
R21 Bldg 22 2nd Floor Facade&Balcony	48	1	0.0	58.8	66	58.8	10	----	58.8	0.0	8	-8.0
R22 Bldg 22 3rd Floor Facade&Balcony	49	1	0.0	58.8	66	58.8	10	----	58.8	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction

RESULTS: SOUND LEVELS **8607**

			Min	Avg	Max
			dB	dB	dB
All Selected		22	0.0	0.0	0.0
All Impacted		0	0.0	0.0	0.0
All that meet NR Goal		0	0.0	0.0	0.0

APPENDIX M

Draft Transportation Impact Assessment (TIA)

Solana Highlands Residential Project

Draft TIA

Prepared for:
HG Fenton Company

November, 2016

SD14-0110

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1.0 INTRODUCTION

Consistent with regional traffic impact study guidelines, the purpose of this Transportation Impact Assessment (TIA) is to identify and document the project related transportation impacts associated with the Solana Highlands residential project located in the City of Solana Beach, California.

PROJECT DESCRIPTION

The Solana Highlands project is located west of Stevens Avenue along S. Nardo Avenue. The site currently contains a 194 apartment units. The project proposes to increase the number of units from 194 to 260, to increase the total number of parking spaces and parking ratios and to reduce the total number of project driveways from four to two. Modifications to the site include re-grading to provide for internal auto connections between buildings and improved pedestrian access throughout the site. **Figure 1-1** displays the project's regional location, and **Figure 1-2** shows the project's location within the context of Solana Beach.

STUDY SCENARIOS

Six (6) scenarios were analyzed to determine the proposed project's Near Term (2017) and Horizon Year (2035) impacts, including:

1. **Existing Conditions** – establishes the existing baseline of traffic operations within the project study area.

2. **Existing Plus Project Conditions** – represents the existing traffic conditions plus the addition of traffic generated by the proposed Solana Highlands project.

3. **Near Term (2017) Conditions** – establishes a Near Term (2017) baseline (without the project) against which conditions with the Solana Highlands project can be compared. Near Term (2017) Conditions include traffic from planned projects in Solana Beach, with a timeframe consistent with the proposed opening year for the project.

4. **Near Term (2017) Plus Project Conditions** – represents the Near Term (2017) baseline traffic conditions plus the addition of traffic generated by the proposed Solana Highlands project.

5. **Horizon Year (2035) Conditions** – establishes a Year 2035 Future baseline (without the project) against which conditions with the Solana Highlands project can be compared. Year 2035 Future Conditions include traffic from all existing and planned projects in Solana Beach.

6. **Horizon Year (2035) Plus Project Conditions** – represents the Year 2035 Future baseline traffic conditions plus the addition of traffic generated by the proposed Solana Highlands project.

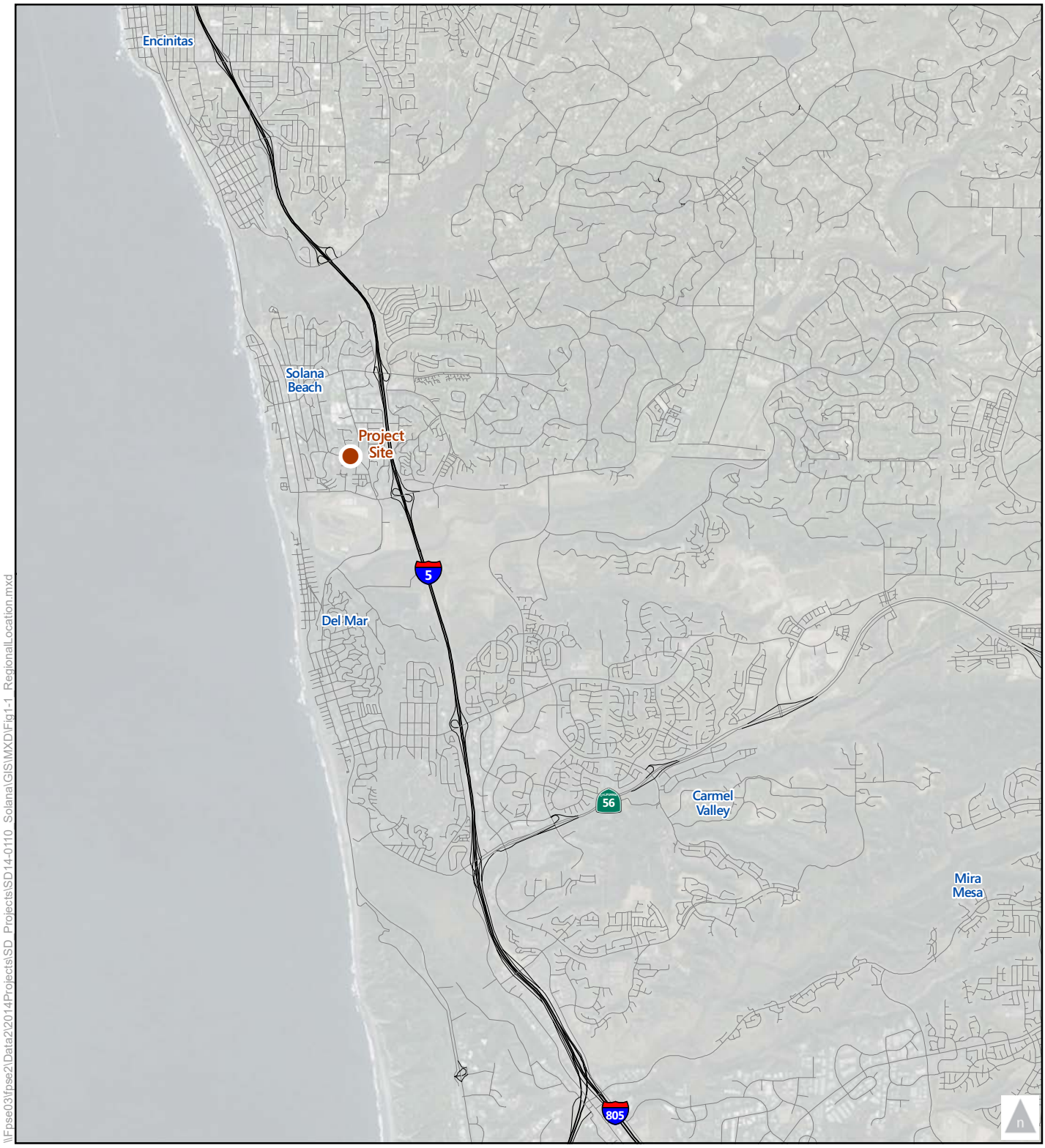

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Figure 1-1

Project Regional Location Map

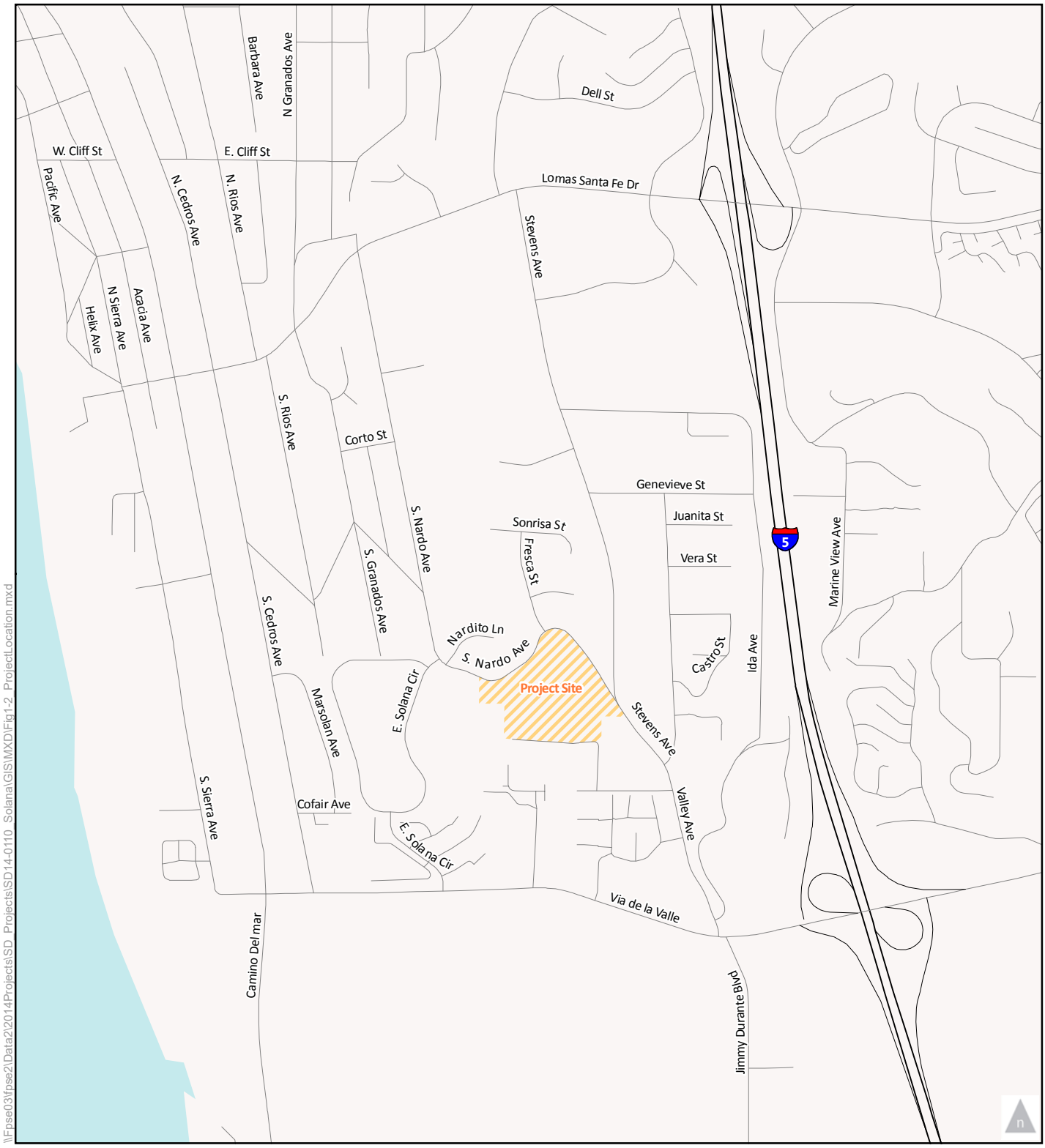

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Figure 1-2

Project Location

REPORT ORGANIZATION

Following this introduction chapter, this report is organized into the following sections:

2.0 Study Methodology – This chapter describes the methodologies and standards utilized to analyze intersection operations.

3.0 Project Description – This chapter describes the proposed project including the estimated traffic generation, assumed trip distribution pattern, and resulting trip assignment.

4.0 Existing Conditions – This chapter describes the traffic operations under existing conditions, as well as for existing conditions plus the addition of the proposed project traffic.

5.0 Near Term (2017) Conditions – This chapter describes anticipated Near Term (2017) traffic conditions assuming all approved development projects, as identified by the City of Solana Beach, as well as Near Term (2017) Conditions plus the addition of the proposed project traffic.

6.0 Horizon Year (2035) Conditions – This chapter describes anticipated Horizon Year (2035) traffic conditions, as well as Horizon Year (2035) Conditions plus the addition of the proposed project traffic.

7.0 Special Conditions – This chapter describes operations of study area roadway segments under special Fair and Race Seasons at the Del Mar Fairgrounds and describes how project traffic is expected to respond.

8.0 Bicycle, Pedestrian, and Transit Impacts – This chapter describes impacts to the bicycle, pedestrian, and transit facilities and on-site project improvements.

9.0 Community Traffic Related Comments – This chapter describes comments received from the community during two community workshops as well as measures taken by the project to address these concerns.

10.0 Project Findings – This chapter summarizes the project impacts and associated mitigation presented by scenario.

11.0 Recommendations and Conclusions – This chapter outlines the overall study findings and any recommended mitigation measures.

2.0 STUDY METHODOLOGY

Detailed information on intersection analysis methodologies, standards, and thresholds are discussed in the following sections.

PEAK HOUR LEVEL OF SERVICE ANALYSIS

The operations of roadway facilities are described with the term level of service (LOS). LOS is a qualitative description of traffic flow based on such factors as speed, travel time, delay, and freedom to maneuver. Six levels are defined from LOS A, with the least congested operating conditions, to LOS F, with the most congested operating conditions. LOS E represents "at-capacity" operations. Operations are designated as LOS F when volumes exceed capacity, resulting in stop-and-go conditions. The methodology for signalized and unsignalized intersections is described below.

SIGNALIZED INTERSECTION ANALYSIS

The signalized intersection analysis conforms to the operational analysis methodology outlined in Chapter 16 of the *2000 Highway Capacity Manual (HCM 2000), Transportation Research Board Special Report 209*. The *HCM* 2010 was available as of the time this report was published; however, not many jurisdictions have yet adopted the HCM 2010, as many LOS software programs are still fine tuning released updated versions incorporating the 2010 methods. For example, the HCM 2010 software automatically analyzes an intersection assuming there are no right-turns on red, and this can lead to LOS results appearing worse than they truly are. For peak hour intersection evaluation the use of HCM 2000 is not expected to change the conclusions of this report. The HCM 2000 methodology relates the intersection Level of Service (LOS) to intersection control delay, in terms of seconds per vehicle (sec/veh). This methodology sets 1,900 passenger-cars per hour per lane (pcphpl) as the base (or ideal) saturation flow rate at signalized intersections, which is based on the minimum headway that can be sustained between departing vehicles at a signalized intersection.

The LOS criteria used for the analysis of signalized intersections are described in **Table 2.1**, identifying the thresholds of control delays and the associated LOS. The computerized analysis of the intersection operations was performed utilizing the *Traffix 8.0* traffic analysis software.

TABLE 2.1 SIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS		
LEVEL OF SERVICE	**DESCRIPTION**	**AVERAGE CONTROL DELAY (SECONDS/VEHICLE)**
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	<10
B	Operations with low delay occurring with good progression and/or short cycle lengths.	>10– 20
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	>20 – 35
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	>35– 55
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	>55 – 80
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	>80

Source: 2000 Highway Capacity Manual, TRB Special Report 209

Consistent with SANTEC/ITE Traffic Study Guidelines, LOS D was identified as the acceptable LOS threshold for peak hour intersection operating conditions. If the analysis indicates that intersections are substantially affected by a project resulting in LOS E or F with the addition of project traffic, the traffic study shall identify improvements to achieve an acceptable LOS.

UNSIGNALIZED INTERSECTION ANALYSIS

Unsignalized intersections, including two-way and all-way stop controlled intersections were analyzed using the *HCM 2000* (Section 10) analysis methodology. The *Traffix 8.0* software supports this methodology and was utilized to produce results. The level of service for a two-way stop controlled (TWSC) intersection is determined by the computed or measured control delay and is defined for each minor movement.

Table 2.2 summarizes the level of service criteria for unsignalized intersections.

TABLE 2.2 UNSIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS		
LEVEL OF SERVICE	**DESCRIPTION**	**AVERAGE CONTROL DELAY (SECONDS/VEHICLE)**
A	Little or no delay.	≤ 10.0
B	Short traffic delay.	<10.1- 15.0
C	Average traffic delays.	<15.1- 25.0
D	Long traffic delays.	<25.1- 35.0
E	Very long traffic delays.	<35.1- 50.0
F	Extreme traffic delays with intersection capacity exceeded.	> 50.0

Source: 2000 Highway Capacity Manual, TRB Special Report 209

ROADWAY SEGMENT LEVEL OF SERVICE ANALYSIS

Roadway segment operating conditions are based on the ratio of daily traffic volume (ADT) and roadway segment capacity. Roadway capacities are based on the number of lanes, speed, access points and other physical features of the road. Capacity thresholds used to determine roadway segment operating conditions are provided in **Table 2.3** below and are based on the SANTEC/ITE Traffic Impact Study Guidelines.

TABLE 2.3 ROADWAY CAPACITY THRESHOLDS					
ROADWAY CLASSIFICATION	**LOS A**	**LOS B**	**LOS C**	**LOS D**	**LOS E**
Expressway	30,000	42,000	60,000	70,000	80,000
Prime Arterial	25,000	35,000	50,000	55,000	60,000
Major Arterial (6 lanes)	20,000	28,000	40,000	45,000	50,000
Major Arterial (4 lanes)	15,000	21,000	30,000	35,000	40,000
Secondary Arterial/Collector	10,000	14,000	20,000	25,000	30,000
Collector (continuous left-turn lane)	5,000	7,000	10,000	13,000	15,000
Collector (no fronting property)	4,000	5,500	7,500	9,000	10,000
Collector (commercial-industrial fronting)	2,500	3,500	5,000	6,500	8,000
Collector (multi-family)	2,500	3,500	5,000	6,500	8,000
Sub-Collector (single family)	-	-	2,200	-	-

Source: SANTEC/ITE Traffic Impact Study Guidelines.

DESCRIPTION OF SIGNIFICANT IMPACTS

The SANTEC/ITE Traffic Study Guidelines define project impact thresholds corresponding to the type of facility. These thresholds are generally based upon an acceptable increase in vehicle delays for intersections and a change in V/C for roadway segments. Accordingly, the project is considered to have a significant impact on the operation of an intersection or roadway segment when one of the following occurs:

- The addition of project traffic results in a Level of Service dropping from LOS D or better to LOS E or F. Under this condition, the project is determined to have a direct and significant impact and mitigation would be necessary to restore the intersection level of service to LOS D conditions or better.
- If an intersection is operating at LOS E or F under base conditions and the project adds more than an additional two (2) seconds of average vehicle delay, the project is determined to have a significant impact. Under this condition, mitigation would be necessary to bring the impacted intersection LOS to pre-development conditions or better.
- If a roadway segment is operating at LOS E or F under base conditions and the project results in a change in V/C of 0.020 or more, the project is determined to have a significant impact. Under this condition, mitigation would be necessary to bring the impacted intersection LOS to pre-development conditions or better.

3.0 PROJECT DESCRIPTION

This section describes the proposed Solana Highlands project including the proposed land uses, estimated trip generation, trip distribution, and trip assignment.

PROJECT DESCRIPTION

The Solana Highlands project is located in Solana Beach, west of Stevens Avenue along S. Nardo Avenue. The proposed project includes the addition of 66 apartment units to the Solana Highlands apartment complex. The project proposes to increase the number of units from 194 to 260, to increase the total number of parking spaces and parking ratios, and to reduce the total number of project driveways from four to two. Modifications to the site include re-grading to provide for internal auto connections between buildings and improved pedestrian access throughout the site. **Figure 3-1** displays the Solana Highlands site plan and ground level circulation.

PROJECT TRIP GENERATION

Vehicle trip generation rates for the proposed project were obtained from the *SANDAG Traffic Generators, "Not So Brief Guide…(April 2002)"*. Trips associated with the existing apartments are on the roadway network and will continue to be on the roadway network, therefore the new trips are those associated with the 66 new apartment units. **Table 3.1** displays the daily project trip generation, as well as the trip estimates for the AM and PM peak hours.

TABLE 3.1
SOLANA HIGLANDS PROJECT TRIP GENERATION

Land Use	Size	Daily		AM Peak Hour				PM Peak Hour			
		Rate	Trips	Rate[1]	Trips	In	Out	Rate[1]	Trips	In	Out
Apartment	66 DU	8 trips/DU	528	8%	42	8	34	10%	53	37	16

Note: [1] Percent of daily trips.

Source: City of Solana Beach; *SANDAG Traffic Generators Manual "Not So Brief Guide…"*

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Figure 3-1

Project Site Plan

PARKING

The project proposes to increase the total number of parking spaces and parking ratios, and to reduce the total number of project driveways from four to two. According to the City of Solana Beach municipal code, the project is required to provide 1.5 parking spaces per one-bedroom apartment and two parking spaces per two-bedroom apartment. Additionally, guest parking should be provided at a rate of 1 parking space for every four apartments. The proposed project includes 121 one-bedroom apartments and 139 two-bedroom apartments and is therefore required to provide 525 parking spaces. The project qualifies for a density bonus parking reduction per the Solana Beach municipal code. The reduced parking rate requires the project provide one parking space per one-bedroom apartment and two spaces per two-bedroom apartment, for a total of 399 required parking spaces. Guest parking is not required with the density bonus reduction. The project will provide a total of 525 parking spaces, of which 253 will be garage spaces, 25 spaces will be covered, and 242 spaces will be open, and therefore meets the City's requirements both with and without the applied density bonus.

PROJECT TRIP DISTRIBUTION

The distribution of project-generated trips was based upon existing travel patterns and the location of complementary land uses within and outside the Solana Beach area, as well as access points to the adjacent roadway network. Peak hour driveway counts collected at the four existing project driveways confirmed existing travel patterns to and from the site along the local roadway network. **Figure 3-2** displays the anticipated trip distribution patterns applied to each Plus Project scenario.

PROJECT TRIP ASSIGNMENT

Based upon the project trip distribution and the peak hour project trip generation, project trips were assigned to the roadway network as displayed on **Figure 3-3**. **Figure 3-4** also includes the trip assignment at each of the project driveways. It is important to note that the project proposes to reduce the number of project driveways from four to two with the proposed modification to the site plan.

PROJECT STUDY AREA

This traffic analysis was performed in accordance with the *SANTEC/ITE Traffic Impact Study Guidelines,* which states that a study area should include all intersections where the proposed project will add 50 or more peak hour trips to a single approach or 20 or more trips to a metered on-ramp. Due to the size of the proposed project, the increase in residential units does not result in an increase in peak hour trips that exceeds the trip threshold. Therefore, the study area focuses on the intersections most adjacent to the project site that may be impacted by the proposed project. The following ten intersections have been defined as key study intersections:

1. S. Nardo Avenue & Lomas Santa Fe Drive*
2. Stevens Avenue & Lomas Santa Fe Drive*
3. S. Nardo Avenue & E Solana Circle
4. Fresca Street & S. Nardo Avenue
5. Stevens Avenue & S. Nardo Avenue*
6. E. Solana Circle & Via De La Valle
7. Stevens Avenue-Valley Avenue & Via De La Valle*
8. Stevens Avenue & Valley Avenue*
9. Driveway A & S. Nardo Ave**
10. Driveway B & S. Nardo Ave**

Note:

* Signalized intersection.

**Driveway intersections analyzed under "Plus Project" scenarios only.

Figure 3-5 illustrates the proposed project study area including the key study area intersections. The project is not expected to add more than 20 peak-hour trips to the on- or off-ramps to northbound and southbound I-5 east of the project site.

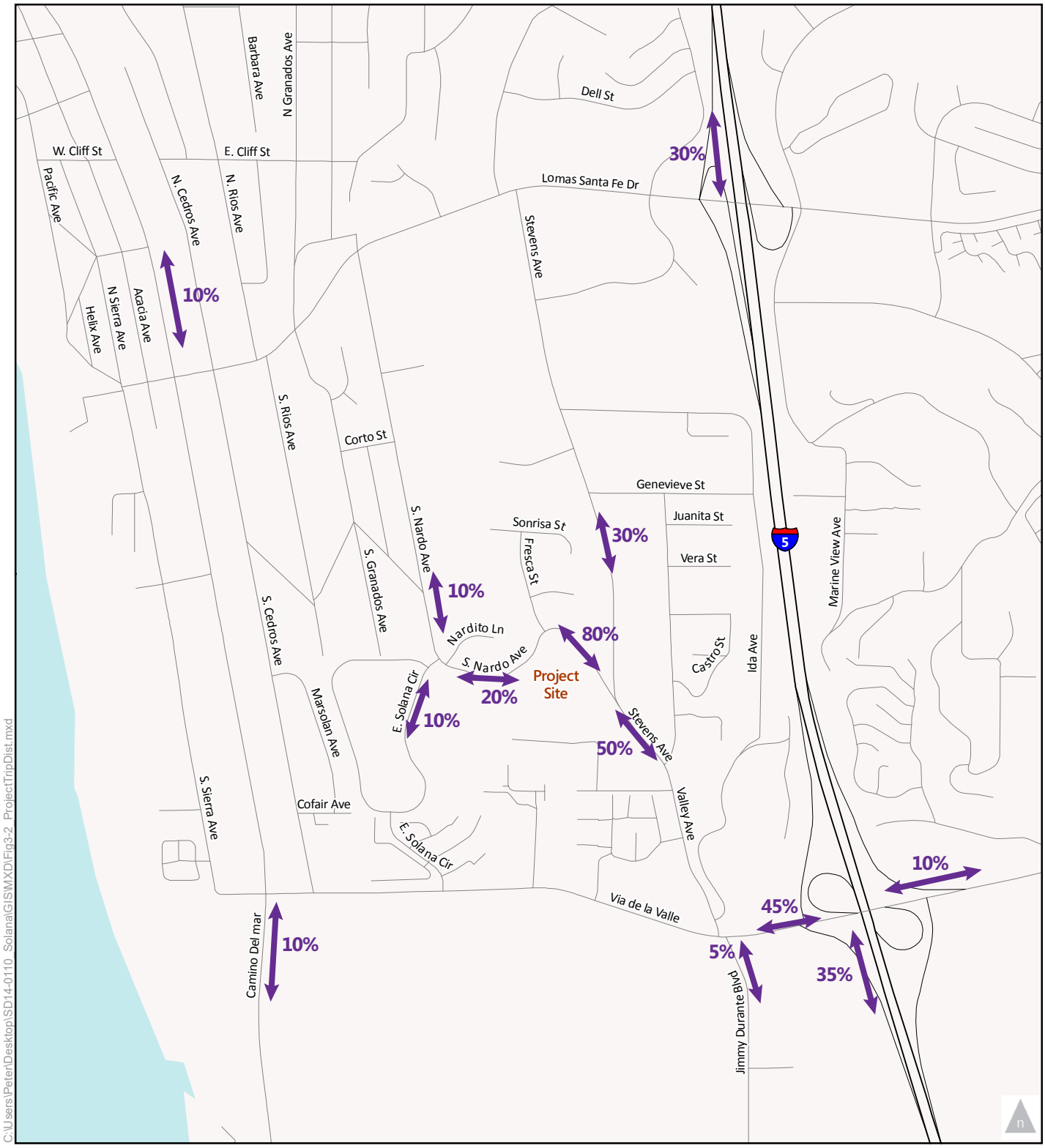

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Figure 3-2

Project Trip Distribution

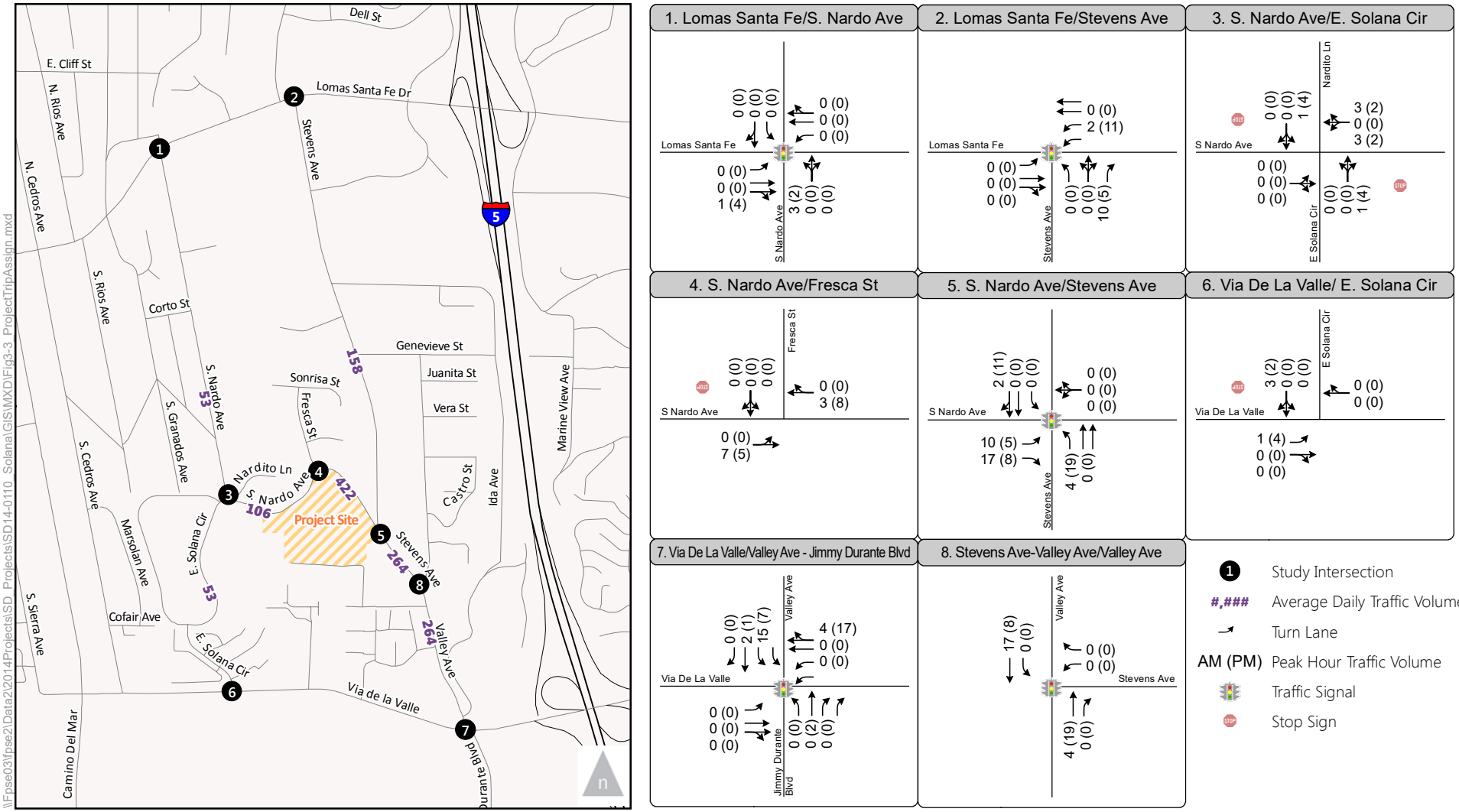
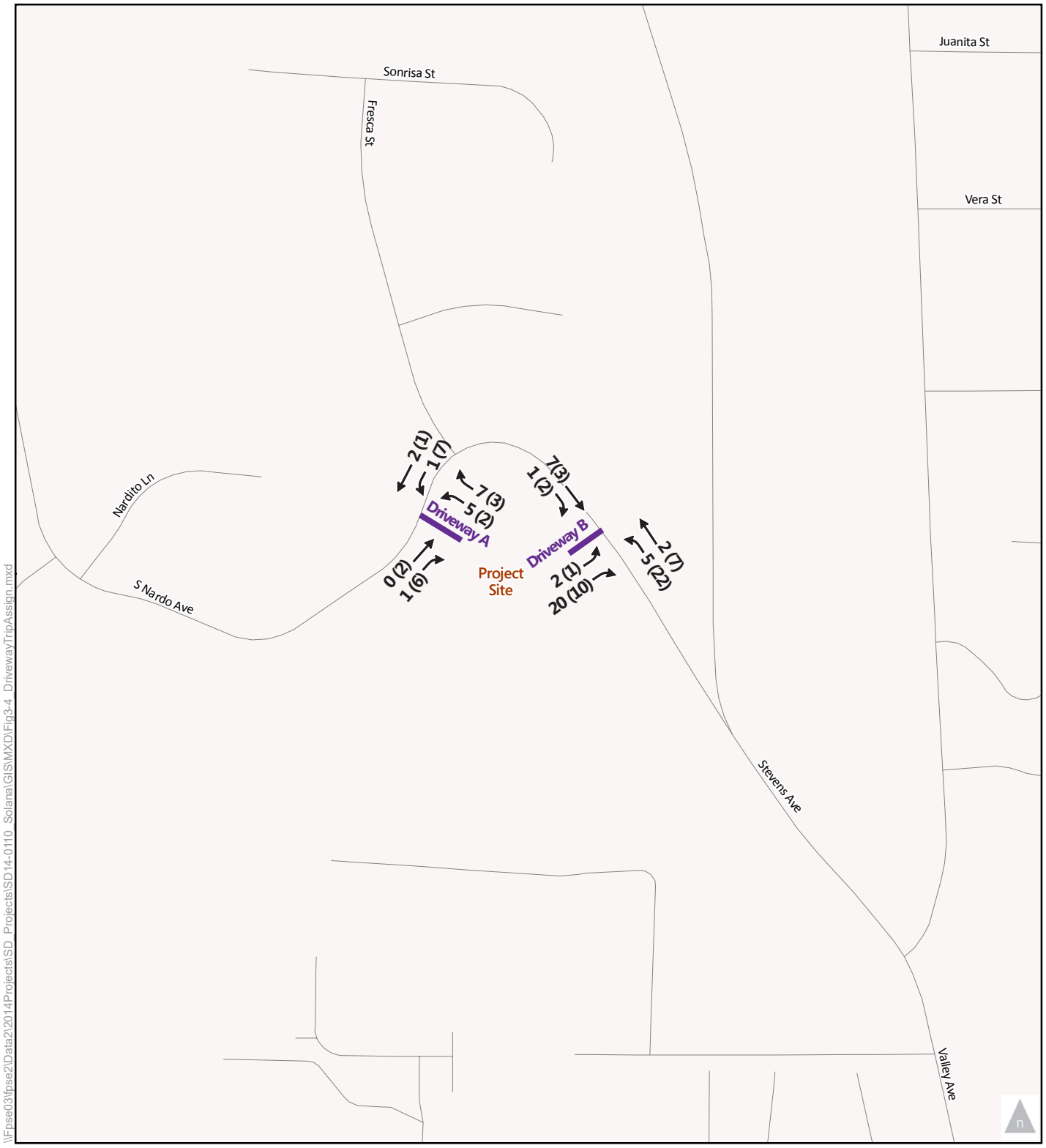


Figure 3-3

Project Trip Assignment



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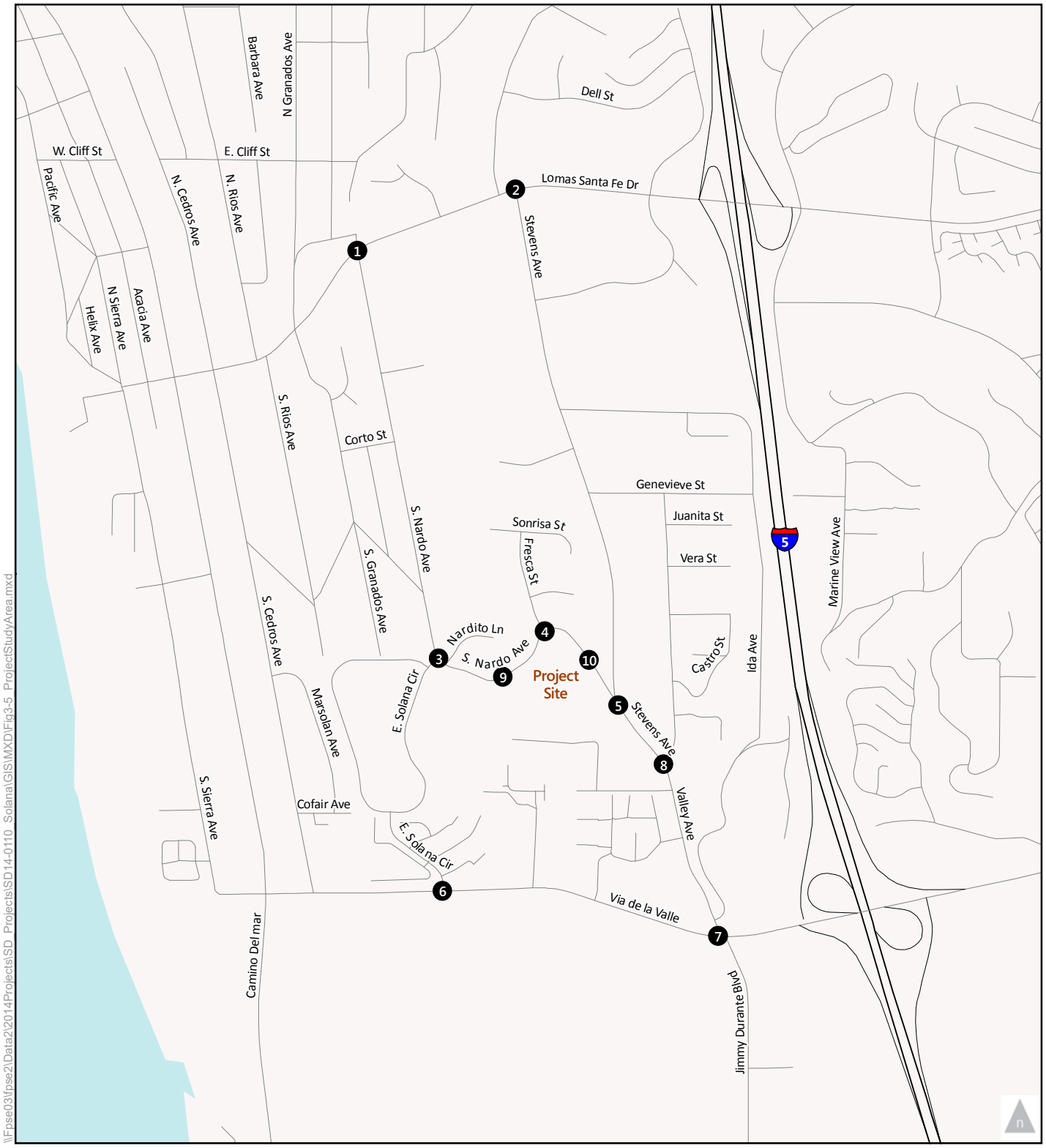
Turn Lane

AM (PM) Peak Hour Traffic Volume

Figure 3-4

Project Driveway Trip Assignment



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❶ Study Intersection

Figure 3-5

Project Study Area

4.0 EXISTING CONDITIONS

This section describes key study area intersections, existing peak hour traffic volume information, and Level of Service (LOS) analysis results. Existing pedestrian, bicycle and transit facilities and services are also described in this chapter.

EXISTING ROADWAY NETWORK

The study area is generally bounded by Highway 101 to the west, Interstate 5 to the east, Via De La Valle to the south, and Lomas Santa Fe Drive to the north. Major roadway facilities within the project study area are listed below. **Figure 4-1** illustrates the study area roadway network and intersection geometry. The following is a brief description of the roadways within the study area.

NORTH/SOUTH ROADWAY FACILITIES

Stevens Avenue—is predominately a two-way, four lane roadway. It extends from Lomas Santa Fe Drive in the north and continues south where it becomes Valley Avenue. The posted speed limit is 40 MPH.

S. Nardo Avenue—is currently a two-way, two lane roadway that extends from Lomas Santa Fe Drive in the north to E. Solana Circle in the south. At E. Solana Circle, S. Nardo Avenue continues east to terminate at Stevens Avenue. The posted speed limit is 25 MPH.

Fresca Street—is a two-way residential street. The prima facie speed limit is 25 MPH.

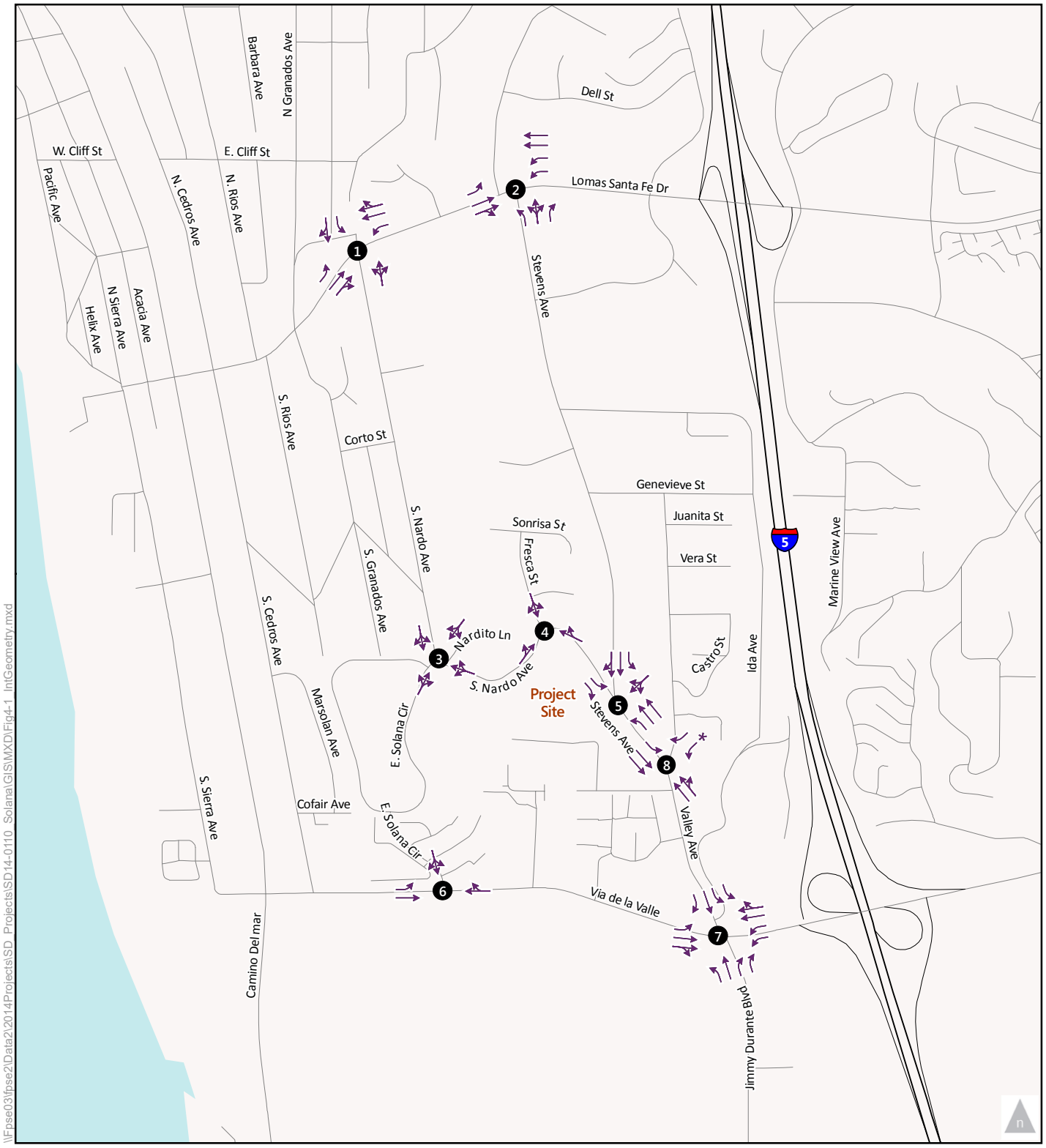
Highland Drive—is a two-way, two lane roadway primarily surrounded by residential uses. Highland Drive is bisected by the I-5 Freeway. On the east side of I-5, Highland Drive connects residences to Lomas Santa Fe Drive and El Camino real further north. On the west side of I-5, Highland Drive connects residences to Valley Avenue and Via De La Valle. The posted speed limit is 35 MPH.

Highway 101—is predominately a two-way, four lane roadway within the study area. The posted speed limit is 35 MPH. The speed limit along Highway 101 was recently reduced as a result of the Streetscape Project.

EAST/WEST ROADWAY FACILITIES

Lomas Santa Fe Drive—is predominately a two-way, four lane divided roadway. It extends from Highway 101 in the west and continues east past Interstate 5.

Via De La Valle—is currently a two-way, two lane roadway that extends from Highway 101 in the west and continues east past Interstate 5. On-street parallel parking is provided along the north side of the roadway. Bicycle facilities are provided along both sides. The posted speed limit is 45 MPH.



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* De-facto

Figure 4-1

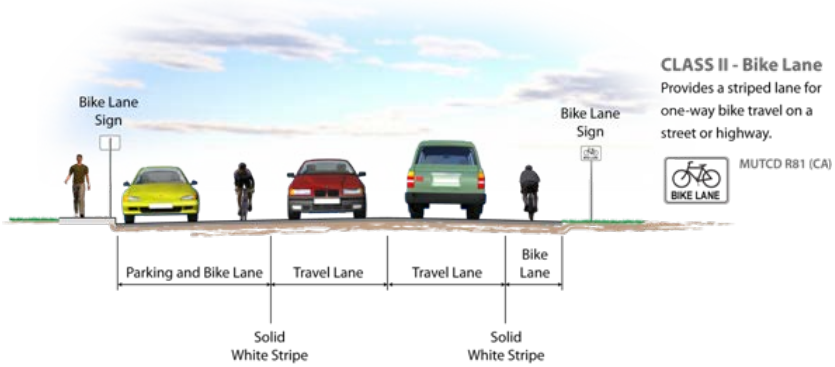
Existing Roadway Network & Intersection Geometry

EXISTING AND PLANNED BICYCLE FACILITIES

"Chapter 1000 Bikeway Planning and Design" of the California Highway Design Manual (September 2014) identifies three classes of bikeways which are outlined below:

- *Class I—Bike or Shared Use Paths* provide a completely separate right-of-way and is designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian cross-flow minimized. Generally, the recommended pavement width for a two-directional shared use path is ten (10) feet.

- *Class II—Bike Lanes* provide a restricted right-of-way and is designated for the use of bicycles with a striped lane on a street or highway. Bicycle lanes are generally five (5) feet wide. Adjacent vehicle parking and vehicle/pedestrian cross-flow are permitted.



- *Class III—Bike Route or Signed Shared Roadways* provide for a right-of-way designated by signs or pavement markings for shared use with pedestrians or motor vehicles.

The City of Solana Beach currently has four designated bicycle facilities: Highway 101, Lomas Santa Fe Drive, Via De Le Valle, and San Andres Drive. The Solana Beach portion of the Coastal Rail Trail constructed a northbound and southbound Class I bike path along Highway 101 between Ocean Street and Via De La Valle. At each end of the Coastal Rail Trail, the bike path transitions to Class II bike lanes.

Along Lomas Santa Fe Drive and Via De Le Valle there are Class II bike lanes in both the eastbound and westbound directions. These bicycle lanes connect the coast to inland communities. A Class III bike route exists along San Andres Drive and Highland Drive. There are no marked bicycle facilities adjacent to the project site on Stevens Avenue or S. Nardo Avenue.

EXISTING PEDESTRIAN FACILITIES

Pedestrian facilities in the project vicinity include sidewalks along the project frontage and crosswalks at signalized intersections. Within the project vicinity, sidewalks are present on both sides of Lomas Santa Fe Drive and on one side (north side) of Via De La Valle. Stevens Avenue-Valley Avenue offers sidewalks on both sides of the roadway, however there are periodic gaps. Approximately 600 feet north of the S. Nardo Avenue intersection, Stevens Avenue-Valley Avenue lacks sidewalks on both sides of the street. At the Stevens Avenue-Valley Avenue / Valley Avenue intersection, the east side of the roadway lacks sidewalks for approximately 1,000 feet south of the intersection. None of these sidewalk gaps occur along the project frontage. S. Nardo Avenue provides sidewalks on both sides of the street from Stevens Avenue to just west of Fresca Street. The Fresca Street / S. Nardo Avenue intersection has a marked school crossing on the west leg. Continuing west to E. Solana Circle, S. Nardo Avenue provides sidewalks on the south side of the street. The E. Solana Circle / S. Nardo Avenue intersection also has a marked school crossing on the south leg which is adjacent to the St. James Catholic Church and School. S. Nardo Avenue lacks sidewalks on both sides of the street between E. Solana Circle and Lomas Santa Fe Drive.

Figure 4-2 displays the existing bicycle and pedestrian facilities in the study area.

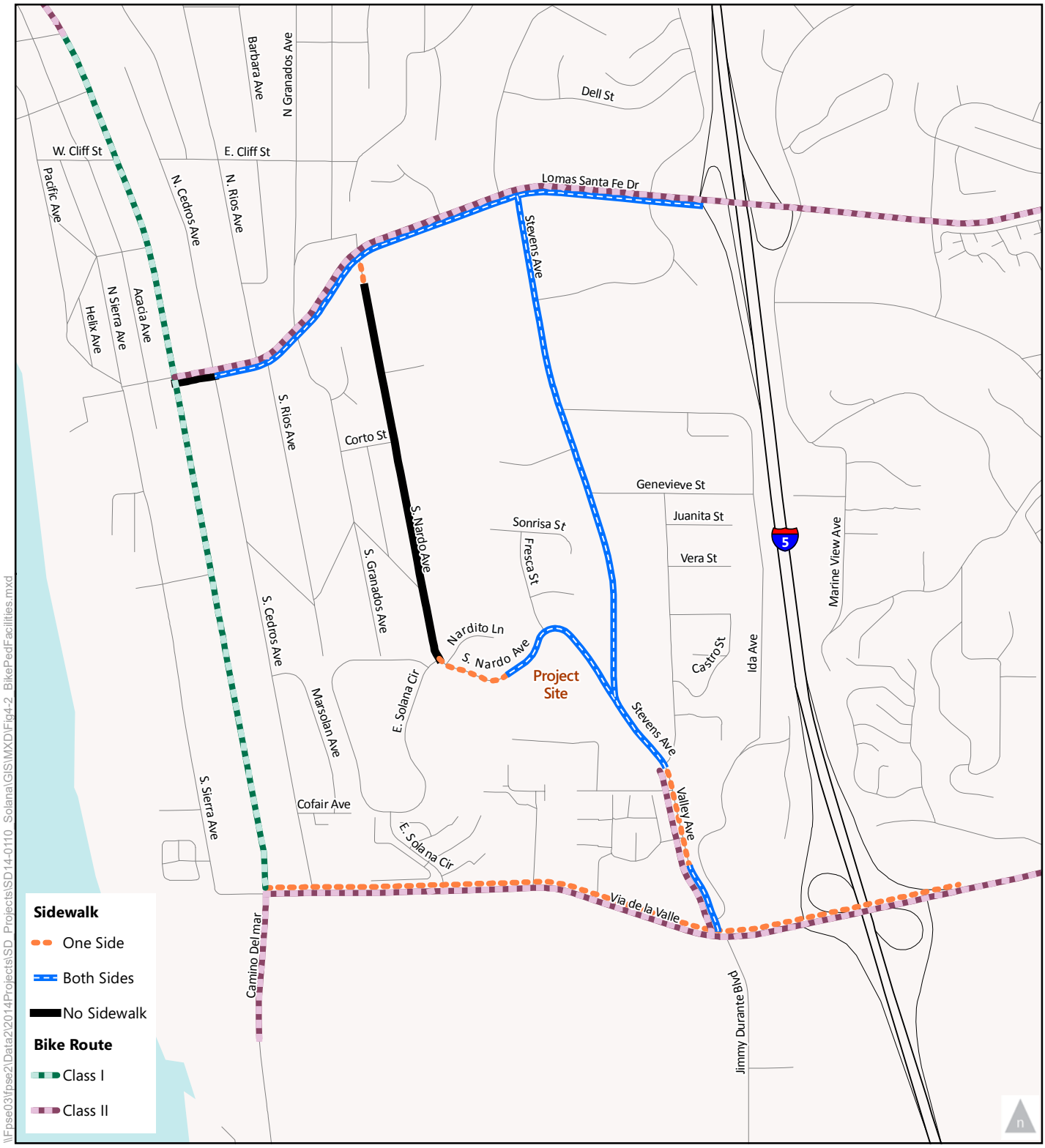


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Figure 4-2

Existing Bicycle and Pedestrian Facilities

EXISTING TRANSIT FACILITIES

Public transit in Solana Beach consists of the following services and facilities:

- North County Transit District (NCTD) BREEZE – providing regular bus service throughout the City of Solana Beach. The following bus routes provide service near the project site:
    - ***Route 101 –*** The Route 101 bus provides service between Oceanside and San Diego along Highway 101. This route operates daily between 5:00 a.m. and 11:00 p.m.
    - ***Route 308 –*** The Route 308 bus provides service between Solana Beach to Escondido with stops along Lomas Santa Fe Drive, Stevens Avenue, and Via De La Valle. This route operates between 5:00 a.m. and 9:00 p.m. on the weekdays and 6:30 a.m. and 8:30 p.m. on the weekends. A Route 308 transit stop is located in close proximity to the project site (i.e. less than 700 feet) on Stevens Avenue, north of South Nardo Avenue.
- North County Transit District (NCTD) COASTER – a commuter train that runs north and south between Oceanside and downtown San Diego. The train operates between 5:00 a.m. and 8:30 p.m. on the weekdays and 8:30 a.m. and 8:00 p.m. on weekends and holidays. The COASTER train station is located in close proximity to the project site (i.e. less than 2,000 feet) on North Cedros Avenue, north of Lomas Santa Fe Drive.
- Amtrak Pacific Surfliner – a regional train route serving communities connecting San Louis Obispo and San Diego. The Amtrak station in Solana Beach is located in the same location as the COASTER, on North Cedros Avenue. Three northbound Amtrak trains operate in the evening between 7:00 p.m. and 12:00 a.m. daily. Two southbound Amtrak trains run in the morning between 8:30 a.m. and 11:45 p.m. and one southbound train operates in the evening between 9:00 p.m. and 10:00 p.m.

Figure 4-3 illustrates the existing transit routes and locations of existing stops and stations in the study area.

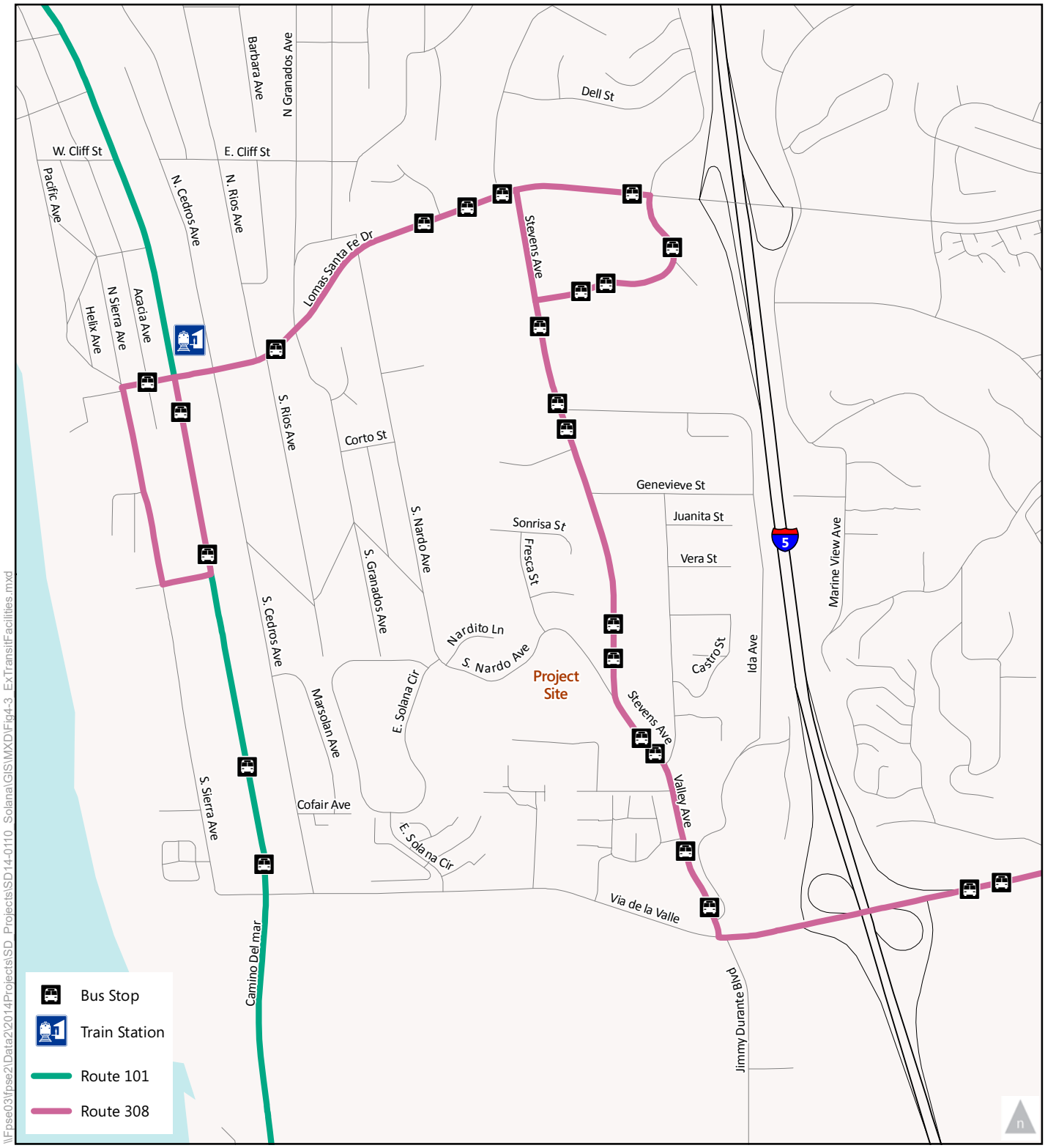

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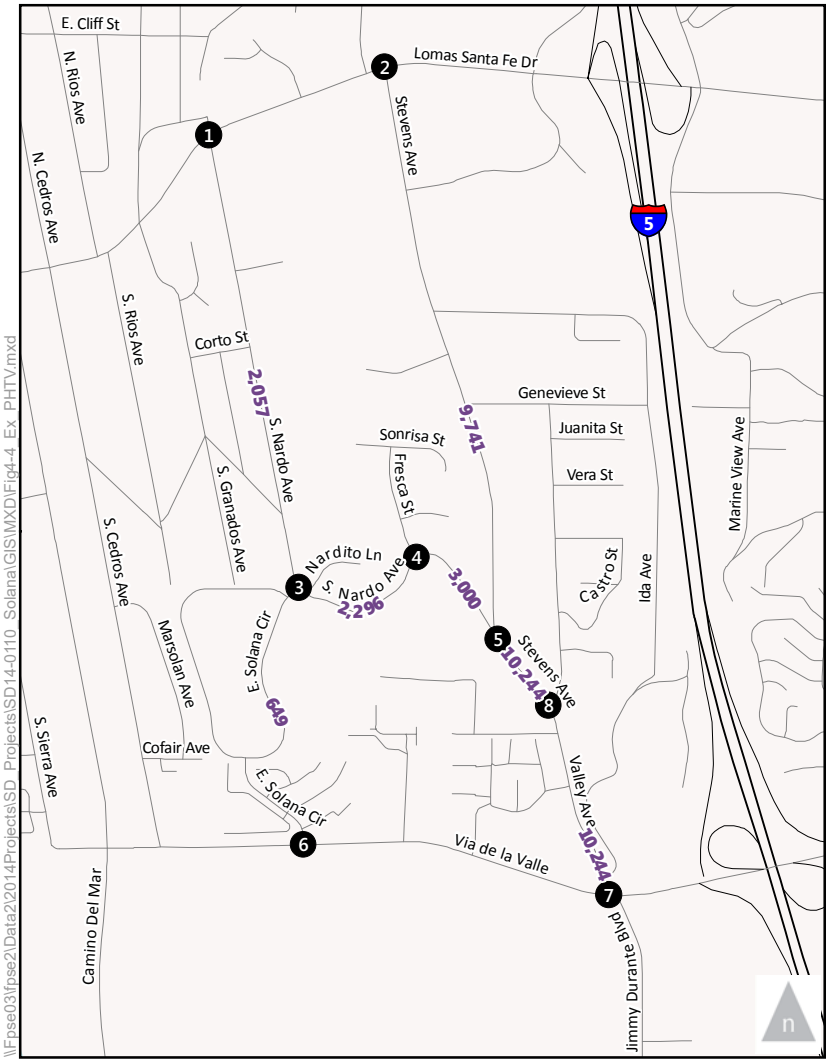
Figure 4-3

Existing Transit Facilities

EXISTING TRAFFIC VOLUMES

Traffic counts were conducted in January 2014 at all study intersections during the AM (7:00 AM to 9:00 AM) and PM (4:00 PM to 6:00 PM) peak hours and for a 24-hour period along all study roadway segments. **Figure 4-4** displays the existing AM and PM peak hour and daily traffic volumes at the study intersections and along the study roadway segments. After the data was collected, the City requested the intersection of Stevens Avenue/Valley Avenue be added to the study area. As traffic data was not collected at the Stevens Avenue / Valley Avenue intersection traffic volumes along Stevens Avenue, at the South Nardo Avenue and Via De La Valle intersections were used to estimate the through volumes along with field observations along Valley Avenue. The peak hour volumes were summed for northbound and southbound turning movements, and then balanced between the two intersections in order to estimate the volumes at the Stevens Avenue / Valley Avenue intersection. Count worksheets are provided in **Appendix A**.



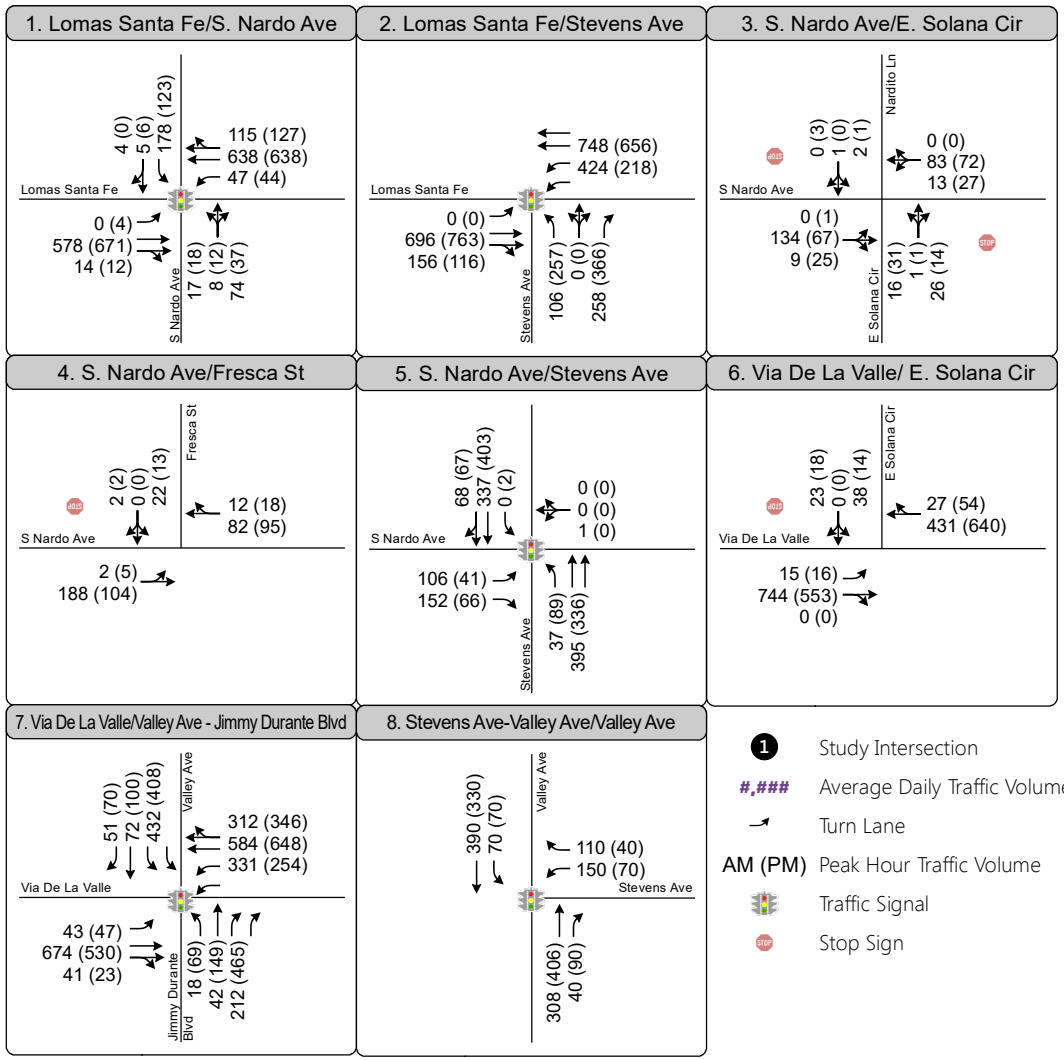


Figure 4-4

Peak Hour Traffic Volumes and Lane Configurations - Existing Conditions

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FIELD OBSERVATIONS

Field observations were conducted on an average weekday in January 2014 to verify existing lane configurations, traffic controls, signal timing, and operating conditions. The field visit revealed generally minimal delays during the AM and PM peak periods at the study intersections. The study intersections do not experience excessive queuing and vehicles are able to clear the intersections during each cycle. This is consistent with the analysis results as all intersections operate acceptably.

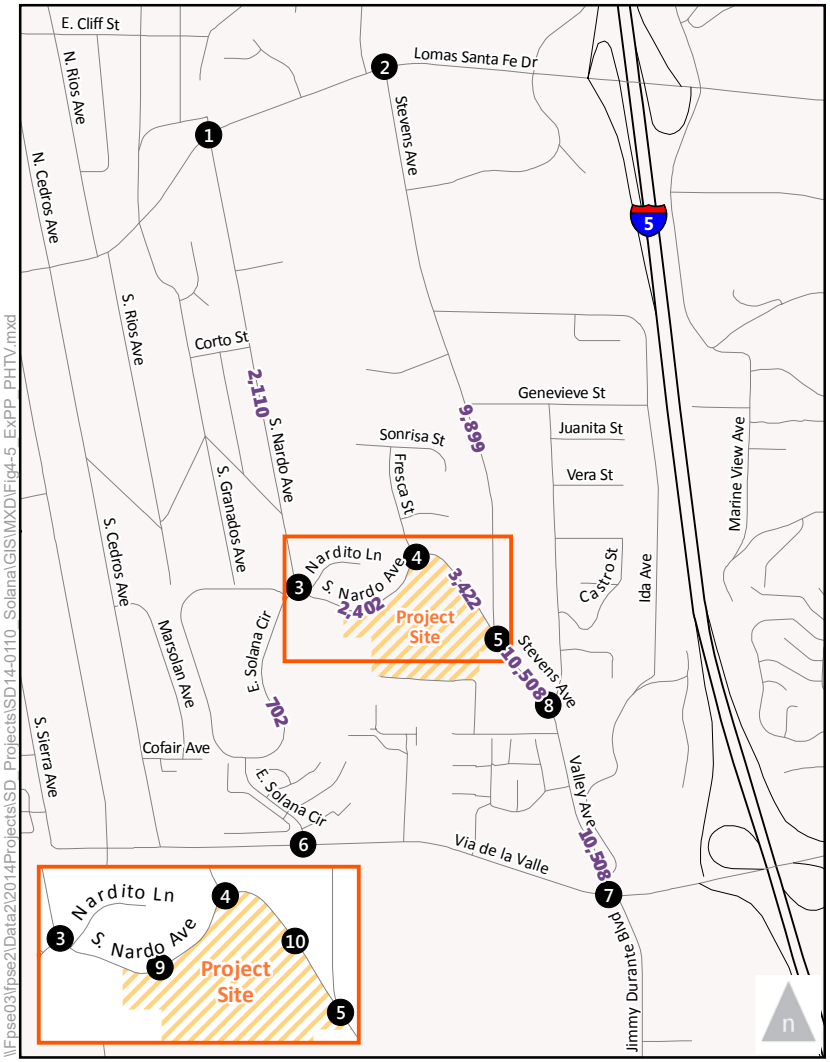
EXISTING PLUS PROJECT TRAFFIC VOLUMES

Existing plus Project traffic volumes were determined by overlaying the forecast project generated trips on the existing conditions peak hour and daily roadway segment volumes based on the trip assignment previously presented in this report. These volumes are displayed in **Figure 4-5**.

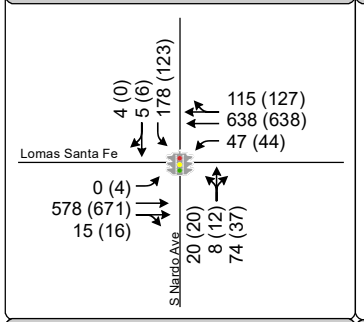
EXISTING TRAFFIC OPERATIONS

The existing traffic volumes, lane configurations and signal timings (for signalized intersections) were used to calculate the existing conditions level of service (LOS) for all of the study locations. The proposed project trips were overlaid on the existing condition traffic to determine the Existing plus Project Conditions impacts. **Table 4.1** displays intersection LOS and average vehicle delay for the key study area intersections under Existing Conditions and Existing plus Project Conditions. The corresponding calculation worksheets for existing conditions are provided in **Appendix B** for Existing Conditions and **Appendix C** for Existing plus Project Conditions.

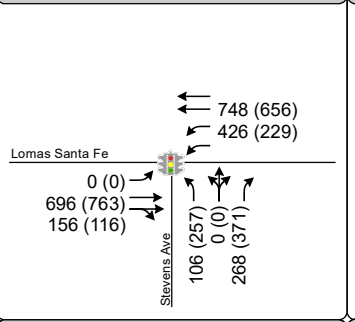
As shown in Table 4.1, all key study area intersections are currently operating at LOS C or better without and with the proposed project. **Table 4.2** summarizes the results of the roadway segment level of service analysis. As shown in the table, the study roadway segments are forecast to operate at acceptable LOS without and with the proposed project, with the exception of Via de la Valle. This segment V/C ratio suggests LOS F operating conditions without and with the project. The project traffic results in a nominal change in V/C ratio that falls below the City's threshold of significance for segments. Therefore the project is not forecast to result in a significant impact along this segment and mitigation measures are not necessary or required.



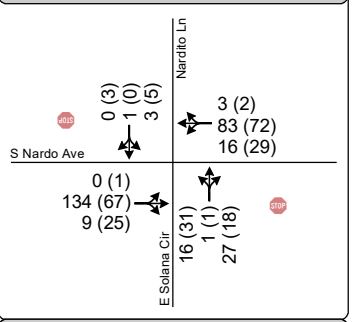
1. Lomas Santa Fe/S. Nardo Ave



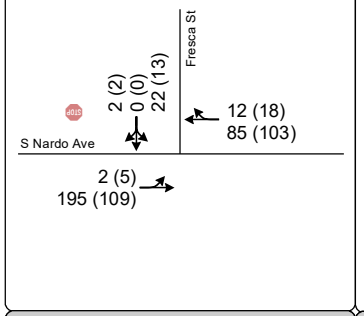
2. Lomas Santa Fe/Stevens Ave



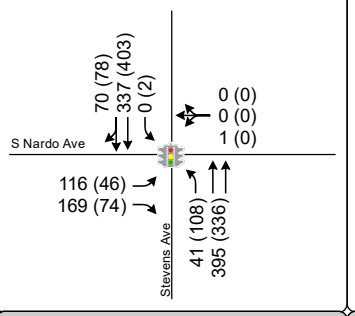
3. S. Nardo Ave/E. Solana Cir



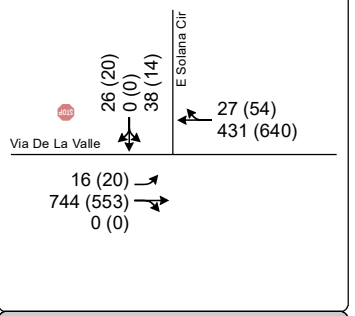
4. S. Nardo Ave/Fresca St



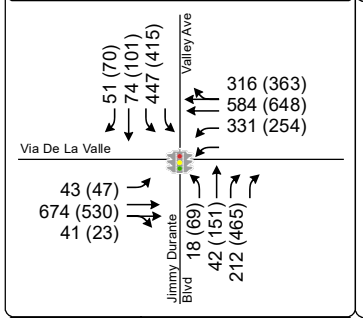
5. S. Nardo Ave/Stevens Ave



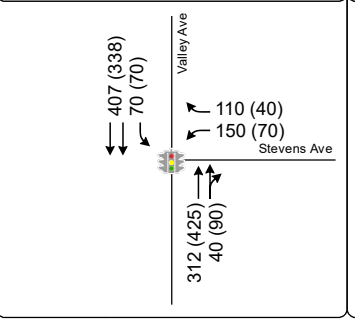
6. Via De La Valle/ E. Solana Cir



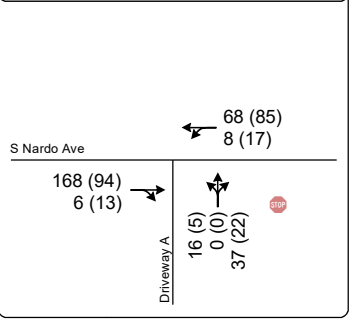
7. Via De La Valle/Valley Ave - Jimmy Durante Blvd



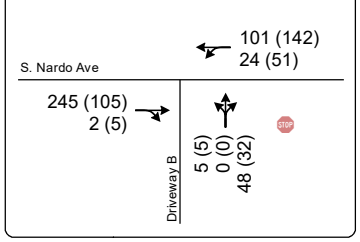
8. Stevens Ave-Valley Ave/Valley Ave



9. S. Nardo Ave/Driveway A



10. S. Nardo Ave/Driveway B



1 Study Intersection

#,### Average Daily Traffic Volume

Turn Lane

AM (PM) Peak Hour Traffic Volume

Traffic Signal

Stop Sign

Figure 4 -5

Peak Hour Traffic Volumes and Lane Configurations - Existing Plus Project Conditions

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TABLE 4.1
EXISTING CONDITIONS PEAK HOUR INTERSECTION LEVEL OF SERVICE

#	Intersection	AM					PM					S?[4]
		Existing		Existing Plus Project		Δ[3]	Existing		Existing Plus Project		Δ[3]	
		Delay[1]	LOS[2]	Delay[1]	LOS[2]		Delay[1]	LOS[2]	Delay[1]	LOS[2]		
1	Lomas Santa Fe Drive / S. Nardo Avenue*	14.8	B	14.8	B	0.0	11.4	B	11.4	B	0.0	N
2	Lomas Santa Fe Drive / Stevens Avenue*	23.8	C	24.1	C	0.3	24.0	C	24.3	C	0.3	N
3	S. Nardo Avenue / E. Solana Circle	11.0	B	11.1	B	0.1	10.5	B	10.6	B	0.1	N
4	S. Nardo Avenue / Fresca Street	10.9	B	11.0	B	0.1	9.8	A	9.9	A	0.1	N
5	Stevens Avenue / S. Nardo Avenue*	18.3	B	19.1	B	0.8	15.0	B	16.3	B	1.3	N
6	Via de La Valle / E. Solana Circle	26.3	D	26.3	D	0.0	21.0	C	21.0	C	0.0	N
7	Stevens Avenue-Valley Avenue/ Via de la Valle*	28.8	C	29.0	C	0.2	33.0	C	33.1	C	0.1	N
8	Stevens Avenue / Valley Avenue*	19.3	B	19.3	B	0.0	13.1	B	13.1	B	0.0	N
9	Driveway A / S. Nardo Avenue	N/A	N/A	4.0	A	N/A	N/A	N/A	3.3	A	N/A	N/A
10	Driveway B / S. Nardo Avenue	N/A	N/A	4.0	A	N/A	N/A	N/A	3.4	A	N/A	N/A

Source: Fehr & Peers, January 2014

Note:
1. Whole intersection weighted average stopped delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections.
2. LOS = Level of Service.
3. Δ = Change in delay, seconds
4. S? = Significant impact?
N/A = Not Applicable. Driveway intersections were only analyzed under "Plus Project" scenarios.
* = Signalized intersection. ** = All-way stop controlled intersection.

TABLE 4.2
EXISTING CONDITIONS SEGMENT LEVEL OF SERVICE

Roadway Segment	Class & Capacity	No Project			With Project				
		ADT	V/C	LOS	ADT	V/C	LOS	Δ[3]	S?[4]
Stevens Avenue From Lomas Santa Fe Drive To S. Nardo Avenue	Collector (continuous LTL) 15,000	9,741	0.65	C	9,899	0.66	C	0.01	N
Stevens Avenue From S. Nardo Avenue To Valley Avenue	Collector (continuous LTL) 15,000	10,244	0.68	D	10,508	0.70	D	0.02	N
S. Nardo Avenue From Lomas Santa Fe Drive To E. Solana Circle	Sub-Collector (SF) 2,200	2,057	0.94	C	2,110	0.96	C	0.02	N
S. Nardo Avenue From E. Solana Circle To Fresca Street	Collector (MF) 8,000	2,296	0.29	A	2,402	0.30	A	0.01	N
S. Nardo Avenue From Fresca Street To Stevens Avenue	Collector (MF) 8,000	3,000	0.38	B	3,422	0.43	B	0.05	N
E. Solana Circle From S. Nardo Avenue To Via De La Valle	Sub-Collector (SF) 2,200	649	0.30	A	702	0.32	A	0.02	N

TABLE 4.2 EXISTING CONDITIONS SEGMENT LEVEL OF SERVICE									
Lomas Santa Fe[4] From Stevens Avenue To Solana Hills Drive	Major Arterial 40,000	23,013	0.58	C	23,171	0.58	C	0.0	N
Via de la Valle[4,5] From Camino Del Mar To Jimmy Durante Boulevard	Collector (continuous LTL) 15,000	16,525	1.10	F	16,578	1.11	F	0.1	N

Source: Fehr & Peers, January 2014

Note:
1. LOS = Level of Service.
2. Δ = Change in V/C
3. S? = Significant impact?
4. Lomas Santa Fe and Via de la Valle counts were provided by City of Solana Beach for the "typical conditions". Data reported was collected in 2012.
5. Although the theoretical capacity of the roadway segment, Via de la Valle, is 15,000 based on SANTEC/ITE TIS guidelines, the actual capacity is estimated to be higher due to the lack of traffic signals that would typically restrict vehicular flow along this type of segment. Observations of typical operating conditions do not reflect significant congestion on this corridor.

5.0 NEAR TERM (2017) CONDITIONS

This section provides an analysis of Near Term (2017) Conditions. This analysis is based on the existing traffic volumes and the projected volumes for projects in the study area that have been approved by the City and are anticipated to be open/occupied by the project's opening year.

NEAR TERM (2017) PROJECTS IN STUDY AREA

The City of Solana Beach identified four (4) projects within the study area that would likely be occupied at the time this project opened:

- 735 Valley Avenue (Eden Garden)
- 823 Vera Avenue (Eden Garden)
- Santa Fe Christian School, 838 Academy Avenue
- Earl Warren Middle School Improvements

Figure 5-1 illustrates the locations of the projects. In addition to contacting the City of Solana Beach to determine the above listed cumulative projects, the cities of San Diego and Del Mar were also contacted in January 2014 to identify other potential cumulative projects. Although other projects, such as the Del Mar Fairgrounds Master Plan and the One Paseo projects were identified, the project trips associated with those projects did not extend to within the project study area. Therefore, they were not directly addressed in the cumulative project traffic calculations. The projects listed above were determined to either add minimal trips to the study area or not add trips at all. City staff agreed that the best approach for Near Term (2017) analysis would be to consider the identified projects as a part of the overall ambient growth rate applied to the study area volumes.

NEAR TERM (2017) TRAFFIC VOLUMES

Due to the limited number of projects identified by Solana Beach and the surrounding cities, near term cumulative conditions volumes were forecast using an ambient growth rate. This growth rate accounts for the projects listed above, general changes to traffic patterns that occur over time, and traffic associated other planned regional projects outside the study area that may have some impact on the local neighborhoods as trips distribute through and around the Solana Beach community.

Near Term (2017) traffic volumes were derived by adding an ambient growth rate of 2% to the Existing Conditions peak hour and daily roadway segment volumes. This growth rate was determined by reviewing the SANDAG Series 12 model for the horizon year 2035 model volumes, 2008 base year model volumes and comparing them to existing conditions volumes. The growth rate was based on the annual change in traffic volumes forecast from 2008 to 2035 and adjusted to reflect growth that has occurred from 2008 to 2013, the timeframe in which existing counts were conducted. This methodology was confirmed by Staff at the City of Solana Beach. Near Term (2017) plus Project conditions were derived by adding the proposed project trips to the Near Term (2017) traffic volumes. **Figures 5-2** and **5-3** display the peak hour turning movement volumes and daily roadway segment volumes for the Near Term (2017) without and with Project conditions, respectively.

NEAR TERM (2017) ROADWAY NETWORK

The City of Solana Beach identified no planned roadway improvements within the study area that would be completed by year 2017. Therefore, the Near Term (2017) roadway network is assumed to be the same as under Existing Conditions.

NEAR TERM (2017) TRAFFIC OPERATIONS

The operations at all of the study intersections were calculated based on Near Term (2017) and Near Term (2017) plus Project volumes on the existing roadway network. **Table 5.1** displays intersection LOS and average vehicle delay under Near Term (2017) and Near Term (2017) plus Project Conditions. LOS calculation worksheets for this scenario are provided in **Appendix D** for the Near Term (2017) conditions and **Appendix E** for the Near Term (2017) with Project conditions**.**

The table shows that all key study area intersections will continue to operate at LOS D or better in the Near Term (2017) without and with the proposed project. The table below shows that the delay at the Stevens Avenue/Valley Avenue intersection will actually decrease compared to Existing Conditions despite the increase in volumes. This is explained by the intersection's signal timing which automatically adjusts to provide more green time to the north and south approaches in response to the increased demand. The green time provided for the east and west approaches automatically decreases, in response, in order to maintain the cycle length. The vehicular delay at the north and south approaches is therefore reduced and thus the overall delay reported for the intersection is reduced.

Similarly, **Table 5.2** summarizes the results of the roadway segment level of service analysis. As shown in the table, the study roadway segments are forecast to operate at acceptable LOS without and with the proposed project, with the exception of Via de la Valle. This segment V/C ratio suggests LOS F operating conditions without and with the project. The project traffic results in a nominal change in V/C ratio that falls below the roadway segment threshold of significance. Therefore the project is not forecast to result in a significant impact along this segment and mitigation measures are not necessary or required. Therefore, the proposed project does not result in any Near Term (2017) significant impacts to the intersections or roadway network.

TABLE 5.1
NEAR TERM (2017) CONDITIONS PEAK HOUR INTERSECTION LEVEL OF SERVICE

#	Intersection	AM					PM					S?[4]
		Near Term (2017)		Near Term (2017) Plus Project		Δ[3]	Near Term (2017)		Near Term (2017) Plus Project		Δ[3]	
		Delay[1]	LOS[2]	Delay[1]	LOS[2]		Delay[1]	LOS[2]	Delay[1]	LOS[2]		
1	Lomas Santa Fe Drive / S. Nardo Avenue*	14.9	B	14.9	B	0.0	11.5	B	11.5	B	0.0	N
2	Lomas Santa Fe Drive / Stevens Avenue*	24.0	C	24.3	C	0.3	24.1	C	24.4	C	0.3	N
3	S. Nardo Avenue / E. Solana Circle	11.1	B	11.1	B	0.0	10.6	B	10.6	B	0.0	N
4	S. Nardo Avenue / Fresca Street	10.9	B	11.0	B	0.1	9.8	A	9.9	A	0.1	N
5	Stevens Avenue / S. Nardo Avenue*	18.4	B	19.2	B	0.8	15.0	B	16.3	B	1.3	N
6	Via de La Valle / E. Solana Circle	27.5	D	27.5	D	0.0	21.7	C	21.7	C	0.0	N
7	Stevens Avenue-Valley Avenue / Via de la Valle*	29.0	C	29.2	C	0.2	33.3	C	33.5	C	0.2	N
8	Stevens Avenue / Valley Avenue*	19.1	B	19.1	B	0.0	13.0	B	13.0	B	0.0	N
9	Driveway A / S. Nardo Avenue	N/A	N/A	4.1	A	N/A	N/A	N/A	3.7	A	N/A	N/A
10	Driveway B / S. Nardo Avenue	N/A	N/A	3.7	A	N/A	N/A	N/A	3.3	A	N/A	N/A

Source: Fehr & Peers, January 2014

Note:
1. Whole intersection weighted average stopped delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections.
2. LOS = Level of Service.
3. Δ = Change in delay, seconds
4. S? = Significant impact?
N/A = Not Applicable. Driveway intersections were only analyzed under "Plus Project" scenarios. * = Signalized intersection. ** = All-way stop controlled intersection.

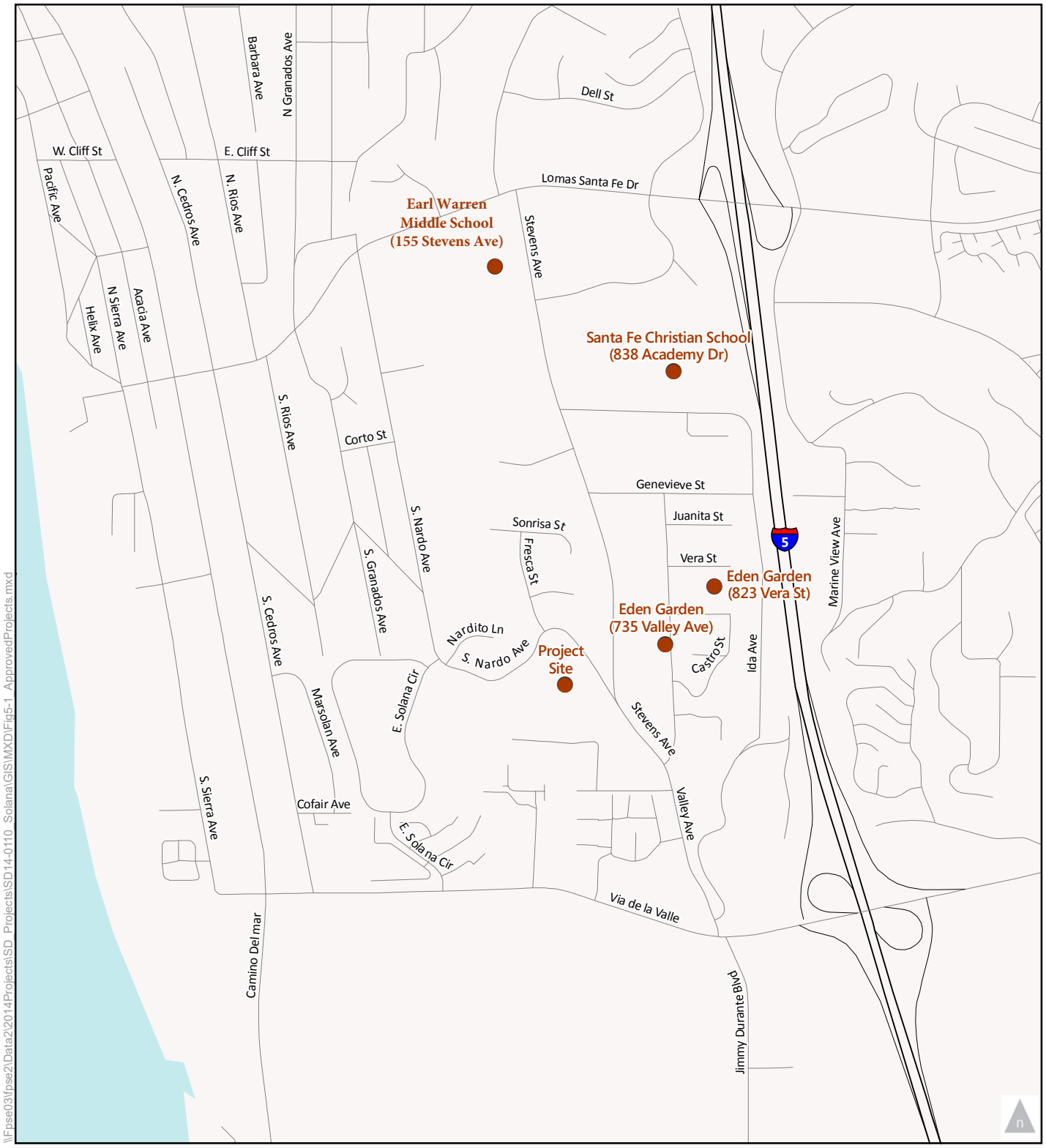
TABLE 5.2
NEAR TERM (2017) CONDITIONS SEGMENT LEVEL OF SERVICE

Roadway Segment	Class & Capacity	No Project			With Project				
		ADT	V/C	LOS	ADT	V/C	LOS	Δ[3]	S?[4]
Stevens Avenue From Lomas Santa Fe Drive To S. Nardo Avenue	Collector (continuous LTL) 15,000	9,936	0.66	C	10,094	0.67	D	0.01	N
Stevens Avenue From S. Nardo Avenue To Valley Avenue	Collector (continuous LTL) 15,000	10,449	0.70	D	10,713	0.71	D	0.02	N
S. Nardo Avenue From Lomas Santa Fe Drive To E. Solana Circle	Sub-Collector (SF) 2,200	2,098	0.95	C	2,151	0.98	C	0.02	N
S. Nardo Avenue From E. Solana Circle To Fresca Street	Collector (MF) 8,000	2,342	0.29	A	2,448	0.31	A	0.01	N
S. Nardo Avenue From Fresca Street To Stevens Avenue	Collector (MF) 8,000	3,060	0.38	B	3,482	0.44	B	0.05	N
E. Solana Circle From S. Nardo Avenue To Via De La Valle	Sub-Collector (SF) 2,200	662	0.30	A	715	0.32	A	0.02	N

TABLE 5.2 NEAR TERM (2017) CONDITIONS SEGMENT LEVEL OF SERVICE									
Lomas Santa Fe[4] From Stevens Avenue To Solana Hills Drive	Major Arterial 40,000	23,473	0.59	C	23,632	0.59	C	0.0	N
Via de la Valle[4] From Camino Del Mar To Jimmy Durante Boulevard	Collector (continuous LTL) 15,000	16,856	1.12	F	16,908	1.13	F	0.1	N

Source: Fehr & Peers, January 2014

Note:
1. LOS = Level of Service.
2. Δ = Change in V/C
3. S? = Significant impact?
4. Lomas Santa Fe and Via de la Valle counts were provided by City of Solana Beach for the "typical conditions". Data reported was collected in 2012.



Approved Project

Figure 5-1

Approved Projects

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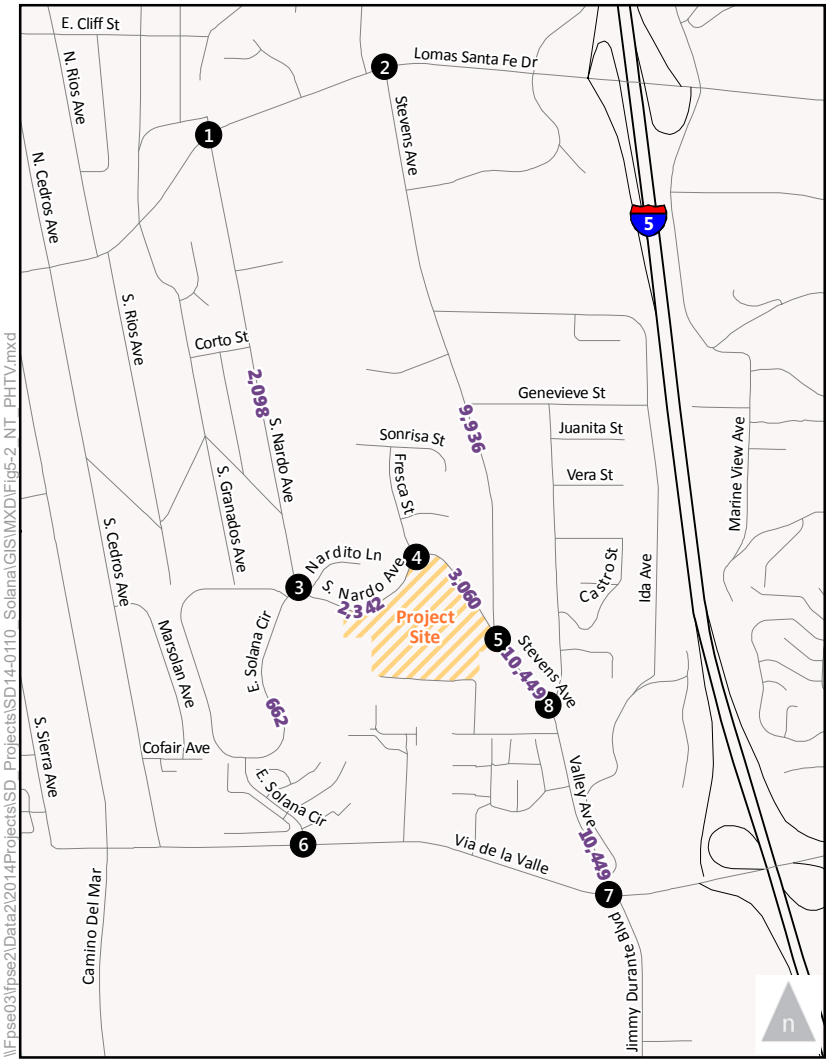

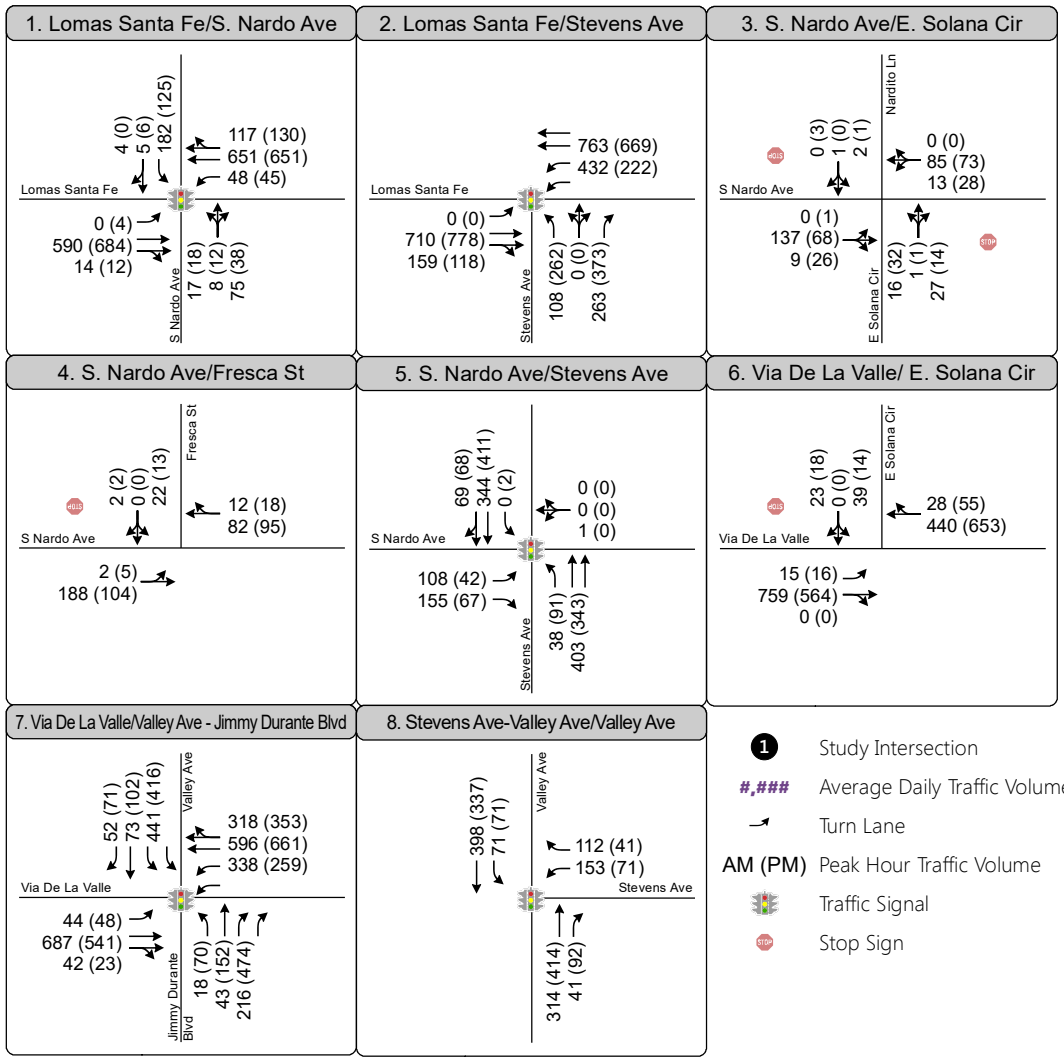

Figure 5-2

Peak Hour Traffic Volumes and Lane Configurations Near Term (2017) Conditions

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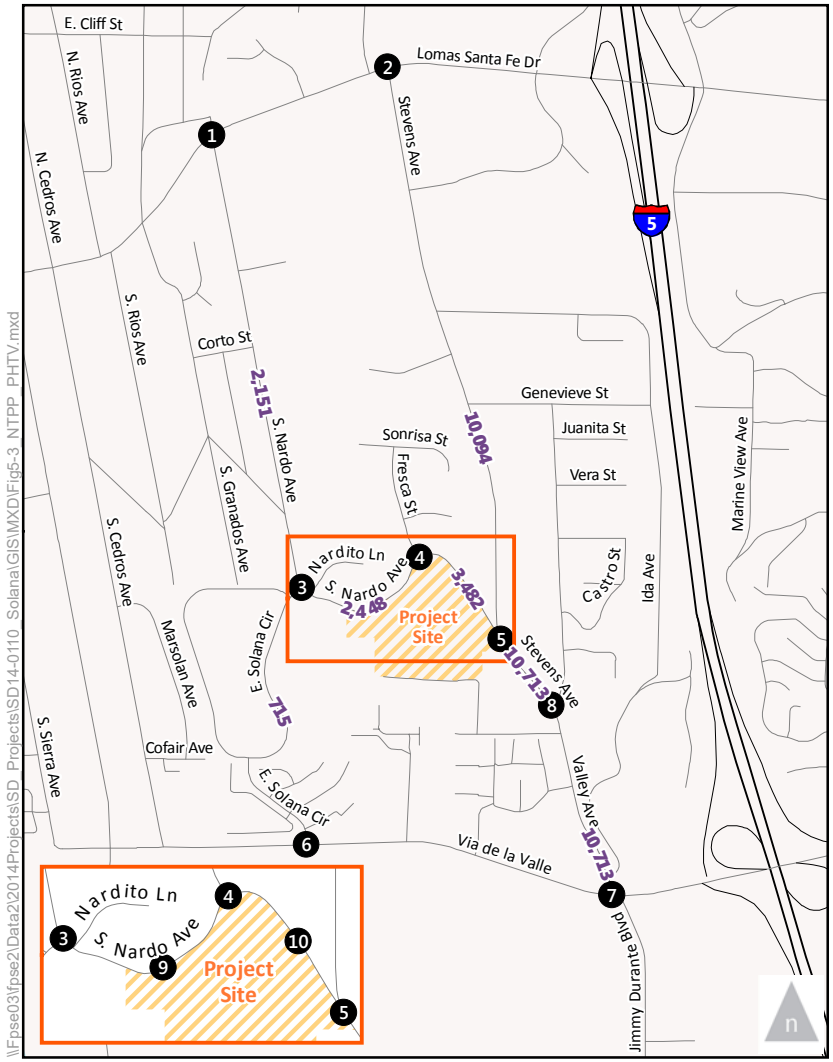
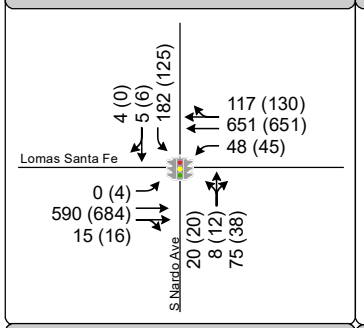
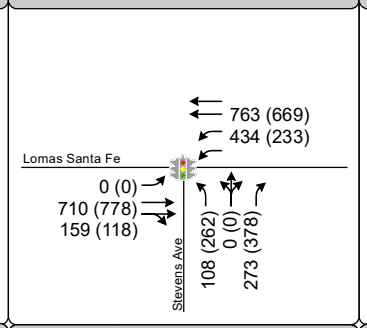


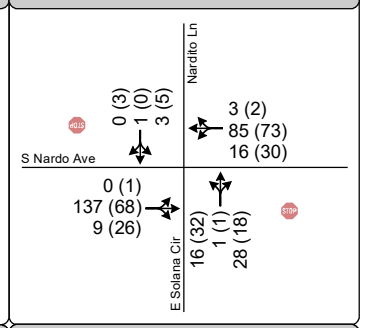
1. Lomas Santa Fe/S. Nardo Ave



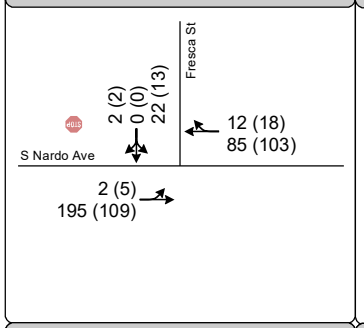
2. Lomas Santa Fe/Stevens Ave



3. S. Nardo Ave/E. Solana Cir



4. S. Nardo Ave/Fresca St



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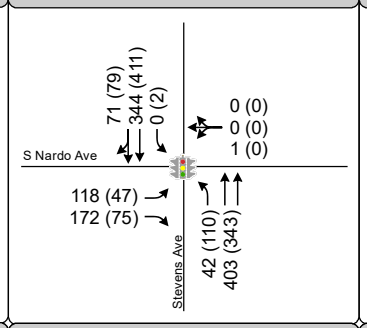
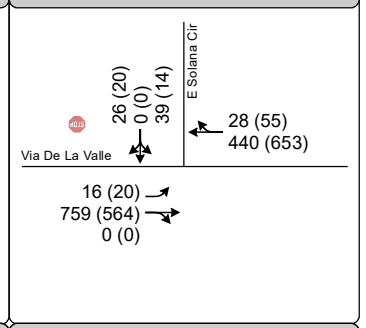
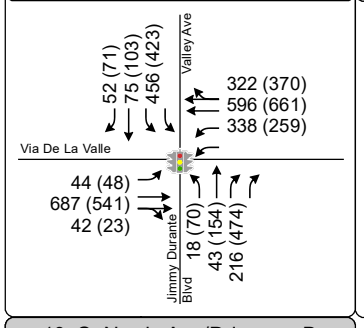


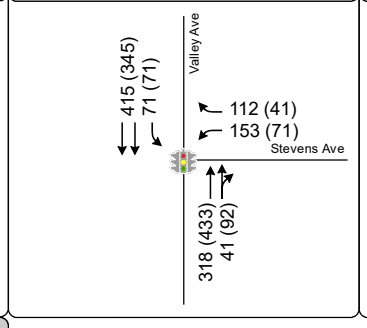
6. Via De La Valle/ E. Solana Cir



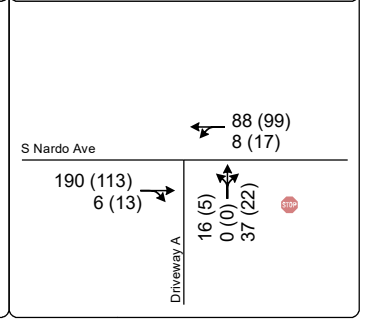
7. Via De La Valle/Valley Ave - Jimmy Durante Blvd



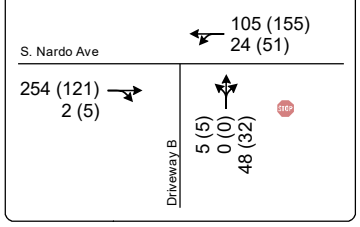
8. Stevens Ave-Valley Ave/Valley Ave



9. S. Nardo Ave/Driveway A



10. S. Nardo Ave/Driveway B



1	Study Intersection		Traffic Signal
#,###	Average Daily Traffic Volume		Stop Sign
	Turn Lane		
AM (PM)	Peak Hour Traffic Volume		

Figure 5-3

Peak Hour Traffic Volumes and Lane Configurations - Near Term (2017) Plus Project Conditions

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6.0 HORIZON YEAR (2035) CONDITIONS

This section provides an analysis of Horizon Year (2035) traffic conditions for the proposed Solana Highlands project. This scenario evaluates the baseline conditions and assesses potential long term project impacts.

HORIZON YEAR (2035) ROADWAY NETWORK

The Horizon Year (2035) roadway network is assumed to be the same as under Existing Conditions. Therefore, no roadway improvements are assumed under Horizon Year (2035) Conditions.

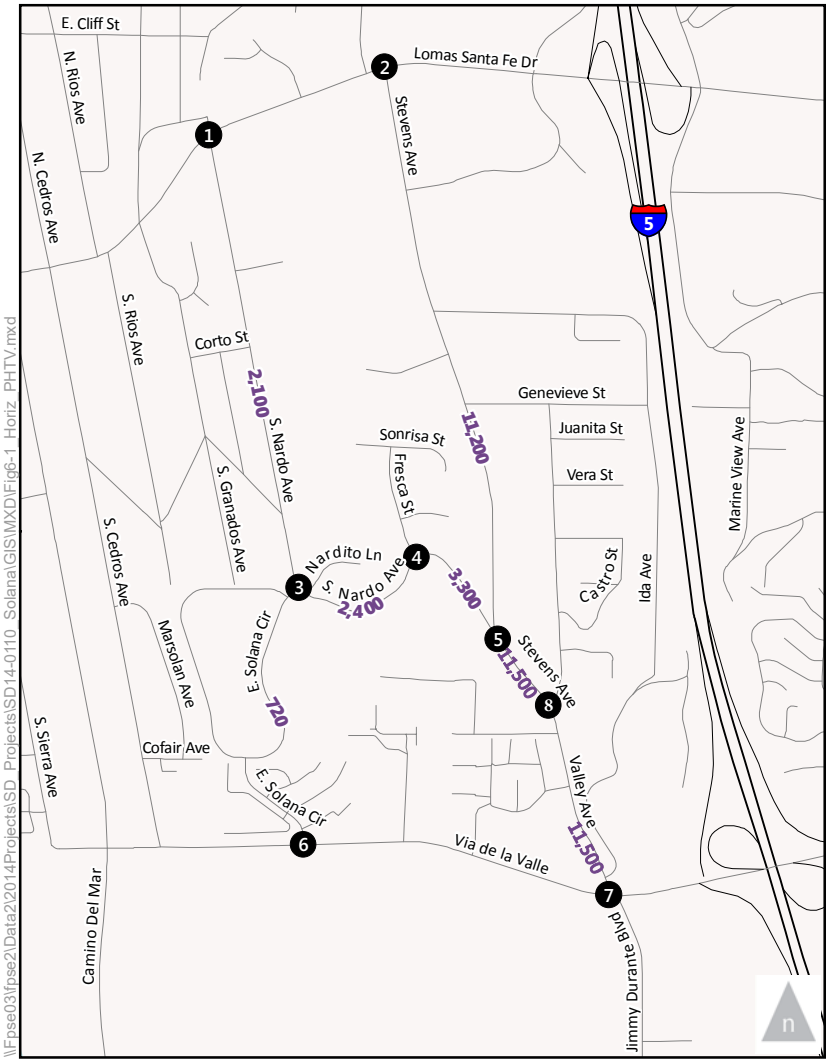
HORIZON YEAR (2035) TRAFFIC VOLUMES

Horizon Year (2035) traffic volumes were determined based on the SANDAG Series 12 traffic model. Future year model volumes were compared to the existing conditions volumes to ensure a minimum 10% growth over existing conditions and were compared to the Series 11 forecast for consistency with previous traffic forecast in the study area.

Daily traffic volumes determined by the model and refined for use in this study were also used to develop the peak hour turning movement volumes that were used to evaluate Horizon Year (2035) intersection operating conditions. Post processing of the daily volumes to determine peak hour volumes was conducted using the Furness method, which balances the volumes inbound and outbound on each leg of the intersection. Intersection movements are based on the existing traffic patterns, existing peak hour percentages of daily traffic and the future year daily traffic forecast for each leg of the intersection. Refinements were made to the processed volumes to ensure that all movements at the intersection were at minimum equal to the existing peak hour volumes. The post-processing worksheets are provided in **Appendix F.**

The traffic model assumes residential development on the project site, but does not take into account the expansion of the site from 194 units to 260 units. To determine the Horizon Year (2035) with Project conditions, the project trips were added to the roadway network based on the trip assignment previously presented in this report.

Figure 6.1 illustrates the Horizon Year (2035) baseline peak hour and daily roadway segment volumes. Horizon Year (2035) with Project volumes are illustrated in **Figure 6.2**.



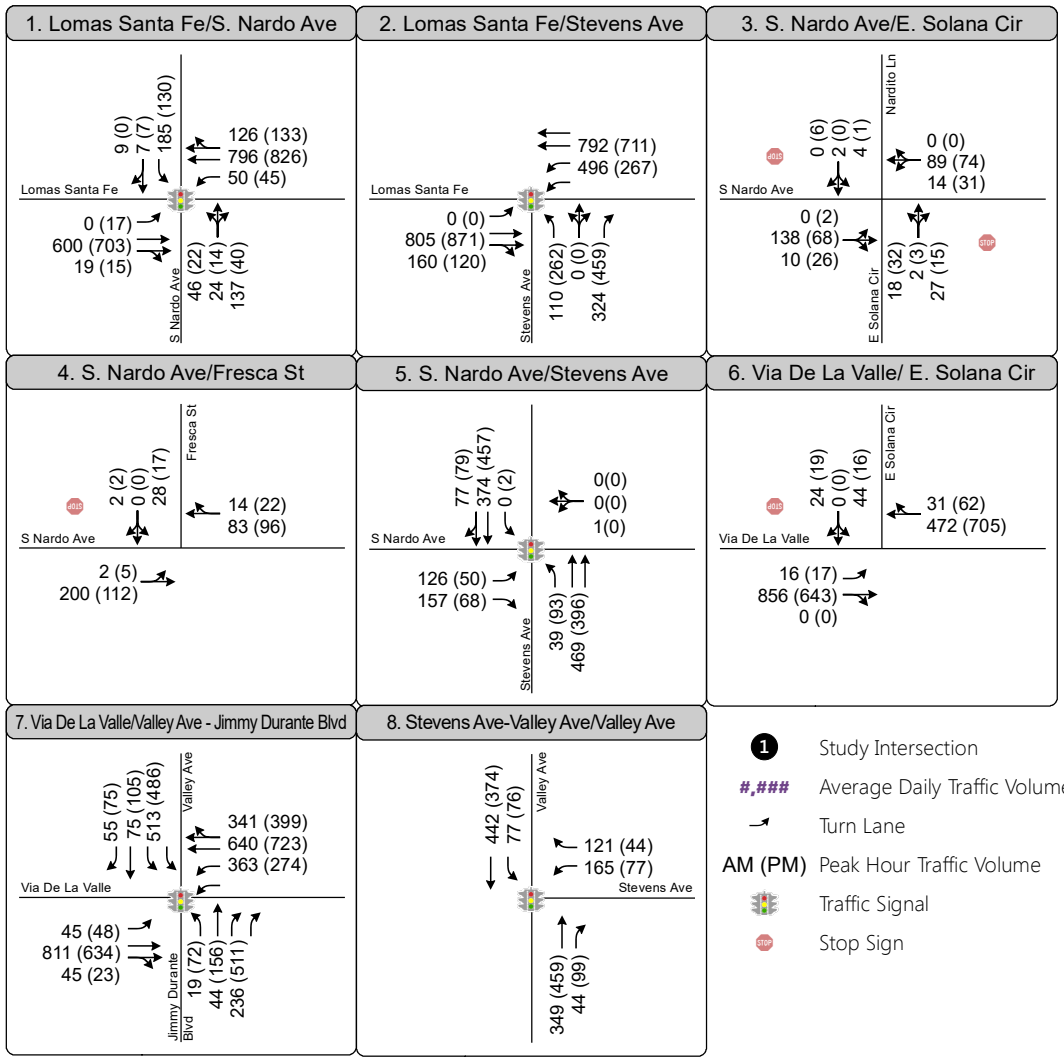


Figure 6-1

Peak Hour Traffic Volumes and Lane Configurations -Horizon Year (2035) Conditions

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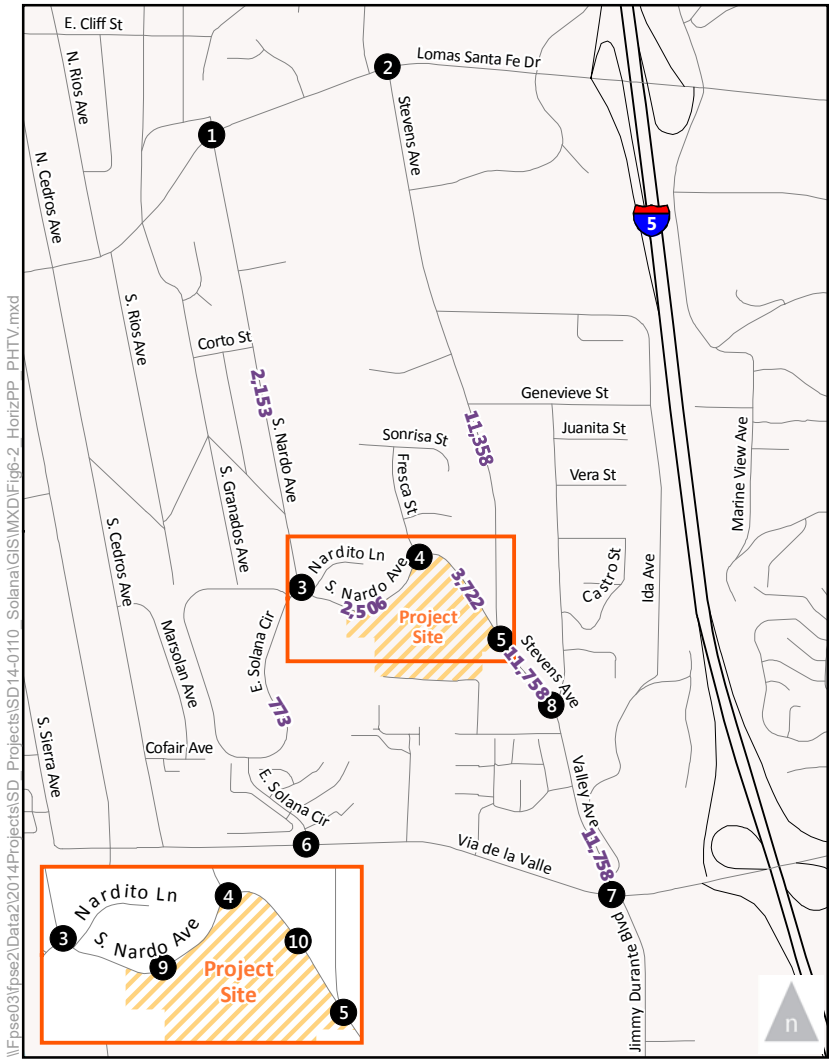

1 Study Intersection

#,### Average Daily Traffic Volume

Turn Lane

AM (PM) Peak Hour Traffic Volume

Traffic Signal

Stop Sign

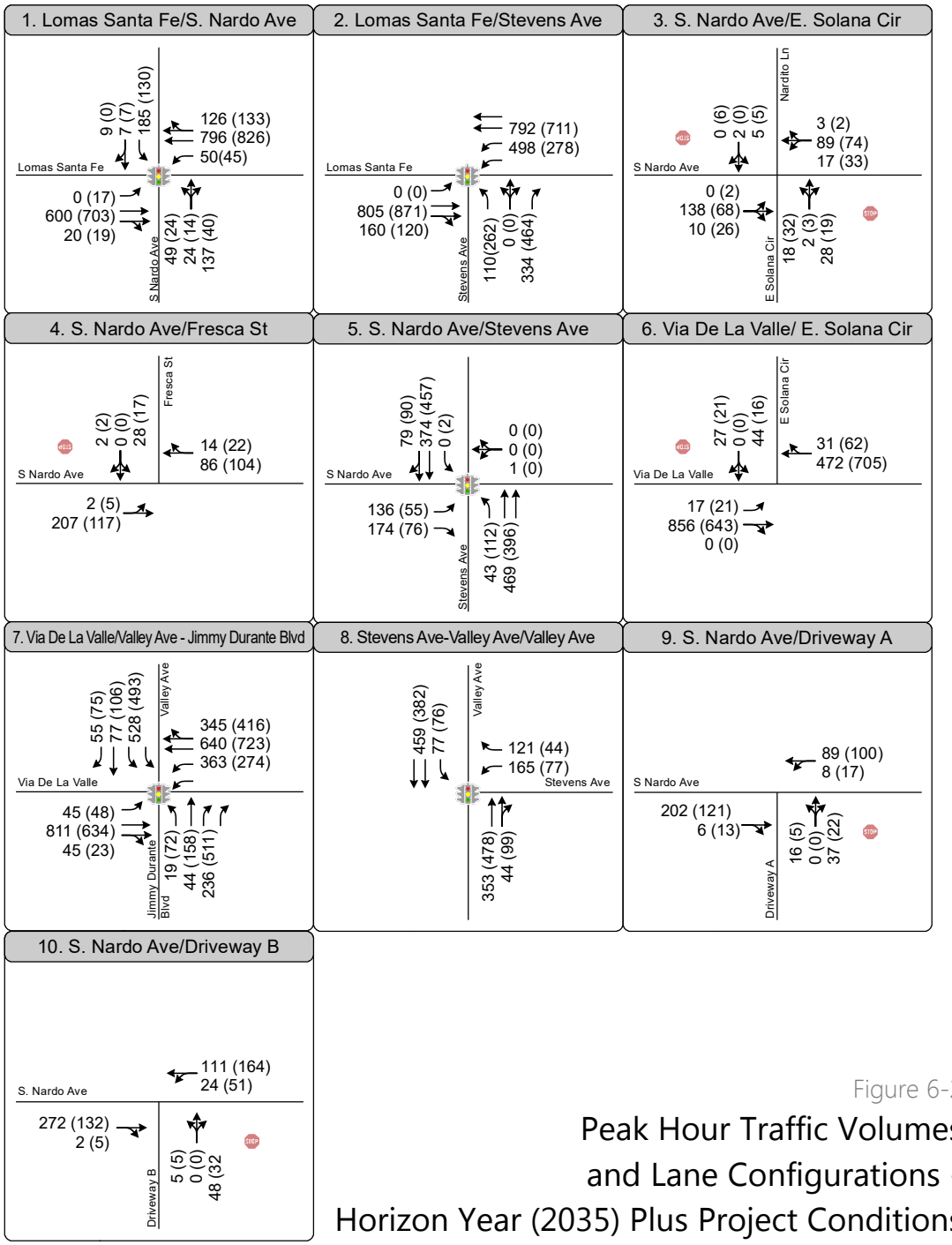

Figure 6-2

Peak Hour Traffic Volumes and Lane Configurations - Horizon Year (2035) Plus Project Conditions

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HORIZON YEAR (2035) TRAFFIC OPERATIONS

The operating conditions at all of the study intersections were calculated based on Horizon Year (2035) plus Project volumes and the existing roadway network. **Table 6.1** displays intersection LOS and average vehicle delay under Horizon Year (2035) and Horizon Year (2035) plus Project Conditions. LOS calculation worksheets for this scenario are provided in **Appendix G** for the Horizon Year (2035) Conditions and **Appendix H** for the Horizon Year (2035) plus Project Conditions**.**

Table 6.1 shows that all key study area intersections will continue to operate at LOS D or better under Horizon Year (2035) Conditions without and with the proposed project. The table below shows that the delay at the Stevens Avenue/S. Nardo Avenue intersection will actually decrease compared to Near Term (2017) Conditions despite the increase in volumes. This is explained by the intersection's signal timing which automatically adjusts to provide more green time to the north and south approaches in response to the increased demand. The green time provided for the east and west approaches automatically decreases, in response, in order to maintain the cycle length. The vehicular delay at the north and south approaches is therefore reduced and thus the overall delay reported for the intersection is reduced. Similarly, **Table 6.2** summarizes the results of the roadway segment level of service analysis. As shown in the table, the study roadway segments are forecast to operate at acceptable LOS without and with the proposed project, with the exception of Via de la Valle which is forecast to operate at LOS F. This segment V/C ratio suggests LOS F operating conditions without and with the project. The project traffic results in no change in V/C ratio, therefore the project is not forecast to result in a significant impact along this segment and mitigation measures are not necessary or required.

Therefore, the proposed project does not result in any Horizon Year (2035) significant impacts to the intersections or roadway network.

TABLE 6.1
HORIZON YEAR (2035) CONDITIONS PEAK HOUR INTERSECTION LEVEL OF SERVICE

#	Intersection	AM					PM					S?[4]
		Horizon Year (2035)		Horizon Year (2035) Plus Project		Δ[3]	Horizon Year (2035)		Horizon Year (2035) Plus Project		Δ[3]	
		Delay[1]	LOS[2]	Delay[1]	LOS[2]		Delay[1]	LOS[2]	Delay[1]	LOS[2]		
1	Lomas Santa Fe Drive / S. Nardo Avenue*	15.6	B	15.6	B	0.0	11.8	B	11.8	B	0.0	N
2	Lomas Santa Fe Drive / Stevens Avenue*	26.3	C	26.6	C	0.3	25.9	C	26.2	C	0.3	N
3	S. Nardo Avenue / E. Solana Circle	11.3	B	11.3	B	0.0	10.7	B	10.7	B	0.0	N
4	S. Nardo Avenue / Fresca Street	11.2	B	11.3	B	0.1	9.9	A	10.0	B	0.1	N
5	Stevens Avenue / S. Nardo Avenue*	18.0	B	18.8	B	0.8	14.4	B	15.6	B	1.2	N
6	Via de La Valle / E. Solana Circle	37.1	E	37.1	E	0.0	26.0	D	26.0	D	0.0	N
7	Stevens Avenue-Valley Avenue/ Via de La Valle*	30.8	C	31.0	C	0.2	36.3	D	36.7	D	0.4	N
8	Stevens Avenue-Valley Avenue / Valley Avenue	19.4	B	19.4	B	0.0	13.0	B	13.0	B	0.0	N
9	Driveway A / S. Nardo Avenue	N/A	N/A	4.2	A	N/A	N/A	N/A	3.7	A	N/A	N/A
10	Driveway B / S. Nardo Avenue	N/A	N/A	3.8	A	N/A	N/A	N/A	3.3	A	N/A	N/A

Source: Fehr & Peers, January 2014

Note:
1. Whole intersection weighted average stopped delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections.
2. LOS = Level of Service.
3. Δ = Change in delay, seconds
4. S? = Significant impact?
N/A = Not Applicable. Driveway intersections were analyzed under "Plus Project" scenarios only. * = Signalized intersection. ** = All-way stop controlled intersection.

TABLE 6.2
HORIZON YEAR (2035) CONDITIONS SEGMENT LEVEL OF SERVICE

Roadway Segment	Class & Capacity	No Project			With Project				
		ADT	V/C	LOS	ADT	V/C	LOS	Δ[3]	S?[4]
Stevens Avenue From Lomas Santa Fe Drive To S. Nardo Avenue	Collector (continuous LTL) 15,000	11,200	0.75	D	11,358	0.76	D	0.01	N
Stevens Avenue From S. Nardo Avenue To Valley Avenue	Collector (continuous LTL) 15,000	11,500	0.77	D	11,758	0.78	D	0.02	N
S. Nardo Avenue From Lomas Santa Fe Drive To E. Solana Circle	Sub-Collector (SF) 2,200	2,100	0.95	C	2,153	0.98	C	0.03	N
S. Nardo Avenue From E. Solana Circle To Fresca Street	Collector (MF) 8,000	2,400	0.30	A	2,506	0.31	B	0.01	N
S. Nardo Avenue From Fresca Street To Stevens Avenue	Collector (MF) 8,000	3,300	0.41	B	3,722	0.47	C	0.05	N
E. Solana Circle From S. Nardo Avenue To Via De La Valle	Sub-Collector (SF) 2,200	720	0.33	A	773	0.35	C	0.02	N
Lomas Santa Fe[4] From Stevens Avenue To Solana Hills Drive	Major Arterial 40,000	25,800	0.65	C	25,979	0.65	C	0.0	N

TABLE 6.2 HORIZON YEAR (2035) CONDITIONS SEGMENT LEVEL OF SERVICE									
Via de la Valle[4] From Camino Del Mar To Jimmy Durante Boulevard	Collector (continuous LTL) 15,000	18,541	1.24	F	18,594	1.24	F	0.0	N

Source: Fehr & Peers, January 2014

Note:
1. LOS = Level of Service.
2. Δ = Change in V/C
3. S = Significant Impact
4. Lomas Santa Fe and Via de la Valle counts were provided by City of Solana Beach for the "typical conditions". Data reported was collected in 2012.

7.0 SPECIAL CONDITIONS

Traffic impact study requirements at the regional and state level require data to be collected on a typical weekday outside of unusual or atypical conditions. The conditions measured in January 2014 represent the typical conditions. However, the community near the Del Mar Fairgrounds expressed concerns about traffic through their community during Fair and Race seasons. At the request of the City of Solana Beach, additional traffic counts were collected to assess the existing and special event traffic patterns associated with the Fair Season at the Del Mar Fairgrounds. Traffic count data was collected at the following times:

- *January 2014: One weekday for peak hour and daily counts for Typical Conditions*
- *July 2014: One weekday of daily counts for Fair Season*
- *August 2014: One day of daily counts for Race Season*
- *August 2014: One additional week of daily counts for Race Season*
- *November 2014: One week of daily counts for Fall Race Season*
- *June 2015: One week of daily counts for Fair Season*

Table 7.1A summarizes the traffic counts collected in January 2014 and those collected from July through June 2015. **Tables 7.1B, 7.1C, and 7.1D** summarize the weeklong data collected for the fair season and both summer and fall race seasons. As shown, Data count worksheets for all count events are provided in **Appendix A**.

The table shows that there is increased traffic in the study area during the fair season with the larger increases occurring on the major roadways such as Lomas Santa Fe and Via de la Valle and lesser changes in the surrounding the residential neighborhoods. The segment of Via de la Valle between Jimmy Durante Blvd and the I-5 ramps was analyzed based on two days of daily traffic count data collected in June 2015, one with the Fair open (Thursday) and one with the Fair closed (Monday). The level of service analysis shows this segment to be operating at LOS F when the fair is open due to a significant increase in vehicular volumes. During this time of year, residents in the area are expected to change their traffic patterns to avoid the most congested conditions, and these changes in trip patterns will vary day to day. The same is anticipated for the 66 new dwelling units associated with the proposed project. As a result, a new project traffic distribution was assumed to analyze the study area roadway segments under Fair Conditions and is illustrated in **Figure 7-1.** The figure shows that a substantial portion of project trips are assumed to access the I-5 Freeway by way of Lomas Santa Fe instead of Via de la Valle in order to avoid the heavily congested intersections providing access to the fairgrounds.

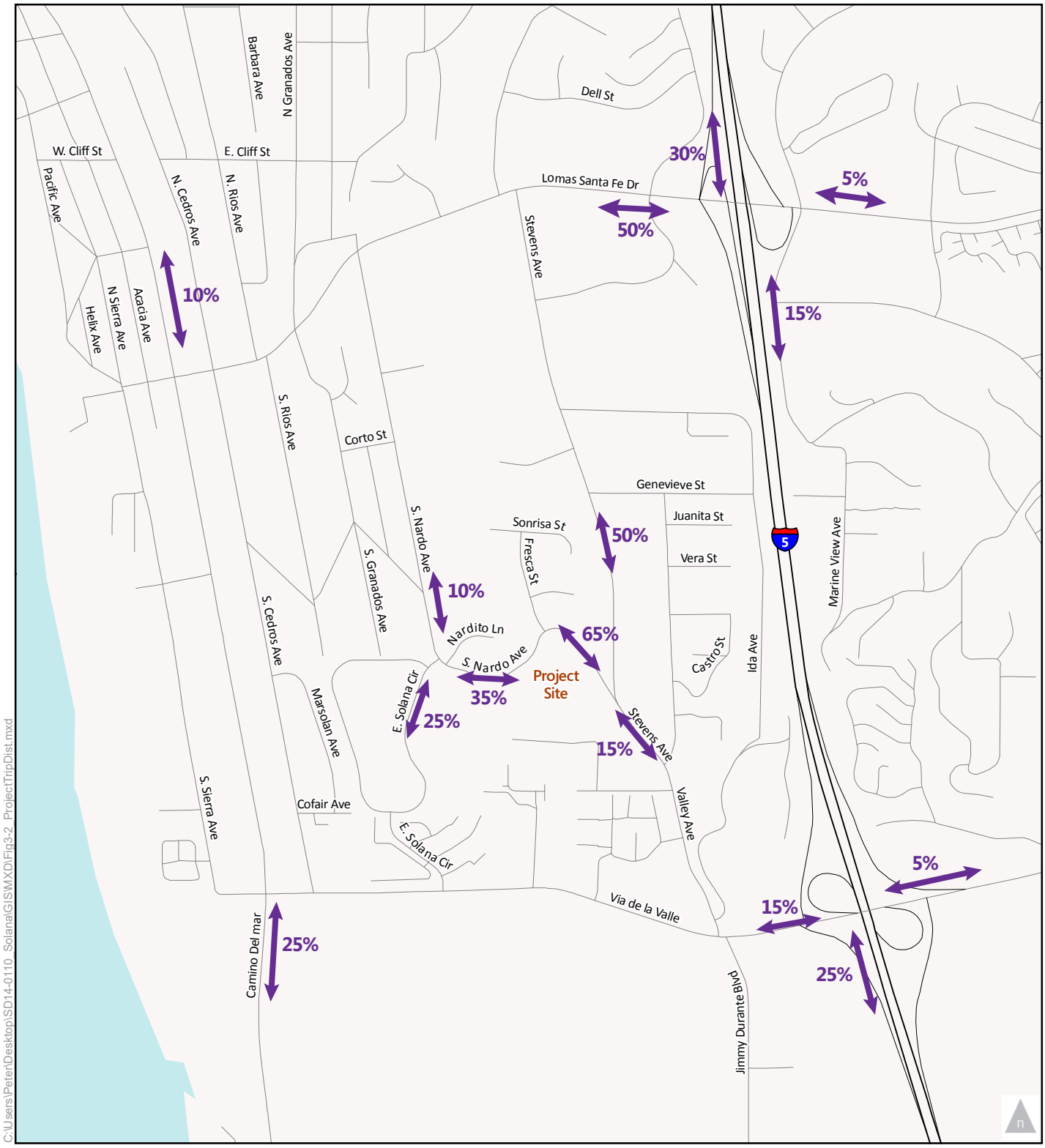

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Figure 7-1

Project Trip Re-Distribution with Fair Conditions

TABLE 7.1A
EXISTING CONDITIONS SEGMENT SEASONAL TRAFFIC COMPARISON

		January 2014			Fair Season (Jun 2015)			Race Season (July/August 2014)			Fall Race Season (November 2014)		
Roadway Segment	**Class & Capacity**	**ADT**	**V/C**	**LOS**	**ADT**	**V/C**	**LOS**	**Count Date**	**ADT**	**LOS**	**ADT**	**V/C**	**LOS**
Stevens Avenue From Lomas Santa Fe Drive To S. Nardo Avenue	Collector (continuous LTL) 15,000	9,741	0.75	C	9,380	0.63	C	7/31/14	8,340	C	10,046	0.77	D
								8/27/14 (1)	6,500	B			
Stevens Avenue From S. Nardo Avenue To Valley Avenue	Collector (continuous LTL) 15,000	10,244	0.79	D	9,416	0.63	C	7/31/14	8,981	C	10,452	0.80	D
								8/27/14	10,142	D			
Valley Avenue From Stevens Avenue To Via De La Valle[2]	Collector (continuous LTL) 15,000	N/A	N/A	N/A	10,587	0.71	D	N/A	N/A	N/A	N/A	N/A	N/A
S. Nardo Avenue[3] From Lomas Santa Fe Drive To E. Solana Circle	Sub-Collector (SF): 2,200	2,057	0.94	C	2,262	1.03	E	7/31/14	2,041	C	2,298	1.04	E
								8/27/14	2,231	E			
S. Nardo Avenue[3] From E. Solana Circle To Fresca Street	Collector (MF) 8,000	2,296	0.35	A	2,397	0.30	A	N/A	N/A	N/A	N/A	N/A	N/A
S. Nardo Avenue From Fresca Street To Stevens Avenue	Collector (MF) 8,000	3,000	0.46	B	3,329	0.42	B	7/31/14	2,137	A	3,526	0.54	C
								8/27/14	2,231	A			
E. Solana Circle From S. Nardo Avenue To Via De La Valle	Sub-Collector (SF): 2,200	649	0.30	A	1,018	0.46	C	7/31/14	881	A	874	0.40	A
								8/27/14	775	A			
Lomas Santa Fe From Stevens Ave To Solana Hills Drive	Major Arterial 40,000	23,013(5)	0.66	C	30,742	0.89	D	7/31/14	26,168	C	26,862	0.77	C
								8/27/14	27,093	C			

TABLE 7.1A EXISTING CONDITIONS SEGMENT SEASONAL TRAFFIC COMPARISON													
Lomas Santa Fe From Solana Hills Drive[2] To I-5	Major Arterial 40,000	N/A	N/A	N/A	39,568	1.13	E	N/A	N/A	N/A	N/A	N/A	N/A
Via de la Valle From Camino Del Mar To Jimmy Durante Boulevard	Collector (continuous LTL) 15,000	16,525[(5)]	1.10	F	21,687	1.45	F	7/31/14	21,609	C	20,170	1.35	F
								8/27/14	19,918	B			
Via de la Valle From Jimmy Durante Boulevard To I-5[2]	Major Arterial 40,000	N/A	N/A	N/A	53,060	1.52	F	N/A	N/A	N/A	N/A	N/A	N/A

Source: Fehr & Peers 2015

Notes:

(1) Data reported for August 27th, November 2014, and June 2015 represent the highest volume day for the majority of the roadway segments. Detailed weekly counts for these two conditions are provided in Table 4.1B, Table 4.1C, and Table 4.1D.

(2) Weekly counts were collected in June 2015 only

(3) Data from summer 2014 and November 2015 is not available at this location due to equipment failure.

(5) Lomas Santa Fe and Via de la Valle counts were provided by City of Solana Beach for the "typical conditions". Data reported was collected in 2012.

TABLE 7.1B FAIR SEASON WEEK LONG DAILY TRAFFIC VOLUMES (JUNE 2015)							
Roadway Segment	**Race Season Weekly Daily Traffic Volumes**						
	Saturday	**Sunday**	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
Stevens Avenue From Lomas Santa Fe Drive To S. Nardo Avenue	6,901	5,335	8,052	8,324	9,380	8,584	8,177
Stevens Avenue From Nardo Avenue To Valley Avenue	6,698	5,287	8,393	8,506	9,416	8,806	8,474
Valley Avenue From Stevens Avenue To Via De La Valle	7,634	6,326	10,358	10,125	11,119	10,587	10,209
S. Nardo Avenue From Lomas Santa Fe Drive To E. Solana Circle	2,052	1,913	1,952	2,100	2,188	2,213	2,262
S. Nardo Avenue From E. Solana Circle To Fresca Street	2,110	1,878	2,106	2,259	2,397	2,370	2,360
S. Nardo Avenue From Fresca Street To Stevens Avenue	2,925	2,746	3,053	3,130	3,252	3,329	3,166
E. Solana Circle From S. Nardo Avenue To Via De La Valle	928	753	782	935	1,018	935	991
Lomas Santa Fe From Stevens Avenue To Solana Hills Drive	27,280	23,145	26,353	29,362	30,742	30,492	29,875

TABLE 7.1B FAIR SEASON WEEK LONG DAILY TRAFFIC VOLUMES (JUNE 2015)							
Lomas Santa Fe From Solana Hills Drive To I-5	35,387	28,928	35,342	38,453	39,568	39,395	37,718
Via de la Valle From E. Solana Circle To Jimmy Durante Boulevard	19,108	18,642	19,109	21,332	21,687	21,109	20,769

TABLE 7.1C RACE SEASON WEEK LONG DAILY TRAFFIC VOLUMES (AUGUST 2014)							
Roadway Segment	**Race Season Weekly Daily Traffic Volumes**						
	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
Stevens Avenue From Lomas Santa Fe Drive To S. Nardo Avenue	6,250	4,535	3,934	5,392	6,235	6,500	6,405
Stevens Avenue From S. Nardo Avenue To Via De La Valle	9,142	6,790	5,974	8,413	9,470	10,142	9,875
S. Nardo Avenue From Lomas Santa Fe Drive To E. Solana Circle	2,051	1,853	1,968	2,089	2,172	2,231	2,256
S. Nardo Avenue From Fresca Street To Stevens Avenue	3,260	2,969	2,794	3,268	3,378	3,491	3,398

TABLE 7.1C RACE SEASON WEEK LONG DAILY TRAFFIC VOLUMES (AUGUST 2014)							
E. Solana Circle From S. Nardo Avenue To Via De La Valle	871	838	834	827	751	775	780
Lomas Santa Fe From Stevens Avenue To I-5	27,218	23,022	21,657	23,852	25,294	27,093	27,246
Via de la Valle From E. Solana Circle To Jimmy Durante Boulevard	22,258	19,513	17,479	16,927	18,055	19,918	20,157

TABLE 7.1D FALL RACE SEASON WEEK LONG DAILY TRAFFIC VOLUMES (NOVEMBER 2014)							
Roadway Segment	**Race Season Weekly Daily Traffic Volumes**						
	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
Stevens Avenue From Lomas Santa Fe Drive To S. Nardo Avenue	8,114	8,350	9,681	10,046	9,932	6,960	5,190
Stevens Avenue From S. Nardo Avenue To Via De La Valle	8,580	8,650	10,123	10,396	10,452	7,150	5,437
S. Nardo Avenue From Lomas Santa Fe Drive To E. Solana Circle	1,933	1,956	2,139	2,258	2,298	1,757	1,861

TABLE 7.1D FALL RACE SEASON WEEK LONG DAILY TRAFFIC VOLUMES (NOVEMBER 2014)							
S. Nardo Avenue From Fresca Street To Stevens Avenue	3,014	3,097	3,315	3,404	3,526	2,970	2,875
E. Solana Circle From S. Nardo Avenue To Via De La Valle	629	580	652	738	746	874	694
Lomas Santa Fe From Stevens Avenue To I-5	22,793	24,182	25,451	26,536	26,862	23,273	18,132
Via de la Valle From E. Solana Circle To Jimmy Durante Boulevard	16,430	17,156	18,025	19,321	20,170	19,226	15,987

June 2015 traffic counts were used as a basis for plus Project analysis under Existing, Near Term, and Horizon Year scenarios. The traffic volume growth assumptions as described in Chapters five and six were used to calculate Near Term and Horizon Year volumes with Fair Conditions. **Table 7.2** displays the roadway segment analysis results assuming the project trip re-distribution with Fair Conditions by scenario. The table shows that heavily traveled roadways such as Lomas Santa Fe and Via de la Valle will continue to operate at unacceptably conditions due to the high volumes of traffic adjacent to the I-5 Freeway ramps. However, the additional project trips to these segments are negligible after the assumed re-distribution described above, and in many cases does not increase the V/C ratio. Furthermore, the re-distribution of project trips to neighborhood facilities is not expected to degrade the operations of the roadways to an unacceptable level. Therefore, the proposed project is not expected to result in any significant impacts to the surrounding roadway network under Fair Conditions which are considered the most extreme.

TABLE 7.2
FAIR CONDITIONS SEGMENT LEVEL OF SERVICE BY SCENARIO

		Existing Conditions								Near Term Conditions								Horizon Year Conditions							
		No Project			With Project					No Project			With Project					No Project			With Project				
Roadway Segment	**Class & Capacity**	**ADT**	**V/C**	**LOS**	**ADT**	**V/C**	**LOS**	**Δ[3]**	**S?[4]**	**ADT**	**V/C**	**LOS**	**ADT**	**V/C**	**LOS**	**Δ[3]**	**S?[4]**	**ADT**	**V/C**	**LOS**	**ADT**	**V/C**	**LOS**	**Δ[3]**	**S?[4]**
Stevens Avenue From Lomas Santa Fe Drive To S. Nardo Avenue	Collector (continuous LTL) 15,000	8,584	0.57	C	8,848	0.59	C	0.02	N	8,756	0.58	C	9,020	0.60	C	0.02	N	11,200	0.75	D	11,464	0.76	D	0.02	N
Stevens Avenue From S. Nardo Avenue To Valley Avenue	Collector (continuous LTL) 15,000	8,806	0.59	C	8,885	0.59	C	0.00	N	8,982	0.60	C	9,061	0.60	C	0.01	N	9,880	0.66	C	9,960	0.66	C	0.01	N
Valley Avenue[4] From Stevens Avenue To Via de la Valle	Collector (continuous LTL) 15,000	10,587	0.71	D	10,666	0.71	D	0.01	N	10,799	0.72	D	10,878	0.73	D	0.01	N	11,880	0.79	D	11,958	0.80	D	0.01	N
S. Nardo Avenue From Lomas Santa Fe Drive To E. Solana Circle	Sub-Collector (SF) 2,200	2,100	0.95	C	2,153	0.98	C	0.03	N	2,150	0.98	C	2,200	1.0	C	0.02	N	2,150	0.98	C	2,200	1.0	C	0.02	N
S. Nardo Avenue From E. Solana Circle To Fresca Street	Collector (MF) 8,000	2,370	0.30	A	2,555	0.32	B	0.03	N	2,417	0.30	A	2,602	0.33	B	0.03	N	2,400	0.30	A	2,585	0.32	B	0.03	N
S. Nardo Avenue From Fresca Street To Stevens Avenue	Collector (MF) 8,000	3,329	0.42	B	3,672	0.46	C	0.05	N	3,396	0.42	B	3,739	0.47	B	0.06	N	3,300	0.41	B	3,643	0.46	C	0.05	N
E. Solana Circle From S. Nardo Avenue To Via De La Valle	Sub-Collector (SF) 2,200	935	0.43	A	1,067	0.49	A	0.06	N	954	0.43	A	1,086	0.49	A	0.06	N	1,000	0.45	A	1,132	0.51	A	0.06	N
Lomas Santa Fe[4] From Stevens Avenue To Solana Hills Drive	Major Arterial 40,000	30,492	0.76	D	30,756	0.77	D	0.01	N	31,102	0.78	D	31,366	0.78	D	0.01	N	34,200	0.86	D	34,476	0.86	D	0.0	N
Lomas Santa Fe[4] From Solana Hills Drive To I-5	Major Arterial 40,000	**39,395**	**0.98**	**E**	**39,659**	**0.99**	**E**	0.0	N	**40,183**	**1.00**	**F**	**40,477**	**1.01**	**F**	0.01	N	**44,400**	**1.11**	**F**	**44,465**	**1.11**	**F**	0.0	N
Via de la Valle[4] From Camino Del Mar To Jimmy Durante Boulevard	Collector (continuous LTL) 15,000	21,687	1.45	F	21,819	1.45	F	0.0	N	22,121	1.47	F	22,253	1.48	F	0.01	N	24,330	1.62	F	24,465	1.63	F	0.01	N
Via de la Valle[4] From Jimmy Durante Boulevard To I-5	Major Arterial 40,000	**53,060**	**1.33**	**F**	**53,139**	**1.33**	**F**	0.0	N	**54,121**	**1.35**	**F**	**54,200**	**1.36**	**F**	0.0	N	**59,530**	**1.49**	**F**	**59,613**	**1.49**	**F**	0.0	N

8.0 BICYCLE, PEDESTRIAN, AND TRANSIT IMPACTS

The City of Solana Beach currently has four designated bicycle facilities: Highway 101, Lomas Santa Fe Drive, Via De Le Valle, and San Andres Drive. The Solana Beach portion of the Coastal Rail Trail constructed a northbound and southbound Class I bike path along Highway 101 between Ocean Street and Via De La Valle. At each end of the Coastal Rail Trail, the bike path transitions to Class II bike lanes.

Along Lomas Santa Fe Drive and Via De Le Valle there are Class II bike lanes in both the eastbound and westbound directions. These bicycle lanes connect the coast to inland communities. A Class III bike route exists along San Andres Drive and Highland Drive. There are no marked bicycle facilities adjacent to the project site on Stevens Avenue or S. Nardo Avenue.

Given the existing sidewalks and the marked crosswalk both at the Fresca Street / S. Nardo Avenue and E. Solana Circle / S. Nardo Avenue intersections, the surrounding area is a walkable environment with sidewalks and residential users. Chapter 8 below discusses opportunities for traffic calming on S. Nardo Avenue that would also contribute to improving the pedestrian environment.

The proposed project site plan in Figure 3-1 displays improved pedestrian connectivity within the complex. Sidewalks or pedestrian paths are provided throughout allowing for improved connections throughout the site, including to the club house and residences. In addition, the project proposes bike racks spread throughout the project.

The increase in traffic on S. Nardo Avenue due to the project could affect pedestrians within the surrounding neighborhoods. However, the proposed project is not expected to substantially increase the biking, walking, or transit demand to a level where it could not be accommodated by existing or planned facilities, nor is the project anticipated to conflict with any local or regional policies related to bicycle, pedestrian, or transit activity. The project's impacts to bicycle, pedestrian, and transit facilities are therefore considered less-than-significant.

9.0 COMMUNITY TRAFFIC RELATED COMMENTS

HG Fenton conducted two public workshops in March 2014. During these workshops, participants were provided the opportunity to share ideas and concerns about traffic and parking near the project site. The five key issues raised by the community are listed below along with the project's proposed improvement in response to these concerns:

- **Reduce traffic speeds along S. Nardo Ave. from Solana Circle to Fresca St.**

  The project proposes to construct traffic calming devices along S. Nardo Avenue from Solana Circle-Nardito Lane to Stevens Avenue. Traffic calming devices are illustrated in **Figure 8-1** and include:

  - Installation of a 10-foot raised median and striping on S. Nardo Avenue just west of Stevens Avenue, which will create a left-turn pocket for vehicles entering the project site.
  - Installation of curb extensions on the northwest and northeast corners of the Fresca Street / S. Nardo Avenue intersection, which will narrow the street, reduce speeds, and make pedestrians more visible.
  - Installation of chokers, including a 6-foot center median and 5-foot medians on either side of the street, on S. Nardo Avenue approximately 230 feet west of Fresca Street, and approximately 360 feet east of Nardito Lane, which will narrow the street and reduce speeds along a long stretch of S. Nardo Avenue.
  - Installation of a speed table on S. Nardo Avenue between Nardito Lane and Solana Circle to reduce turning speeds through the intersections

- **Reduce and/or make street parking safer along S. Nardo Ave. adjacent to Solana Highlands and along Fresca St. to Fresca Ct. (particularly during the Del Mar race season).**

  The proposed implementation of traffic calming along S. Nardo Avenue will help reduce traffic speeds along the corridor. Curb extensions that are constructed as part of the chokers, and curb extensions at intersections will help buffer the parked vehicles along the street. The curb extensions constructed as part of the chokers could result in the loss of between three to five on-street parking spaces on Nardo Avenue. There is currently red curb at the Nardo Avenue/Fresca Street intersection which will prevent any loss of parking due to the curb extensions.

50 25 0 50 100 150

SCALE: 1"=50'

Recommended Traffic Calming Concept

Solana Highlands Project

N:\Projects\2014_Projects\0110 Solana Highlands TIA\CADD\TransPW\Exhibits\PDFs

- **Improve pedestrian safety along S. Nardo Ave. from Solana Circle to Fresca St. with raised pedestrian crossings or stop signs.**

  Preliminary All-Way STOP warrants were conducted for the Nardito Lane / S. Nardo Avenue and Fresca St. / S. Nardo Avenue intersections. Based on traffic volume through the intersection, the All-Way STOP warrants were not met. Therefore, other measures were considered to help improve the walking environment along S. Nardo Avenue:

  - Curb extensions proposed at the Fresca Street /S. Nardo Avenue intersection will help reduce the crossing distance for pedestrians and reduce traffic speeds at this intersection. While a raised crosswalk was considered, the slope of S. Nardo Avenue prohibits the construction of a raised crosswalk at this location.
  - A ladder striped crosswalk is recommended on the STOP controlled north leg of the S. Nardo Avenue/Fresca Street intersection. The ladder striped crosswalk painted with highlight reflective paint will improve pedestrian visibility compared to the existing condition at this location.
  - A speed table is recommended between E. Solana Circle and Nardito Lane. The speed table, in conjunction with the other traffic calming devices, will help to reduce traffic speeds between Nardito Lane and Fresca Street. An existing striped yellow school crosswalk is located on the east leg of the S. Nardo Avenue/Nardito Lane intersection serving the adjacent St. James Catholic Church and School. It is recommended this crosswalk be repainted with highlight reflective paint in order to improve the visibility of the marked crosswalk. Due to a lack of sidewalks on the north side of S. Nardo Avenue, a marked crosswalk on the speed table is not recommended.

- **Improve safe access for drivers exiting from, or turning left into, the Turfwood Community driveway on Valley Ave.**

  Although the Solana Highlands project will not directly affect the access to and from the driveway at the Turfwood Community, a field assessment was conducted to determine existing access issues at the Turfwood Community Driveway. The field assessment revealed that approximately 200 feet of visibility is achievable from the driveway looking north along Valley Avenue if the driver moves beyond the existing signage for the Ocean Crest Apartments property and existing utility boxes along the curvature of the road. **Figure 8-2** below illustrates the line of sight required to meet the minimum stopping sight distances. As shown, the monument for the adjacent apartment complex is within that line of sight and obstructs the drivers view.

  The presence of a lane drop at the driveway further complicates access at this driveway. As vehicles pass through the Turfwood Driveway, they are merging into a single lane southbound toward Via de la Valle.

  It is possible that restriping Stevens Avenue in advance of the signalized Stevens Avenue/Valley Avenue intersection could reduce the lane merge in front of the Turfwood Community Driveway and improve the line of sight by allowing vehicles from the driveway to "creep out" beyond the existing obstructions to see around the curve on Valley Avenue-Stevens Avenue.

10.0 PROJECT FINDINGS

This chapter provides a summary of the key findings and study recommendations, including the level of service results for each scenario analyzed and recommended mitigation measures.

SUMMARY OF TRAFFIC OPERATIONS

Table 9.1 summarizes the intersection level of service results for each of the analyzed scenarios. **Table 9.2** summarizes the results of the roadway segment analysis.

Both tables show that the propose project will not result in any significant impacts to either intersections or roadway segments. All intersections and roadway segments will operate acceptably through Horizon Year (2035) Conditions, without and with the project. Therefore, no mitigation measures are required.

TABLE 9.1
SUMMARY OF INTERSECTION PEAK HOUR LEVEL OF SERVICE

#	Intersection	Existing		Existing + Project		Near Term (2017)[1]		Near Term (2017) + Project[1]		Horizon Year (2035)		Horizon Year (2035) + Project	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	Lomas Santa Fe Drive & S. Nardo Avenue*	B	B	B	B	B	B	B	B	B	B	B	B
2	Lomas Santa Fe Drive & Stevens Avenue*	C	C	C	C	C	C	C	C	C	C	C	C
3	S. Nardo Avenue & E. Solana Circle	B	B	B	B	B	B	B	B	B	B	B	B
4	S. Nardo Avenue & Fresca Street	B	A	B	A	B	A	B	A	B	A	B	B
5	Stevens Avenue & S. Nardo Avenue*	B	B	B	B	B	B	B	B	B	B	B	B
6	Via de La Valle & E. Solana Circle	D	C	D	C	D	C	D	C	E	D	E	D
7	Stevens Avenue-Valley Avenue/ Via de La Valle*	C	C	C	C	C	C	C	C	C	D	C	D
8	Stevens Avenue-Valley Avenue / Valley Avenue	B	B	B	B	B	B	B	B	B	B	B	B
9	Driveway A / S. Nardo Avenue	N/A	N/A	A	A	N/A	N/A	A	A	N/A	N/A	A	A
10	Driveway B / S. Nardo Avenue	N/A	N/A	A	A	N/A	N/A	A	A	N/A	N/A	A	A

Source: Fehr & Peers, January 2014

TABLE 9.2 SUMMARY OF ROADWAY SEGMENT LEVEL OF SERVICE							
#	**Roadway Segment**	**Existing**	**Existing + Project**	**Near Term (2017)**	**Near Term (2017) + Project**	**Horizon Year (2035)**	**Horizon Year (2035) + Project**
1	***Stevens Avenue*** From Lomas Santa Fe Drive To S. Nardo Avenue	C	C	C	D	D	D
2	***Stevens Avenue*** From S. Nardo Avenue To Via De La Valle	D	D	D	D	D	D
3	***S. Nardo Avenue*** From Lomas Santa Fe Drive To E. Solana Circle	C	C	C	C	C	C
4	***S. Nardo Avenue*** From E. Solana Circle To Fresca Street	A	A	A	A	A	B
5	***S. Nardo Avenue*** From Fresca Street To Stevens Avenue	B	B	B	B	B	C
6	***E. Solana Circle*** From S. Nardo Avenue To Via De La Valle	A	A	A	A	A	A

Source: Fehr & Peers, January 2014

11.0 CONCLUSIONS AND RECOMMENDATIONS

The Solana Highlands site currently contains 194 apartment units, and the proposed project will increase the number of units to 260, increase the total number of parking spaces and parking ratios, and reduce the total number of project driveways from four to two. Modifications to the site include re-grading to provide for internal auto connections between buildings and improved pedestrian access throughout the site.

The analysis conducted and summarized in this report shows that the proposed project will not result in any significant impacts to the surrounding roadway segments or intersections under Near Term (2017) Conditions and Horizon Year (2035) Conditions and therefore no mitigation is required.

The project developer conducted two public workshops in March 2014. During these workshops, participants were provided the opportunity to share ideas and concerns about traffic and parking near the project site. The project developer is proposing various traffic calming measures to address these resident concerns.

The project proposes to construct traffic calming devices along S. Nardo Avenue from Solana Circle-Nardito Lane to Stevens Avenue including:

- Installation of a 10-foot raised median and striping on S. Nardo Avenue just west of Stevens Avenue, which will create a left-turn pocket for vehicles entering the project site.
- Installation of curb extensions on the northwest and northeast corners of the Fresca Street / S. Nardo Avenue intersection, which will narrow the street, reduce speeds, and make pedestrians more visible.
- Installation of chokers, including a 6-foot center median and 5-foot medians on either side of the street, on S. Nardo Avenue approximately 230 feet west of Fresca Street, and approximately 360 feet east of Nardito Lane, which will narrow the street and reduce speeds along a long stretch of S. Nardo Avenue.
- Installation of a speed table on S. Nardo Avenue between Nardito Lane and Solana Circle to reduce turning speeds through the intersections

Other measures were considered, but ultimately dismissed, to help improve the walking environment along S. Nardo Avenue including:

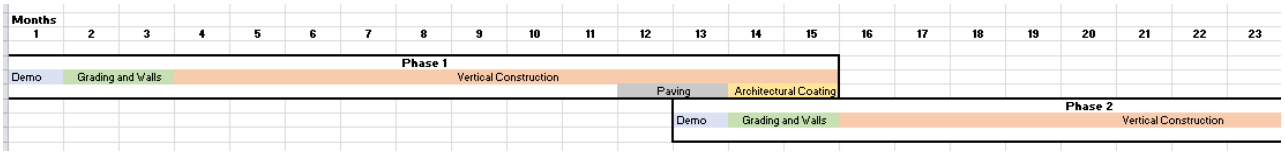
- Curb extensions proposed at the Fresca Street /S. Nardo Avenue intersection will help reduce the crossing distance for pedestrians and reduce traffic speeds at this intersection. While a raised crosswalk was considered, the slope of S. Nardo Avenue prohibits the construction of a raised crosswalk at this location.

- A ladder striped crosswalk is recommended on the STOP controlled north leg of the S. Nardo Avenue/Fresca Street intersection. The ladder striped crosswalk painted with highlight reflective paint will improve pedestrian visibility compared to the existing condition at this location.
- A speed table is recommended between E. Solana Circle and Nardito Lane. The speed table, in conjunction with the other traffic calming devices, will help to reduce traffic speeds between Nardito Lane and Fresca Street. An existing striped yellow school crosswalk is located on the east leg of the S. Nardo Avenue/Nardito Lane intersection serving the adjacent St. James Catholic Church and School. It is recommended this crosswalk be repainted with highlight reflective paint in order to improve the visibility of the marked crosswalk. Due to a lack of sidewalks on the north side of S. Nardo Avenue, a marked crosswalk on the speed table is not recommended.

The proposed implementation of traffic calming along S. Nardo Avenue will help reduce traffic speeds along the corridor. Curb extensions that are constructed as part of the chokers, and curb extensions at intersections will help buffer the parked vehicles along the street. The curb extensions constructed as part of the chokers could result in the loss of between three to five on-street parking spaces on Nardo Avenue. There is currently red curb at the Nardo Avenue/Fresca Street intersection which will prevent any loss of parking due to the curb extensions. Generally, the proposed project is not expected to substantially increase the walking, biking, or transit demand to a level where it could not be accommodated by existing or planned facilities.

PROJECT CONSTRUCTION

Project construction is planned for three phases, each of which is defined by three work phases, and which will last for approximately 15 months. There will be a three month overlap between Phase 1 and Phase 2, and between Phase 2 and Phase 3, an example of which is displayed below.



The construction period will last for a total of 39 months. During each phase of construction, a portion of the existing residences will be removed so that the new buildings can be constructed:

- Phase 1 – 10 buildings removed, 74 apartment units in operation (592 resident trips)
- Phase 2 – 2 buildings removed, 120 apartment units in operation (960 resident trips)
- Phase 3 – 6 buildings removed, 148 apartment units in operation (1,184 resident trips)

The existing site has 194 apartment units and generates a total of 1,552 daily trips under Existing Conditions. The removal of buildings will result in a net loss of daily trips during each phase of construction. Phase 1 will result in the highest reduction in resident related trips to and from the site, while Phase 2 will result in the lowest reduction in the resident related trips.

It should be noted that while the months which overlap between Phases (i.e- month 13, 14, and 15) are anticipated to experience the highest volume of construction traffic, and represent the worst case scenario, the increase in construction traffic will not exceed the anticipated reduction in daily trips associated with the units removed during demolition. **Table 10.1** demonstrates the daily trips associated with each element of construction activity anticipated to occur on the project site. As shown with this data provided by the environmental consultant, the highest generator of trips occurs during building or vertical construction, which results in 40 workers and 10 vendors per day or approximately 100 daily round trips. The highest overlap of activity occurs when the two phases of construction overlap and as a result all five elements of construction activity occur simultaneously. During this time, the daily construction related traffic would include a total of 128 daily worker trips, 24 daily vendor trips, and 24 daily hauling trips for a total of 176 daily trips associated with the overlap of phases.

Since the apartment units generate approximately 8 trips per day, the 176 construction trips would be equivalent to 22 apartment units. Compared to the existing 194 apartment units, each of the phases removes more than 22 apartment units, as described above. Therefore, at no point would the construction trips exceed the current trips generated by the residential uses on site.

TABLE 10.1
PROJECT TRIP GENERATION PER ELEMENT OF CONSTRUCTION ACTIVITY

Phase	Daily Worker Trips (one-way)	Daily Vendor Trips (one-way)	Total Hauling Trips (one way) *over entire phase	Worker Trip Length (model default)	Vendor Trip length (model default)	Hauling Trip Length (nearest disposal facility)
Demolition	12 (6 workers)	4 (2 delivery trucks)	302 (default demolition haul trucks)	10.8 miles	7.3 miles	22 miles (Sycamore Landfill)
Grading	12 (6 workers)	0	814 (6,500 cy/16 cy truck capacity *2)	10.8 miles	7.3 miles	33 miles (Otay Landfill)
Building Construction	80 (40 workers)	20 (10 delivery trucks)	0	10.8 miles	7.3 miles	0
Paving	12 (6 workers)	0	0	10.8 miles	7.3 miles	0
Arch Coating	12 (6 workers)	0	0	10.8 miles	7.3 miles	0

Source: Dudek, 2015

Note:
(1) Each load includes two one-way trips – one trip with an empty trailer to the site and the other trips with a loaded trailer to the landfill.
(2) The material is assumed to be hauled across each of the three phases equally. Therefore, it is assumed 6,500 cy of material is removed in each phase. The 813 one-way trips is equivalent to 407 loads of material hauled from the site over the entire phase.

The information from the table above was tallied for each construction phase and added to the trips that would be generated by the apartment units that would continue to be occupied during each phase. To provide a slightly more conservative evaluation, the number of construction worker trips was increased to three (3) trips per day to account for some workers that might travel to and from the site during lunch. Similarly, the effect of larger trucks on traffic flow was accounted for by adjusting the haul truck volume by a factor of 2.5, which represents the passenger car equivalent (PCE) of each truck.

Table 10.2 illustrates the total traffic volume expected to be generated during each development phase, which comprises both construction traffic (i.e., workers, vendors, and trucks) and apartment resident traffic. For comparison purposes, the existing site has 194 apartment units and generates a total of 1,552 daily trips under Existing Conditions. Under each phase of construction, the project will result in a net reduction in daily trips when compared to the 1,552 trips generated by the existing apartment units. Once Phase 3 on construction is completed, there will be 260 apartment units on site, for a net increase of 66 units. The traffic analysis was therefore based on these 66 additional units and their associated trips as a worst-case

scenario, and it is anticipated that construction traffic will not result in any additional impacts to the study area. During the time of construction, construction vehicles will be parked on site with existing tenants and will not interfere with the existing on-street parking.

TABLE 10.2
PROJECT TRIP GENERATION PER CONSTRUCTION PHASE

Trip Type	Daily Trip Rate	Phase 1		Phase 2		Phase 3		Total Project	
		Amount	ADT	Amount	ADT	Amount	ADT	Amount	ADT
Workers[1]	3 trips/worker[1]	64	192	64	192	64	192	0	0
Vendors	2 trips/vendor	12	24	12	24	12	24		
Trucks[2]	5 trips/truck[2]	12	60	12	60	12	60	0	0
Apartment Units[3]	8 trips/DU	74	592	120	960	148	1,184	260	2,080
Total Trips			**868**		**1,236**		**1,460**		**2,080**

Notes:
[1] Accounts for inbound and outbound trips, as well as any mid-day trips for lunch or meetings.
[2] Based on 2.5 passenger car equivalent * 2 trips per day (in and out
[3] Refers to number of apartment units built and occupied during construction phase

APPENDIX A: EXISTING TRAFFIC COUNTS

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Lomas Santa Fe @ Stevens Avenue

Date of Count: *Thursday, January 23, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *14-0147*

FEHR PEERS

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Lomas Santa Fe @ Stevens Avenue

AM Period (7:00 AM - 9:00 AM)									
		Westbound		Northbound			Eastbound		
		Left	Thru	Left		Right	Thru	Right	TOTAL
7:00 AM		90	88	11		35	69	20	313
7:15 AM		154	109	20		42	111	42	478
7:30 AM		177	116	38		79	167	64	641
7:45 AM		102	150	31		81	139	50	553
8:00 AM		81	134	17		73	191	37	533
8:15 AM		93	145	21		61	148	24	492
8:30 AM		118	233	23		59	183	53	669
8:45 AM		132	236	45		65	174	42	694
Total		947	1,211	206		495	1,182	332	4,373

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.86**

		Westbound		Northbound			Eastbound			TOTAL
		Left	Thru	Left	Thru	Right	Left	Thru	Right	
Volume		424	748	106		258		696	156	2,388
PHF		0.80	0.79	0.59		0.88		0.91	0.74	0.86
Movement PHF			0.80		0.83			0.90		0.86

PM Period (4:00 PM - 6:00 PM)									
		Westbound		Northbound			Eastbound		
		Left	Thru	Left		Right	Thru	Right	TOTAL
4:00 PM		59	158	66		76	186	43	588
4:15 PM		72	149	49		71	189	32	562
4:30 PM		54	153	68		96	174	30	575
4:45 PM		60	203	53		55	194	34	599
5:00 PM		44	158	69		95	229	28	623
5:15 PM		60	142	67		120	166	24	579
5:30 PM		59	149	64		73	187	22	554
5:45 PM		70	132	47		65	168	19	501
Total		478	1,244	483		651	1,493	232	4,581

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.95**

		Westbound		Northbound			Eastbound			TOTAL
		Left	Thru	Left		Right	Thru	Right		
Volume		218	656	257		366	763	116		2376
PHF		0.908	0.808	0.931		0.763	0.833	0.853		0.95
Movement PHF			0.83		0.83		0.86			0.95

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

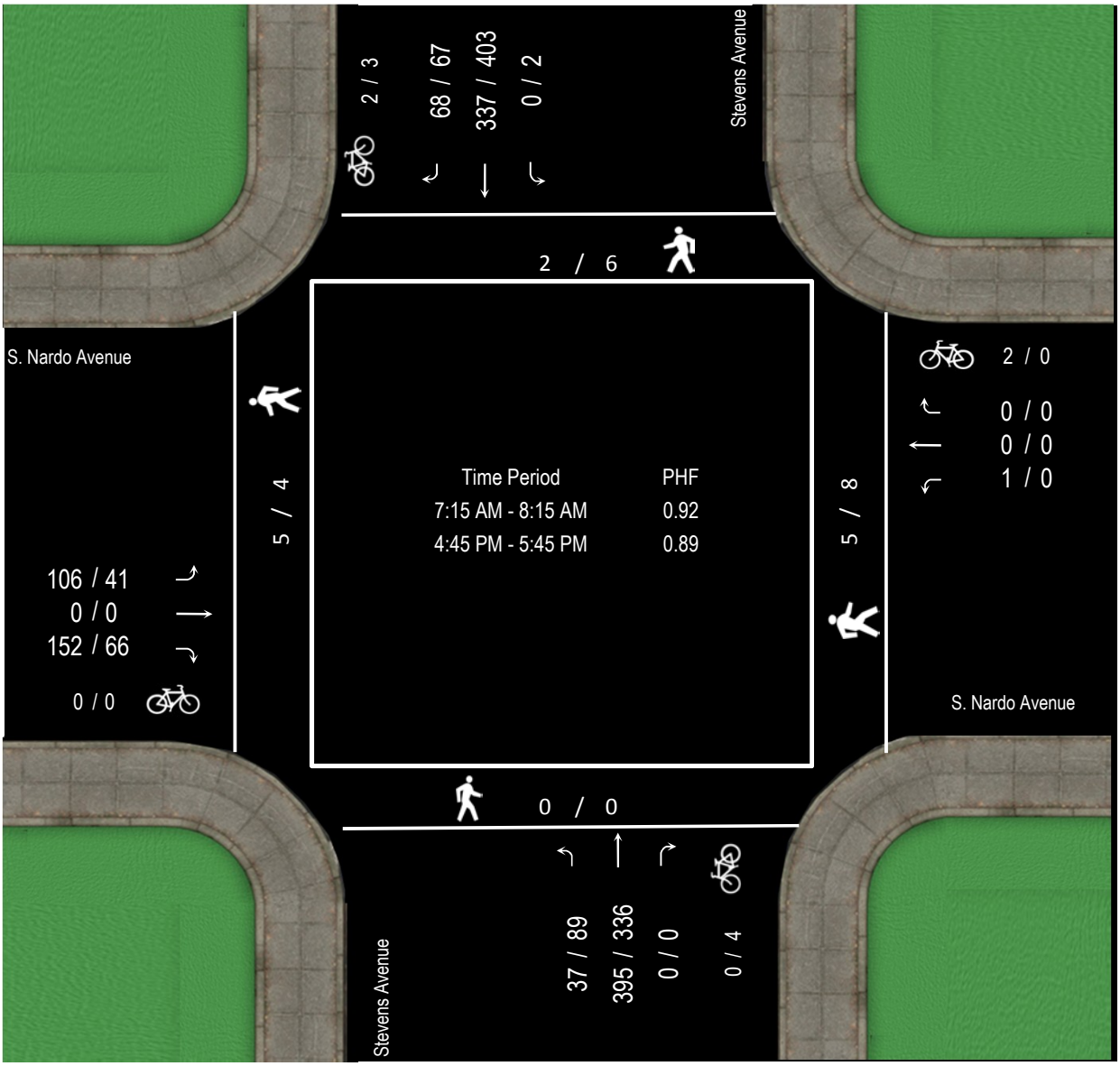
Location: S. Nardo Avenue @ Stevens Avenue

Date of Count: *Thursday, January 23, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *14-0147*



FEHR PEERS

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: S. Nardo Avenue @ Stevens Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	TOTAL
7:00 AM	0	39	7	0	0	0	9	69	0	15	0	34	173
7:15 AM	0	85	7	0	0	0	6	129	0	26	0	29	282
7:30 AM	0	132	24	0	0	0	9	83	0	31	0	19	298
7:45 AM	0	70	22	1	0	0	17	95	0	13	0	58	276
8:00 AM	0	50	15	0	0	0	5	88	0	36	0	46	240
8:15 AM	0	52	7	0	0	0	6	79	0	23	0	19	186
8:30 AM	0	59	16	0	0	0	5	90	0	20	0	34	224
8:45 AM	0	61	10	0	0	0	6	82	0	13	0	18	190
Total	0	548	108	1	0	0	63	715	0	177	0	257	1,869

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.92**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Volume	0	337	68	1	0	0	37	395	0	106	0	152	1,096
PHF	#####	0.64	0.71	0.25	#####	#####	0.54	0.77	#####	0.74	#####	0.66	0.92
Movement PHF		0.65			0.25			0.80			0.79		0.92

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	TOTAL
4:00 PM	0	88	12	0	0	0	19	98	0	18	0	24	259
4:15 PM	0	82	15	0	0	0	19	93	0	12	0	20	241
4:30 PM	0	91	11	0	0	0	23	87	0	20	0	14	246
4:45 PM	0	64	13	0	0	0	17	88	0	9	0	17	208
5:00 PM	0	119	13	0	0	0	24	79	0	9	0	17	261
5:15 PM	0	111	20	0	0	0	34	83	0	10	0	24	282
5:30 PM	2	109	21	0	0	0	14	86	0	13	0	8	253
5:45 PM	1	75	11	0	0	0	15	65	0	9	0	20	196
Total	3	739	116	0	0	0	165	679	0	100	0	144	1,946

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.89**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Volume	2	403	67	0	0	0	89	336	0	41	0	66	1004
PHF	0.25	0.847	0.798	#####	#####	#####	0.654	0.955	#####	0.788	#####	0.688	0.89
Movement PHF		0.89			#DIV/0!			0.91			0.79		0.89

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

FEHR PEERS

AVC

Location: Via De La Valle @ Stevens Avenue-Valley Avenue

Date of Count: *Thursday, January 23, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *14-0147*

FEHR PEERS

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Via De La Valle @ Stevens Avenue-Valley Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	TOTAL
7:00 AM	103	10	10	51	66	75	7	9	21	4	129	4	489
7:15 AM	113	18	3	32	93	108	4	16	44	10	139	6	586
7:30 AM	134	27	12	46	94	87	4	13	39	8	156	1	621
7:45 AM	122	21	9	73	150	94	3	8	59	13	153	12	717
8:00 AM	118	15	10	82	155	88	7	12	49	11	167	7	721
8:15 AM	96	18	17	87	137	50	2	12	57	11	163	14	664
8:30 AM	96	18	15	89	142	80	6	10	47	8	191	8	710
8:45 AM	90	17	7	71	172	76	2	13	48	15	178	14	703
Total	872	144	83	531	1,009	658	35	93	364	80	1,276	66	5,211

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.98**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Volume	432	72	51	331	584	312	18	42	212	43	674	41	2,812
PHF	0.89	0.86	0.75	0.93	0.94	0.83	0.64	0.88	0.90	0.83	0.88	0.73	0.98
Movement PHF		0.91			0.94			0.96			0.92		0.98

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	TOTAL
4:00 PM	101	20	7	87	191	82	12	24	78	19	156	9	786
4:15 PM	91	22	15	73	166	73	22	30	133	19	126	6	776
4:30 PM	106	15	15	54	146	74	14	34	84	13	125	4	684
4:45 PM	80	19	12	76	153	72	22	39	132	12	117	4	738
5:00 PM	131	25	11	66	154	80	21	39	138	15	146	7	833
5:15 PM	103	27	26	63	171	99	14	37	110	10	145	5	810
5:30 PM	94	29	21	49	170	95	12	34	85	10	122	7	728
5:45 PM	85	16	22	65	182	73	15	23	96	11	134	10	732
Total	791	173	129	533	1,333	648	132	260	856	109	1,071	52	6,087

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.93**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Volume	408	100	70	254	648	346	69	149	465	47	530	23	3109
PHF	0.78	0.862	0.673	0.836	0.947	0.874	0.784	0.955	0.842	0.783	0.908	0.821	0.93
Movement PHF		0.87			0.94			0.86			0.89		0.93

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

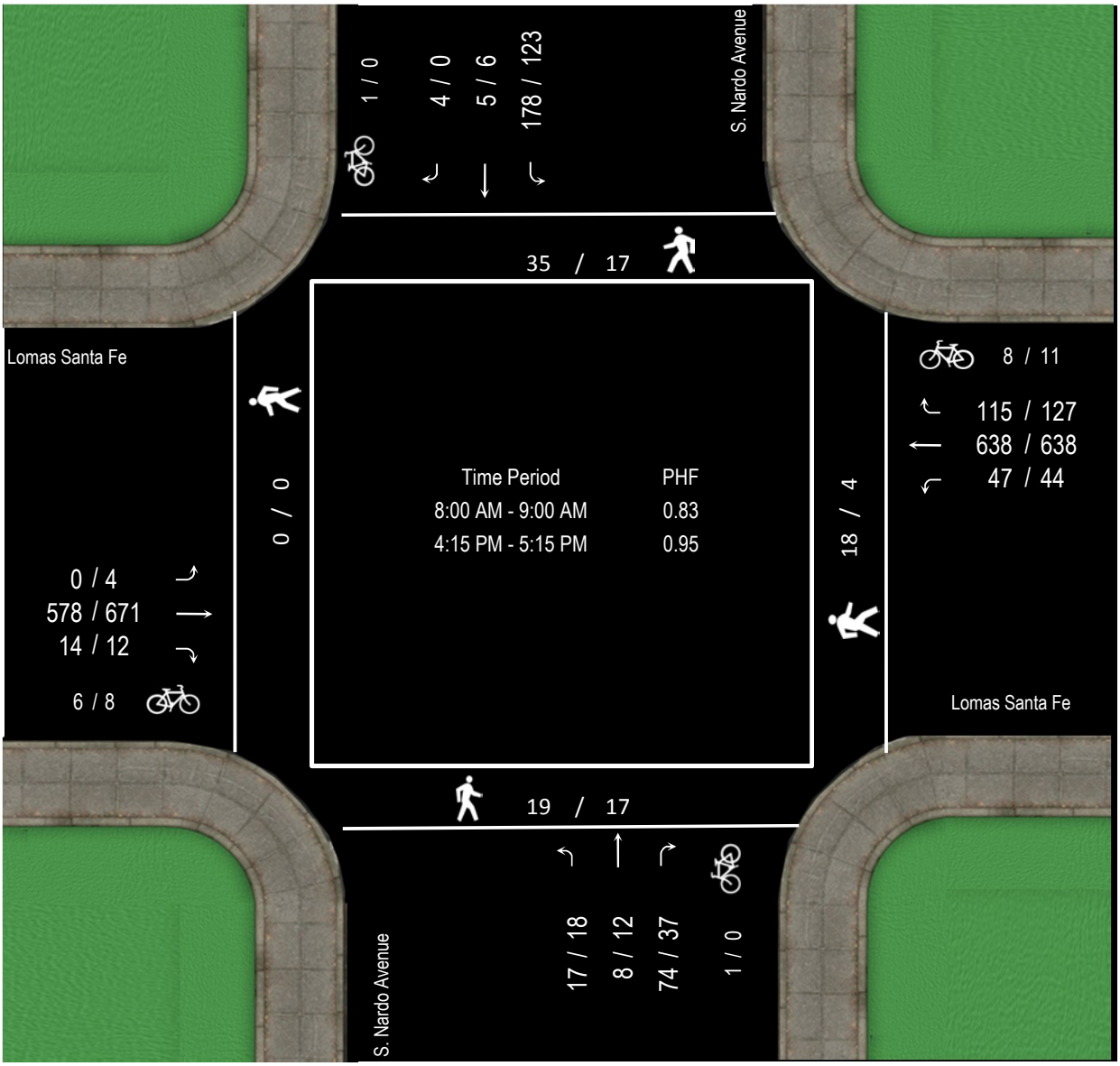
Location: Lomas Santa Fe @ S. Nardo Avenue

Date of Count: *Thursday, January 23, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *14-0147*



FEHR PEERS

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Lomas Santa Fe @ S. Nardo Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	TOTAL
7:00 AM	31	2	0	4	79	5	1	0	4	0	50	3	179
7:15 AM	39	2	0	4	98	8	5	1	12	0	105	1	275
7:30 AM	60	2	0	16	115	20	4	1	10	3	130	7	368
7:45 AM	25	7	0	14	123	23	7	2	5	1	137	6	350
8:00 AM	44	1	1	4	118	26	5	4	23	0	146	4	376
8:15 AM	42	1	1	8	140	20	4	0	22	0	102	3	343
8:30 AM	39	1	1	20	164	30	3	1	13	0	176	6	454
8:45 AM	53	2	1	15	216	39	5	3	16	0	154	1	505
Total	333	18	4	85	1,053	171	34	12	105	4	1,000	31	2,850

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.83**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Volume	178	5	4	47	638	115	17	8	74	0	578	14	1,678
PHF	0.84	0.63	1.00	0.59	0.74	0.74	0.85	0.50	0.80	#####	0.82	0.58	0.83
Movement PHF		0.83			0.74			0.77			0.81		0.83

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	TOTAL
4:00 PM	34	3	0	17	151	30	6	6	12	3	164	7	433
4:15 PM	34	0	0	11	150	23	4	4	10	2	155	6	399
4:30 PM	26	2	0	13	151	48	6	1	8	1	184	2	442
4:45 PM	30	3	0	15	174	34	3	4	11	1	130	1	406
5:00 PM	33	1	0	5	163	22	5	3	8	0	202	3	445
5:15 PM	22	0	0	12	143	39	4	2	8	1	148	1	380
5:30 PM	30	0	1	21	137	50	4	2	13	0	129	3	390
5:45 PM	21	1	0	7	108	27	2	0	6	1	137	1	311
Total	230	10	1	101	1,177	273	34	22	76	9	1,249	24	3,206

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.95**

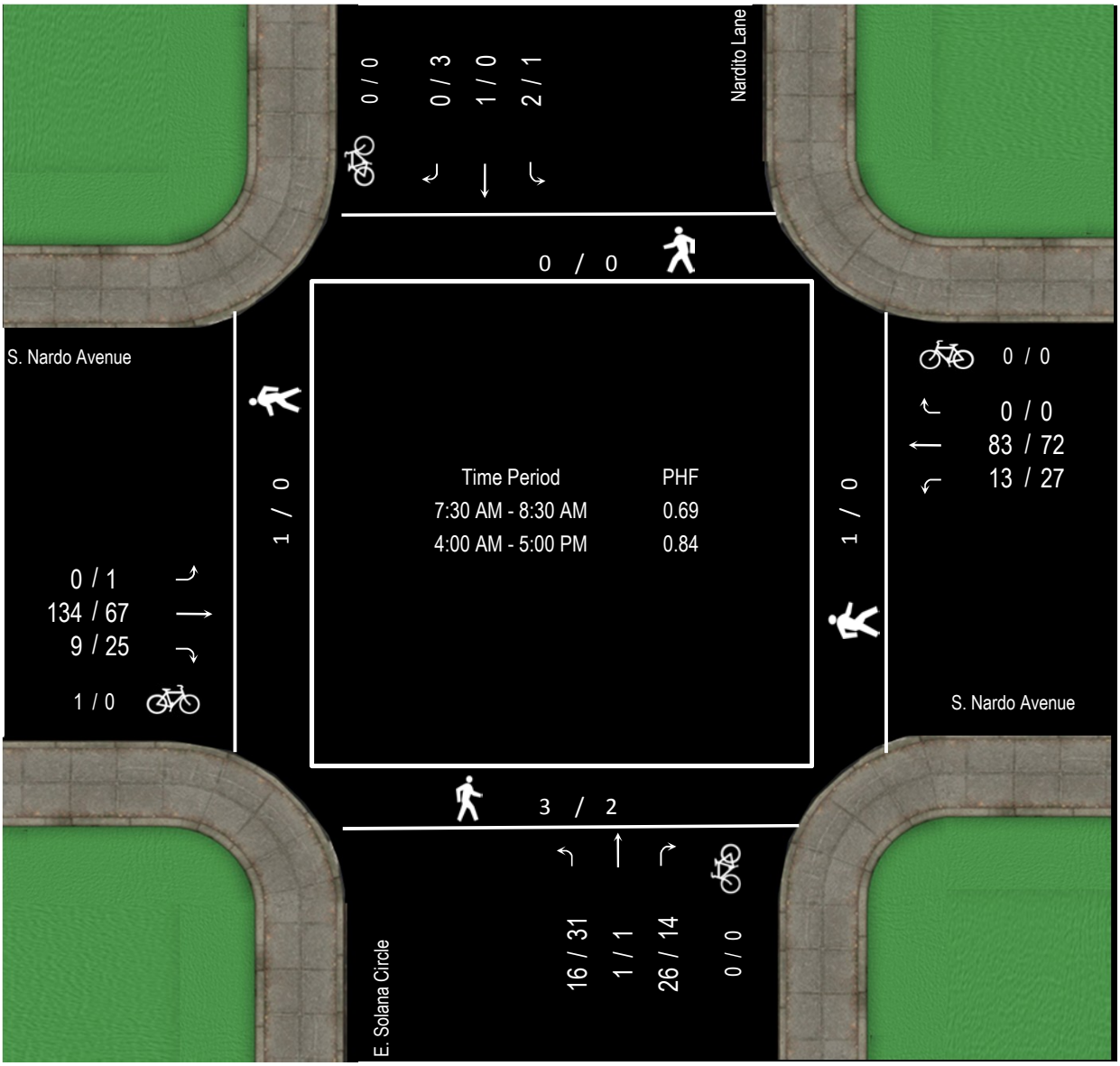
	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Volume	123	6	0	44	638	127	18	12	37	4	671	12	1692
PHF	0.90	0.5	#####	0.733	0.917	0.661	0.75	0.75	0.841	0.5	0.83	0.5	0.95
Movement PHF		0.95			0.91			0.93			0.84		0.95

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

FEHR PEERS

Location:	S. Nardo Avenue	@	Nardito Lane
Date of Count:	*Thursday, January 23, 2014*		
Analysts:	*LV/CD*		
Weather:	*Sunny*		
AVC Proj No:	*14-0147*		



FEHR PEERS

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: S. Nardo Avenue @ Nardito Lane

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	TOTAL
7:00 AM	0	0	1	4	5	0	1	0	4	0	19	0	34
7:15 AM	0	0	0	1	11	0	4	0	4	0	19	0	39
7:30 AM	2	0	0	3	16	0	2	0	4	0	42	1	70
7:45 AM	0	1	0	6	25	0	4	0	8	0	59	1	104
8:00 AM	0	0	0	3	24	0	5	0	8	0	18	2	60
8:15 AM	0	0	0	1	18	0	5	1	6	0	15	5	51
8:30 AM	0	0	0	5	15	0	5	0	7	0	25	4	61
8:45 AM	2	0	0	5	13	0	4	0	3	0	11	3	41
Total	4	1	1	28	127	0	30	1	44	0	208	16	460

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.69**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Volume	2	1	0	13	83	0	16	1	26	0	134	9	285
PHF	0.25	0.25	#####	0.54	0.83	#####	0.80	0.25	0.81	#####	0.57	0.45	0.69
Movement PHF		0.38			0.77			0.83			0.60		0.69

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	TOTAL
4:00 PM	1	0	0	7	28	0	8	0	2	0	21	5	72
4:15 PM	0	0	0	4	20	0	9	0	4	0	13	7	57
4:30 PM	0	0	0	7	16	0	3	0	3	0	18	8	55
4:45 PM	0	0	3	9	8	0	11	1	5	1	15	5	58
5:00 PM	0	0	0	5	20	0	1	0	5	0	7	3	41
5:15 PM	0	0	0	6	22	0	4	0	2	0	11	5	50
5:30 PM	0	0	0	7	9	0	5	0	2	1	11	9	44
5:45 PM	1	0	1	4	9	0	5	0	7	0	13	4	44
Total	2	0	4	49	132	0	46	1	30	2	109	46	421

PM Intersection Peak Hour : **4:00 AM - 5:00 PM** Intersection PHF : **0.84**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Volume	1	0	3	27	72	0	31	1	14	1	67	25	242
PHF	0.25	#####	0.25	0.75	0.643	#####	0.705	0.25	0.7	0.25	0.798	0.781	0.84
Movement PHF		0.33			0.71			0.68			0.89		0.84

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: S. Nardo Avenue @ Fresca Street

Date of Count: *Thursday, January 23, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *14-0147*

FEHR PEERS

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: S. Nardo Avenue @ Fresca Street

AM Period (7:00 AM - 9:00 AM)								
	Southbound		Westbound			Eastbound		
	Left	Right	Thru	Right		Left	Thru	TOTAL
7:00 AM	10	0	12	0		2	35	59
7:15 AM	9	0	11	4		1	39	64
7:30 AM	3	0	26	0		0	36	65
7:45 AM	6	2	33	5		0	59	105
8:00 AM	4	0	12	3		1	54	74
8:15 AM	7	2	10	2		1	34	56
8:30 AM	4	1	16	7		2	43	73
8:45 AM	3	2	12	5		2	21	45
Total	46	7	132	26		9	321	541

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.73**

	Southbound		Westbound			Eastbound		TOTAL
	Left	Right	Thru	Right		Left	Thru	
Volume	22	2	82	12		2	188	308
PHF	0.61	0.25	0.62	0.60		0.50	0.80	0.73
Movement PHF	0.67		0.62				0.81	0.73

PM Period (4:00 PM - 6:00 PM)								
	Southbound		Westbound			Eastbound		
	Left	Right	Thru	Right		Left	Thru	TOTAL
4:00 PM	4	2	26	3		0	31	66
4:15 PM	3	0	25	8		1	27	64
4:30 PM	5	0	20	4		1	25	55
4:45 PM	1	0	24	3		3	21	52
5:00 PM	3	2	29	3		0	16	53
5:15 PM	6	1	34	12		0	15	68
5:30 PM	7	0	19	5		1	18	50
5:45 PM	6	0	23	3		0	20	52
Total	35	5	200	41		6	173	460

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.90**

	Southbound		Westbound			Eastbound		TOTAL
	Left	Right	Thru	Right		Left	Thru	
Volume	13	2	95	18		5	104	237
PHF	0.65	0.25	0.913	0.563		0.417	0.839	0.90
Movement PHF	0.63		0.86				0.88	0.90

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Via De La Valle @ E. Solana Circle

Date of Count: *Thursday, January 23, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *14-0147*

FEHR PEERS

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Via De La Valle @ E. Solana Circle

AM Period (7:00 AM - 9:00 AM)								
	Southbound		Westbound			Eastbound		
	Left	Right	Thru	Right		Left	Thru	TOTAL
7:00 AM	10	3	53	2		0	108	176
7:15 AM	16	3	77	3		1	129	229
7:30 AM	13	3	82	5		5	154	262
7:45 AM	11	4	86	3		4	191	299
8:00 AM	10	1	115	8		3	170	307
8:15 AM	8	7	96	12		0	172	295
8:30 AM	7	10	109	3		6	211	346
8:45 AM	13	5	111	4		6	191	330
Total	88	36	729	40		25	1,326	2,244

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.92**

	Southbound		Westbound			Eastbound		TOTAL
	Left	Right	Thru	Right		Left	Thru	
Volume	38	23	431	27		15	744	1,278
PHF	0.73	0.58	0.94	0.56		0.63	0.88	0.92
Movement PHF	0.85		0.93				0.87	0.92

PM Period (4:00 PM - 6:00 PM)								
	Southbound		Westbound			Eastbound		
	Left	Right	Thru	Right		Left	Thru	TOTAL
4:00 PM	5	4	169	12		3	151	344
4:15 PM	7	5	201	10		5	130	358
4:30 PM	11	7	147	10		5	113	293
4:45 PM	3	8	151	16		4	111	293
5:00 PM	3	1	147	11		4	160	326
5:15 PM	5	0	176	13		3	135	332
5:30 PM	3	9	166	14		5	147	344
5:45 PM	3	5	132	8		7	133	288
Total	40	39	1,289	94		36	1,080	2,578

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.94**

	Southbound		Westbound			Eastbound		TOTAL
	Left	Right	Thru	Right		Left	Thru	
Volume	14	18	640	54		16	553	1295
PHF	0.70	0.5	0.909	0.844		0.8	0.864	0.94
Movement PHF	0.67		0.92				0.87	0.94

24 Hour Segment Count

FEHR PEERS

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 1. S. Nardo Avenue, north of the S. Nardo Avenue and E. Solana Circle intersection

Orientation: *North-South*

Date of Count: *Thursday, January 23, 2014*

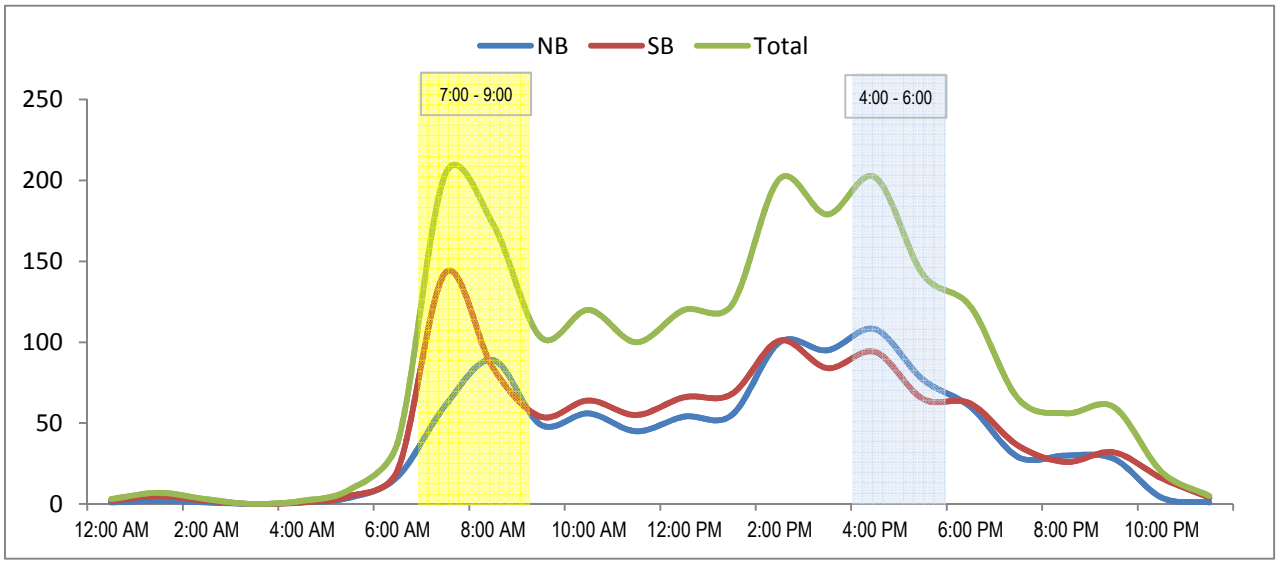
Analysts: *DASH*

Weather: *Sunny*

AVC Proj. No: *14-0147*

24 Hour Segment Volume				2,057					
Time	Hourly Volume				Time	Hourly Volume			
	NB	SB	Total			NB	SB	Total
12:00 AM - 1:00 AM	1	2	3		12:00 PM - 1:00 PM	54	66	120
1:00 AM - 2:00 AM	2	5	7		1:00 PM - 2:00 PM	55	68	123
2:00 AM - 3:00 AM	1	2	3		2:00 PM - 3:00 PM	100	101	201
3:00 AM - 4:00 AM	0	0	0		3:00 PM - 4:00 PM	95	84	179
4:00 AM - 5:00 AM	1	1	2		4:00 PM - 5:00 PM	108	94	202
5:00 AM - 6:00 AM	4	5	9		5:00 PM - 6:00 PM	77	65	142
6:00 AM - 7:00 AM	17	21	38		6:00 PM - 7:00 PM	60	62	122
7:00 AM - 8:00 AM	61	143	204		7:00 PM - 8:00 PM	29	36	65
8:00 AM - 9:00 AM	89	84	173		8:00 PM - 9:00 PM	30	26	56
9:00 AM - 10:00 AM	49	54	103		9:00 PM - 10:00 PM	28	32	60
10:00 AM - 11:00 AM	56	64	120		10:00 PM - 11:00 PM	4	16	20
11:00 AM - 12:00 PM	45	55	100		11:00 PM - 12:00 AM	1	4	5
Total	**326**	**436**	**762**		**Total**	**641**	**654**	**1,295**

24-Hour	NB	Volume	967	24-Hour	SB	Volume	1,090



24 Hour Segment Count

FEHR PEERS

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 2. E. Solana Circle, south of the S. Nardo Avenue and E. Solana Circle intersection

Orientation: *North-South*

Date of Count: *Thursday, January 23, 2014*

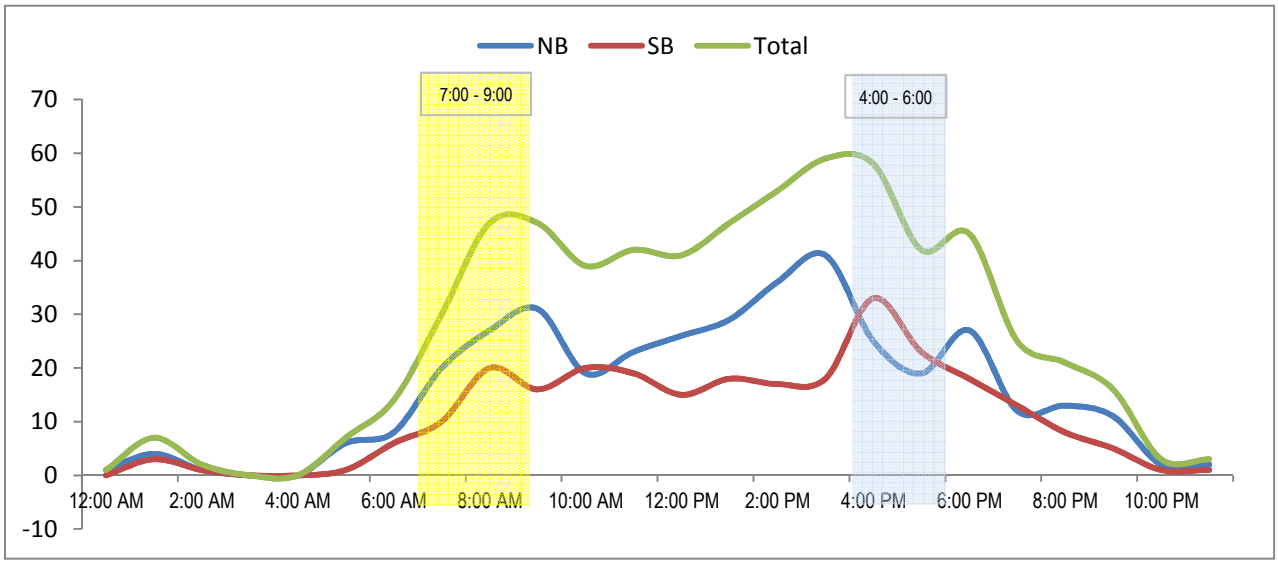
Analysts: *DASH*

Weather: *Sunny*

AVC Proj. No: *14-0147*

24 Hour Segment Volume				*649*			
Time	**Hourly Volume**			**Time**	**Hourly Volume**		
	NB	**SB**	**Total**		**NB**	**SB**	**Total**
12:00 AM - 1:00 AM	1	0	1	12:00 PM - 1:00 PM	26	15	41
1:00 AM - 2:00 AM	4	3	7	1:00 PM - 2:00 PM	29	18	47
2:00 AM - 3:00 AM	1	1	2	2:00 PM - 3:00 PM	36	17	53
3:00 AM - 4:00 AM	0	0	0	3:00 PM - 4:00 PM	41	18	59
4:00 AM - 5:00 AM	0	0	0	4:00 PM - 5:00 PM	25	33	58
5:00 AM - 6:00 AM	6	1	7	5:00 PM - 6:00 PM	19	23	42
6:00 AM - 7:00 AM	8	6	14	6:00 PM - 7:00 PM	27	18	45
7:00 AM - 8:00 AM	20	10	30	7:00 PM - 8:00 PM	12	13	25
8:00 AM - 9:00 AM	27	20	47	8:00 PM - 9:00 PM	13	8	21
9:00 AM - 10:00 AM	31	16	47	9:00 PM - 10:00 PM	11	5	16
10:00 AM - 11:00 AM	19	20	39	10:00 PM - 11:00 PM	2	1	3
11:00 AM - 12:00 PM	23	19	42	11:00 PM - 12:00 AM	2	1	3
Total	**140**	**96**	**236**	**Total**	**243**	**170**	**413**

24-Hour	*NB*	*Volume*	*383*	*24-Hour*	*SB*	*Volume*	*266*



24 Hour Segment Count

FEHR PEERS

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 3. S. Nardo Avenue, between E. Solana Circle and Fresca Street

Orientation: *East-West*

Date of Count: *Thursday, January 23, 2014*

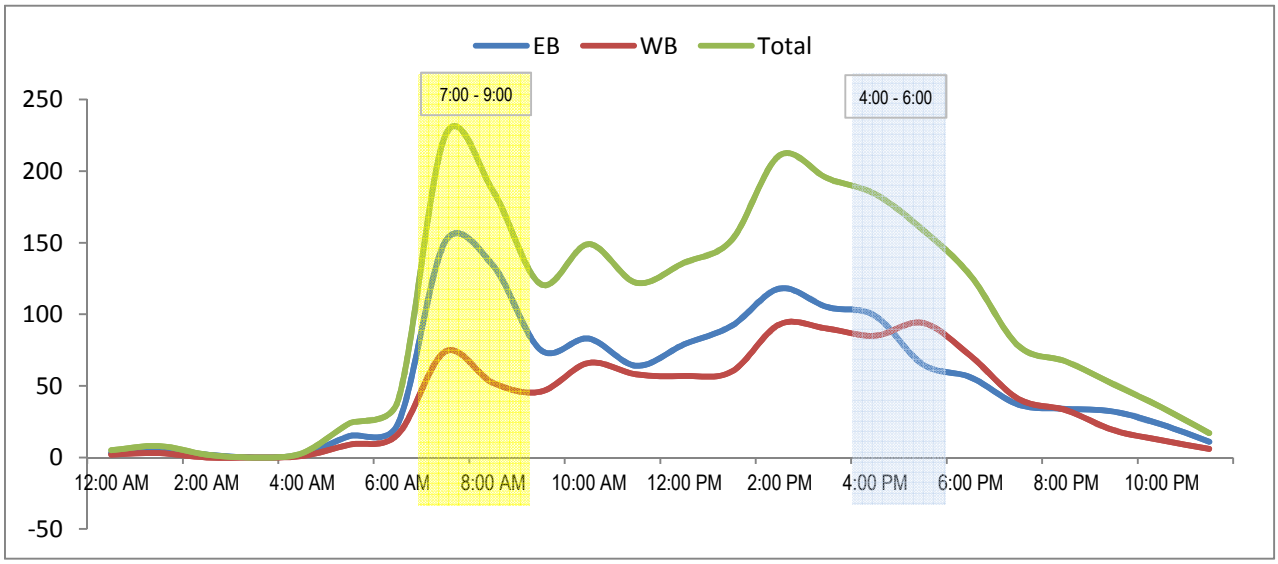
Analysts: *DASH*

Weather: *Sunny*

AVC Proj. No: *14-0147*

24 Hour Segment Volume				2,296			
Time	Hourly Volume			Time	Hourly Volume		
	EB	WB	Total		EB	WB	Total
12:00 AM - 1:00 AM	3	2	5	12:00 PM - 1:00 PM	79	57	136
1:00 AM - 2:00 AM	5	3	8	1:00 PM - 2:00 PM	92	60	152
2:00 AM - 3:00 AM	2	0	2	2:00 PM - 3:00 PM	118	93	211
3:00 AM - 4:00 AM	0	0	0	3:00 PM - 4:00 PM	105	90	195
4:00 AM - 5:00 AM	2	1	3	4:00 PM - 5:00 PM	99	85	184
5:00 AM - 6:00 AM	15	9	24	5:00 PM - 6:00 PM	65	94	159
6:00 AM - 7:00 AM	23	16	39	6:00 PM - 7:00 PM	56	71	127
7:00 AM - 8:00 AM	151	74	225	7:00 PM - 8:00 PM	37	41	78
8:00 AM - 9:00 AM	134	52	186	8:00 PM - 9:00 PM	34	33	67
9:00 AM - 10:00 AM	75	46	121	9:00 PM - 10:00 PM	32	19	51
10:00 AM - 11:00 AM	83	66	149	10:00 PM - 11:00 PM	23	12	35
11:00 AM - 12:00 PM	64	58	122	11:00 PM - 12:00 AM	11	6	17
Total	**557**	**327**	**884**	**Total**	**751**	**661**	**1,412**

24-Hour	EB	Volume	1,308	24-Hour	WB	Volume	988



24 Hour Segment Count

FEHR PEERS

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 4. S. Nardo Avenue, between Fresca Street and Stevens Avenue

Orientation: *North-South*

Date of Count: *Thursday, January 23, 2014*

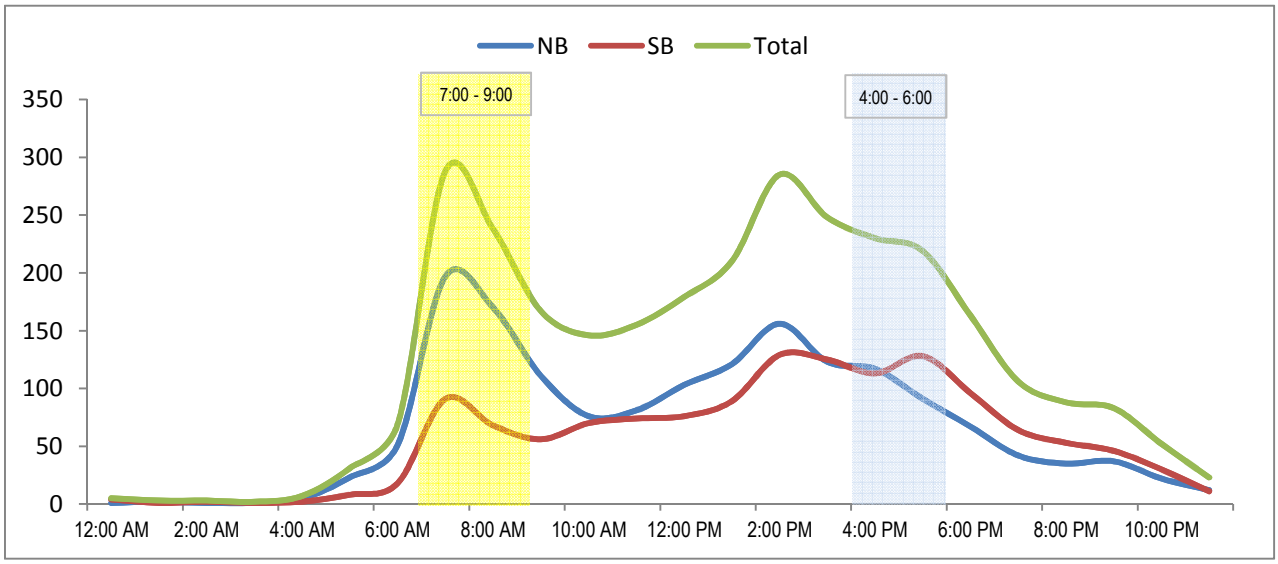
Analysts: *DASH*

Weather: *Sunny*

AVC Proj. No: *14-0147*

24 Hour Segment Volume				3,000			
Time	Hourly Volume			Time	Hourly Volume		
	NB	SB	Total		NB	SB	Total
12:00 AM - 1:00 AM	1	4	5	12:00 PM - 1:00 PM	103	76	179
1:00 AM - 2:00 AM	2	1	3	1:00 PM - 2:00 PM	121	89	210
2:00 AM - 3:00 AM	1	2	3	2:00 PM - 3:00 PM	156	129	285
3:00 AM - 4:00 AM	1	1	2	3:00 PM - 4:00 PM	123	125	248
4:00 AM - 5:00 AM	5	2	7	4:00 PM - 5:00 PM	117	113	230
5:00 AM - 6:00 AM	23	8	31	5:00 PM - 6:00 PM	91	128	219
6:00 AM - 7:00 AM	51	18	69	6:00 PM - 7:00 PM	67	96	163
7:00 AM - 8:00 AM	197	91	288	7:00 PM - 8:00 PM	42	64	106
8:00 AM - 9:00 AM	170	68	238	8:00 PM - 9:00 PM	35	53	88
9:00 AM - 10:00 AM	111	56	167	9:00 PM - 10:00 PM	37	46	83
10:00 AM - 11:00 AM	76	70	146	10:00 PM - 11:00 PM	22	30	52
11:00 AM - 12:00 PM	81	74	155	11:00 PM - 12:00 AM	12	11	23
Total	**719**	**395**	**1,114**	**Total**	**926**	**960**	**1,886**

24-Hour	NB	Volume	1,645	24-Hour	SB	Volume	1,355



24 Hour Segment Count

FEHR PEERS

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 5. Stevens Avenue, north of S. Nardo Avenue

Orientation: *North-South*

Date of Count: *Thursday, January 23, 2014*

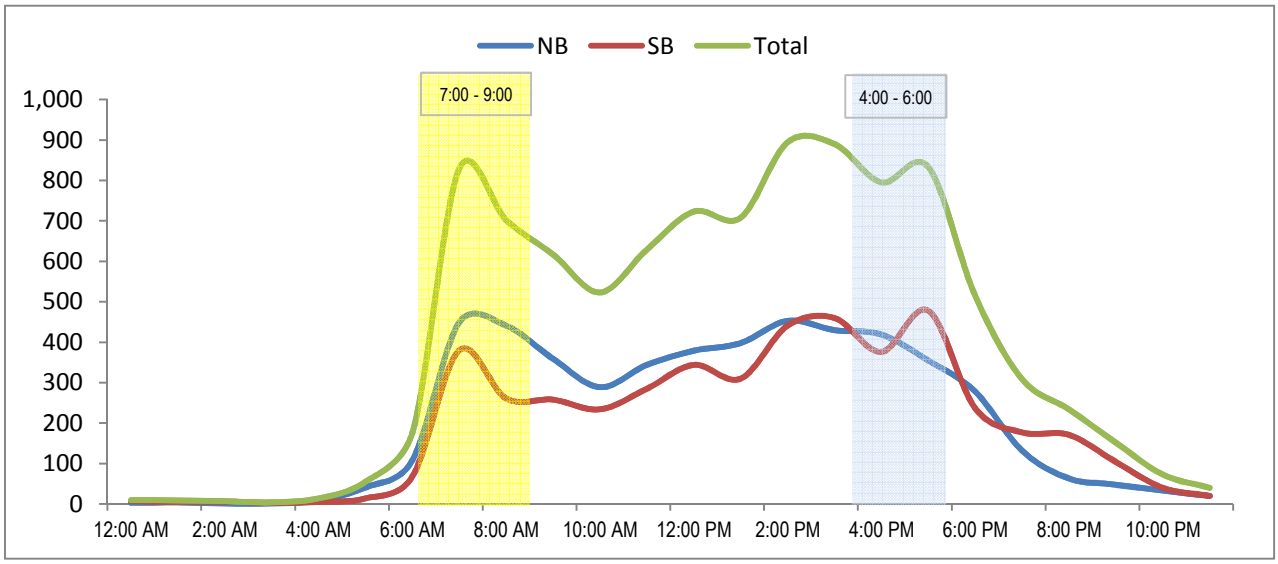
Analysts: *DASH*

Weather: *Sunny*

AVC Proj. No: *14-0147*

24 Hour Segment Volume											***9,741***
Time			**Hourly Volume**			**Time**			**Hourly Volume**		
			NB	**SB**	**Total**				**NB**	**SB**	**Total**
12:00 AM	-	1:00 AM	3	7	10	12:00 PM	-	1:00 PM	379	344	723
1:00 AM	-	2:00 AM	4	5	9	1:00 PM	-	2:00 PM	398	310	708
2:00 AM	-	3:00 AM	1	6	7	2:00 PM	-	3:00 PM	453	441	894
3:00 AM	-	4:00 AM	1	3	4	3:00 PM	-	4:00 PM	430	460	890
4:00 AM	-	5:00 AM	9	5	14	4:00 PM	-	5:00 PM	419	376	795
5:00 AM	-	6:00 AM	41	14	55	5:00 PM	-	6:00 PM	355	478	833
6:00 AM	-	7:00 AM	108	68	176	6:00 PM	-	7:00 PM	278	237	515
7:00 AM	-	8:00 AM	449	380	829	7:00 PM	-	8:00 PM	132	177	309
8:00 AM	-	9:00 AM	441	261	702	8:00 PM	-	9:00 PM	63	171	234
9:00 AM	-	10:00 AM	359	258	617	9:00 PM	-	10:00 PM	48	104	152
10:00 AM	-	11:00 AM	289	234	523	10:00 PM	-	11:00 PM	33	40	73
11:00 AM	-	12:00 PM	344	285	629	11:00 PM	-	12:00 AM	20	20	40
Total			**2,049**	**1,526**	**3,575**	**Total**			**3,008**	**3,158**	**6,166**

24-Hour	***NB***	***Volume***	***5,057***	***24-Hour***	***SB***	***Volume***	***4,684***



24 Hour Segment Count

FEHR PEERS

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 6. Stevens Avenue, south of S. Nardo Avenue

Orientation: *North-South*

Date of Count: *Thursday, January 23, 2014*

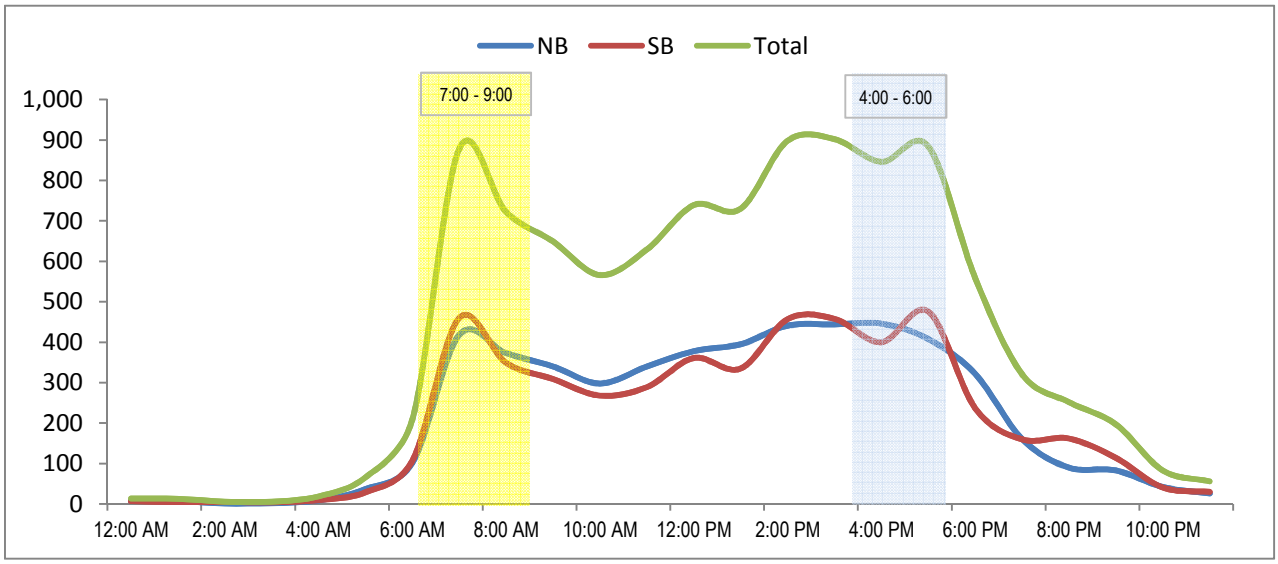
Analysts: *DASH*

Weather: *Sunny*

AVC Proj. No: *14-0147*

24 Hour Segment Volume											***10,244***
Time			**Hourly Volume**			**Time**			**Hourly Volume**		
			NB	**SB**	**Total**				**NB**	**SB**	**Total**
12:00 AM	-	1:00 AM	7	7	14	12:00 PM	-	1:00 PM	378	361	739
1:00 AM	-	2:00 AM	8	5	13	1:00 PM	-	2:00 PM	395	335	730
2:00 AM	-	3:00 AM	1	5	6	2:00 PM	-	3:00 PM	441	457	898
3:00 AM	-	4:00 AM	2	4	6	3:00 PM	-	4:00 PM	444	458	902
4:00 AM	-	5:00 AM	9	10	19	4:00 PM	-	5:00 PM	446	400	846
5:00 AM	-	6:00 AM	37	29	66	5:00 PM	-	6:00 PM	408	476	884
6:00 AM	-	7:00 AM	102	107	209	6:00 PM	-	7:00 PM	322	237	559
7:00 AM	-	8:00 AM	418	460	878	7:00 PM	-	8:00 PM	161	160	321
8:00 AM	-	9:00 AM	373	349	722	8:00 PM	-	9:00 PM	90	162	252
9:00 AM	-	10:00 AM	340	309	649	9:00 PM	-	10:00 PM	83	114	197
10:00 AM	-	11:00 AM	298	268	566	10:00 PM	-	11:00 PM	42	41	83
11:00 AM	-	12:00 PM	340	289	629	11:00 PM	-	12:00 AM	26	30	56
Total			**1,935**	**1,842**	**3,777**	**Total**			**3,236**	**3,231**	**6,467**

24-Hour	***NB***	***Volume***	***5,171***	***24-Hour***	***SB***	***Volume***	***5,073***



2013 - S23 Via De La Valle (478' East of Cedros)

Box B

Day ->	Thu	Fri	Sat	Sun	Mon		Thu	Fri	Sat	Sun	Mon
Date ->	**4/18/2013**	**4/19/2013**	**4/20/2013**	**4/21/2013**	**4/22/2013**		**4/18/2013**	**4/19/2013**	**4/20/2013**	**4/21/2013**	**4/22/2013**
Leg ->	**E/B**	**E/B**	**E/B**	**E/B**	**E/B**		**W/B**	**W/B**	**W/B**	**W/B**	**W/B**
0:00:00		37	111	87	15			28	42	60	19
1:00:00		11	33	50	14			10	24	22	11
2:00:00		11	20	22	8			9	15	25	6
3:00:00		9	9	14	6			12	13	9	9
4:00:00		14	12	12	24			22	9	7	31
5:00:00		48	42	26	52			58	10	14	58
6:00:00		185	92	44	200			162	100	74	182
7:00:00		486	208	131	501			321	204	144	343
8:00:00		564	334	227	682			464	312	272	448
9:00:00		492	474	348	468			539	438	398	460
10:00:00		534	581	470	392			535	508	523	412
11:00:00	544	570	536	523	440		563	612	604	544	480
12:00:00	550	567	609	576	450		566	634	631	688	471
13:00:00	586	681	674	606	395		491	618	657	663	333
14:00:00	595	680	686	642			451	642	578	604	
15:00:00	626	636	691	631			625	753	609	550	
16:00:00	574	614	666	599			670	864	524	528	
17:00:00	542	578	606	532			683	766	482	443	
18:00:00	525	504	505	428			562	549	488	360	
19:00:00	438	462	416	370			289	479	372	278	
20:00:00	283	366	320	238			244	284	248	170	
21:00:00	225	318	258	146			177	198	220	118	
22:00:00	136	200	186	85			104	138	138	70	
23:00:00	77	121	142	82			60	96	90	41	
Thu --> Mon. overlap:	8063						7464				
	E/B	**E/B**	**E/B**	**E/B**	**E/B**		**W/B**	**W/B**	**W/B**	**W/B**	**W/B**
DAY-TOTAL->	**5701**	**8688**	**8211**	**6889**	**3647**		**5485**	**8793**	**7316**	**6605**	**3263**
	Thu	**Fri**	**Sat**	**Sun**	**Mon**		**Thu**	**Fri**	**Sat**	**Sun**	**Mon**
	4/18/2013	**4/19/2013**	**4/20/2013**	**4/21/2013**	**4/22/2013**		**4/18/2013**	**4/19/2013**	**4/20/2013**	**4/21/2013**	**4/22/2013**
LEG-TOTAL: Wed -> Mon.	**33136**						**31462**				
Vehicles: Avg/hr.	**439**	**362**	**342**	**287**	**261**		**422**	**366**	**305**	**275**	**233**
AVG-DAILY	**E/B**						**W/B**				
Total weekday/leg	**8376**						**8129**				
weekend/leg	**7550**						**6961**				
TOTAL / Leg->	**7963**						**7545**				

2013 - S23 Via De La Valle (478' East of Cedros)

Box B

Day ->	Thu	Fri	Sat	Sun	Mon		Thu	Fri	Sat	Sun	Mon
Date ->	**4/18/2013**	**4/19/2013**	**4/20/2013**	**4/21/2013**	**4/22/2013**		**4/18/2013**	**4/19/2013**	**4/20/2013**	**4/21/2013**	**4/22/2013**
Leg ->	**E/B**	**E/B**	**E/B**	**E/B**	**E/B**		**W/B**	**W/B**	**W/B**	**W/B**	**W/B**
0:00:00		37	111	87	15			28	42	60	19
1:00:00		11	33	50	14			10	24	22	11
2:00:00		11	20	22	8			9	15	25	6
3:00:00		9	9	14	6			12	13	9	9
4:00:00		14	12	12	24			22	9	7	31
5:00:00		48	42	26	52			58	10	14	58
6:00:00		185	92	44	200			162	100	74	182
7:00:00		486	208	131	501			321	204	144	343
8:00:00		564	334	227	682			464	312	272	448
9:00:00		492	474	348	468			539	438	398	460
10:00:00		534	581	470	392			535	508	523	412
11:00:00	544	570	536	523	440		563	612	604	544	480
12:00:00	550	567	609	576	450		566	634	631	688	471
13:00:00	586	681	674	606	395		491	618	657	663	333
14:00:00	595	680	686	642			451	642	578	604	
15:00:00	626	636	691	631			625	753	609	550	
16:00:00	574	614	666	599			670	864	524	528	
17:00:00	542	578	606	532			683	766	482	443	
18:00:00	525	504	505	428			562	549	488	360	
19:00:00	438	462	416	370			289	479	372	278	
20:00:00	283	366	320	238			244	284	248	170	
21:00:00	225	318	258	146			177	198	220	118	
22:00:00	136	200	186	85			104	138	138	70	
23:00:00	77	121	142	82			60	96	90	41	
Thu --> Mon. overlap:	8063						7464				
	E/B	**E/B**	**E/B**	**E/B**	**E/B**		**W/B**	**W/B**	**W/B**	**W/B**	**W/B**
DAY-TOTAL->	**5701**	**8688**	**8211**	**6889**	**3647**		**5485**	**8793**	**7316**	**6605**	**3263**
	Thu	**Fri**	**Sat**	**Sun**	**Mon**		**Thu**	**Fri**	**Sat**	**Sun**	**Mon**
	4/18/2013	**4/19/2013**	**4/20/2013**	**4/21/2013**	**4/22/2013**		**4/18/2013**	**4/19/2013**	**4/20/2013**	**4/21/2013**	**4/22/2013**
LEG-TOTAL: Wed -> Mon.	**33136**						**31462**				
Vehicles: Avg/hr.	**439**	**362**	**342**	**287**	**261**		**422**	**366**	**305**	**275**	**233**
AVG-DAILY	**E/B**						**W/B**				
Total weekday/leg	**8376**						**8129**				
weekend/leg	**7550**						**6961**				
TOTAL / Leg->	**7963**						**7545**				

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: S Nardo Ave Dwy @ Dwy # 1 (655 S Nardo Ave Dwy)

Date of Count: *Thursday, January 23, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *14-0147*

FEHR PEERS

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: S Nardo Ave Dwy @ Dwy # 1 (655 S Nardo Ave Dwy)

AM Period (7:00 AM - 9:00 AM)								
		Westbound		Northbound		Eastbound		
		Left	Thru	Left	Right	Thru	Right	TOTAL
7:00 AM		3	7	0	3	24	2	39
7:15 AM		1	13	2	5	23	0	44
7:30 AM		1	22	0	4	25	0	52
7:45 AM		0	38	1	2	55	2	98
8:00 AM		0	15	1	3	48	0	67
8:15 AM		0	14	1	3	20	1	39
8:30 AM		1	14	1	0	48	2	66
8:45 AM		0	14	1	2	13	1	31
Total		6	137	7	22	256	8	436

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.69**

		Westbound		Northbound			Eastbound			TOTAL
		Left	Thru	Left	Thru	Right	Left	Thru	Right	
Volume		1	81	4		8		171	5	270
PHF		0.25	0.53	1.00		0.67		0.78	0.63	0.69
Movement PHF			0.54		0.75			0.77		0.69

PM Period (4:00 PM - 6:00 PM)								
		Westbound		Northbound		Eastbound		
		Left	Thru	Left	Right	Thru	Right	TOTAL
4:00 PM		0	29	1	0	29	1	60
4:15 PM		0	21	0	2	28	0	51
4:30 PM		3	18	0	2	18	1	42
4:45 PM		2	20	1	3	20	0	46
5:00 PM		2	26	0	0	13	1	42
5:15 PM		2	30	0	0	19	0	51
5:30 PM		1	17	0	3	10	1	32
5:45 PM		1	8	1	1	7	0	18
Total		11	169	3	11	144	4	342

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.83**

		Westbound		Northbound		Eastbound		TOTAL
		Left	Thru	Left	Right	Thru	Right	
Volume		5	88	2	7	95	2	199
PHF		0.417	0.759	0.5	0.583	0.819	0.5	0.83
Movement PHF			0.80	0.56		0.81		0.83

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: S Nardo Ave Dwy @ Dwy # 2 (685 S Nardo Ave Dwy)

Date of Count: *Thursday, January 23, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *14-0147*

Time Period	PHF
7:45 AM - 8:45 AM	0.73
4:00 PM - 5:00 PM	0.90

FEHR PEERS

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: S Nardo Ave Dwy @ Dwy # 2 (685 S Nardo Ave Dwy)

AM Period (7:00 AM - 9:00 AM)								
		Westbound		Northbound		Eastbound		
		Left	Thru	Left	Right	Thru	Right	TOTAL
7:00 AM		1	10	0	8	27	0	46
7:15 AM		1	8	1	3	33	3	49
7:30 AM		2	22	0	1	27	4	56
7:45 AM		1	32	1	3	57	0	94
8:00 AM		2	12	1	9	45	1	70
8:15 AM		2	10	4	7	24	1	48
8:30 AM		2	12	1	3	42	3	63
8:45 AM		2	11	1	6	18	0	38
Total		13	117	9	40	273	12	464

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.73**

		Westbound		Northbound			Eastbound			TOTAL
		Left	Thru	Left	Thru	Right	Left	Thru	Right	
Volume		7	66	7		22		168	5	275
PHF		0.88	0.52	0.44		0.61		0.74	0.42	0.73
Movement PHF			0.55		0.66			0.76		0.73

PM Period (4:00 PM - 6:00 PM)								
		Westbound		Northbound		Eastbound		
		Left	Thru	Left	Right	Thru	Right	TOTAL
4:00 PM		1	24	1	3	26	2	57
4:15 PM		3	20	0	2	23	2	50
4:30 PM		2	19	0	4	22	2	49
4:45 PM		4	21	0	3	21	1	50
5:00 PM		3	25	0	4	12	2	46
5:15 PM		5	30	2	2	13	2	54
5:30 PM		4	23	0	3	17	1	48
5:45 PM		6	11	3	2	16	2	40
Total		28	173	6	23	150	14	394

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.90**

		Westbound		Northbound		Eastbound		TOTAL
		Left	Thru	Left	Right	Thru	Right	
Volume		10	84	1	12	92	7	206
PHF		0.625	0.875	0.25	0.75	0.885	0.875	0.90
Movement PHF			0.94	0.81		0.88		0.90

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: S Nardo Ave Dwy @ Dwy # 3 (695 S Nardo Ave Dwy)

Date of Count: *Thursday, January 23, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *14-0147*

FEHR PEERS

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: S Nardo Ave Dwy @ Dwy # 3 (695 S Nardo Ave Dwy)

AM Period (7:00 AM - 9:00 AM)								
		Westbound		Northbound		Eastbound		
		Left	Thru	Left	Right	Thru	Right	TOTAL
7:00 AM		2	10	0	1	36	0	49
7:15 AM		0	10	0	1	34	0	45
7:30 AM		2	23	0	2	39	0	66
7:45 AM		1	33	0	1	55	1	91
8:00 AM		1	14	0	4	48	0	67
8:15 AM		0	11	0	2	25	0	38
8:30 AM		0	16	0	0	42	0	58
8:45 AM		0	13	0	2	20	0	35
Total		6	130	0	13	299	1	449

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.74**

		Westbound		Northbound			Eastbound			TOTAL
		Left	Thru	Left	Thru	Right	Left	Thru	Right	
Volume		4	80	0		8		176	1	269
PHF		0.50	0.61	#####		0.50		0.80	0.25	0.74
Movement PHF			0.62		0.50			0.79		0.74

PM Period (4:00 PM - 6:00 PM)								
		Westbound		Northbound		Eastbound		
		Left	Thru	Left	Right	Thru	Right	TOTAL
4:00 PM		1	25	0	1	29	0	56
4:15 PM		2	24	0	0	24	0	50
4:30 PM		1	21	0	2	24	1	49
4:45 PM		0	22	0	1	23	0	46
5:00 PM		2	28	0	0	14	1	45
5:15 PM		0	35	0	0	14	0	49
5:30 PM		0	20	0	1	18	0	39
5:45 PM		1	22	0	0	21	0	44
Total		7	197	0	5	167	2	378

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.90**

		Westbound		Northbound		Eastbound		TOTAL
		Left	Thru	Left	Right	Thru	Right	
Volume		4	92	0	4	100	1	201
PHF		0.5	0.92	#####	0.5	0.862	0.25	0.90
Movement PHF			0.92	0.50		0.87		0.90

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: S Nardo Ave Dwy @ Dwy # 4 (774 S Nardo Ave Dwy)

Date of Count: *Thursday, January 23, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *14-0147*

FEHR PEERS

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: S Nardo Ave Dwy @ Dwy # 4 (774 S Nardo Ave Dwy)

AM Period (7:00 AM - 9:00 AM)								
		Westbound		Northbound		Eastbound		
		Left	Thru	Left	Right	Thru	Right	TOTAL
7:00 AM		1	15	0	2	47	0	65
7:15 AM		1	12	0	1	54	0	68
7:30 AM		1	32	0	5	45	0	83
7:45 AM		2	37	3	3	68	2	115
8:00 AM		2	18	0	11	71	1	103
8:15 AM		1	12	0	6	36	0	55
8:30 AM		2	19	0	8	46	0	75
8:45 AM		4	12	1	3	28	0	48
Total		14	157	4	39	395	3	612

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.80**

		Westbound		Northbound			Eastbound			TOTAL
		Left	Thru	Left	Thru	Right	Left	Thru	Right	
Volume		6	99	3		20		238	3	369
PHF		0.75	0.67	0.25		0.45		0.84	0.38	0.80
Movement PHF			0.67		0.52			0.84		0.80

PM Period (4:00 PM - 6:00 PM)								
		Westbound		Northbound		Eastbound		
		Left	Thru	Left	Right	Thru	Right	TOTAL
4:00 PM		5	26	0	4	38	2	75
4:15 PM		3	31	2	4	28	0	68
4:30 PM		8	26	1	6	28	0	69
4:45 PM		4	26	2	1	25	0	58
5:00 PM		3	34	0	5	21	0	63
5:15 PM		5	49	1	6	28	0	89
5:30 PM		2	33	0	0	21	1	57
5:45 PM		4	22	2	3	26	2	59
Total		34	247	8	29	215	5	538

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.78**

		Westbound		Northbound			Eastbound			TOTAL
		Left	Thru	Left	Thru	Right	Left	Thru	Right	
Volume		20	135	4		18		102	0	279
PHF		0.625	0.689	0.5		0.75		0.911	#####	0.78
Movement PHF			0.72		0.79			0.91		0.78

24 Hour Segment Count

FEHR PEERS

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Dwy 1 (655 S Nardo Ave Driveway)

Orientation: *North-South*

Date of Count: *Thursday, January 23, 2014*

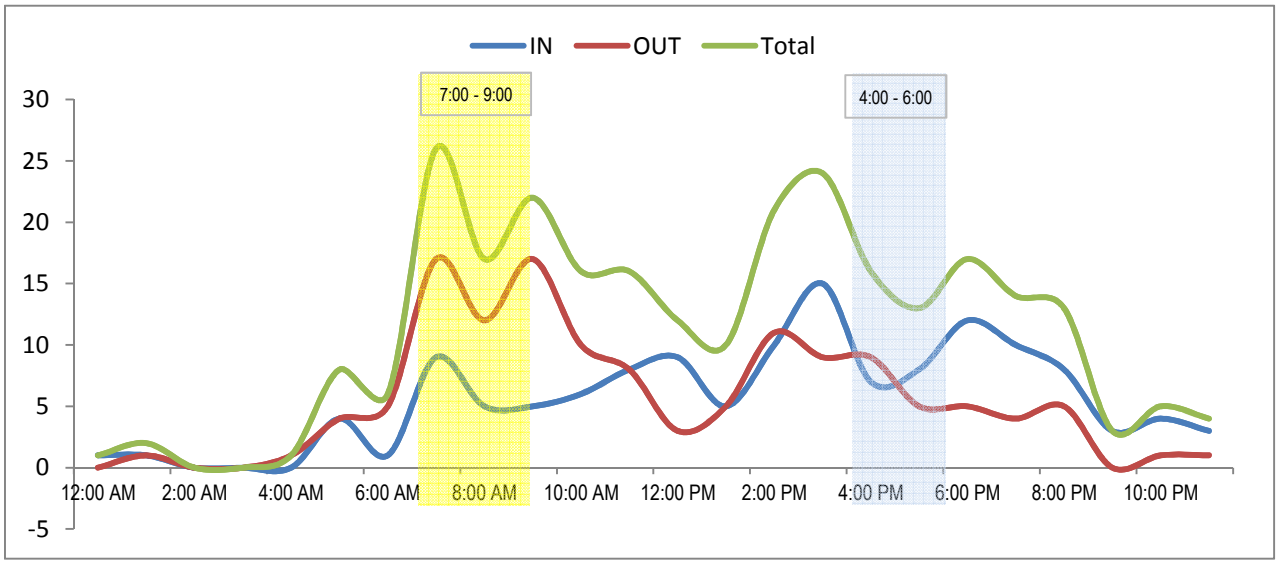
Analysts: *DASH*

Weather: *Sunny*

AVC Proj. No: *14-0147*

24 Hour Segment Volume				267			
Time	Hourly Volume			Time	Hourly Volume		
	IN	OUT	Total		IN	OUT	Total
12:00 AM - 1:00 AM	1	0	1	12:00 PM - 1:00 PM	9	3	12
1:00 AM - 2:00 AM	1	1	2	1:00 PM - 2:00 PM	5	5	10
2:00 AM - 3:00 AM	0	0	0	2:00 PM - 3:00 PM	10	11	21
3:00 AM - 4:00 AM	0	0	0	3:00 PM - 4:00 PM	15	9	24
4:00 AM - 5:00 AM	0	1	1	4:00 PM - 5:00 PM	7	9	16
5:00 AM - 6:00 AM	4	4	8	5:00 PM - 6:00 PM	8	5	13
6:00 AM - 7:00 AM	1	5	6	6:00 PM - 7:00 PM	12	5	17
7:00 AM - 8:00 AM	9	17	26	7:00 PM - 8:00 PM	10	4	14
8:00 AM - 9:00 AM	5	12	17	8:00 PM - 9:00 PM	8	5	13
9:00 AM - 10:00 AM	5	17	22	9:00 PM - 10:00 PM	3	0	3
10:00 AM - 11:00 AM	6	10	16	10:00 PM - 11:00 PM	4	1	5
11:00 AM - 12:00 PM	8	8	16	11:00 PM - 12:00 AM	3	1	4
Total	**40**	**75**	**115**	**Total**	**94**	**58**	**152**

24-Hour	IN	Volume	134	24-Hour	OUT	Volume	133



24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

FEHR PEERS

Location: Dwy # 2 (685 S Nardo Ave Dwy)

Orientation: *North-South*

Date of Count: *Thursday, January 23, 2014*

Analysts: *DASH*

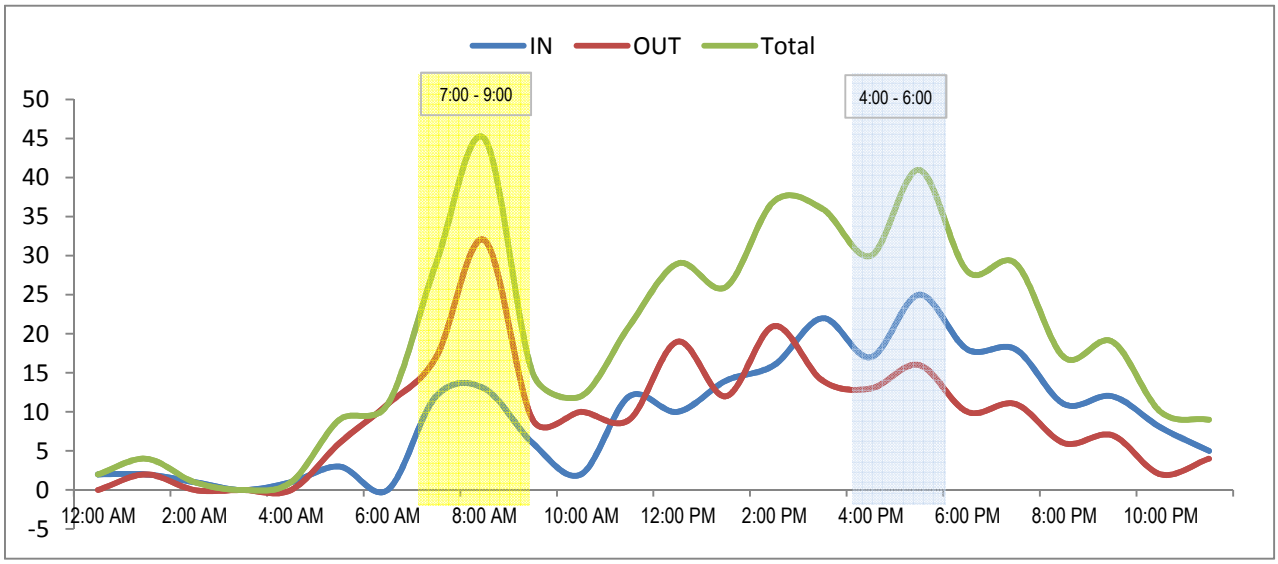
Weather: *Sunny*

AVC Proj. No: *14-0147*

24 Hour Segment Volume 461

Time	Hourly Volume IN	Hourly Volume OUT	Hourly Volume Total	Time	Hourly Volume IN	Hourly Volume OUT	Hourly Volume Total
12:00 AM - 1:00 AM	2	0	2	12:00 PM - 1:00 PM	10	19	29
1:00 AM - 2:00 AM	2	2	4	1:00 PM - 2:00 PM	14	12	26
2:00 AM - 3:00 AM	1	0	1	2:00 PM - 3:00 PM	16	21	37
3:00 AM - 4:00 AM	0	0	0	3:00 PM - 4:00 PM	22	14	36
4:00 AM - 5:00 AM	1	0	1	4:00 PM - 5:00 PM	17	13	30
5:00 AM - 6:00 AM	3	6	9	5:00 PM - 6:00 PM	25	16	41
6:00 AM - 7:00 AM	0	11	11	6:00 PM - 7:00 PM	18	10	28
7:00 AM - 8:00 AM	12	17	29	7:00 PM - 8:00 PM	18	11	29
8:00 AM - 9:00 AM	13	32	45	8:00 PM - 9:00 PM	11	6	17
9:00 AM - 10:00 AM	6	9	15	9:00 PM - 10:00 PM	12	7	19
10:00 AM - 11:00 AM	2	10	12	10:00 PM - 11:00 PM	8	2	10
11:00 AM - 12:00 PM	12	9	21	11:00 PM - 12:00 AM	5	4	9
Total	**54**	**96**	**150**	**Total**	**176**	**135**	**311**

24-Hour IN Volume 230 **24-Hour OUT Volume 231**



24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

FEHR PEERS

Location: Dwy # 2 (695 S Nardo Ave Dwy)

Orientation: *North-South*

Date of Count: *Thursday, January 23, 2014*

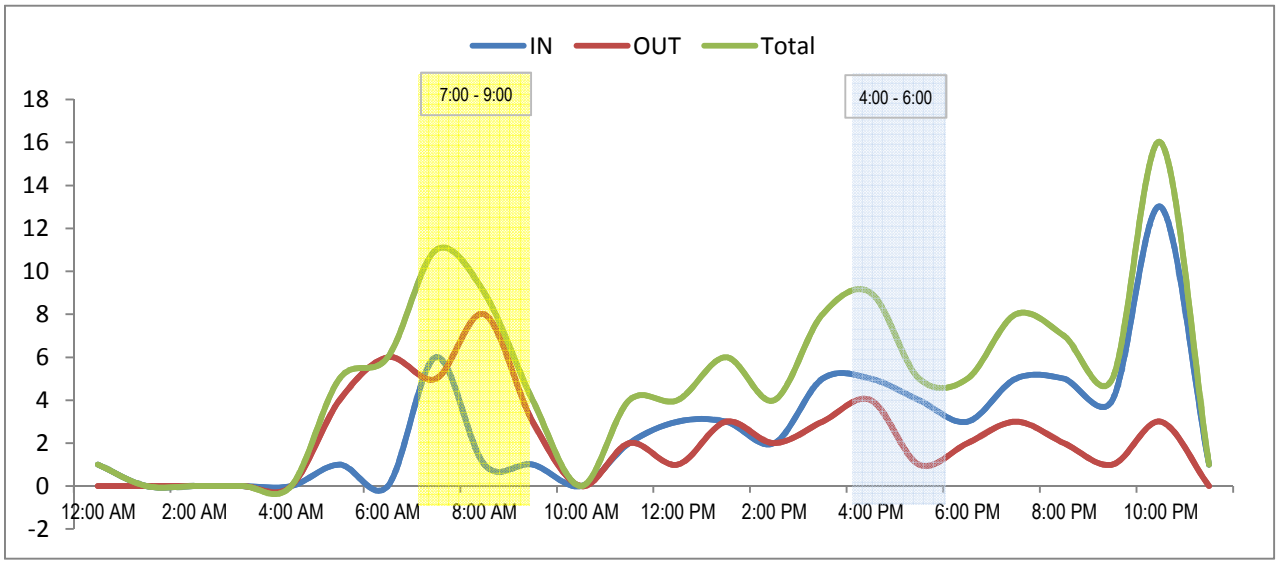
Analysts: *DASH*

Weather: *Sunny*

AVC Proj. No: *14-0147*

24 Hour Segment Volume				118			
Time	Hourly Volume			Time	Hourly Volume		
	IN	OUT	Total		IN	OUT	Total
12:00 AM - 1:00 AM	1	0	1	12:00 PM - 1:00 PM	3	1	4
1:00 AM - 2:00 AM	0	0	0	1:00 PM - 2:00 PM	3	3	6
2:00 AM - 3:00 AM	0	0	0	2:00 PM - 3:00 PM	2	2	4
3:00 AM - 4:00 AM	0	0	0	3:00 PM - 4:00 PM	5	3	8
4:00 AM - 5:00 AM	0	0	0	4:00 PM - 5:00 PM	5	4	9
5:00 AM - 6:00 AM	1	4	5	5:00 PM - 6:00 PM	4	1	5
6:00 AM - 7:00 AM	0	6	6	6:00 PM - 7:00 PM	3	2	5
7:00 AM - 8:00 AM	6	5	11	7:00 PM - 8:00 PM	5	3	8
8:00 AM - 9:00 AM	1	8	9	8:00 PM - 9:00 PM	5	2	7
9:00 AM - 10:00 AM	1	3	4	9:00 PM - 10:00 PM	4	1	5
10:00 AM - 11:00 AM	0	0	0	10:00 PM - 11:00 PM	13	3	16
11:00 AM - 12:00 PM	2	2	4	11:00 PM - 12:00 AM	1	0	1
Total	**12**	**28**	**40**	**Total**	**53**	**25**	**78**

24-Hour	IN	Volume	65	24-Hour	OUT	Volume	53



24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

FEHR PEERS

Location: Dwy # 4 (774 S Nardo Ave Dwy)

Orientation: *North-South*

Date of Count: *Thursday, January 23, 2014*

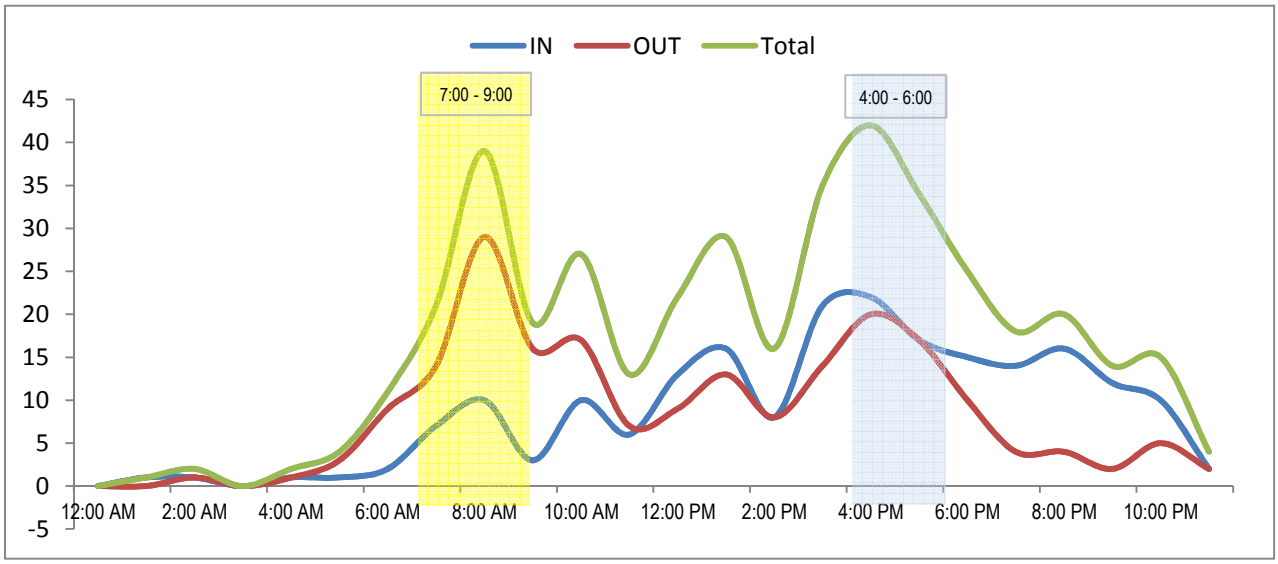
Analysts: *DASH*

Weather: *Sunny*

AVC Proj. No: *14-0147*

24 Hour Segment Volume				413			
Time	Hourly Volume			Time	Hourly Volume		
	IN	OUT	Total		IN	OUT	Total
12:00 AM - 1:00 AM	0	0	0	12:00 PM - 1:00 PM	13	9	22
1:00 AM - 2:00 AM	1	0	1	1:00 PM - 2:00 PM	16	13	29
2:00 AM - 3:00 AM	1	1	2	2:00 PM - 3:00 PM	8	8	16
3:00 AM - 4:00 AM	0	0	0	3:00 PM - 4:00 PM	21	14	35
4:00 AM - 5:00 AM	1	1	2	4:00 PM - 5:00 PM	22	20	42
5:00 AM - 6:00 AM	1	3	4	5:00 PM - 6:00 PM	17	17	34
6:00 AM - 7:00 AM	2	9	11	6:00 PM - 7:00 PM	15	10	25
7:00 AM - 8:00 AM	7	14	21	7:00 PM - 8:00 PM	14	4	18
8:00 AM - 9:00 AM	10	29	39	8:00 PM - 9:00 PM	16	4	20
9:00 AM - 10:00 AM	3	16	19	9:00 PM - 10:00 PM	12	2	14
10:00 AM - 11:00 AM	10	17	27	10:00 PM - 11:00 PM	10	5	15
11:00 AM - 12:00 PM	6	7	13	11:00 PM - 12:00 AM	2	2	4
Total	**42**	**97**	**139**	**Total**	**166**	**108**	**274**

24-Hour	IN	Volume	208	24-Hour	OUT	Volume	205



APPENDIX B: TRAFFIX WORKSHEETS-EXISTING CONDITIONS

Existing
AM

Scenario Report

Scenario:	Existing AM
Command:	Existing AM
Volume:	Existing AM
Geometry:	Existing AM
Impact Fee:	Default Impact Fee
Trip Generation:	No Project
Trip Distribution:	Project
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Existing
AM

Trip Distribution Report

Percent Of Trips Project

	To Gates					
Zone	1	2	3	4	5	6
1	10.0	5.0	35.0	10.0	10.0	30.0

Existing
AM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 S. Nardo Ave & Lomas Santa Fe	B	14.8	0.472	B	14.8	0.472	+ 0.000 D/V
# 2 Stevens Av & Lomas Santa Fe	C	23.8	0.603	C	23.8	0.603	+ 0.000 D/V
# 3 S. Nardo Ave & E. Solana Circl	B	11.0	0.246	B	11.0	0.246	+ 0.000 D/V
# 4 Fresca St & S. Nardo Ave	B	10.9	0.048	B	10.9	0.048	+ 0.000 D/V
# 5 Stevens Ave & S. Nardo Ave	B	18.3	0.284	B	18.3	0.284	+ 0.000 D/V
# 6 E. Solana Circle & Via De La V	D	26.3	0.241	D	26.3	0.241	+ 0.000 D/V
# 7 Stevens Ave/Valley Ave & Via D	C	28.8	0.562	C	28.8	0.562	+ 0.000 D/V
# 20 Driveway A	A	0.7	0.000	A	0.7	0.000	+ 0.000 D/V
# 21 Driveway B	A	0.4	0.000	A	0.4	0.000	+ 0.000 D/V
# 24 Stevens Avenue-Valley Avenue /	B	19.3	0.283	B	19.3	0.283	+ 0.000 D/V

Existing
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 S. Nardo Ave & Lomas Santa Fe

Cycle (sec): 69 Critical Vol./Cap.(X): 0.472
Loss Time (sec): 12 Average Delay (sec/veh): 14.8
Optimal Cycle: 45 Level Of Service: B

Street Name:	S. Nardo Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	8	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	0 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	17	8	74	178	5	4	0	578	14	47	638	115
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	8	74	178	5	4	0	578	14	47	638	115
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	8	74	178	5	4	0	578	14	47	638	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	20	10	89	214	6	5	0	696	17	57	769	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	10	89	214	6	5	0	696	17	57	769	139
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	10	89	214	6	5	0	696	17	57	769	139
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.70	0.93	0.93	1.00	0.95	0.95	0.95	0.93	0.93
Lanes:	0.17	0.08	0.75	1.00	0.56	0.44	1.00	1.95	0.05	1.00	1.69	0.31
Final Sat.:	283	133	1231	1338	985	788	1900	3511	85	1805	2988	539
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.16	0.01	0.01	0.00	0.20	0.20	0.03	0.26	0.26
Crit Moves:				****				****		****		
Green Time:	23.2	23.2	23.2	23.2	23.2	23.2	0.0	28.8	28.8	5.0	33.8	33.8
Volume/Cap:	0.22	0.22	0.22	0.48	0.02	0.02	0.00	0.48	0.48	0.43	0.53	0.53
Delay/Veh:	16.6	16.6	16.6	18.9	15.3	15.3	0.0	14.9	14.9	32.9	12.4	12.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.6	16.6	16.6	18.9	15.3	15.3	0.0	14.9	14.9	32.9	12.4	12.4
LOS by Move:	B	B	B	B	B	B	A	B	B	C	B	B
HCM2kAvgQ:	2	2	2	4	0	0	0	6	6	1	7	7

Note: Queue reported is the number of cars per lane.

Existing
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Stevens Av & Lomas Santa Fe

Cycle (sec): 112 Critical Vol./Cap.(X): 0.603
Loss Time (sec): 14 Average Delay (sec/veh): 23.8
Optimal Cycle: 54 Level Of Service: C

Street Name:	Stevens Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	8	1	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1! 0	1	0 0	0 0	0	1 0	1 1	0	2 0	2 0	0
Volume Module:												
Base Vol:	106	0	258	0	0	0	0	696	156	424	748	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	0	258	0	0	0	0	696	156	424	748	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	106	0	258	0	0	0	0	696	156	424	748	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	123	0	300	0	0	0	0	809	181	493	870	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	0	300	0	0	0	0	809	181	493	870	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	0	300	0	0	0	0	809	181	493	870	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	1.00	1.00	1.00	1.00	0.92	0.92	0.92	0.95	1.00
Lanes:	1.29	0.00	1.71	0.00	0.00	0.00	1.00	1.63	0.37	2.00	2.00	0.00
Final Sat.:	2163	0	2862	0	0	0	1900	2869	643	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.10	0.00	0.00	0.00	0.00	0.28	0.28	0.14	0.24	0.00
Crit Moves:			****					****		****		
Green Time:	19.5	0.0	19.5	0.0	0.0	0.0	0.0	52.4	52.4	26.1	78.5	0.0
Volume/Cap:	0.33	0.00	0.60	0.00	0.00	0.00	0.00	0.60	0.60	0.60	0.34	0.00
Delay/Veh:	40.7	0.0	44.2	0.0	0.0	0.0	0.0	22.7	22.7	39.6	6.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.7	0.0	44.2	0.0	0.0	0.0	0.0	22.7	22.7	39.6	6.7	0.0
LOS by Move:	D	A	D	A	A	A	A	C	C	D	A	A
HCM2kAvgQ:	3	0	6	0	0	0	0	13	13	8	6	0

Note: Queue reported is the number of cars per lane.

Existing
AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 S. Nardo Ave & E. Solana Circle/Nardito Ln

Average Delay (sec/veh): 9.6 Worst Case Level Of Service: B[11.0]

Street Name:	S. Nardo Ave						E. Solana Circle/Nardito Ln					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	16	1	26	2	1	0	0	134	9	13	83	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	1	26	2	1	0	0	134	9	13	83	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	1	26	2	1	0	0	134	9	13	83	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
PHF Volume:	23	1	38	3	1	0	0	194	13	19	120	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	23	1	38	3	1	0	0	194	13	19	120	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	6.5	6.2	7.1	6.5	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	4.0	3.3	3.5	4.0	xxxxx
Capacity Module:												
Cnflict Vol:	1	xxxx	xxxxx	39	xxxx	xxxxx	xxxx	93	1	178	74	xxxxx
Potent Cap.:	1634	xxxx	xxxxx	1584	xxxx	xxxxx	xxxx	801	1089	789	820	xxxxx
Move Cap.:	1634	xxxx	xxxxx	1584	xxxx	xxxxx	xxxx	788	1089	624	807	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	0.25	0.01	0.03	0.15	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.2	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	802	776	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	1.0	0.6	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	11.0	10.6	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	B	B	*	*
ApproachDel:	xxxxxx			xxxxxx			11.0			10.6		
ApproachLOS:	*			*			B			B		

Note: Queue reported is the number of cars per lane.

Existing
AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Fresca St & S. Nardo Ave

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[10.9]

Street Name:	Fresca St									Nardo Ave								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0	0	0		22	0		2		2	188		0		0	82		12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0		22	0		2		2	188		0		0	82		12
Added Vol:	0	0	0		0	0		0		0	0		0		0	0		0
PasserByVol:	0	0	0		0	0		0		0	0		0		0	0		0
Initial Fut:	0	0	0		22	0		2		2	188		0		0	82		12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
PHF Volume:	0	0	0		30	0		3		3	258		0		0	112		16
Reduct Vol:	0	0	0		0	0		0		0	0		0		0	0		0
FinalVolume:	0	0	0		30	0		3		3	258		0		0	112		16
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	6.5		6.2		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	4.0		3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx		384	384		121		129	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx		623	553		936		1469	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx		622	552		936		1469	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx		0.05	0.00		0.00		0.00	xxxx	xxxx	xxxx	xxxx	xxxx			
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx		xxxxx		0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx		xxxxx		7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*		*	*		*		A	*	*	*	*	*			
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	640		xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	0.2		xxxxx		0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	10.9		xxxxx		7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*		*	B		*		A	*	*	*	*	*			
ApproachDel:	xxxxxx					10.9				xxxxxx			xxxxxx					
ApproachLOS:	*					B				*			*					

Note: Queue reported is the number of cars per lane.

Existing
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Stevens Ave & S. Nardo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.284
Loss Time (sec): 12 Average Delay (sec/veh): 18.3
Optimal Cycle: 30 Level Of Service: B

Street Name:	Stevens Ave									S. Nardo Ave								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0		0	0		0		0	0		0		0	0		0
Y+R:	4.0	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0		4.0	4.0		4.0
Lanes:	1	0	2	0	0	1	0	1	1	0	1	0	0	0	1	1	0	0	0	0
Volume Module:																				
Base Vol:	37	395		0		0	337		68		106		0		152		1		0	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	37	395		0		0	337		68		106		0		152		1		0	
Added Vol:	0		0		0	0		0		0	0		0		0	0		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	37	395		0		0	337		68		106		0		152		1		0	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	40	429		0		0	366		74		115		0		165		1		0	
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	40	429		0		0	366		74		115		0		165		1		0	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	429		0		0	366		74		115		0		165		1		0	
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.93	0.93	0.95	1.00	0.85	0.95	1.00	1.00						
Lanes:	1.00	2.00	0.00	1.00	1.66	0.34	1.00	0.00	1.00	1.00	0.00	0.00						
Final Sat.:	1805	3610		0	1900	2929		591	1805		0	1615	1805		0			
Capacity Analysis Module:																				
Vol/Sat:	0.02	0.12	0.00	0.00	0.13	0.13	0.06	0.00	0.10	0.00	0.00	0.00						
Crit Moves:	****				****				****	****								
Green Time:	7.8	51.8	0.0	0.0	44.0	44.0	36.2	0.0	36.0	0.2	0.0	0.0						
Volume/Cap:	0.28	0.23	0.00	0.00	0.28	0.28	0.18	0.00	0.28	0.28	0.00	0.00						
Delay/Veh:	44.5	13.2	0.0	0.0	18.0	18.0	21.9	0.0	23.1	86.8	0.0	0.0						
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
AdjDel/Veh:	44.5	13.2	0.0	0.0	18.0	18.0	21.9	0.0	23.1	86.8	0.0	0.0						
LOS by Move:	D	B	A	A	B	B	C	A	C	F	A	A						
HCM2kAvgQ:	1	4	0	0	4	4	2	0	4	0	0	0						

Note: Queue reported is the number of cars per lane.

Existing
AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 E. Solana Circle & Via De La Valle

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: D[26.3]

Street Name:	E. Solana Circle								Via De La Valle							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	1	0	0	1	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0	0	0			38	0	23			15	744	0			0	431			27
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00
Initial Bse:	0	0	0			38	0	23			15	744	0			0	431			27
Added Vol:	0	0	0			0	0	0			0	0	0			0	0			0
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0			0
Initial Fut:	0	0	0			38	0	23			15	744	0			0	431			27
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00
PHF Adj:	0.92	0.92	0.92			0.92	0.92	0.92			0.92	0.92	0.92			0.92	0.92			0.92
PHF Volume:	0	0	0			41	0	25			16	809	0			0	468			29
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0			0
FinalVolume:	0	0	0			41	0	25			16	809	0			0	468			29
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx			6.4	6.5	6.2			4.1	xxxx	xxxxx	xxxxx		xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx			3.5	4.0	3.3			2.2	xxxx	xxxxx	xxxxx		xxxx	xxxxx			
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx			1324	1324	483			498	xxxx	xxxxx			xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx			174	157	588			1077	xxxx	xxxxx			xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx			172	155	588			1077	xxxx	xxxxx			xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx			0.24	0.00	0.04			0.02	xxxx	xxxx			xxxx	xxxx			
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.0	xxxx	xxxxx			xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			8.4	xxxx	xxxxx			xxxxx	xxxxx			
LOS by Move:	*	*	*			*	*	*			A	*	*			*	*			
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	234	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx	1.1	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx			xxxxx	26.3	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxxx			
Shared LOS:	*	*	*			*	D	*			*	*	*			*	*			
ApproachDel:	xxxxxx					xxxxxx	26.3				xxxxxx					xxxxxx				
ApproachLOS:	*					*	D				*					*				

Note: Queue reported is the number of cars per lane.

Existing
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Stevens Ave/Valley Ave & Via De La Valle

Cycle (sec): 98 Critical Vol./Cap.(X): 0.562
Loss Time (sec): 12 Average Delay (sec/veh): 28.8
Optimal Cycle: 45 Level Of Service: C

Street Name:	Stevens Ave/Valley Ave								Via De La Valle							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	5	0			5	0	0			5	10	0			5	10			0
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0			4.0
Lanes:	1	0	1	0	2	2	0	1	0	1	1	0	1	1	0	2	0	1	1	0
Volume Module:																				
Base Vol:	18	42	212			432	72	51			43	674	41			331	584			312
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00
Initial Bse:	18	42	212			432	72	51			43	674	41			331	584			312
Added Vol:	0	0	0			0	0	0			0	0	0			0	0			0
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0			0
Initial Fut:	18	42	212			432	72	51			43	674	41			331	584			312
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00
PHF Adj:	0.98	0.98	0.98			0.98	0.98	0.98			0.98	0.98	0.98			0.98	0.98			0.98
PHF Volume:	18	43	216			441	73	52			44	688	42			338	596			318
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0			0
Reduced Vol:	18	43	216			441	73	52			44	688	42			338	596			318
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00
FinalVolume:	18	43	216			441	73	52			44	688	42			338	596			318
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900			1900
Adjustment:	0.95	1.00	0.75			0.92	1.00	0.85			0.95	0.94	0.94			0.92	0.90			0.90
Lanes:	1.00	1.00	2.00			2.00	1.00	1.00			1.00	1.89	0.11			2.00	1.30			0.70
Final Sat.:	1805	1900	2842			3502	1900	1615			1805	3372	205			3502	2231			1192
Capacity Analysis Module:																				
Vol/Sat:	0.01	0.02	0.08			0.13	0.04	0.03			0.02	0.20	0.20			0.10	0.27			0.27
Crit Moves:			****			****					****						****			
Green Time:	13.1	13.1	13.1			21.7	21.7	21.7			5.0	34.7	34.7			16.4	46.1			46.1
Volume/Cap:	0.08	0.17	0.57			0.57	0.17	0.15			0.48	0.58	0.58			0.58	0.57			0.57
Delay/Veh:	37.3	37.9	41.8			34.9	31.1	30.9			49.1	26.3	26.3			39.0	19.2			19.2
User DelAdj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00
AdjDel/Veh:	37.3	37.9	41.8			34.9	31.1	30.9			49.1	26.3	26.3			39.0	19.2			19.2
LOS by Move:	D	D	D			C	C	C			D	C	C			D	B			B
HCM2kAvgQ:	1	1	4			6	2	1			2	10	10			6	11			11

Note: Queue reported is the number of cars per lane.

Existing
AM

Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A

Street Name:	Driveway A						Nardo Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	11	0	30	0	0	0	0	168	10	8	66	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	0	30	0	0	0	0	168	10	8	66	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	0	30	0	0	0	0	168	10	8	66	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	12	0	33	0	0	0	0	183	11	9	72	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	0	33	0	0	0	0	183	11	9	72	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	13	0	36	0	0	0	0	183	11	10	72	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	268	xxxx	188	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	193	xxxx	xxxxx
Potent Cap.:	740	xxxx	1112	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1386	xxxx	xxxxx
Adj Cap:	0.99	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	735	xxxx	1112	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1386	xxxx	xxxxx
Level Of Service Module:												
Control Del:	5.0	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	977	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1386	xxxx	xxxxx
Shrd ConDel:	xxxxx	3.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.8	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	3.9			xxxxxx			0.0			0.3		
ApproachLOS:	A			*			A			A		

Existing
AM

Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A

Street Name:	Driveway B						Nardo Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	3	0	28	0	0	0	0	238	4	10	99	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	0	28	0	0	0	0	238	4	10	99	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	0	28	0	0	0	0	238	4	10	99	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	3	0	30	0	0	0	0	259	4	11	108	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	3	0	30	0	0	0	0	259	4	11	108	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	4	0	33	0	0	0	0	259	4	12	108	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	379	xxxx	261	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	263	xxxx	xxxxx
Potent Cap.:	638	xxxx	1021	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1285	xxxx	xxxxx
Adj Cap:	0.99	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	632	xxxx	1021	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1285	xxxx	xxxxx
Level Of Service Module:												
Control Del:	5.7	xxxx	3.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.8	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	964	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1285	xxxx	xxxxx
Shrd ConDel:	xxxxx	3.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.1	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	3.9			xxxxxx			0.0			0.3		
ApproachLOS:	A			*			A			A		

Existing
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Stevens Avenue-Valley Avenue / Valley Avenue

Cycle (sec): 100 Critical Vol./Cap.(X): 0.283
Loss Time (sec): 8 Average Delay (sec/veh): 19.3
Optimal Cycle: 23 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0	0	1	1 0	1	0	2	0 0	0	0	0	0 0	1	0	0	0 1
Volume Module:																
Base Vol:	0	308	40		70	390	0		0	0	0		150	0	110	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	308	40		70	390	0		0	0	0		150	0	110	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	308	40		70	390	0		0	0	0		150	0	110	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92	
PHF Volume:	0	335	43		76	424	0		0	0	0		163	0	120	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	335	43		76	424	0		0	0	0		163	0	120	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	335	43		76	424	0		0	0	0		163	0	120	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.93	0.93		0.95	0.95	1.00		1.00	1.00	1.00		0.77	1.00	0.85	
Lanes:	0.00	1.77	0.23		1.00	2.00	0.00		0.00	0.00	0.00		1.00	0.00	1.00	
Final Sat.:	0	3141	408		1805	3610	0		0	0	0		1463	0	1615	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.11	0.11		0.04	0.12	0.00		0.00	0.00	0.00		0.11	0.00	0.07	
Crit Moves:		****			****								****			
Green Time:	0.0	37.7	37.7		14.9	52.6	0.0		0.0	0.0	0.0		39.4	0.0	39.4	
Volume/Cap:	0.00	0.28	0.28		0.28	0.22	0.00		0.00	0.00	0.00		0.28	0.00	0.19	
Delay/Veh:	0.0	21.8	21.8		38.4	12.8	0.0		0.0	0.0	0.0		20.9	0.0	20.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	21.8	21.8		38.4	12.8	0.0		0.0	0.0	0.0		20.9	0.0	20.0	
LOS by Move:	A	C	C		D	B	A		A	A	A		C	A	B	
HCM2kAvgQ:	0	4	4		2	4	0		0	0	0		3	0	2	

Note: Queue reported is the number of cars per lane.

Existing Plus Project
PM

Scenario Report

Scenario:	Existing PM
Command:	Existing PM
Volume:	Existing PM
Geometry:	Existing PM
Impact Fee:	Default Impact Fee
Trip Generation:	No Project
Trip Distribution:	Project
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Existing Plus Project
PM

Trip Distribution Report

Percent Of Trips Project

	To Gates					
Zone	1	2	3	4	5	6
1	10.0	5.0	35.0	10.0	10.0	30.0

Existing Plus Project
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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in D/V
# 1 S. Nardo Ave & Lomas Santa Fe	B	11.4	0.333	B	11.4	0.333	+ 0.000
# 2 Stevens Av & Lomas Santa Fe	C	24.0	0.537	C	24.0	0.537	+ 0.000
# 3 S. Nardo Ave & E. Solana Circl	B	10.5	0.109	B	10.5	0.109	+ 0.000
# 4 Fresca St & S. Nardo Ave	A	9.8	0.019	A	9.8	0.019	+ 0.000
# 5 Stevens Ave & S. Nardo Ave	B	15.0	0.285	B	15.0	0.285	+ 0.000
# 6 E. Solana Circle & Via De La V	C	21.0	0.088	C	21.0	0.088	+ 0.000
# 7 Stevens Ave/Valley Ave & Via D	C	33.0	0.731	C	33.0	0.731	+ 0.000
# 20 Driveway A	A	0.4	0.000	A	0.4	0.000	+ 0.000
# 21 Driveway B	A	0.4	0.000	A	0.4	0.000	+ 0.000
# 24 Stevens Avenue-Valley Avenue /	B	13.1	0.268	B	13.1	0.268	+ 0.000

Existing Plus Project
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 S. Nardo Ave & Lomas Santa Fe

Cycle (sec): 69 Critical Vol./Cap.(X): 0.333
Loss Time (sec): 12 Average Delay (sec/veh): 11.4
Optimal Cycle: 45 Level Of Service: B

Street Name:	S. Nardo Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	8	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	0 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	18	12	37	123	6	0	4	671	12	44	638	127
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	12	37	123	6	0	4	671	12	44	638	127
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	12	37	123	6	0	4	671	12	44	638	127
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	19	13	39	129	6	0	4	706	13	46	672	134
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	13	39	129	6	0	4	706	13	46	672	134
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	13	39	129	6	0	4	706	13	46	672	134
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.85	0.85	0.76	1.00	1.00	0.95	0.95	0.95	0.95	0.93	0.93
Lanes:	0.27	0.18	0.55	1.00	1.00	0.00	1.00	1.96	0.04	1.00	1.67	0.33
Final Sat.:	433	288	889	1446	1900	0	1805	3536	63	1805	2935	584
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.09	0.00	0.00	0.00	0.20	0.20	0.03	0.23	0.23
Crit Moves:		****					****				****	
Green Time:	8.4	8.4	8.4	8.4	8.4	0.0	5.0	38.9	38.9	9.7	43.6	43.6
Volume/Cap:	0.36	0.36	0.36	0.74	0.03	0.00	0.03	0.35	0.35	0.18	0.36	0.36
Delay/Veh:	29.0	29.0	29.0	44.6	26.8	0.0	29.9	8.3	8.3	26.5	6.1	6.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.0	29.0	29.0	44.6	26.8	0.0	29.9	8.3	8.3	26.5	6.1	6.1
LOS by Move:	C	C	C	D	C	A	C	A	A	C	A	A
HCM2kAvgQ:	2	2	2	4	0	0	0	4	4	1	4	4

Note: Queue reported is the number of cars per lane.

Existing Plus Project
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Stevens Av & Lomas Santa Fe

Cycle (sec): 112 Critical Vol./Cap.(X): 0.537
Loss Time (sec): 14 Average Delay (sec/veh): 24.0
Optimal Cycle: 48 Level Of Service: C

Street Name:	Stevens Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	8	1	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1! 0	1	0 0	0 0	0 0	1 0	1 1	0	2 0	2 0	0
Volume Module:												
Base Vol:	257	0	366	0	0	0	0	763	116	218	656	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	257	0	366	0	0	0	0	763	116	218	656	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	257	0	366	0	0	0	0	763	116	218	656	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	271	0	385	0	0	0	0	803	122	229	691	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	271	0	385	0	0	0	0	803	122	229	691	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	271	0	385	0	0	0	0	803	122	229	691	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	0.93	0.93	0.92	0.95	1.00
Lanes:	1.41	0.00	1.59	0.00	0.00	0.00	1.00	1.74	0.26	2.00	2.00	0.00
Final Sat.:	2399	0	2696	0	0	0	1900	3071	467	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.14	0.00	0.00	0.00	0.00	0.26	0.26	0.07	0.19	0.00
Crit Moves:			****					****		****		
Green Time:	29.8	0.0	29.8	0.0	0.0	0.0	0.0	54.5	54.5	13.7	68.2	0.0
Volume/Cap:	0.42	0.00	0.54	0.00	0.00	0.00	0.00	0.54	0.54	0.54	0.31	0.00
Delay/Veh:	34.2	0.0	35.7	0.0	0.0	0.0	0.0	20.3	20.3	47.6	10.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.2	0.0	35.7	0.0	0.0	0.0	0.0	20.3	20.3	47.6	10.7	0.0
LOS by Move:	C	A	D	A	A	A	A	C	C	D	B	A
HCM2kAvgQ:	5	0	7	0	0	0	0	11	11	5	6	0

Note: Queue reported is the number of cars per lane.

Existing Plus Project
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 S. Nardo Ave & E. Solana Circle/Nardito Ln

Average Delay (sec/veh): 9.1 Worst Case Level Of Service: B[10.5]

Street Name:	S. Nardo Ave						E. Solana Circle/Nardito Ln					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 1	0	0
Volume Module:												
Base Vol:	31	1	14	1	0	3	1	67	25	27	72	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	31	1	14	1	0	3	1	67	25	27	72	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	1	14	1	0	3	1	67	25	27	72	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	37	1	17	1	0	4	1	80	30	32	86	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	37	1	17	1	0	4	1	80	30	32	86	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	xxxxx
Capacity Module:												
Cnflict Vol:	4	xxxx	xxxxx	18	xxxx	xxxxx	130	96	2	142	89	xxxxx
Potent Cap.:	1632	xxxx	xxxxx	1612	xxxx	xxxxx	847	798	1088	832	805	xxxxx
Move Cap.:	1632	xxxx	xxxxx	1612	xxxx	xxxxx	762	779	1088	732	785	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	0.00	xxxx	xxxx	0.00	0.10	0.03	0.04	0.11	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.3	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	843	xxxxx	770	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	0.5	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.9	xxxxx	10.5	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	A	*	B	*	*
ApproachDel:	xxxxxx			xxxxxx			9.9			10.5		
ApproachLOS:	*			*			A			B		

Note: Queue reported is the number of cars per lane.

Existing Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Fresca St & S. Nardo Ave

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: A[9.8]

Street Name:	Fresca St									Nardo Ave											
Approach:	North Bound					South Bound				East Bound					West Bound						
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled					
Rights:	Include					Include					Include					Include					
Lanes:	0	0	0	0	0	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0	
Volume Module:																					
Base Vol:	0	0	0	13	0	2	5	104	0	0	95	18									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Initial Bse:	0	0	0	13	0	2	5	104	0	0	95	18									
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0									
Initial Fut:	0	0	0	13	0	2	5	104	0	0	95	18									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90									
PHF Volume:	0	0	0	14	0	2	6	116	0	0	106	20									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
FinalVolume:	0	0	0	14	0	2	6	116	0	0	106	20									
Critical Gap Module:																					
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx									
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx									
Capacity Module:																					
Cnflict Vol:	xxxx	xxxx	xxxxx	242	242	116	126	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Potent Cap.:	xxxx	xxxx	xxxxx	751	663	942	1473	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Move Cap.:	xxxx	xxxx	xxxxx	748	660	942	1473	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Volume/Cap:	xxxx	xxxx	xxxx	0.02	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx									
Level Of Service Module:																					
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx									
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*									
Movement:	LT - LTR - RT					LT - LTR - RT				LT - LTR - RT						LT - LTR - RT					
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	769	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	9.8	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	A	*	A	*	*	*	*	*									
ApproachDel:	xxxxxx				9.8		xxxxxx			xxxxxx											
ApproachLOS:	*				A		*			*											

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Stevens Ave & S. Nardo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.285
Loss Time (sec): 12 Average Delay (sec/veh): 15.0
Optimal Cycle: 30 Level Of Service: B

Street Name:	Stevens Ave									S. Nardo Ave											
Approach:	North Bound					South Bound				East Bound					West Bound						
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Control:	Protected					Protected					Protected					Protected					
Rights:	Include					Include					Include					Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	1	0	2	0	0	1	0	1	1	0	1	0	0	0	1	0	0	0	0	0	
Volume Module:																					
Base Vol:	89	336	0	2	403	67	41	0	66	0	0	0									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Initial Bse:	89	336	0	2	403	67	41	0	66	0	0	0									
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0									
Initial Fut:	89	336	0	2	403	67	41	0	66	0	0	0									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89									
PHF Volume:	100	378	0	2	453	75	46	0	74	0	0	0									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	100	378	0	2	453	75	46	0	74	0	0	0									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
FinalVolume:	100	378	0	2	453	75	46	0	74	0	0	0									
Saturation Flow Module:																					
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900									
Adjustment:	0.95	0.95	1.00	0.95	0.93	0.93	0.95	1.00	0.85	1.00	1.00	1.00									
Lanes:	1.00	2.00	0.00	1.00	1.71	0.29	1.00	0.00	1.00	0.00	0.00	0.00									
Final Sat.:	1805	3610	0	1805	3030	504	1805	0	1615	0	0	0									
Capacity Analysis Module:																					
Vol/Sat:	0.06	0.10	0.00	0.00	0.15	0.15	0.03	0.00	0.05	0.00	0.00	0.00									
Crit Moves:	****				****				****												
Green Time:	19.4	71.0	0.0	0.8	52.4	52.4	16.1	0.0	16.1	0.0	0.0	0.0									
Volume/Cap:	0.28	0.15	0.00	0.15	0.28	0.28	0.16	0.00	0.28	0.00	0.00	0.00									
Delay/Veh:	34.8	4.7	0.0	53.6	13.4	13.4	36.4	0.0	37.5	0.0	0.0	0.0									
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
AdjDel/Veh:	34.8	4.7	0.0	53.6	13.4	13.4	36.4	0.0	37.5	0.0	0.0	0.0									
LOS by Move:	C	A	A	D	B	B	D	A	D	A	A	A									
HCM2kAvgQ:	3	2	0	0	5	5	1	0	2	0	0	0									

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 E. Solana Circle & Via De La Valle

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[21.0]

Street Name:	E. Solana Circle									Via De La Valle								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	1	0	0	1	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0	0	0		14	0		18		16	553		0		0	640		54
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00
Initial Bse:	0	0	0		14	0		18		16	553		0		0	640		54
Added Vol:	0	0	0		0	0		0		0	0		0		0	0		0
PasserByVol:	0	0	0		0	0		0		0	0		0		0	0		0
Initial Fut:	0	0	0		14	0		18		16	553		0		0	640		54
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00
PHF Adj:	0.94	0.94	0.94		0.94	0.94		0.94		0.94	0.94		0.94		0.94	0.94		0.94
PHF Volume:	0	0	0		15	0		19		17	588		0		0	681		57
Reduct Vol:	0	0	0		0	0		0		0	0		0		0	0		0
FinalVolume:	0	0	0		15	0		19		17	588		0		0	681		57
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	6.5		6.2		4.1	xxxx	xxxxx	xxxxx		xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	4.0		3.3		2.2	xxxx	xxxxx	xxxxx		xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx		1332	1332		710		738	xxxx	xxxxx		xxxx	xxxx	xxxxx		
Potent Cap.:	xxxx	xxxx	xxxxx		172	156		437		877	xxxx	xxxxx		xxxx	xxxx	xxxxx		
Move Cap.:	xxxx	xxxx	xxxxx		169	153		437		877	xxxx	xxxxx		xxxx	xxxx	xxxxx		
Volume/Cap:	xxxx	xxxx	xxxx		0.09	0.00		0.04		0.02	xxxx	xxxx		xxxx	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx		xxxxx		0.1	xxxx	xxxxx		xxxx	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx		xxxxx		9.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*		*	*		*		A	*	*		*	*	*		
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	258		xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	0.4		xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	21.0		xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*		*	C		*		*	*	*		*	*	*		
ApproachDel:	xxxxxx					21.0				xxxxxx				xxxxxx				
ApproachLOS:	*					C				*				*				

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Stevens Ave/Valley Ave & Via De La Valle

Cycle (sec): 98 Critical Vol./Cap.(X): 0.731
Loss Time (sec): 12 Average Delay (sec/veh): 33.0
Optimal Cycle: 64 Level Of Service: C

Street Name:	Stevens Ave/Valley Ave									Via De La Valle								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	5	0		5	0		0		5	10		0		5	10		0
Y+R:	4.0	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0		4.0	4.0		4.0
Lanes:	1	0	1	0	2	2	0	1	0	1	1	0	1	1	0	2	0	1	1	0
Volume Module:																				
Base Vol:	69	149	465		408	100		70		47	530		23		254	648		346
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00
Initial Bse:	69	149	465		408	100		70		47	530		23		254	648		346
Added Vol:	0	0	0		0	0		0		0	0		0		0	0		0
PasserByVol:	0	0	0		0	0		0		0	0		0		0	0		0
Initial Fut:	69	149	465		408	100		70		47	530		23		254	648		346
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00
PHF Adj:	0.93	0.93	0.93		0.93	0.93		0.93		0.93	0.93		0.93		0.93	0.93		0.93
PHF Volume:	74	160	500		439	108		75		51	570		25		273	697		372
Reduct Vol:	0	0	0		0	0		0		0	0		0		0	0		0
Reduced Vol:	74	160	500		439	108		75		51	570		25		273	697		372
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00
FinalVolume:	74	160	500		439	108		75		51	570		25		273	697		372
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900		1900	1900		1900		1900	1900		1900		1900	1900		1900
Adjustment:	0.95	1.00	0.75		0.92	1.00		0.85		0.95	0.94		0.94		0.92	0.90		0.90
Lanes:	1.00	1.00	2.00		2.00	1.00		1.00		1.00	1.92		0.08		2.00	1.30		0.70
Final Sat.:	1805	1900	2842		3502	1900		1615		1805	3439		149		3502	2231		1191
Capacity Analysis Module:																				
Vol/Sat:	0.04	0.08	0.18		0.13	0.06		0.05		0.03	0.17		0.17		0.08	0.31		0.31
Crit Moves:			****		****					****						****		
Green Time:	23.2	23.2	23.2		16.5	16.5		16.5		5.0	31.4		31.4		14.8	41.2		41.2
Volume/Cap:	0.17	0.36	0.74		0.74	0.34		0.28		0.55	0.52		0.52		0.52	0.74		0.74
Delay/Veh:	29.9	31.6	39.1		43.7	36.5		36.1		52.3	27.5		27.5		39.2	26.0		26.0
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00
AdjDel/Veh:	29.9	31.6	39.1		43.7	36.5		36.1		52.3	27.5		27.5		39.2	26.0		26.0
LOS by Move:	C	C	D		D	D		D		D	C		C		D	C		C
HCM2kAvgQ:	2	4	10		7	3		2		2	8		8		5	16		16

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A

Street Name:	Driveway A						Nardo Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	1 0	0	0 0	1 0	0
Volume Module:												
Base Vol:	3	0	19	0	0	0	0	92	0	0	84	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	0	19	0	0	0	0	92	0	0	84	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	0	19	0	0	0	0	92	0	0	84	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	3	0	21	0	0	0	0	100	0	0	91	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	3	0	21	0	0	0	0	100	0	0	91	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	4	0	23	0	0	0	0	100	0	0	91	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	191	xxxx	100	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	820	xxxx	1232	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	1.00	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	820	xxxx	1232	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Control Del:	4.4	xxxx	3.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	1153	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	3.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	*	*	*
ApproachDel:	3.2			xxxxxx			0.0			0.0		
ApproachLOS:	A			*			A			A		

Existing Plus Project
PM

Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A

Street Name:	Driveway B						Nardo Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	1 0	0	0 0	1 0	0
Volume Module:												
Base Vol:	4	0	22	0	0	0	0	102	0	0	135	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	0	22	0	0	0	0	102	0	0	135	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	0	22	0	0	0	0	102	0	0	135	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	4	0	24	0	0	0	0	111	0	0	147	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	4	0	24	0	0	0	0	111	0	0	147	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	5	0	26	0	0	0	0	111	0	0	147	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	258	xxxx	111	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	751	xxxx	1217	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	1.00	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	751	xxxx	1217	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Control Del:	4.8	xxxx	3.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	1111	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	3.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	*	*	*
ApproachDel:	3.3			xxxxxx			0.0			0.0		
ApproachLOS:	A			*			A			A		

Existing Plus Project
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Stevens Avenue-Valley Avenue / Valley Avenue

Cycle (sec): 100 Critical Vol./Cap.(X): 0.268
Loss Time (sec): 8 Average Delay (sec/veh): 13.1
Optimal Cycle: 23 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0	0	1	1 0	1	0	2	0 0	0	0	0	0 0	1	0	0	0 1
Volume Module:																
Base Vol:	0	406	90		70	330	0		0	0	0		70	0	40	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	406	90		70	330	0		0	0	0		70	0	40	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	406	90		70	330	0		0	0	0		70	0	40	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92	
PHF Volume:	0	441	98		76	359	0		0	0	0		76	0	43	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	441	98		76	359	0		0	0	0		76	0	43	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	441	98		76	359	0		0	0	0		76	0	43	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.92	0.92		0.95	0.95	1.00		1.00	1.00	1.00		0.78	1.00	0.85	
Lanes:	0.00	1.64	0.36		1.00	2.00	0.00		0.00	0.00	0.00		1.00	0.00	1.00	
Final Sat.:	0	2875	637		1805	3610	0		0	0	0		1490	0	1615	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.15	0.15		0.04	0.10	0.00		0.00	0.00	0.00		0.05	0.00	0.03	
Crit Moves:		****			****								****			
Green Time:	0.0	57.2	57.2		15.7	73.0	0.0		0.0	0.0	0.0		19.0	0.0	19.0	
Volume/Cap:	0.00	0.27	0.27		0.27	0.14	0.00		0.00	0.00	0.00		0.27	0.00	0.14	
Delay/Veh:	0.0	10.9	10.9		37.6	4.1	0.0		0.0	0.0	0.0		35.0	0.0	33.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	10.9	10.9		37.6	4.1	0.0		0.0	0.0	0.0		35.0	0.0	33.9	
LOS by Move:	A	B	B		D	A	A		A	A	A		D	A	C	
HCM2kAvgQ:	0	4	4		2	2	0		0	0	0		2	0	1	

Note: Queue reported is the number of cars per lane.

APPENDIX C: TRAFFIX WORKSHEETS-EXISTING PLUS PROJECT CONDITIONS

Existing Plus Project
AM

Scenario Report

Scenario:	Existing Plus Project AM
Command:	Existing Plus Project AM
Volume:	Existing AM
Geometry:	Existing AM
Impact Fee:	Default Impact Fee
Trip Generation:	Project AM
Trip Distribution:	Project
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Existing Plus Project
AM

Trip Generation Report

Forecast for Project AM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1	Project	1.00	Project	8.00	34.00	8	34	42	100.0
	Zone 1 Subtotal		.....			8	34	42	100.0
TOTAL			.....			8	34	42	100.0

Existing Plus Project
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Trip Distribution Report

Percent Of Trips Project

Zone	To Gates 1	2	3	4	5	6
1	10.0	5.0	35.0	10.0	10.0	30.0

Existing Plus Project
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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 S. Nardo Ave & Lomas Santa Fe	B	14.8	0.472	B	14.8	0.472	+ 0.000 D/V
# 2 Stevens Av & Lomas Santa Fe	C	23.8	0.603	C	24.1	0.608	+ 0.273 D/V
# 3 S. Nardo Ave & E. Solana Circl	B	11.0	0.246	B	11.1	0.247	+ 0.014 D/V
# 4 Fresca St & S. Nardo Ave	B	10.9	0.048	B	11.0	0.049	+ 0.110 D/V
# 5 Stevens Ave & S. Nardo Ave	B	18.3	0.284	B	19.1	0.301	+ 0.810 D/V
# 6 E. Solana Circle & Via De La V	D	26.3	0.241	D	26.0	0.242	-0.350 D/V
# 7 Stevens Ave/Valley Ave & Via D	C	28.8	0.562	C	29.0	0.569	+ 0.160 D/V
# 20 Driveway A	A	0.7	0.000	A	0.8	0.000	+ 0.000 D/V
# 21 Driveway B	A	0.5	0.000	A	0.7	0.000	+ 0.000 D/V
# 24 Stevens Avenue-Valley Avenue /	B	19.3	0.283	B	19.2	0.284	-0.114 D/V

Existing Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 S. Nardo Ave & Lomas Santa Fe

Cycle (sec):	69	Critical Vol./Cap.(X):	0.472
Loss Time (sec):	12	Average Delay (sec/veh):	14.8
Optimal Cycle:	45	Level Of Service:	B

Street Name:	S. Nardo Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	8	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0	0	1	0	1	0	1	1	0	1	0	1	1	0
Volume Module:												
Base Vol:	17	8	74	178	5	4	0	578	14	47	638	115
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	8	74	178	5	4	0	578	14	47	638	115
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	8	74	178	5	4	0	578	14	47	638	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	20	10	89	214	6	5	0	696	17	57	769	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	10	89	214	6	5	0	696	17	57	769	139
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	10	89	214	6	5	0	696	17	57	769	139
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.70	0.93	0.93	1.00	0.95	0.95	0.95	0.93	0.93
Lanes:	0.17	0.08	0.75	1.00	0.56	0.44	1.00	1.95	0.05	1.00	1.69	0.31
Final Sat.:	283	133	1231	1338	985	788	1900	3511	85	1805	2988	539
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.16	0.01	0.01	0.00	0.20	0.20	0.03	0.26	0.26
Crit Moves:				****				****		****		
Green Time:	23.2	23.2	23.2	23.2	23.2	23.2	0.0	28.8	28.8	5.0	33.8	33.8
Volume/Cap:	0.22	0.22	0.22	0.48	0.02	0.02	0.00	0.48	0.48	0.43	0.53	0.53
Delay/Veh:	16.6	16.6	16.6	18.9	15.3	15.3	0.0	14.9	14.9	32.9	12.4	12.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.6	16.6	16.6	18.9	15.3	15.3	0.0	14.9	14.9	32.9	12.4	12.4
LOS by Move:	B	B	B	B	B	B	A	B	B	C	B	B
HCM2kAvgQ:	2	2	2	4	0	0	0	6	6	1	7	7

Note: Queue reported is the number of cars per lane.

Existing Plus Project
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Stevens Av & Lomas Santa Fe

Cycle (sec):	112	Critical Vol./Cap.(X):	0.608
Loss Time (sec):	14	Average Delay (sec/veh):	24.1
Optimal Cycle:	55	Level Of Service:	C

Street Name:	Stevens Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	8	1	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	0	1	0	1	1	0	2	0	2	0	0
Volume Module:												
Base Vol:	106	0	258	0	0	0	0	696	156	424	748	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	0	258	0	0	0	0	696	156	424	748	0
Added Vol:	0	0	10	0	0	0	0	0	0	2	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	106	0	268	0	0	0	0	696	156	426	748	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	123	0	312	0	0	0	0	809	181	495	870	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	0	312	0	0	0	0	809	181	495	870	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	0	312	0	0	0	0	809	181	495	870	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	1.00	1.00	1.00	1.00	0.92	0.92	0.92	0.95	1.00
Lanes:	1.28	0.00	1.72	0.00	0.00	0.00	1.00	1.63	0.37	2.00	2.00	0.00
Final Sat.:	2145	0	2869	0	0	0	1900	2869	643	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.11	0.00	0.00	0.00	0.00	0.28	0.28	0.14	0.24	0.00
Crit Moves:			****					****		****		
Green Time:	20.0	0.0	20.0	0.0	0.0	0.0	0.0	51.9	51.9	26.1	78.0	0.0
Volume/Cap:	0.32	0.00	0.61	0.00	0.00	0.00	0.00	0.61	0.61	0.61	0.35	0.00
Delay/Veh:	40.2	0.0	43.9	0.0	0.0	0.0	0.0	23.1	23.1	39.8	6.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.2	0.0	43.9	0.0	0.0	0.0	0.0	23.1	23.1	39.8	6.9	0.0
LOS by Move:	D	A	D	A	A	A	A	C	C	D	A	A
HCM2kAvgQ:	3	0	6	0	0	0	0	13	13	9	6	0

Note: Queue reported is the number of cars per lane.

Existing Plus Project
AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 S. Nardo Ave & E. Solana Circle/Nardito Ln

Average Delay (sec/veh): 9.6 Worst Case Level Of Service: B[11.1]

Street Name:	S. Nardo Ave									E. Solana Circle/Nardito Ln							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	16		1		26	2		1		0	0		134		9	13		83		0
Growth Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	16		1		26	2		1		0	0		134		9	13		83		0
Added Vol:	0		0		1	0		0		0	0		0		0	3		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	16		1		27	2		1		0	0		134		9	16		83		0
User Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.69		0.69		0.69	0.69		0.69		0.69	0.69		0.69		0.69	0.69		0.69		0.69
PHF Volume:	23		1		39	3		1		0	0		194		13	23		120		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	23		1		39	3		1		0	0		194		13	23		120		0
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx			4.1	xxxx	xxxxx	xxxxx		6.5		6.2			7.1		6.5	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx			2.2	xxxx	xxxxx	xxxxx		4.0		3.3			3.5		4.0	xxxxx	
Capacity Module:																				
Cnflict Vol:	1	xxxx	xxxxx			41	xxxx	xxxxx		xxxx	94				1	178		75	xxxxx	
Potent Cap.:	1634	xxxx	xxxxx			1582	xxxx	xxxxx		xxxx	800		1089			788		820	xxxxx	
Move Cap.:	1634	xxxx	xxxxx			1582	xxxx	xxxxx		xxxx	787		1089			623		806	xxxxx	
Volume/Cap:	0.01	xxxx	xxxx			0.00	xxxx	xxxx		xxxx	0.25		0.01			0.04		0.15	xxxx	
Level Of Service Module:																				
2Way95thQ:	0.0	xxxx	xxxxx			0.0	xxxx	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			
Control Del:	7.2	xxxx	xxxxx			7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx			xxxx	xxxx	xxxxx			
LOS by Move:	A		*		*	A		*		*	*		*		*	*		*		*
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		xxxx	xxxx		801			770	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx			0.0	xxxx	xxxxx	xxxxx	xxxx			1.0			0.7	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx			7.3	xxxx	xxxxx	xxxxx	xxxx			11.1			10.7	xxxx	xxxxx		
Shared LOS:	*		*		*	A		*		*	*		B			B		*		*
ApproachDel:	xxxxxx					xxxxxx					11.1					10.7				
ApproachLOS:	*					*					B					B				

Note: Queue reported is the number of cars per lane.

Existing Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Fresca St & S. Nardo Ave

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[11.0]

Street Name:	Fresca St									Nardo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0		0		0	22		0		2	2		188		0	0		82		12
Growth Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0		0		0	22		0		2	2		188		0	0		82		12
Added Vol:	0		0		0	0		0		0	0		7		0	0		3		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	0		0		0	22		0		2	2		195		0	0		85		12
User Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.73		0.73		0.73	0.73		0.73		0.73	0.73		0.73		0.73	0.73		0.73		0.73
PHF Volume:	0		0		0	30		0		3	3		267		0	0		116		16
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	0		0		0	30		0		3	3		267		0	0		116		16
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx			6.4		6.5		6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx			3.5		4.0		3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx			397		397		125	133	xxxx	xxxxx		xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx			612		543		931	1464	xxxx	xxxxx		xxxx	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx			611		542		931	1464	xxxx	xxxxx		xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx			0.05		0.00		0.00	0.00	xxxx	xxxx		xxxx	xxxx	xxxx			
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.0	xxxx	xxxxx		xxxx	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			7.5	xxxx	xxxxx		xxxxx	xxxx	xxxxx			
LOS by Move:	*		*		*	*		*		*	A		*		*	*		*		*
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx		629	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx		0.2	xxxxx				0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx		11.0	xxxxx				7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*		*		*	*		B		*	A		*		*	*		*		*
ApproachDel:	xxxxxx					11.0					xxxxxx					xxxxxx				
ApproachLOS:	*					B					*					*				

Note: Queue reported is the number of cars per lane.

Existing Plus Project
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Stevens Ave & S. Nardo Ave

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.301
Loss Time (sec): 12 | Average Delay (sec/veh): 19.1
Optimal Cycle: 31 | Level Of Service: B

Street Name:	Stevens Ave									S. Nardo Ave		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 0	1	0 1	1 0	1	0 0	0 1	1	0 0	0 0
Volume Module:												
Base Vol:	37	395	0	0	337	68	106	0	152	1	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	37	395	0	0	337	68	106	0	152	1	0	0
Added Vol:	4	0	0	0	0	2	10	0	17	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	395	0	0	337	70	116	0	169	1	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	45	429	0	0	366	76	126	0	184	1	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	429	0	0	366	76	126	0	184	1	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	429	0	0	366	76	126	0	184	1	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.93	0.93	0.95	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	2.00	0.00	1.00	1.66	0.34	1.00	0.00	1.00	1.00	0.00	0.00
Final Sat.:	1805	3610	0	1900	2911	605	1805	0	1615	1805	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.12	0.00	0.00	0.13	0.13	0.07	0.00	0.11	0.00	0.00	0.00
Crit Moves:	****				****				****	****		
Green Time:	8.2	50.0	0.0	0.0	41.8	41.8	38.0	0.0	37.8	0.2	0.0	0.0
Volume/Cap:	0.30	0.24	0.00	0.00	0.30	0.30	0.18	0.00	0.30	0.30	0.00	0.00
Delay/Veh:	44.3	14.3	0.0	0.0	19.5	19.5	20.8	0.0	22.1	91.5	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.3	14.3	0.0	0.0	19.5	19.5	20.8	0.0	22.1	91.5	0.0	0.0
LOS by Move:	D	B	A	A	B	B	C	A	C	F	A	A
HCM2kAvgQ:	1	4	0	0	5	5	3	0	4	0	0	0

Note: Queue reported is the number of cars per lane.

Existing Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 E. Solana Circle & Via De La Valle

Average Delay (sec/veh): 1.4 | Worst Case Level Of Service: D[26.0]

Street Name:	E. Solana Circle								Via De La Valle			
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L - T - R				L - T - R				L - T - R				L - T - R			
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0
Volume Module:																	
Base Vol:	0	0	0	38	0	23	15	744	0	0	431	27					
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Initial Bse:	0	0	0	38	0	23	15	744	0	0	431	27					
Added Vol:	0	0	0	0	0	3	1	0	0	0	0	0					
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0					
Initial Fut:	0	0	0	38	0	26	16	744	0	0	431	27					
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92					
PHF Volume:	0	0	0	41	0	28	17	809	0	0	468	29					
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0					
FinalVolume:	0	0	0	41	0	28	17	809	0	0	468	29					
Critical Gap Module:																	
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Capacity Module:																	
Cnflict Vol:	xxxx	xxxx	xxxxx	1327	1327	483	498	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Potent Cap.:	xxxx	xxxx	xxxxx	173	157	588	1077	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Move Cap.:	xxxx	xxxx	xxxxx	171	154	588	1077	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Volume/Cap:	xxxx	xxxx	xxxx	0.24	0.00	0.05	0.02	xxxx	xxxx	xxxx	xxxx	xxxx					
Level Of Service Module:																	
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*					
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT							
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	240	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	26.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Shared LOS:	*	*	*	*	D	*	*	*	*	*	*	*					
ApproachDel:	xxxxxx				26.0		xxxxxx			xxxxxx							
ApproachLOS:	*				D			*			*						

Note: Queue reported is the number of cars per lane.

Existing Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Stevens Ave/Valley Ave & Via De La Valle

Cycle (sec): 98 | Critical Vol./Cap.(X): 0.569
Loss Time (sec): 12 | Average Delay (sec/veh): 29.0
Optimal Cycle: 46 | Level Of Service: C

Street Name:	Stevens Ave/Valley Ave						Via De La Valle					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	5	0	5	0	0	5	10	0	5	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	18	42	212	432	72	51	43	674	41	331	584	312
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	42	212	432	72	51	43	674	41	331	584	312
Added Vol:	0	0	0	15	2	0	0	0	0	0	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	42	212	447	74	51	43	674	41	331	584	316
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	18	43	216	456	76	52	44	688	42	338	596	322
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	43	216	456	76	52	44	688	42	338	596	322
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	43	216	456	76	52	44	688	42	338	596	322
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.75	0.92	1.00	0.85	0.95	0.94	0.94	0.92	0.90	0.90
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.89	0.11	2.00	1.30	0.70
Final Sat.:	1805	1900	2842	3502	1900	1615	1805	3372	205	3502	2218	1200
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.08	0.13	0.04	0.03	0.02	0.20	0.20	0.10	0.27	0.27
Crit Moves:			****	****			****				****	
Green Time:	13.0	13.0	13.0	22.2	22.2	22.2	5.0	34.5	34.5	16.3	45.8	45.8
Volume/Cap:	0.08	0.17	0.57	0.57	0.18	0.14	0.48	0.58	0.58	0.58	0.57	0.57
Delay/Veh:	37.4	38.1	42.1	34.7	30.7	30.5	49.1	26.5	26.5	39.1	19.5	19.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.4	38.1	42.1	34.7	30.7	30.5	49.1	26.5	26.5	39.1	19.5	19.5
LOS by Move:	D	D	D	C	C	C	D	C	C	D	B	B
HCM2kAvgQ:	1	1	4	6	2	1	2	10	10	6	11	11

Note: Queue reported is the number of cars per lane.

Existing Plus Project
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Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 0.8 | Worst Case Level Of Service: A

Street Name:	Driveway A									Nardo Avenue					
Approach:	North Bound						South Bound			East Bound			West Bound		
Movement:	L - T - R						L - T - R			L - T - R			L - T - R		
Control:	Stop Sign						Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include						Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 0	0	0 0	1 0	0	0 1	0 0	0
Volume Module:															
Base Vol:	11	0	30	0	0	0	0	168	5	6	66	0			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	11	0	30	0	0	0	0	168	5	6	66	0			
Added Vol:	5	0	7	0	0	0	0	0	1	2	2	0			
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0			
Initial Fut:	16	0	37	0	0	0	0	168	6	8	68	0			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
PHF Volume:	17	0	40	0	0	0	0	183	7	9	74	0			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
FinalVolume:	17	0	40	0	0	0	0	183	7	9	74	0			
Adjusted Volume Module:															
Grade:	0%			0%			0%			0%					
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx				
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx				
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00			
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx				
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx				
Adj Vol.:	19	0	44	0	0	0	0	183	7	10	74	0			
Critical Gap Module:															
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx			
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx			
Capacity Module:															
Cnflict Vol:	268	xxxx	186	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	189	xxxx	xxxxx			
Potent Cap.:	740	xxxx	1115	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1393	xxxx	xxxxx			
Adj Cap:	0.99	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx			
Move Cap.:	735	xxxx	1115	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1393	xxxx	xxxxx			
Level of Service Module:															
Control Del:	5.0	xxxx	3.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.6	xxxx	xxxxx			
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*			
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT			
Shared Cap.:	xxxx	964	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1393	xxxx	xxxxx			
Shrd ConDel:	xxxxx	4.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.7	xxxx	xxxxx			
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*			
ApproachDel:	4.0			xxxxxx			0.0			0.3					
ApproachLOS:	A			*			A			A					

Existing Plus Project
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Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A

Street Name: Driveway B Nardo Avenue

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	3	0	28	0	0	0	0	238	2	19	99	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	0	28	0	0	0	0	238	2	19	99	0
Added Vol:	2	0	20	0	0	0	0	7	0	5	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	48	0	0	0	0	245	2	24	101	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	5	0	52	0	0	0	0	266	2	26	110	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	5	0	52	0	0	0	0	266	2	26	110	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.10	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	6	0	57	0	0	0	0	266	2	29	110	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	403	xxxx	267	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	268	xxxx	xxxxx
Potent Cap.:	618	xxxx	1014	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1277	xxxx	xxxxx
Adj Cap:	0.98	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	604	xxxx	1014	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1277	xxxx	xxxxx
Level of Service Module:												
Control Del:	6.0	xxxx	3.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	953	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1277	xxxx	xxxxx
Shrd ConDel:	xxxxx	4.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.2	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:		4.0		xxxxxx			0.0			0.6		
ApproachLOS:		A		*			A			A		

Existing Plus Project
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Stevens Avenue-Valley Avenue / Valley Avenue

Cycle (sec): 100 Critical Vol./Cap.(X): 0.284
Loss Time (sec): 8 Average Delay (sec/veh): 19.2
Optimal Cycle: 23 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0 0	1 1	0		1 0	2 0	0		0 0	0 0	0		1 0	0 0	1	
Volume Module:																
Base Vol:	0	308	40		70	390	0		0	0	0		150	0	110	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	308	40		70	390	0		0	0	0		150	0	110	
Added Vol:	0	4	0		0	17	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	312	40		70	407	0		0	0	0		150	0	110	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92	
PHF Volume:	0	339	43		76	442	0		0	0	0		163	0	120	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	339	43		76	442	0		0	0	0		163	0	120	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	339	43		76	442	0		0	0	0		163	0	120	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.93	0.93		0.95	0.95	1.00		1.00	1.00	1.00		0.77	1.00	0.85	
Lanes:	0.00	1.77	0.23		1.00	2.00	0.00		0.00	0.00	0.00		1.00	0.00	1.00	
Final Sat.:	0	3145	403		1805	3610	0		0	0	0		1463	0	1615	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.11	0.11		0.04	0.12	0.00		0.00	0.00	0.00		0.11	0.00	0.07	
Crit Moves:		****			****								****			
Green Time:	0.0	37.9	37.9		14.8	52.8	0.0		0.0	0.0	0.0		39.2	0.0	39.2	
Volume/Cap:	0.00	0.28	0.28		0.28	0.23	0.00		0.00	0.00	0.00		0.28	0.00	0.19	
Delay/Veh:	0.0	21.7	21.7		38.4	12.8	0.0		0.0	0.0	0.0		21.1	0.0	20.1	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	21.7	21.7		38.4	12.8	0.0		0.0	0.0	0.0		21.1	0.0	20.1	
LOS by Move:	A	C	C		D	B	A		A	A	A		C	A	C	
HCM2kAvgQ:	0	4	4		2	4	0		0	0	0		3	0	2	

Note: Queue reported is the number of cars per lane.

Existing Plus Project
PM

Scenario Report

Scenario:	Existing Plus Project PM
Command:	Existing PM
Volume:	Existing PM
Geometry:	Existing PM
Impact Fee:	Default Impact Fee
Trip Generation:	Project PM
Trip Distribution:	Project
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Existing Plus Project
PM

Trip Generation Report

Forecast for Project PM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1	Project	1.00	Project	37.00	16.00	37	16	53	100.0
	Zone 1 Subtotal					37	16	53	100.0
TOTAL						37	16	53	100.0

Existing Plus Project
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Trip Distribution Report

Percent Of Trips Project

Zone	To Gates 1	2	3	4	5	6
1	10.0	5.0	35.0	10.0	10.0	30.0

Existing Plus Project
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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 S. Nardo Ave & Lomas Santa Fe	B	11.4	0.333	B	11.4	0.333	+ 0.000 D/V
# 2 Stevens Av & Lomas Santa Fe	C	24.0	0.537	C	24.3	0.543	+ 0.275 D/V
# 3 S. Nardo Ave & E. Solana Circl	B	10.5	0.109	B	10.6	0.109	+ 0.049 D/V
# 4 Fresca St & S. Nardo Ave	A	9.8	0.019	A	9.9	0.020	+ 0.083 D/V
# 5 Stevens Ave & S. Nardo Ave	B	15.0	0.285	B	16.3	0.309	+ 1.276 D/V
# 6 E. Solana Circle & Via De La V	C	21.0	0.088	C	20.9	0.089	-0.114 D/V
# 7 Stevens Ave/Valley Ave & Via D	C	33.0	0.731	C	33.1	0.740	+ 0.172 D/V
# 20 Driveway A	A	0.5	0.000	A	0.6	0.000	+ 0.000 D/V
# 21 Driveway B	A	0.6	0.000	A	0.8	0.000	+ 0.000 D/V
# 24 Stevens Avenue-Valley Avenue /	B	13.1	0.268	B	12.9	0.274	-0.245 D/V

Existing Plus Project
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 S. Nardo Ave & Lomas Santa Fe

Cycle (sec):	69	Critical Vol./Cap.(X):	0.333
Loss Time (sec):	12	Average Delay (sec/veh):	11.4
Optimal Cycle:	45	Level Of Service:	B

Street Name:	S. Nardo Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	8	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0	0	1	0	1	0	1
Volume Module:												
Base Vol:	18	12	37	123	6	0	4	671	12	44	638	127
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	12	37	123	6	0	4	671	12	44	638	127
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	12	37	123	6	0	4	671	12	44	638	127
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	19	13	39	129	6	0	4	706	13	46	672	134
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	13	39	129	6	0	4	706	13	46	672	134
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	13	39	129	6	0	4	706	13	46	672	134
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.85	0.85	0.76	1.00	1.00	0.95	0.95	0.95	0.95	0.93	0.93
Lanes:	0.27	0.18	0.55	1.00	1.00	0.00	1.00	1.96	0.04	1.00	1.67	0.33
Final Sat.:	433	288	889	1446	1900	0	1805	3536	63	1805	2935	584
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.09	0.00	0.00	0.00	0.20	0.20	0.03	0.23	0.23
Crit Moves:		****					****				****	
Green Time:	8.4	8.4	8.4	8.4	8.4	0.0	5.0	38.9	38.9	9.7	43.6	43.6
Volume/Cap:	0.36	0.36	0.36	0.74	0.03	0.00	0.03	0.35	0.35	0.18	0.36	0.36
Delay/Veh:	29.0	29.0	29.0	44.6	26.8	0.0	29.9	8.3	8.3	26.5	6.1	6.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.0	29.0	29.0	44.6	26.8	0.0	29.9	8.3	8.3	26.5	6.1	6.1
LOS by Move:	C	C	C	D	C	A	C	A	A	C	A	A
HCM2kAvgQ:	2	2	2	4	0	0	0	4	4	1	4	4

Note: Queue reported is the number of cars per lane.

Existing Plus Project
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Stevens Av & Lomas Santa Fe

Cycle (sec):	112	Critical Vol./Cap.(X):	0.543
Loss Time (sec):	14	Average Delay (sec/veh):	24.3
Optimal Cycle:	49	Level Of Service:	C

Street Name:	Stevens Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	8	1	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	0	1	0	1
Volume Module:												
Base Vol:	257	0	366	0	0	0	0	763	116	218	656	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	257	0	366	0	0	0	0	763	116	218	656	0
Added Vol:	0	0	5	0	0	0	0	0	0	11	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	257	0	371	0	0	0	0	763	116	229	656	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	271	0	391	0	0	0	0	803	122	241	691	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	271	0	391	0	0	0	0	803	122	241	691	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	271	0	391	0	0	0	0	803	122	241	691	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	0.93	0.93	0.92	0.95	1.00
Lanes:	1.41	0.00	1.59	0.00	0.00	0.00	1.00	1.74	0.26	2.00	2.00	0.00
Final Sat.:	2390	0	2698	0	0	0	1900	3071	467	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.14	0.00	0.00	0.00	0.00	0.26	0.26	0.07	0.19	0.00
Crit Moves:			****					****		****		
Green Time:	29.9	0.0	29.9	0.0	0.0	0.0	0.0	53.9	53.9	14.2	68.1	0.0
Volume/Cap:	0.42	0.00	0.54	0.00	0.00	0.00	0.00	0.54	0.54	0.54	0.31	0.00
Delay/Veh:	34.2	0.0	35.7	0.0	0.0	0.0	0.0	20.7	20.7	47.2	10.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.2	0.0	35.7	0.0	0.0	0.0	0.0	20.7	20.7	47.2	10.7	0.0
LOS by Move:	C	A	D	A	A	A	A	C	C	D	B	A
HCM2kAvgQ:	5	0	7	0	0	0	0	11	11	5	6	0

Note: Queue reported is the number of cars per lane.

Existing Plus Project
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 S. Nardo Ave & E. Solana Circle/Nardito Ln

Average Delay (sec/veh): 9.0 Worst Case Level Of Service: B[10.6]

Street Name:	S. Nardo Ave									E. Solana Circle/Nardito Ln							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	1	0	0	0
Volume Module:																				
Base Vol:	31		1		14	1		0		3	1		67		25	27		72		0
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	31		1		14	1		0		3	1		67		25	27		72		0
Added Vol:	0		0		4	0		0		0	0		0		0	2		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	31		1		18	1		0		3	1		67		25	29		72		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.84	0.84		0.84		0.84	0.84		0.84		0.84	0.84		0.84		0.84	0.84		0.84	
PHF Volume:	37		1		21	1		0		4	1		80		30	35		86		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	37		1		21	1		0		4	1		80		30	35		86		0
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx			4.1	xxxx	xxxxx			7.1		6.5		6.2	7.1		6.5	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx			2.2	xxxx	xxxxx			3.5		4.0		3.3	3.5		4.0	xxxxx	
Capacity Module:																				
Cnflict Vol:	4	xxxx	xxxxx			23	xxxx	xxxxx			133		101		2	145		92	xxxxx	
Potent Cap.:	1632	xxxx	xxxxx			1606	xxxx	xxxxx			844		793		1088	829		802	xxxxx	
Move Cap.:	1632	xxxx	xxxxx			1606	xxxx	xxxxx			759		774		1088	729		783	xxxxx	
Volume/Cap:	0.02	xxxx		xxxx		0.00	xxxx		xxxx		0.00		0.10		0.03	0.05		0.11		xxxx
Level Of Service Module:																				
2Way95thQ:	0.1	xxxx	xxxxx			0.0	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Control Del:	7.3	xxxx	xxxxx			7.2	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
LOS by Move:	A		*		*	A		*		*	*		*		*	*		*		*
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx		839	xxxxx		767	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx		0.5	xxxxx		0.6	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx		9.9	xxxxx		10.6	xxxx	xxxxx		
Shared LOS:	*		*		*	*		*		*	*		A		*	B		*		*
ApproachDel:	xxxxxx					xxxxxx					9.9					10.6				
ApproachLOS:	*					*					A					B				

Note: Queue reported is the number of cars per lane.

Existing Plus Project
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Fresca St & S. Nardo Ave

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A[9.9]

Street Name:	Fresca St									Nardo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0		0		0	13		0		2	5		104		0	0		95		18
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	0		0		0	13		0		2	5		104		0	0		95		18
Added Vol:	0		0		0	0		0		0	0		4		0	0		8		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	0		0		0	13		0		2	5		108		0	0		103		18
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	0		0		0	14		0		2	6		120		0	0		114		20
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	0		0		0	14		0		2	6		120		0	0		114		20
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx			6.4		6.5		6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx			3.5		4.0		3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx			256		256		124	134	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx			737		652		932	1463	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx			735		649		932	1463	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx		xxxx		0.02	0.00		0.00		0.00	xxxx		xxxx	xxxx		xxxx			
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.0	xxxx	xxxxx		xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			7.5	xxxx	xxxxx		xxxx	xxxxx				
LOS by Move:	*		*		*	*		*		*	A		*		*	*				
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx		757	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx		0.1	xxxxx		0.0	xxxx	xxxxx		xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx			xxxxx		9.9	xxxxx		7.5	xxxx	xxxxx		xxxx	xxxxx				
Shared LOS:	*		*		*	*		A		*	A		*		*	*				
ApproachDel:	xxxxxx					9.9					xxxxxx					xxxxxx				
ApproachLOS:	*					A					*					*				

Note: Queue reported is the number of cars per lane.

Existing Plus Project
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Stevens Ave & S. Nardo Ave

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.309
Loss Time (sec): 12 | Average Delay (sec/veh): 16.3
Optimal Cycle: 31 | Level Of Service: B

Street Name:	Stevens Ave									S. Nardo Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 0	1	0 1	1 0	1	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	89	336	0	2	403	67	41	0	66	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	89	336	0	2	403	67	41	0	66	0	0	0
Added Vol:	19	0	0	0	0	11	5	0	8	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	108	336	0	2	403	78	46	0	74	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	121	378	0	2	453	88	52	0	83	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	121	378	0	2	453	88	52	0	83	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	121	378	0	2	453	88	52	0	83	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	0.95	0.93	0.93	0.95	1.00	0.85	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	1.00	1.68	0.32	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1805	3610	0	1805	2952	571	1805	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.10	0.00	0.00	0.15	0.15	0.03	0.00	0.05	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green Time:	21.7	70.5	0.0	0.8	49.6	49.6	16.7	0.0	16.7	0.0	0.0	0.0
Volume/Cap:	0.31	0.15	0.00	0.15	0.31	0.31	0.17	0.00	0.31	0.00	0.00	0.00
Delay/Veh:	33.3	4.9	0.0	53.7	15.1	15.1	36.0	0.0	37.3	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.3	4.9	0.0	53.7	15.1	15.1	36.0	0.0	37.3	0.0	0.0	0.0
LOS by Move:	C	A	A	D	B	B	D	A	D	A	A	A
HCM2kAvgQ:	3	2	0	0	5	5	1	0	2	0	0	0

Note: Queue reported is the number of cars per lane.

Existing Plus Project
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 E. Solana Circle & Via De La Valle

Average Delay (sec/veh): 0.7 | Worst Case Level Of Service: C[20.9]

Street Name:	E. Solana Circle						Via De La Valle					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0 0	0 0	1! 0	0 0	1 0	0 1	0 0	0 0	0 1	0 0
Volume Module:												
Base Vol:	0	0	0	14	0	18	16	553	0	0	640	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	14	0	18	16	553	0	0	640	54
Added Vol:	0	0	0	0	0	2	4	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	14	0	20	20	553	0	0	640	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	0	0	15	0	21	21	588	0	0	681	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	15	0	21	21	588	0	0	681	57
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1340	1340	710	738	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	170	154	437	877	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	167	150	437	877	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.09	0.00	0.05	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	262	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	20.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			20.9			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Note: Queue reported is the number of cars per lane.

Existing Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Stevens Ave/Valley Ave & Via De La Valle

Cycle (sec): 98 | Critical Vol./Cap.(X): 0.740
Loss Time (sec): 12 | Average Delay (sec/veh): 33.1
Optimal Cycle: 65 | Level Of Service: C

Street Name:	Stevens Ave/Valley Ave									Via De La Valle					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	5	0	5	0	0	5	10	0	5	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	69	149	465	408	100	70	47	530	23	254	648	346
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	69	149	465	408	100	70	47	530	23	254	648	346
Added Vol:	0	2	0	7	1	0	0	0	0	0	0	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	69	151	465	415	101	70	47	530	23	254	648	363
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	74	162	500	446	109	75	51	570	25	273	697	390
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	162	500	446	109	75	51	570	25	273	697	390
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	74	162	500	446	109	75	51	570	25	273	697	390
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.75	0.92	1.00	0.85	0.95	0.94	0.94	0.92	0.90	0.90
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.92	0.08	2.00	1.28	0.72
Final Sat.:	1805	1900	2842	3502	1900	1615	1805	3439	149	3502	2189	1226
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.18	0.13	0.06	0.05	0.03	0.17	0.17	0.08	0.32	0.32
Crit Moves:			****	****			****				****	
Green Time:	22.9	22.9	22.9	16.6	16.6	16.6	5.0	31.6	31.6	14.9	41.5	41.5
Volume/Cap:	0.18	0.37	0.75	0.75	0.34	0.28	0.55	0.51	0.51	0.51	0.75	0.75
Delay/Veh:	30.2	32.0	39.7	44.1	36.5	36.0	52.3	27.4	27.4	39.1	26.2	26.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.2	32.0	39.7	44.1	36.5	36.0	52.3	27.4	27.4	39.1	26.2	26.2
LOS by Move:	C	C	D	D	D	D	D	C	C	D	C	C
HCM2kAvgQ:	2	4	10	7	3	2	2	8	8	5	16	16

Note: Queue reported is the number of cars per lane.

Existing Plus Project
PM

Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 0.6 | Worst Case Level Of Service: A

Street Name:	Driveway A									Nardo Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	3	0	19	0	0	0	0	92	7	10	84	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	0	19	0	0	0	0	92	7	10	84	0
Added Vol:	2	0	3	0	0	0	0	1	3	7	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	22	0	0	0	0	93	10	17	85	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	5	0	24	0	0	0	0	101	11	18	92	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	5	0	24	0	0	0	0	101	11	18	92	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	6	0	26	0	0	0	0	101	11	20	92	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	217	xxxx	107	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	112	xxxx	xxxxx
Potent Cap.:	792	xxxx	1223	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1516	xxxx	xxxxx
Adj Cap:	0.99	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	781	xxxx	1223	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1516	xxxx	xxxxx
Level of Service Module:												
Control Del:	4.6	xxxx	3.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.4	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	1107	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1516	xxxx	xxxxx
Shrd ConDel:	xxxxx	3.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.6	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	3.3			xxxxxx			0.0			0.4		
ApproachLOS:	A			*			A			A		

Existing Plus Project
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Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: A

Street Name: Driveway B Nardo Avenue

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	4	0	22	0	0	0	0	102	3	29	135	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	0	22	0	0	0	0	102	3	29	135	0
Added Vol:	1	0	10	0	0	0	0	3	1	22	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	32	0	0	0	0	105	4	51	142	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	5	0	35	0	0	0	0	114	4	55	154	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	5	0	35	0	0	0	0	114	4	55	154	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	6	0	38	0	0	0	0	114	4	61	154	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	326	xxxx	116	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	118	xxxx	xxxxx
Potent Cap.:	685	xxxx	1209	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1505	xxxx	xxxxx
Adj Cap:	0.96	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	655	xxxx	1209	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1505	xxxx	xxxxx
Level Of Service Module:												
Control Del:	5.5	xxxx	3.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	1085	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1505	xxxx	xxxxx
Shrd ConDel:	xxxxx	3.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.8	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	3.4			xxxxxx			0.0			0.7		
ApproachLOS:	A			*			A			A		

Existing Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Stevens Avenue-Valley Avenue / Valley Avenue

Cycle (sec): 100 Critical Vol./Cap.(X): 0.274
Loss Time (sec): 8 Average Delay (sec/veh): 12.9
Optimal Cycle: 23 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0 0	1 1	0		1 0	2 0	0		0 0	0 0	0		1 0	0 0	1	
Volume Module:																
Base Vol:	0	406	90		70	330	0		0	0	0		70	0	40	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	406	90		70	330	0		0	0	0		70	0	40	
Added Vol:	0	19	0		0	8	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	425	90		70	338	0		0	0	0		70	0	40	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92	
PHF Volume:	0	462	98		76	367	0		0	0	0		76	0	43	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	462	98		76	367	0		0	0	0		76	0	43	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	462	98		76	367	0		0	0	0		76	0	43	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.93	0.93		0.95	0.95	1.00		1.00	1.00	1.00		0.78	1.00	0.85	
Lanes:	0.00	1.65	0.35		1.00	2.00	0.00		0.00	0.00	0.00		1.00	0.00	1.00	
Final Sat.:	0	2902	614		1805	3610	0		0	0	0		1490	0	1615	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.16	0.16		0.04	0.10	0.00		0.00	0.00	0.00		0.05	0.00	0.03	
Crit Moves:		****			****								****			
Green Time:	0.0	58.0	58.0		15.4	73.4	0.0		0.0	0.0	0.0		18.6	0.0	18.6	
Volume/Cap:	0.00	0.27	0.27		0.27	0.14	0.00		0.00	0.00	0.00		0.27	0.00	0.14	
Delay/Veh:	0.0	10.6	10.6		37.9	4.0	0.0		0.0	0.0	0.0		35.4	0.0	34.3	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	10.6	10.6		37.9	4.0	0.0		0.0	0.0	0.0		35.4	0.0	34.3	
LOS by Move:	A	B	B		D	A	A		A	A	A		D	A	C	
HCM2kAvgQ:	0	4	4		2	2	0		0	0	0		2	0	1	

Note: Queue reported is the number of cars per lane.

APPENDIX D: TRAFFIX WORKSHEETS-NEAR TERM (2017) CONDITIONS

Near Term Plus Project
AM

Scenario Report

Scenario:	Near Term AM
Command:	Near Term AM
Volume:	Near Term AM
Geometry:	Near Term AM
Impact Fee:	Default Impact Fee
Trip Generation:	No Project
Trip Distribution:	Project
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Near Term Plus Project
AM

Trip Distribution Report

Percent Of Trips Project

	To Gates					
Zone	1	2	3	4	5	6
1	10.0	5.0	35.0	10.0	10.0	30.0

Near Term Plus Project
AM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 S. Nardo Ave & Lomas Santa Fe	B	14.9	0.482	B	14.9	0.482	+ 0.000 D/V
# 2 Stevens Av & Lomas Santa Fe	C	24.0	0.615	C	24.0	0.615	+ 0.000 D/V
# 3 S. Nardo Ave & E. Solana Circl	B	11.1	0.252	B	11.1	0.252	+ 0.000 D/V
# 4 Fresca St & S. Nardo Ave	B	10.9	0.048	B	10.9	0.048	+ 0.000 D/V
# 5 Stevens Ave & S. Nardo Ave	B	18.4	0.290	B	18.4	0.290	+ 0.000 D/V
# 6 E. Solana Circle & Via De La V	D	27.5	0.255	D	27.5	0.255	+ 0.000 D/V
# 7 Stevens Ave/Valley Ave & Via D	C	29.0	0.574	C	29.0	0.574	+ 0.000 D/V
# 20 Driveway A		0.0	0.000		0.0	0.000	+ 0.000 D/V
# 21 Driveway B		0.0	0.000		0.0	0.000	+ 0.000 D/V
# 24 Stevens Avenue-Valley Avenue /	B	19.1	0.265	B	19.1	0.265	+ 0.000 D/V

Near Term Plus Project
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 S. Nardo Ave & Lomas Santa Fe

Cycle (sec): 69 Critical Vol./Cap.(X): 0.482
Loss Time (sec): 12 Average Delay (sec/veh): 14.9
Optimal Cycle: 45 Level Of Service: B

Street Name:	S. Nardo Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	8	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	0 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	17	8	74	178	5	4	0	578	14	47	638	115
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	17	8	75	182	5	4	0	590	14	48	651	117
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	8	75	182	5	4	0	590	14	48	651	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	21	10	91	219	6	5	0	710	17	58	784	141
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	10	91	219	6	5	0	710	17	58	784	141
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	21	10	91	219	6	5	0	710	17	58	784	141
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.70	0.93	0.93	1.00	0.95	0.95	0.95	0.93	0.93
Lanes:	0.17	0.08	0.75	1.00	0.56	0.44	1.00	1.95	0.05	1.00	1.69	0.31
Final Sat.:	282	133	1230	1338	985	788	1900	3511	85	1805	2988	539
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.16	0.01	0.01	0.00	0.20	0.20	0.03	0.26	0.26
Crit Moves:				****				****		****		
Green Time:	23.2	23.2	23.2	23.2	23.2	23.2	0.0	28.8	28.8	5.0	33.8	33.8
Volume/Cap:	0.22	0.22	0.22	0.49	0.02	0.02	0.00	0.49	0.49	0.44	0.54	0.54
Delay/Veh:	16.6	16.6	16.6	19.0	15.3	15.3	0.0	15.0	15.0	33.0	12.5	12.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.6	16.6	16.6	19.0	15.3	15.3	0.0	15.0	15.0	33.0	12.5	12.5
LOS by Move:	B	B	B	B	B	B	A	B	B	C	B	B
HCM2kAvgQ:	2	2	2	4	0	0	0	6	6	1	7	7

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Stevens Av & Lomas Santa Fe

Cycle (sec): 112 Critical Vol./Cap.(X): 0.615
Loss Time (sec): 14 Average Delay (sec/veh): 24.0
Optimal Cycle: 55 Level Of Service: C

Street Name:	Stevens Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	8	1	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1! 0	1	0 0	1! 0	0	1 0	1 1	0	2 0	2 0	0
Volume Module:												
Base Vol:	106	0	258	0	0	0	0	696	156	424	748	0
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	108	0	263	0	0	0	0	710	159	432	763	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	108	0	263	0	0	0	0	710	159	432	763	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	126	0	306	0	0	0	0	825	185	503	887	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	0	306	0	0	0	0	825	185	503	887	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	126	0	306	0	0	0	0	825	185	503	887	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	1.00	1.00	1.00	1.00	0.92	0.92	0.92	0.95	1.00
Lanes:	1.29	0.00	1.71	0.00	1.00	0.00	1.00	1.63	0.37	2.00	2.00	0.00
Final Sat.:	2163	0	2862	0	1900	0	1900	2869	643	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.11	0.00	0.00	0.00	0.00	0.29	0.29	0.14	0.25	0.00
Crit Moves:			****					****		****		
Green Time:	19.5	0.0	19.5	0.0	0.0	0.0	0.0	52.4	52.4	26.1	78.5	0.0
Volume/Cap:	0.33	0.00	0.62	0.00	0.00	0.00	0.00	0.62	0.62	0.62	0.35	0.00
Delay/Veh:	40.7	0.0	44.4	0.0	0.0	0.0	0.0	23.0	23.0	39.8	6.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.7	0.0	44.4	0.0	0.0	0.0	0.0	23.0	23.0	39.8	6.7	0.0
LOS by Move:	D	A	D	A	A	A	A	C	C	D	A	A
HCM2kAvgQ:	3	0	6	0	0	0	0	13	13	9	6	0

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 S. Nardo Ave & E. Solana Circle/Nardito Ln

Average Delay (sec/veh): 9.6 Worst Case Level Of Service: B[11.1]

Street Name:	S. Nardo Ave									E. Solana Circle/Nardito Ln								
Approach:	North Bound						South Bound			East Bound						West Bound		
Movement:	L - T - R						L - T - R			L - T - R						L - T - R		
Control:	Uncontrolled						Uncontrolled			Stop Sign						Stop Sign		
Rights:	Include						Include			Include						Include		
Lanes:	0 0	1! 0	0				0 1	0	0	0 0	0	1	0			0 1	0	0
Volume Module:																		
Base Vol:	16	1	26				2	1	0	0	134	9				13	83	0
Growth Adj:	1.02	1.02	1.02				1.02	1.02	1.02	1.02	1.02	1.02				1.02	1.02	1.02
Initial Bse:	16	1	27				2	1	0	0	137	9				13	85	0
Added Vol:	0	0	0				0	0	0	0	0	0				0	0	0
PasserByVol:	0	0	0				0	0	0	0	0	0				0	0	0
Initial Fut:	16	1	27				2	1	0	0	137	9				13	85	0
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
PHF Adj:	0.69	0.69	0.69				0.69	0.69	0.69	0.69	0.69	0.69				0.69	0.69	0.69
PHF Volume:	24	1	38				3	1	0	0	198	13				19	123	0
Reduct Vol:	0	0	0				0	0	0	0	0	0				0	0	0
FinalVolume:	24	1	38				3	1	0	0	198	13				19	123	0
Critical Gap Module:																		
Critical Gp:	4.1	xxxx	xxxxx				4.1	xxxx	xxxxx	xxxxx	6.5	6.2				7.1	6.5	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx				2.2	xxxx	xxxxx	xxxxx	4.0	3.3				3.5	4.0	xxxxx
Capacity Module:																		
Cnflict Vol:	1	xxxx	xxxxx				40	xxxx	xxxxx	xxxx	95	1				181	75	xxxxx
Potent Cap.:	1634	xxxx	xxxxx				1583	xxxx	xxxxx	xxxx	799	1089				785	819	xxxxx
Move Cap.:	1634	xxxx	xxxxx				1583	xxxx	xxxxx	xxxx	786	1089				617	805	xxxxx
Volume/Cap:	0.01	xxxx	xxxx				0.00	xxxx	xxxx	xxxx	0.25	0.01				0.03	0.15	xxxx
Level Of Service Module:																		
2Way95thQ:	0.0	xxxx	xxxxx				0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx
Control Del:	7.2	xxxx	xxxxx				7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*				A	*	*	*	*	*				*	*	*
Movement:	LT - LTR - RT						LT - LTR - RT			LT - LTR - RT						LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx	xxxx	xxxx	800				773	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx	xxxxx	xxxx	1.1				0.7	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx	xxxxx	xxxx	11.1				10.7	xxxx	xxxxx
Shared LOS:	*	*	*				A	*	*	*	*	B				B	*	*
ApproachDel:	xxxxxx						xxxxxx			11.1						10.7		
ApproachLOS:	*						*			B						B		

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Fresca St & S. Nardo Ave

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[10.9]

Street Name:	Fresca St								Nardo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0	0	0	22	0	2	2	188	0	0	82	12								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	0	0	0	22	0	2	2	188	0	0	82	12								
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	0	0	0	22	0	2	2	188	0	0	82	12								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73								
PHF Volume:	0	0	0	30	0	3	3	258	0	0	112	16								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	0	0	0	30	0	3	3	258	0	0	112	16								
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx	384	384	121	129	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Potent Cap.:	xxxx	xxxx	xxxxx	623	553	936	1469	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Move Cap.:	xxxx	xxxx	xxxxx	622	552	936	1469	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	xxxx	xxxx	xxxx	0.05	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*								
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	640	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	10.9	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*								
ApproachDel:	xxxxxx				10.9		xxxxxx			xxxxxx										
ApproachLOS:	*				B		*			*										

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Stevens Ave & S. Nardo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.290
Loss Time (sec): 12 Average Delay (sec/veh): 18.4
Optimal Cycle: 31 Level Of Service: B

Street Name:	Stevens Ave								S. Nardo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0								
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0								
Lanes:	1	0	2	0	0	1	0	1	1	0	1	0	0	0	1	1	0	0	0	0
Volume Module:																				
Base Vol:	37	395	0	0	337	68	106	0	152	1	0	0								
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02								
Initial Bse:	38	403	0	0	344	69	108	0	155	1	0	0								
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	38	403	0	0	344	69	108	0	155	1	0	0								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92								
PHF Volume:	41	438	0	0	374	75	118	0	169	1	0	0								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	41	438	0	0	374	75	118	0	169	1	0	0								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	41	438	0	0	374	75	118	0	169	1	0	0								
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900								
Adjustment:	0.95	0.95	1.00	1.00	0.93	0.93	0.95	1.00	0.85	0.95	1.00	1.00								
Lanes:	1.00	2.00	0.00	1.00	1.66	0.34	1.00	0.00	1.00	1.00	0.00	0.00								
Final Sat.:	1805	3610	0	1900	2929	591	1805	0	1615	1805	0	0								
Capacity Analysis Module:																				
Vol/Sat:	0.02	0.12	0.00	0.00	0.13	0.13	0.07	0.00	0.10	0.00	0.00	0.00								
Crit Moves:	****				****				****	****										
Green Time:	7.8	51.8	0.0	0.0	44.0	44.0	36.2	0.0	36.0	0.2	0.0	0.0								
Volume/Cap:	0.29	0.23	0.00	0.00	0.29	0.29	0.18	0.00	0.29	0.29	0.00	0.00								
Delay/Veh:	44.6	13.3	0.0	0.0	18.1	18.1	21.9	0.0	23.2	87.7	0.0	0.0								
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
AdjDel/Veh:	44.6	13.3	0.0	0.0	18.1	18.1	21.9	0.0	23.2	87.7	0.0	0.0								
LOS by Move:	D	B	A	A	B	B	C	A	C	F	A	A								
HCM2kAvgQ:	1	4	0	0	4	4	2	0	4	0	0	0								

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 E. Solana Circle & Via De La Valle

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: D[27.5]

Street Name:	E. Solana Circle								Via De La Valle							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	0	1	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0	0	0		38	0		23		15	744		0		0	431		27		
Growth Adj:	1.02	1.02	1.02		1.02	1.02		1.02		1.02	1.02		1.02		1.02	1.02		1.02		
Initial Bse:	0	0	0		39	0		23		15	759		0		0	440		28		
Added Vol:	0	0	0		0	0		0		0	0		0		0	0		0		
PasserByVol:	0	0	0		0	0		0		0	0		0		0	0		0		
Initial Fut:	0	0	0		39	0		23		15	759		0		0	440		28		
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		
PHF Adj:	0.92	0.92	0.92		0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92		
PHF Volume:	0	0	0		42	0		26		17	825		0		0	478		30		
Reduct Vol:	0	0	0		0	0		0		0	0		0		0	0		0		
FinalVolume:	0	0	0		42	0		26		17	825		0		0	478		30		
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2		6.4	6.5		6.2		4.1	xxxx		xxxxx		xxxxx	xxxx		xxxxx		
FollowUpTim:	3.5	4.0	3.3		3.5	4.0		3.3		2.2	xxxx		xxxxx		xxxxx	xxxx		xxxxx		
Capacity Module:																				
Cnflict Vol:	1364	1366	825		1351	1351		493		508	xxxx		xxxxx		xxxx	xxxx		xxxxx		
Potent Cap.:	126	149	376		167	152		580		1067	xxxx		xxxxx		xxxx	xxxx		xxxxx		
Move Cap.:	119	146	376		165	149		580		1067	xxxx		xxxxx		xxxx	xxxx		xxxxx		
Volume/Cap:	0.00	0.00	0.00		0.25	0.00		0.04		0.02	xxxx		xxxx		xxxx	xxxx		xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx		xxxxx		0.0	xxxx		xxxxx		xxxx	xxxx		xxxxx		
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx		xxxxx		8.4	xxxx		xxxxx		xxxxx	xxxx		xxxxx		
LOS by Move:	*	*	*		*	*		*		A	*		*		*	*		*		
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx		0	xxxxx	xxxx	226	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx					
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	27.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*		*	D		*		*	*		*		*	*		*		
ApproachDel:	xxxxxx				27.5			xxxxxx					xxxxxx							
ApproachLOS:	*				D					*					*					

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Stevens Ave/Valley Ave & Via De La Valle

Cycle (sec): 98 Critical Vol./Cap.(X): 0.574
Loss Time (sec): 12 Average Delay (sec/veh): 29.0
Optimal Cycle: 46 Level Of Service: C

Street Name:	Stevens Ave/Valley Ave								Via De La Valle							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	5	0		5	0		0		5	10		0		5	10		0		
Y+R:	4.0	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0		4.0	4.0		4.0		
Lanes:	1	0	1	0	2	2	0	1	0	1	1	0	1	1	0	2	0	1	1	0
Volume Module:																				
Base Vol:	18	42	212		432	72		51		43	674		41		331	584		312		
Growth Adj:	1.02	1.02	1.02		1.02	1.02		1.02		1.02	1.02		1.02		1.02	1.02		1.02		
Initial Bse:	18	43	216		441	73		52		44	687		42		338	596		318		
Added Vol:	0	0	0		0	0		0		0	0		0		0	0		0		
PasserByVol:	0	0	0		0	0		0		0	0		0		0	0		0		
Initial Fut:	18	43	216		441	73		52		44	687		42		338	596		318		
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		
PHF Adj:	0.98	0.98	0.98		0.98	0.98		0.98		0.98	0.98		0.98		0.98	0.98		0.98		
PHF Volume:	19	44	221		450	75		53		45	702		43		345	608		325		
Reduct Vol:	0	0	0		0	0		0		0	0		0		0	0		0		
Reduced Vol:	19	44	221		450	75		53		45	702		43		345	608		325		
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		
FinalVolume:	19	44	221		450	75		53		45	702		43		345	608		325		
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900		1900	1900		1900		1900	1900		1900		1900	1900		1900		
Adjustment:	0.95	1.00	0.75		0.92	1.00		0.85		0.95	0.94		0.94		0.92	0.90		0.90		
Lanes:	1.00	1.00	2.00		2.00	1.00		1.00		1.00	1.89		0.11		2.00	1.30		0.70		
Final Sat.:	1805	1900	2842		3502	1900		1615		1805	3372		205		3502	2231		1192		
Capacity Analysis Module:																				
Vol/Sat:	0.01	0.02	0.08		0.13	0.04		0.03		0.02	0.21		0.21		0.10	0.27		0.27		
Crit Moves:			****		****					****						****				
Green Time:	13.1	13.1	13.1		21.7	21.7		21.7		5.0	34.7		34.7		16.4	46.1		46.1		
Volume/Cap:	0.08	0.17	0.58		0.58	0.18		0.15		0.49	0.59		0.59		0.59	0.58		0.58		
Delay/Veh:	37.3	37.9	42.1		35.1	31.1		30.9		49.2	26.5		26.5		39.2	19.4		19.4		
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		
AdjDel/Veh:	37.3	37.9	42.1		35.1	31.1		30.9		49.2	26.5		26.5		39.2	19.4		19.4		
LOS by Move:	D	D	D		D	C		C		D	C		C		D	B		B		
HCM2kAvgQ:	1	1	4		6	2		1		2	10		10		6	11		11		

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 0.0 Worst Case Level Of Service:

Street Name:	Driveway A											
	Nardo Avenue											
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:																				
Base Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Growth Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Bse:	0		0		0	0		0		0	0		0		0	0		0		0
Added Vol:	0		0		0	0		0		0	0		0		0	0		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	0		0		0	0		0		0	0		0		0	0		0		0
User Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PHF Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PHF Volume:	0		0		0	0		0		0	0		0		0	0		0		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	0		0		0	0		0		0	0		0		0	0		0		0
Adjusted Volume Module:																				
Grade:	0%				0%				0%				0%			
% Cycle/Cars:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
% Truck/Comb:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
PCE Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cycl/Car PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Trck/Cmb PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Adj Vol.:	0		0		0	0		0		0	0		0		0	0		0		0
Critical Gap Module:																				
MoveUp Time:	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Critical Gp:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capacity Module:																				
Cnflict Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Potent Cap.:	0		0		0	0		0		0	0		0		0	0		0		0
Adj Cap:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Move Cap.:	1		1		1	1		1		1	1		1		1	1		1		1
Level Of Service Module:																				
Control Del:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LOS by Move:																				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	0		0		0	0		0		0	0		0		0	0		0		0
Shrd ConDel:	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Shared LOS:																				
ApproachDel:	0.0				0.0				0.0				0.0			
ApproachLOS:																				

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Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 0.0 Worst Case Level Of Service:

Street Name:	Driveway B											
	Nardo Avenue											
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:																				
Base Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Growth Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Bse:	0		0		0	0		0		0	0		0		0	0		0		0
Added Vol:	0		0		0	0		0		0	0		0		0	0		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	0		0		0	0		0		0	0		0		0	0		0		0
User Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PHF Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PHF Volume:	0		0		0	0		0		0	0		0		0	0		0		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	0		0		0	0		0		0	0		0		0	0		0		0
Adjusted Volume Module:																				
Grade:	0%				0%				0%				0%			
% Cycle/Cars:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
% Truck/Comb:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
PCE Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cycl/Car PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Trck/Cmb PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Adj Vol.:	0		0		0	0		0		0	0		0		0	0		0		0
Critical Gap Module:																				
MoveUp Time:	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Critical Gp:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capacity Module:																				
Cnflict Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Potent Cap.:	0		0		0	0		0		0	0		0		0	0		0		0
Adj Cap:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Move Cap.:	1		1		1	1		1		1	1		1		1	1		1		1
Level Of Service Module:																				
Control Del:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LOS by Move:																				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	0		0		0	0		0		0	0		0		0	0		0		0
Shrd ConDel:	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Shared LOS:																				
ApproachDel:	0.0				0.0				0.0				0.0			
ApproachLOS:																				

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Stevens Avenue-Valley Avenue / Valley Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.265
Loss Time (sec):	8	Average Delay (sec/veh):	19.1
Optimal Cycle:	23	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0	0	1	1	0	1	0	2	0	0	0	0	0	1	0	0	0	1
Volume Module:																
Base Vol:	0	308	40		70	390	0		0	0	0		150	0	110	
Growth Adj:	1.02	1.02	1.02		1.02	1.02	1.02		1.02	1.02	1.02		1.02	1.02	1.02	
Initial Bse:	0	314	41		71	398	0		0	0	0		153	0	112	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	314	41		71	398	0		0	0	0		153	0	112	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	314	41		71	398	0		0	0	0		153	0	112	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	314	41		71	398	0		0	0	0		153	0	112	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	314	41		71	398	0		0	0	0		153	0	112	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.93	0.93		0.95	0.95	1.00		1.00	1.00	1.00		0.77	1.00	0.85	
Lanes:	0.00	1.77	0.23		1.00	2.00	0.00		0.00	0.00	0.00		1.00	0.00	1.00	
Final Sat.:	0	3141	408		1805	3610	0		0	0	0		1467	0	1615	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.10	0.10		0.04	0.11	0.00		0.00	0.00	0.00		0.10	0.00	0.07	
Crit Moves:		****			****								****			
Green Time:	0.0	37.7	37.7		14.9	52.7	0.0		0.0	0.0	0.0		39.3	0.0	39.3	
Volume/Cap:	0.00	0.27	0.27		0.27	0.21	0.00		0.00	0.00	0.00		0.27	0.00	0.18	
Delay/Veh:	0.0	21.6	21.6		38.2	12.7	0.0		0.0	0.0	0.0		20.8	0.0	19.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	21.6	21.6		38.2	12.7	0.0		0.0	0.0	0.0		20.8	0.0	19.9	
LOS by Move:	A	C	C		D	B	A		A	A	A		C	A	B	
HCM2kAvgQ:	0	4	4		2	3	0		0	0	0		3	0	2	

Note: Queue reported is the number of cars per lane.

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Near Term
PM

Scenario Report

Scenario:	Near Term PM
Command:	Near Term PM
Volume:	Near Term PM
Geometry:	Near Term PM
Impact Fee:	Default Impact Fee
Trip Generation:	No Project
Trip Distribution:	Project
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Near Term
PM

Trip Distribution Report

Percent Of Trips Project

	To Gates					
Zone	1	2	3	4	5	6
1	10.0	5.0	35.0	10.0	10.0	30.0

Near Term
PM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 S. Nardo Ave & Lomas Santa Fe	B	11.5	0.339	B	11.5	0.339	+ 0.000 D/V
# 2 Stevens Av & Lomas Santa Fe	C	24.1	0.548	C	24.1	0.548	+ 0.000 D/V
# 3 S. Nardo Ave & E. Solana Circl	B	10.6	0.112	B	10.6	0.112	+ 0.000 D/V
# 4 Fresca St & S. Nardo Ave	A	9.8	0.019	A	9.8	0.019	+ 0.000 D/V
# 5 Stevens Ave & S. Nardo Ave	B	15.0	0.291	B	15.0	0.291	+ 0.000 D/V
# 6 E. Solana Circle & Via De La V	C	21.7	0.093	C	21.7	0.093	+ 0.000 D/V
# 7 Stevens Ave/Valley Ave & Via D	C	33.3	0.746	C	33.3	0.746	+ 0.000 D/V
# 20 Driveway A	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 21 Driveway B	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 24 Stevens Avenue-Valley Avenue /	B	13.0	0.251	B	13.0	0.251	+ 0.000 D/V

Near Term
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 S. Nardo Ave & Lomas Santa Fe

Cycle (sec): 69 Critical Vol./Cap.(X): 0.339
Loss Time (sec): 12 Average Delay (sec/veh): 11.5
Optimal Cycle: 45 Level Of Service: B

Street Name:	S. Nardo Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	8	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	0 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	18	12	37	123	6	0	4	671	12	44	638	127
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	18	12	38	125	6	0	4	684	12	45	651	130
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	12	38	125	6	0	4	684	12	45	651	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	19	13	40	132	6	0	4	720	13	47	685	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	13	40	132	6	0	4	720	13	47	685	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	13	40	132	6	0	4	720	13	47	685	136
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.85	0.85	0.76	1.00	1.00	0.95	0.95	0.95	0.95	0.93	0.93
Lanes:	0.27	0.18	0.55	1.00	1.00	0.00	1.00	1.96	0.04	1.00	1.67	0.33
Final Sat.:	433	288	889	1450	1900	0	1805	3536	63	1805	2935	584
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.09	0.00	0.00	0.00	0.20	0.20	0.03	0.23	0.23
Crit Moves:		****					****				****	
Green Time:	8.4	8.4	8.4	8.4	8.4	0.0	5.0	38.9	38.9	9.7	43.6	43.6
Volume/Cap:	0.37	0.37	0.37	0.75	0.03	0.00	0.03	0.36	0.36	0.19	0.37	0.37
Delay/Veh:	29.1	29.1	29.1	45.9	26.8	0.0	29.9	8.3	8.3	26.5	6.2	6.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.1	29.1	29.1	45.9	26.8	0.0	29.9	8.3	8.3	26.5	6.2	6.2
LOS by Move:	C	C	C	D	C	A	C	A	A	C	A	A
HCM2kAvgQ:	2	2	2	5	0	0	0	5	5	1	4	4

Note: Queue reported is the number of cars per lane.

Near Term
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Stevens Av & Lomas Santa Fe

Cycle (sec): 112 Critical Vol./Cap.(X): 0.548
Loss Time (sec): 14 Average Delay (sec/veh): 24.1
Optimal Cycle: 49 Level Of Service: C

Street Name:	Stevens Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	8	1	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1! 0	1	0 0	1! 0	0	1 0	1 1	0	2 0	2 0	0
Volume Module:												
Base Vol:	257	0	366	0	0	0	0	763	116	218	656	0
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	262	0	373	0	0	0	0	778	118	222	669	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	262	0	373	0	0	0	0	778	118	222	669	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	276	0	393	0	0	0	0	819	125	234	704	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	276	0	393	0	0	0	0	819	125	234	704	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	276	0	393	0	0	0	0	819	125	234	704	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	0.93	0.93	0.92	0.95	1.00
Lanes:	1.41	0.00	1.59	0.00	1.00	0.00	1.00	1.74	0.26	2.00	2.00	0.00
Final Sat.:	2399	0	2696	0	1900	0	1900	3071	467	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.12	0.00	0.15	0.00	0.00	0.00	0.00	0.27	0.27	0.07	0.20	0.00
Crit Moves:			****					****		****		
Green Time:	29.8	0.0	29.8	0.0	0.0	0.0	0.0	54.5	54.5	13.7	68.2	0.0
Volume/Cap:	0.43	0.00	0.55	0.00	0.00	0.00	0.00	0.55	0.55	0.55	0.32	0.00
Delay/Veh:	34.3	0.0	35.8	0.0	0.0	0.0	0.0	20.5	20.5	47.8	10.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.3	0.0	35.8	0.0	0.0	0.0	0.0	20.5	20.5	47.8	10.7	0.0
LOS by Move:	C	A	D	A	A	A	A	C	C	D	B	A
HCM2kAvgQ:	5	0	7	0	0	0	0	12	12	5	6	0

Note: Queue reported is the number of cars per lane.

Near Term
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 S. Nardo Ave & E. Solana Circle/Nardito Ln

Average Delay (sec/veh): 9.1 Worst Case Level Of Service: B[10.6]

Street Name:	S. Nardo Ave						E. Solana Circle/Nardito Ln					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 1	0	0
Volume Module:												
Base Vol:	31	1	14	1	0	3	1	67	25	27	72	0
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	32	1	14	1	0	3	1	68	26	28	73	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	1	14	1	0	3	1	68	26	28	73	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	38	1	17	1	0	4	1	81	30	33	87	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	38	1	17	1	0	4	1	81	30	33	87	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	xxxxx
Capacity Module:												
Cnflict Vol:	4	xxxx	xxxxx	18	xxxx	xxxxx	133	98	2	145	91	xxxxx
Potent Cap.:	1631	xxxx	xxxxx	1612	xxxx	xxxxx	844	796	1088	828	803	xxxxx
Move Cap.:	1631	xxxx	xxxxx	1612	xxxx	xxxxx	757	777	1088	727	783	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	0.00	xxxx	xxxx	0.00	0.10	0.03	0.05	0.11	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.3	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	841	xxxxx	767	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	0.6	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.9	xxxxx	10.6	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	A	*	B	*	*
ApproachDel:	xxxxxx			xxxxxx				9.9			10.6	
ApproachLOS:		*			*			A			B	

Note: Queue reported is the number of cars per lane.

Near Term
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Fresca St & S. Nardo Ave

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: A[9.8]

Street Name:	Fresca St								Nardo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0	0	0		13	0		2			5	104		0		0		95		18
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00			1.00	1.00		1.00		1.00		1.00		1.00
Initial Bse:	0	0	0		13	0		2			5	104		0		0		95		18
Added Vol:	0	0	0		0	0		0			0	0		0		0		0		0
PasserByVol:	0	0	0		0	0		0			0	0		0		0		0		0
Initial Fut:	0	0	0		13	0		2			5	104		0		0		95		18
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00			1.00	1.00		1.00		1.00		1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90			0.90	0.90		0.90		0.90		0.90		0.90
PHF Volume:	0	0	0		14	0		2			6	116		0		0		106		20
Reduct Vol:	0	0	0		0	0		0			0	0		0		0		0		0
FinalVolume:	0	0	0		14	0		2			6	116		0		0		106		20
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	6.5		6.2			4.1	xxxx		xxxxx		xxxxx		xxxx		xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	4.0		3.3			2.2	xxxx		xxxxx		xxxxx		xxxx		xxxxx
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx		242	242		116			126	xxxx		xxxxx		xxxx		xxxx		xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx		751	663		942			1473	xxxx		xxxxx		xxxx		xxxx		xxxxx
Move Cap.:	xxxx	xxxx	xxxxx		748	660		942			1473	xxxx		xxxxx		xxxx		xxxx		xxxxx
Volume/Cap:	xxxx	xxxx	xxxx		0.02	0.00		0.00			0.00	xxxx		xxxx		xxxx		xxxx		xxxx
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx		xxxxx			0.0	xxxx		xxxxx		xxxx		xxxx		xxxxx
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx		xxxxx			7.5	xxxx		xxxxx		xxxxx		xxxx		xxxxx
LOS by Move:	*	*	*		*	*		*			A	*		*		*		*		*
Movement:	LT -	LTR -	RT		LT -	LTR -		RT			LT -	LTR -		RT		LT -		LTR -		RT
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	769		xxxxx			xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	0.1		xxxxx			0.0	xxxx		xxxxx		xxxxx		xxxx		xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	9.8		xxxxx			7.5	xxxx		xxxxx		xxxxx		xxxx		xxxxx
Shared LOS:	*	*	*		*	A		*			A	*		*		*		*		*
ApproachDel:	xxxxxx					9.8					xxxxxx					xxxxxx				
ApproachLOS:	*					A						*						*		

Note: Queue reported is the number of cars per lane.

Near Term
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Stevens Ave & S. Nardo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.291
Loss Time (sec): 12 Average Delay (sec/veh): 15.0
Optimal Cycle: 31 Level Of Service: B

Street Name:	Stevens Ave								S. Nardo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0		0	0		0			0	0		0		0		0		0
Y+R:	4.0	4.0	4.0		4.0	4.0		4.0			4.0	4.0		4.0		4.0		4.0		4.0
Lanes:	1	0	2	0	0	1	0	1	1	0	1	0	0	0	1	0	0	0	0	0
Volume Module:																				
Base Vol:	89	336		0		2	403		67		41		0		66		0		0	
Growth Adj:	1.02	1.02		1.02		1.02	1.02		1.02		1.02	1.02		1.02		1.02	1.02		1.02	
Initial Bse:	91	343		0		2	411		68		42		0		67		0		0	
Added Vol:	0	0		0		0	0		0		0		0		0		0		0	
PasserByVol:	0	0		0		0	0		0		0		0		0		0		0	
Initial Fut:	91	343		0		2	411		68		42		0		67		0		0	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.89	0.89		0.89		0.89	0.89		0.89		0.89	0.89		0.89		0.89	0.89		0.89	
PHF Volume:	102	385		0		2	462		77		47		0		76		0		0	
Reduct Vol:	0	0		0		0	0		0		0		0		0		0		0	
Reduced Vol:	102	385		0		2	462		77		47		0		76		0		0	
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
FinalVolume:	102	385		0		2	462		77		47		0		76		0		0	
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900	
Adjustment:	0.95	0.95		1.00		0.95	0.93		0.93		0.95	1.00		0.85		1.00	1.00		1.00	
Lanes:	1.00	2.00		0.00		1.00	1.71		0.29		1.00	0.00		1.00		0.00	0.00		0.00	
Final Sat.:	1805	3610		0		1805	3030		504		1805		0		1615		0		0	
Capacity Analysis Module:																				
Vol/Sat:	0.06	0.11		0.00		0.00	0.15		0.15		0.03	0.00		0.05		0.00	0.00		0.00	
Crit Moves:	****						****							****						
Green Time:	19.4	71.0		0.0		0.8	52.4		52.4		16.1		0.0	16.1		0.0	0.0		0.0	
Volume/Cap:	0.29	0.15		0.00		0.15	0.29		0.29		0.16	0.00		0.29		0.00	0.00		0.00	
Delay/Veh:	34.9	4.7		0.0		53.8	13.4		13.4		36.4		0.0	37.5		0.0	0.0		0.0	
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
AdjDel/Veh:	34.9	4.7		0.0		53.8	13.4		13.4		36.4		0.0	37.5		0.0	0.0		0.0	
LOS by Move:	C	A		A		D	B		B		D		A	D		A	A		A	
HCM2kAvgQ:	3	2		0		0	5		5		1		0	2		0	0		0	

Note: Queue reported is the number of cars per lane.

Near Term
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 E. Solana Circle & Via De La Valle

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[21.7]

Street Name:	E. Solana Circle									Via De La Valle							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	0	1	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0	0	0	14	0	18	16	553	0	0	640	54								
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02								
Initial Bse:	0	0	0	14	0	18	16	564	0	0	653	55								
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	0	0	0	14	0	18	16	564	0	0	653	55								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94								
PHF Volume:	0	0	0	15	0	20	17	600	0	0	694	59								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	0	0	0	15	0	20	17	600	0	0	694	59								
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	1368	1388	600	1359	1359	724	753	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Potent Cap.:	125	144	505	166	150	429	866	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Move Cap.:	118	141	505	163	147	429	866	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	0.00	0.00	0.00	0.09	0.00	0.05	0.02	xxxx	xxxx	xxxx	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*								
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT								
Shared Cap.:	xxxx	0	xxxxx	xxxx	250	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	21.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	C	*	*	*	*	*	*	*								
ApproachDel:	xxxxxx			21.7			xxxxxx			xxxxxx										
ApproachLOS:	*			C			*			*										

Note: Queue reported is the number of cars per lane.

Near Term
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Stevens Ave/Valley Ave & Via De La Valle

Cycle (sec):	98	Critical Vol./Cap.(X):	0.746
Loss Time (sec):	12	Average Delay (sec/veh):	33.3
Optimal Cycle:	66	Level Of Service:	C

Street Name:	Stevens Ave/Valley Ave									Via De La Valle							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	5	0	5	0	0	5	10	0	5	10	0								
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0								
Lanes:	1	0	1	0	2	2	0	1	0	1	1	0	1	1	0	2	0	1	1	0
Volume Module:																				
Base Vol:	69	149	465	408	100	70	47	530	23	254	648	346								
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02								
Initial Bse:	70	152	474	416	102	71	48	541	23	259	661	353								
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	70	152	474	416	102	71	48	541	23	259	661	353								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93								
PHF Volume:	76	163	510	447	110	77	52	581	25	279	711	379								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	76	163	510	447	110	77	52	581	25	279	711	379								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	76	163	510	447	110	77	52	581	25	279	711	379								
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900								
Adjustment:	0.95	1.00	0.75	0.92	1.00	0.85	0.95	0.94	0.94	0.92	0.90	0.90								
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.92	0.08	2.00	1.30	0.70								
Final Sat.:	1805	1900	2842	3502	1900	1615	1805	3439	149	3502	2231	1191								
Capacity Analysis Module:																				
Vol/Sat:	0.04	0.09	0.18	0.13	0.06	0.05	0.03	0.17	0.17	0.08	0.32	0.32								
Crit Moves:			****	****			****				****									
Green Time:	23.2	23.2	23.2	16.5	16.5	16.5	5.0	31.4	31.4	14.8	41.2	41.2								
Volume/Cap:	0.18	0.36	0.76	0.76	0.34	0.28	0.56	0.53	0.53	0.53	0.76	0.76								
Delay/Veh:	30.0	31.7	39.7	44.4	36.6	36.1	53.0	27.7	27.7	39.4	26.5	26.5								
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
AdjDel/Veh:	30.0	31.7	39.7	44.4	36.6	36.1	53.0	27.7	27.7	39.4	26.5	26.5								
LOS by Move:	C	C	D	D	D	D	D	C	C	D	C	C								
HCM2kAvgQ:	2	4	10	7	3	2	2	8	8	5	16	16								

Note: Queue reported is the number of cars per lane.

Near Term
PM

Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A

Street Name:	Driveway A												Nardo Avenue											
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1!	0	0	0	0	0	0	0	1	0	0	0	1	0	0
Volume Module:																	
Base Vol:	0	0	0	0	0	0	0	0	0	111	0	0	0	98	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	0	0	111	0	0	0	98	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	0	0	0	0	111	0	0	0	98	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	0	0	0	0	0	0	0	0	121	0	0	0	107	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	0	0	0	0	121	0	0	0	107	0
Adjusted Volume Module:																	
Grade:	0%				0%				0%				0%			
% Cycle/Cars:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
% Truck/Comb:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00	1.00	
Cycl/Car PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Trck/Cmb PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Adj Vol.:	0	0	0	0	0	0	0	0	0	121	0	0	0	107	0
Critical Gap Module:																	
MoveUp Time:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Capacity Module:																	
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Adj Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Level Of Service Module:																	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*					
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*					
ApproachDel:	xxxxxx				xxxxxx				0.0				0.0			
ApproachLOS:	*				*				A				A			

Near Term
PM

Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A

Street Name:	Driveway B												Nardo Avenue											
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1!	0	0	0	0	0	0	0	1	0	0	0	1	0	0
Volume Module:																	
Base Vol:	0	0	0	0	0	0	0	0	0	120	0	0	0	120	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	0	0	120	0	0	0	120	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	0	0	0	0	120	0	0	0	120	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	0	0	0	0	0	0	0	0	130	0	0	0	130	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	0	0	0	0	130	0	0	0	130	0
Adjusted Volume Module:																	
Grade:	0%				0%				0%				0%			
% Cycle/Cars:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
% Truck/Comb:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00	1.00	
Cycl/Car PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Trck/Cmb PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Adj Vol.:	0	0	0	0	0	0	0	0	0	130	0	0	0	130	0
Critical Gap Module:																	
MoveUp Time:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Capacity Module:																	
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Adj Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Level Of Service Module:																	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*					
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*					
ApproachDel:	xxxxxx				xxxxxx				0.0				0.0			
ApproachLOS:	*				*				A				A			

Near Term
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Stevens Avenue-Valley Avenue / Valley Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.251
Loss Time (sec):	8	Average Delay (sec/veh):	13.0
Optimal Cycle:	22	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0	0	1	1 0	1	0	2	0 0	0	0	0	0 0	1	0	0	0 1
Volume Module:																
Base Vol:	0	406	90		70	330	0		0	0	0		70	0	40	
Growth Adj:	1.02	1.02	1.02		1.02	1.02	1.02		1.02	1.02	1.02		1.02	1.02	1.02	
Initial Bse:	0	414	92		71	337	0		0	0	0		71	0	41	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	414	92		71	337	0		0	0	0		71	0	41	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	414	92		71	337	0		0	0	0		71	0	41	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	414	92		71	337	0		0	0	0		71	0	41	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	414	92		71	337	0		0	0	0		71	0	41	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.92	0.92		0.95	0.95	1.00		1.00	1.00	1.00		0.79	1.00	0.85	
Lanes:	0.00	1.64	0.36		1.00	2.00	0.00		0.00	0.00	0.00		1.00	0.00	1.00	
Final Sat.:	0	2875	637		1805	3610	0		0	0	0		1497	0	1615	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.14	0.14		0.04	0.09	0.00		0.00	0.00	0.00		0.05	0.00	0.03	
Crit Moves:		****			****								****			
Green Time:	0.0	57.3	57.3		15.7	73.0	0.0		0.0	0.0	0.0		19.0	0.0	19.0	
Volume/Cap:	0.00	0.25	0.25		0.25	0.13	0.00		0.00	0.00	0.00		0.25	0.00	0.13	
Delay/Veh:	0.0	10.7	10.7		37.4	4.0	0.0		0.0	0.0	0.0		34.9	0.0	33.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	10.7	10.7		37.4	4.0	0.0		0.0	0.0	0.0		34.9	0.0	33.9	
LOS by Move:	A	B	B		D	A	A		A	A	A		C	A	C	
HCM2kAvgQ:	0	4	4		2	2	0		0	0	0		2	0	1	

Note: Queue reported is the number of cars per lane.

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APPENDIX E: TRAFFIX WORKSHEETS-NEAR TERM (2017) PLUS PROJECT CONDITIONS

Near Term Plus Project
AM

Scenario Report

Scenario:	Near Term Plus Project AM
Command:	Near Term AM
Volume:	Near Term AM
Geometry:	Near Term AM
Impact Fee:	Default Impact Fee
Trip Generation:	Project AM
Trip Distribution:	Project
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Near Term Plus Project
AM

Trip Generation Report

Forecast for Project AM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1	Project	1.00	Project	8.00	34.00	8	34	42	100.0
	Zone 1 Subtotal		.....			8	34	42	100.0
TOTAL			.....			8	34	42	100.0

Near Term Plus Project
AM

Trip Distribution Report

Percent Of Trips Project

Zone	To Gates 1	2	3	4	5	6
1	10.0	5.0	35.0	10.0	10.0	30.0

Near Term Plus Project
AM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in D/V
# 1 S. Nardo Ave & Lomas Santa Fe	B	14.9	0.482	B	14.9	0.482	+ 0.000
# 2 Stevens Av & Lomas Santa Fe	C	24.0	0.615	C	24.3	0.620	+ 0.267
# 3 S. Nardo Ave & E. Solana Circl	B	11.1	0.252	B	11.1	0.252	+ 0.014
# 4 Fresca St & S. Nardo Ave	B	10.9	0.048	B	11.0	0.049	+ 0.110
# 5 Stevens Ave & S. Nardo Ave	B	18.4	0.290	B	19.2	0.307	+ 0.799
# 6 E. Solana Circle & Via De La V	D	27.5	0.255	D	27.2	0.256	-0.358
# 7 Stevens Ave/Valley Ave & Via D	C	29.0	0.574	C	29.2	0.580	+ 0.162
# 20 Driveway A	A	0.6	0.000	A	0.8	0.000	+ 0.000
# 21 Driveway B	A	0.5	0.000	A	0.7	0.000	+ 0.000
# 24 Stevens Avenue-Valley Avenue /	B	19.1	0.265	B	19.0	0.266	-0.114

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 S. Nardo Ave & Lomas Santa Fe

Cycle (sec):	69	Critical Vol./Cap.(X):	0.482
Loss Time (sec):	12	Average Delay (sec/veh):	14.9
Optimal Cycle:	45	Level Of Service:	B

Street Name:	S. Nardo Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	8	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0	0 1	0	1	1 0	1	0 1	1	0
Volume Module:												
Base Vol:	17	8	74	178	5	4	0	578	14	47	638	115
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	17	8	75	182	5	4	0	590	14	48	651	117
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	8	75	182	5	4	0	590	14	48	651	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	21	10	91	219	6	5	0	710	17	58	784	141
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	10	91	219	6	5	0	710	17	58	784	141
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	21	10	91	219	6	5	0	710	17	58	784	141
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.70	0.93	0.93	1.00	0.95	0.95	0.95	0.93	0.93
Lanes:	0.17	0.08	0.75	1.00	0.56	0.44	1.00	1.95	0.05	1.00	1.69	0.31
Final Sat.:	282	133	1230	1338	985	788	1900	3511	85	1805	2988	539
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.16	0.01	0.01	0.00	0.20	0.20	0.03	0.26	0.26
Crit Moves:				****				****		****		
Green Time:	23.2	23.2	23.2	23.2	23.2	23.2	0.0	28.8	28.8	5.0	33.8	33.8
Volume/Cap:	0.22	0.22	0.22	0.49	0.02	0.02	0.00	0.49	0.49	0.44	0.54	0.54
Delay/Veh:	16.6	16.6	16.6	19.0	15.3	15.3	0.0	15.0	15.0	33.0	12.5	12.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.6	16.6	16.6	19.0	15.3	15.3	0.0	15.0	15.0	33.0	12.5	12.5
LOS by Move:	B	B	B	B	B	B	A	B	B	C	B	B
HCM2kAvgQ:	2	2	2	4	0	0	0	6	6	1	7	7

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Stevens Av & Lomas Santa Fe

Cycle (sec):	112	Critical Vol./Cap.(X):	0.620
Loss Time (sec):	14	Average Delay (sec/veh):	24.3
Optimal Cycle:	56	Level Of Service:	C

Street Name:	Stevens Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	8	1	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	1! 0	0	1	0	1	0 1	1	0	2	0	2	0	0
Volume Module:												
Base Vol:	106	0	258	0	0	0	0	696	156	424	748	0
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	108	0	263	0	0	0	0	710	159	432	763	0
Added Vol:	0	0	10	0	0	0	0	0	0	2	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	108	0	273	0	0	0	0	710	159	434	763	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	126	0	318	0	0	0	0	825	185	505	887	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	0	318	0	0	0	0	825	185	505	887	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	126	0	318	0	0	0	0	825	185	505	887	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	1.00	1.00	1.00	1.00	0.92	0.92	0.92	0.95	1.00
Lanes:	1.28	0.00	1.72	0.00	1.00	0.00	1.00	1.63	0.37	2.00	2.00	0.00
Final Sat.:	2147	0	2871	0	1900	0	1900	2869	643	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.11	0.00	0.00	0.00	0.00	0.29	0.29	0.14	0.25	0.00
Crit Moves:			****					****		****		
Green Time:	20.0	0.0	20.0	0.0	0.0	0.0	0.0	52.0	52.0	26.1	78.0	0.0
Volume/Cap:	0.33	0.00	0.62	0.00	0.00	0.00	0.00	0.62	0.62	0.62	0.35	0.00
Delay/Veh:	40.3	0.0	44.2	0.0	0.0	0.0	0.0	23.3	23.3	40.0	6.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.3	0.0	44.2	0.0	0.0	0.0	0.0	23.3	23.3	40.0	6.9	0.0
LOS by Move:	D	A	D	A	A	A	A	C	C	D	A	A
HCM2kAvgQ:	3	0	6	0	0	0	0	13	13	9	6	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 S. Nardo Ave & E. Solana Circle/Nardito Ln

Average Delay (sec/veh): 9.7 Worst Case Level Of Service: B[11.1]

Street Name:	S. Nardo Ave									E. Solana Circle/Nardito Ln							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	16		1		26	2		1		0	0		134		9	13		83		0
Growth Adj:	1.02	1.02		1.02		1.02	1.02		1.02		1.02	1.02		1.02		1.02	1.02		1.02	
Initial Bse:	16		1		27	2		1		0	0		137		9	13		85		0
Added Vol:	0		0		1	0		0		0	0		0		0	3		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	16		1		28	2		1		0	0		137		9	16		85		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.69	0.69		0.69		0.69	0.69		0.69		0.69	0.69		0.69		0.69	0.69		0.69	
PHF Volume:	24		1		40	3		1		0	0		198		13	24		123		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	24		1		40	3		1		0	0		198		13	24		123		0
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx			4.1	xxxx	xxxxx	xxxxx		6.5		6.2			7.1		6.5	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx			2.2	xxxx	xxxxx	xxxxx		4.0		3.3			3.5		4.0	xxxxx	
Capacity Module:																				
Cnflict Vol:	1	xxxx	xxxxx			41	xxxx	xxxxx		xxxx		96			1		182		76	xxxxx
Potent Cap.:	1634	xxxx	xxxxx			1581	xxxx	xxxxx		xxxx		798			1089		784		818	xxxxx
Move Cap.:	1634	xxxx	xxxxx			1581	xxxx	xxxxx		xxxx		785			1089		616		805	xxxxx
Volume/Cap:	0.01	xxxx		xxxx		0.00	xxxx		xxxx		xxxx	0.25			0.01		0.04		0.15	
Level Of Service Module:																				
2Way95thQ:	0.0	xxxx	xxxxx			0.0	xxxx	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			
Control Del:	7.2	xxxx	xxxxx			7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx			xxxx	xxxx	xxxxx			
LOS by Move:	A		*		*	A		*		*	*		*		*	*		*		*
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		xxxx	xxxx		799			767	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx			0.0	xxxx	xxxxx	xxxxx	xxxx			1.1			0.7	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx			7.3	xxxx	xxxxx	xxxxx	xxxx			11.1			10.8	xxxx	xxxxx		
Shared LOS:	*		*		*	A		*		*	*		B			B		*		*
ApproachDel:	xxxxxx					xxxxxx					11.1					10.8				
ApproachLOS:	*					*					B					B				

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Fresca St & S. Nardo Ave

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[11.0]

Street Name:	Fresca St									Nardo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0		0		0	22		0		2	2		188		0	0		82		12
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	0		0		0	22		0		2	2		188		0	0		82		12
Added Vol:	0		0		0	0		0		0	0		7		0	0		3		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	0		0		0	22		0		2	2		195		0	0		85		12
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.73	0.73		0.73		0.73	0.73		0.73		0.73	0.73		0.73		0.73	0.73		0.73	
PHF Volume:	0		0		0	30		0		3	3		267		0	0		116		16
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	0		0		0	30		0		3	3		267		0	0		116		16
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx			6.4		6.5		6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx			3.5		4.0		3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx			397		397		125	133	xxxx	xxxxx		xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx			612		543		931	1464	xxxx	xxxxx		xxxx	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx			611		542		931	1464	xxxx	xxxxx		xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx		xxxx		0.05	0.00		0.00		0.00	xxxx		xxxx		xxxx	xxxx		xxxx	
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.0	xxxx	xxxxx		xxxx	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			7.5	xxxx	xxxxx		xxxxx	xxxx	xxxxx			
LOS by Move:	*		*		*	*		*		*	A		*		*	*		*		*
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx		629	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx		0.2	xxxxx				0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx		11.0	xxxxx				7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*		*		*	*		B		*	A		*		*	*		*		*
ApproachDel:	xxxxxx					11.0					xxxxxx					xxxxxx				
ApproachLOS:	*					B					*					*				

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Stevens Ave & S. Nardo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.307
Loss Time (sec): 12 Average Delay (sec/veh): 19.2
Optimal Cycle: 31 Level Of Service: B

Street Name:	Stevens Ave									S. Nardo Ave		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	0	0	1	0	1	1	0	1	0	0	0	1	1	0	0	0	0
Volume Module:												
Base Vol:	37	395	0	0	337	68	106	0	152	1	0	0
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	38	403	0	0	344	69	108	0	155	1	0	0
Added Vol:	4	0	0	0	0	2	10	0	17	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	403	0	0	344	71	118	0	172	1	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	45	438	0	0	374	78	128	0	187	1	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	438	0	0	374	78	128	0	187	1	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	438	0	0	374	78	128	0	187	1	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.93	0.93	0.95	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	2.00	0.00	1.00	1.66	0.34	1.00	0.00	1.00	1.00	0.00	0.00
Final Sat.:	1805	3610	0	1900	2912	604	1805	0	1615	1805	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.00	0.00	0.13	0.13	0.07	0.00	0.12	0.00	0.00	0.00
Crit Moves:	****				****				****	****		
Green Time:	8.2	50.0	0.0	0.0	41.8	41.8	38.0	0.0	37.8	0.2	0.0	0.0
Volume/Cap:	0.31	0.24	0.00	0.00	0.31	0.31	0.19	0.00	0.31	0.31	0.00	0.00
Delay/Veh:	44.4	14.3	0.0	0.0	19.5	19.5	20.9	0.0	22.2	92.5	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.4	14.3	0.0	0.0	19.5	19.5	20.9	0.0	22.2	92.5	0.0	0.0
LOS by Move:	D	B	A	A	B	B	C	A	C	F	A	A
HCM2kAvgQ:	1	4	0	0	5	5	3	0	4	0	0	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 E. Solana Circle & Via De La Valle

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: D[27.2]

Street Name:	E. Solana Circle									Via De La Valle		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	0	0	0	1	0	0	0	0	1	0
Volume Module:												
Base Vol:	0	0	0	38	0	23	15	744	0	0	431	27
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	0	0	39	0	23	15	759	0	0	440	28
Added Vol:	0	0	0	0	0	3	1	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	39	0	26	16	759	0	0	440	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	0	0	42	0	29	18	825	0	0	478	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	42	0	29	18	825	0	0	478	30
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1368	1368	825	1353	1353	493	508	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	125	148	376	167	151	580	1067	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	118	146	376	165	149	580	1067	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.00	0.26	0.00	0.05	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	232	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	27.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	D	*	*	*	*	*	*	*
ApproachDel:	xxxxxx				27.2		xxxxxx			xxxxxx		
ApproachLOS:		*			D			*			*	

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Stevens Ave/Valley Ave & Via De La Valle

Cycle (sec): 98 Critical Vol./Cap.(X): 0.580
Loss Time (sec): 12 Average Delay (sec/veh): 29.2
Optimal Cycle: 46 Level Of Service: C

Street Name:	Stevens Ave/Valley Ave						Via De La Valle					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	5	0	5	0	0	5	10	0	5	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	18	42	212	432	72	51	43	674	41	331	584	312
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	18	43	216	441	73	52	44	687	42	338	596	318
Added Vol:	0	0	0	15	2	0	0	0	0	0	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	43	216	456	75	52	44	687	42	338	596	322
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	19	44	221	465	77	53	45	702	43	345	608	329
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	44	221	465	77	53	45	702	43	345	608	329
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	44	221	465	77	53	45	702	43	345	608	329
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.75	0.92	1.00	0.85	0.95	0.94	0.94	0.92	0.90	0.90
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.89	0.11	2.00	1.30	0.70
Final Sat.:	1805	1900	2842	3502	1900	1615	1805	3372	205	3502	2219	1200
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.08	0.13	0.04	0.03	0.02	0.21	0.21	0.10	0.27	0.27
Crit Moves:			****	****			****				****	
Green Time:	13.0	13.0	13.0	22.2	22.2	22.2	5.0	34.5	34.5	16.3	45.8	45.8
Volume/Cap:	0.08	0.17	0.59	0.59	0.18	0.15	0.49	0.59	0.59	0.59	0.59	0.59
Delay/Veh:	37.4	38.1	42.4	34.9	30.8	30.5	49.2	26.7	26.7	39.4	19.7	19.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.4	38.1	42.4	34.9	30.8	30.5	49.2	26.7	26.7	39.4	19.7	19.7
LOS by Move:	D	D	D	C	C	C	D	C	C	D	B	B
HCM2kAvgQ:	1	1	4	6	2	1	2	10	10	6	11	11

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: A

Street Name:	Driveway A									Nardo Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	11	0	30	0	0	0	0	190	5	6	86	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	0	30	0	0	0	0	190	5	6	86	0
Added Vol:	5	0	7	0	0	0	0	0	1	2	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	0	37	0	0	0	0	190	6	8	88	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	17	0	40	0	0	0	0	207	7	9	96	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	17	0	40	0	0	0	0	207	7	9	96	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	19	0	44	0	0	0	0	207	7	10	96	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	314	xxxx	210	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	213	xxxx	xxxxx
Potent Cap.:	697	xxxx	1084	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1357	xxxx	xxxxx
Adj Cap:	0.99	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	691	xxxx	1084	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1357	xxxx	xxxxx
Level Of Service Module:												
Control Del:	5.3	xxxx	3.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	925	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1357	xxxx	xxxxx
Shrd ConDel:	xxxxx	4.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.9	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	4.1			xxxxxx			0.0			0.2		
ApproachLOS:	A			*			A			A		

Near Term Plus Project
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Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A

Street Name: Driveway B Nardo Avenue

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	3	0	28	0	0	0	0	247	2	19	103	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	0	28	0	0	0	0	247	2	19	103	0
Added Vol:	2	0	20	0	0	0	0	7	0	5	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	48	0	0	0	0	254	2	24	105	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	5	0	52	0	0	0	0	276	2	26	114	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	5	0	52	0	0	0	0	276	2	26	114	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	6	0	57	0	0	0	0	276	2	29	114	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	417	xxxx	277	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	278	xxxx	xxxxx
Potent Cap.:	607	xxxx	1002	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1263	xxxx	xxxxx
Adj Cap:	0.98	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	592	xxxx	1002	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1263	xxxx	xxxxx
Level Of Service Module:												
Control Del:	6.1	xxxx	3.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	941	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1263	xxxx	xxxxx
Shrd ConDel:	xxxxx	4.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.2	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	4.1			xxxxxx			0.0			0.6		
ApproachLOS:	A			*			A			A		

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Stevens Avenue-Valley Avenue / Valley Avenue

Cycle (sec): 100 Critical Vol./Cap.(X): 0.266
Loss Time (sec): 8 Average Delay (sec/veh): 19.0
Optimal Cycle: 23 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	308	40	70	390	0	0	0	0	150	0	110
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	314	41	71	398	0	0	0	0	153	0	112
Added Vol:	0	4	0	0	17	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	318	41	71	415	0	0	0	0	153	0	112
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	318	41	71	415	0	0	0	0	153	0	112
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	318	41	71	415	0	0	0	0	153	0	112
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	318	41	71	415	0	0	0	0	153	0	112
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.77	1.00	0.85
Lanes:	0.00	1.77	0.23	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3145	403	1805	3610	0	0	0	0	1467	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.10	0.04	0.11	0.00	0.00	0.00	0.00	0.10	0.00	0.07
Crit Moves:		****		****						****		
Green Time:	0.0	38.0	38.0	14.9	52.8	0.0	0.0	0.0	0.0	39.2	0.0	39.2
Volume/Cap:	0.00	0.27	0.27	0.27	0.22	0.00	0.00	0.00	0.00	0.27	0.00	0.18
Delay/Veh:	0.0	21.5	21.5	38.3	12.6	0.0	0.0	0.0	0.0	20.9	0.0	20.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	21.5	21.5	38.3	12.6	0.0	0.0	0.0	0.0	20.9	0.0	20.0
LOS by Move:	A	C	C	D	B	A	A	A	A	C	A	C
HCM2kAvgQ:	0	4	4	2	3	0	0	0	0	3	0	2

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
PM

Scenario Report

Scenario:	Near Term Plus Project PM
Command:	Near Term Plus Project PM
Volume:	Near Term PM
Geometry:	Near Term PM
Impact Fee:	Default Impact Fee
Trip Generation:	Project PM
Trip Distribution:	Project
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Near Term Plus Project
PM

Trip Generation Report

Forecast for Project PM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1	Project	1.00	Project	37.00	16.00	37	16	53	100.0
	Zone 1 Subtotal					37	16	53	100.0
TOTAL						37	16	53	100.0

Near Term Plus Project
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Trip Distribution Report

Percent Of Trips Project

Zone	To Gates 1	2	3	4	5	6
1	10.0	5.0	35.0	10.0	10.0	30.0

Near Term Plus Project
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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 S. Nardo Ave & Lomas Santa Fe	B	11.5	0.339	B	11.5	0.339	+ 0.000 D/V
# 2 Stevens Av & Lomas Santa Fe	C	24.1	0.548	C	24.4	0.554	+ 0.273 D/V
# 3 S. Nardo Ave & E. Solana Circl	B	10.6	0.112	B	10.6	0.112	+ 0.050 D/V
# 4 Fresca St & S. Nardo Ave	A	9.8	0.019	A	9.9	0.020	+ 0.083 D/V
# 5 Stevens Ave & S. Nardo Ave	B	15.0	0.291	B	16.3	0.315	+ 1.258 D/V
# 6 E. Solana Circle & Via De La V	C	21.7	0.093	C	21.6	0.095	-0.112 D/V
# 7 Stevens Ave/Valley Ave & Via D	C	33.3	0.746	C	33.5	0.755	+ 0.193 D/V
# 20 Driveway A	A	0.4	0.000	A	0.6	0.000	+ 0.000 D/V
# 21 Driveway B	A	0.5	0.000	A	0.8	0.000	+ 0.000 D/V
# 24 Stevens Avenue-Valley Avenue /	B	13.0	0.251	B	12.8	0.257	-0.238 D/V

Near Term Plus Project
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 S. Nardo Ave & Lomas Santa Fe

Cycle (sec):	69	Critical Vol./Cap.(X):	0.339
Loss Time (sec):	12	Average Delay (sec/veh):	11.5
Optimal Cycle:	45	Level Of Service:	B

Street Name:	S. Nardo Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	8	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0	0	1	0	1	0	1
Volume Module:												
Base Vol:	18	12	37	123	6	0	4	671	12	44	638	127
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	18	12	38	125	6	0	4	684	12	45	651	130
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	12	38	125	6	0	4	684	12	45	651	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	19	13	40	132	6	0	4	720	13	47	685	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	13	40	132	6	0	4	720	13	47	685	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	13	40	132	6	0	4	720	13	47	685	136
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.85	0.85	0.76	1.00	1.00	0.95	0.95	0.95	0.95	0.93	0.93
Lanes:	0.27	0.18	0.55	1.00	1.00	0.00	1.00	1.96	0.04	1.00	1.67	0.33
Final Sat.:	433	288	889	1450	1900	0	1805	3536	63	1805	2935	584
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.09	0.00	0.00	0.00	0.20	0.20	0.03	0.23	0.23
Crit Moves:		****					****				****	
Green Time:	8.4	8.4	8.4	8.4	8.4	0.0	5.0	38.9	38.9	9.7	43.6	43.6
Volume/Cap:	0.37	0.37	0.37	0.75	0.03	0.00	0.03	0.36	0.36	0.19	0.37	0.37
Delay/Veh:	29.1	29.1	29.1	45.9	26.8	0.0	29.9	8.3	8.3	26.5	6.2	6.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.1	29.1	29.1	45.9	26.8	0.0	29.9	8.3	8.3	26.5	6.2	6.2
LOS by Move:	C	C	C	D	C	A	C	A	A	C	A	A
HCM2kAvgQ:	2	2	2	5	0	0	0	5	5	1	4	4

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Stevens Av & Lomas Santa Fe

Cycle (sec):	112	Critical Vol./Cap.(X):	0.554
Loss Time (sec):	14	Average Delay (sec/veh):	24.4
Optimal Cycle:	50	Level Of Service:	C

Street Name:	Stevens Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	8	1	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	1! 0	0	1	0	1	0
Volume Module:												
Base Vol:	257	0	366	0	0	0	0	763	116	218	656	0
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	262	0	373	0	0	0	0	778	118	222	669	0
Added Vol:	0	0	5	0	0	0	0	0	0	11	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	262	0	378	0	0	0	0	778	118	233	669	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	276	0	398	0	0	0	0	819	125	246	704	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	276	0	398	0	0	0	0	819	125	246	704	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	276	0	398	0	0	0	0	819	125	246	704	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	0.93	0.93	0.92	0.95	1.00
Lanes:	1.41	0.00	1.59	0.00	1.00	0.00	1.00	1.74	0.26	2.00	2.00	0.00
Final Sat.:	2391	0	2698	0	1900	0	1900	3071	467	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.12	0.00	0.15	0.00	0.00	0.00	0.00	0.27	0.27	0.07	0.20	0.00
Crit Moves:			****					****		****		
Green Time:	29.9	0.0	29.9	0.0	0.0	0.0	0.0	54.0	54.0	14.2	68.1	0.0
Volume/Cap:	0.43	0.00	0.55	0.00	0.00	0.00	0.00	0.55	0.55	0.55	0.32	0.00
Delay/Veh:	34.3	0.0	35.9	0.0	0.0	0.0	0.0	20.9	20.9	47.5	10.8	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.3	0.0	35.9	0.0	0.0	0.0	0.0	20.9	20.9	47.5	10.8	0.0
LOS by Move:	C	A	D	A	A	A	A	C	C	D	B	A
HCM2kAvgQ:	5	0	7	0	0	0	0	12	12	5	6	0

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 S. Nardo Ave & E. Solana Circle/Nardito Ln

Average Delay (sec/veh): 9.0 Worst Case Level Of Service: B[10.6]

Street Name:	S. Nardo Ave									E. Solana Circle/Nardito Ln							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	1	0	0	0
Volume Module:																				
Base Vol:	31		1		14	1		0		3	1		67		25	27		72		0
Growth Adj:	1.02	1.02		1.02		1.02	1.02		1.02		1.02	1.02		1.02		1.02	1.02		1.02	
Initial Bse:	32		1		14	1		0		3	1		68		26	28		73		0
Added Vol:	0		0		4	0		0		0	0		0		0	2		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	32		1		18	1		0		3	1		68		26	30		73		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.84	0.84		0.84		0.84	0.84		0.84		0.84	0.84		0.84		0.84	0.84		0.84	
PHF Volume:	38		1		22	1		0		4	1		81		30	35		87		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	38		1		22	1		0		4	1		81		30	35		87		0
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx			4.1	xxxx	xxxxx			7.1		6.5		6.2	7.1		6.5	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx			2.2	xxxx	xxxxx			3.5		4.0		3.3	3.5		4.0	xxxxx	
Capacity Module:																				
Cnflict Vol:	4	xxxx	xxxxx			23	xxxx	xxxxx			135		103		2	147		93	xxxxx	
Potent Cap.:	1631	xxxx	xxxxx			1605	xxxx	xxxxx			841		791		1088	825		800	xxxxx	
Move Cap.:	1631	xxxx	xxxxx			1605	xxxx	xxxxx			754		772		1088	724		781	xxxxx	
Volume/Cap:	0.02	xxxx		xxxx		0.00	xxxx		xxxx		0.00		0.11		0.03	0.05		0.11		xxxx
Level Of Service Module:																				
2Way95thQ:	0.1	xxxx	xxxxx			0.0	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Control Del:	7.3	xxxx	xxxxx			7.2	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
LOS by Move:	A		*		*	A		*		*	*		*		*	*		*		*
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx		837	xxxxx		764	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx		0.5	xxxxx		0.6	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx		10.0	xxxxx		10.6	xxxx	xxxxx		
Shared LOS:	*		*		*	*		*		*	*		A		*	B		*		*
ApproachDel:	xxxxxx					xxxxxx					10.0					10.6				
ApproachLOS:	*					*					A					B				

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Fresca St & S. Nardo Ave

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A[9.9]

Street Name:	Fresca St									Nardo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0		0		0	13		0		2	5		104		0	0		95		18
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	0		0		0	13		0		2	5		104		0	0		95		18
Added Vol:	0		0		0	0		0		0	0		4		0	0		8		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	0		0		0	13		0		2	5		108		0	0		103		18
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	0		0		0	14		0		2	6		120		0	0		114		20
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	0		0		0	14		0		2	6		120		0	0		114		20
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx			6.4		6.5		6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx			3.5		4.0		3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx			256		256		124	134	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx			737		652		932	1463	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx			735		649		932	1463	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx		xxxx		0.02	0.00		0.00		0.00	xxxx		xxxx	xxxx		xxxx			
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.0	xxxx	xxxxx		xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*		*		*	*		*		*	A		*		*	*				
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx		757	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx		0.1	xxxxx		0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx			xxxxx		9.9	xxxxx		7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*		*		*	*		A		*	A		*		*	*				
ApproachDel:	xxxxxx					9.9					xxxxxx					xxxxxx				
ApproachLOS:	*					A					*					*				

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Stevens Ave & S. Nardo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.315
Loss Time (sec): 12 Average Delay (sec/veh): 16.3
Optimal Cycle: 32 Level Of Service: B

Street Name:	Stevens Ave									S. Nardo Ave		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 0	1	0 1	1 0	1	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	89	336	0	2	403	67	41	0	66	0	0	0
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	91	343	0	2	411	68	42	0	67	0	0	0
Added Vol:	19	0	0	0	0	11	5	0	8	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	110	343	0	2	411	79	47	0	75	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	123	385	0	2	462	89	53	0	85	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	385	0	2	462	89	53	0	85	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	385	0	2	462	89	53	0	85	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	0.95	0.93	0.93	0.95	1.00	0.85	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	1.00	1.68	0.32	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1805	3610	0	1805	2953	570	1805	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.11	0.00	0.00	0.16	0.16	0.03	0.00	0.05	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green Time:	21.7	70.5	0.0	0.8	49.7	49.7	16.6	0.0	16.6	0.0	0.0	0.0
Volume/Cap:	0.31	0.15	0.00	0.15	0.31	0.31	0.18	0.00	0.31	0.00	0.00	0.00
Delay/Veh:	33.4	4.9	0.0	53.8	15.1	15.1	36.1	0.0	37.3	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.4	4.9	0.0	53.8	15.1	15.1	36.1	0.0	37.3	0.0	0.0	0.0
LOS by Move:	C	A	A	D	B	B	D	A	D	A	A	A
HCM2kAvgQ:	3	2	0	0	5	5	1	0	3	0	0	0

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 E. Solana Circle & Via De La Valle

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[21.6]

Street Name:	E. Solana Circle									Via De La Valle		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0	1 0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	14	0	18	16	553	0	0	640	54
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	0	0	14	0	18	16	564	0	0	653	55
Added Vol:	0	0	0	0	0	2	4	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	14	0	20	20	564	0	0	653	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	0	0	15	0	22	22	600	0	0	694	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	15	0	22	22	600	0	0	694	59
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1378	1396	600	1367	1367	724	753	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	123	142	505	164	148	429	866	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	115	139	505	161	145	429	866	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.00	0.09	0.00	0.05	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	254	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	21.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			21.6			xxxxxx			xxxxxx		
ApproachLOS:		*			C			*			*	

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Stevens Ave/Valley Ave & Via De La Valle

Cycle (sec): 98 Critical Vol./Cap.(X): 0.755
Loss Time (sec): 12 Average Delay (sec/veh): 33.5
Optimal Cycle: 68 Level Of Service: C

Street Name:	Stevens Ave/Valley Ave									Via De La Valle					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	5	0	5	0	0	5	10	0	5	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	69	149	465	408	100	70	47	530	23	254	648	346
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	70	152	474	416	102	71	48	541	23	259	661	353
Added Vol:	0	2	0	7	1	0	0	0	0	0	0	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	70	154	474	423	103	71	48	541	23	259	661	370
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	76	166	510	455	111	77	52	581	25	279	711	398
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	166	510	455	111	77	52	581	25	279	711	398
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	76	166	510	455	111	77	52	581	25	279	711	398
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.75	0.92	1.00	0.85	0.95	0.94	0.94	0.92	0.90	0.90
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.92	0.08	2.00	1.28	0.72
Final Sat.:	1805	1900	2842	3502	1900	1615	1805	3439	149	3502	2190	1225
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.18	0.13	0.06	0.05	0.03	0.17	0.17	0.08	0.32	0.32
Crit Moves:			****	****			****				****	
Green Time:	22.9	22.9	22.9	16.6	16.6	16.6	5.0	31.6	31.6	14.9	41.5	41.5
Volume/Cap:	0.18	0.37	0.77	0.77	0.34	0.28	0.56	0.52	0.52	0.52	0.77	0.77
Delay/Veh:	30.2	32.0	40.4	44.8	36.5	36.1	53.0	27.5	27.5	39.3	26.7	26.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.2	32.0	40.4	44.8	36.5	36.1	53.0	27.5	27.5	39.3	26.7	26.7
LOS by Move:	C	C	D	D	D	D	D	C	C	D	C	C
HCM2kAvgQ:	2	4	10	7	3	2	2	8	8	5	16	16

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
PM

Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: A

Street Name:	Driveway A									Nardo Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	3	0	19	0	0	0	0	111	7	10	98	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	0	19	0	0	0	0	111	7	10	98	0
Added Vol:	2	0	3	0	0	0	0	1	3	7	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	22	0	0	0	0	112	10	17	99	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	5	0	24	0	0	0	0	122	11	18	108	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	5	0	24	0	0	0	0	122	11	18	108	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	6	0	26	0	0	0	0	122	11	20	108	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	253	xxxx	127	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	133	xxxx	xxxxx
Potent Cap.:	755	xxxx	1194	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1482	xxxx	xxxxx
Adj Cap:	0.99	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	744	xxxx	1194	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1482	xxxx	xxxxx
Level of Service Module:												
Control Del:	4.9	xxxx	3.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	1074	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1482	xxxx	xxxxx
Shrd ConDel:	xxxxx	3.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.7	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	3.4			xxxxxx			0.0			0.4		
ApproachLOS:	A			*			A			A		

Near Term Plus Project
PM

Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: A

Street Name: Driveway B Nardo Avenue

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	4	0	22	0	0	0	0	118	3	29	148	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	0	22	0	0	0	0	118	3	29	148	0
Added Vol:	1	0	10	0	0	0	0	3	1	22	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	32	0	0	0	0	121	4	51	155	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	5	0	35	0	0	0	0	132	4	55	168	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	5	0	35	0	0	0	0	132	4	55	168	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	6	0	38	0	0	0	0	132	4	61	168	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	358	xxxx	134	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	136	xxxx	xxxxx
Potent Cap.:	657	xxxx	1185	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1477	xxxx	xxxxx
Adj Cap:	0.95	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	627	xxxx	1185	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1477	xxxx	xxxxx
Level Of Service Module:												
Control Del:	5.8	xxxx	3.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	1058	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1477	xxxx	xxxxx
Shrd ConDel:	xxxxx	3.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.9	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	3.5			xxxxxx			0.0			0.7		
ApproachLOS:	A			*			A			A		

Near Term Plus Project
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Stevens Avenue-Valley Avenue / Valley Avenue

Cycle (sec): 100 Critical Vol./Cap.(X): 0.257
Loss Time (sec): 8 Average Delay (sec/veh): 12.8
Optimal Cycle: 23 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0 0	1 1	0		1 0	2 0	0		0 0	0 0	0		1 0	0 0	1	
Volume Module:																
Base Vol:	0	406	90		70	330	0		0	0	0		70	0	40	
Growth Adj:	1.02	1.02	1.02		1.02	1.02	1.02		1.02	1.02	1.02		1.02	1.02	1.02	
Initial Bse:	0	414	92		71	337	0		0	0	0		71	0	41	
Added Vol:	0	19	0		0	8	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	433	92		71	345	0		0	0	0		71	0	41	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	433	92		71	345	0		0	0	0		71	0	41	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	433	92		71	345	0		0	0	0		71	0	41	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	433	92		71	345	0		0	0	0		71	0	41	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.93	0.93		0.95	0.95	1.00		1.00	1.00	1.00		0.79	1.00	0.85	
Lanes:	0.00	1.65	0.35		1.00	2.00	0.00		0.00	0.00	0.00		1.00	0.00	1.00	
Final Sat.:	0	2901	615		1805	3610	0		0	0	0		1495	0	1615	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.15	0.15		0.04	0.10	0.00		0.00	0.00	0.00		0.05	0.00	0.03	
Crit Moves:		****			****								****			
Green Time:	0.0	58.1	58.1		15.4	73.4	0.0		0.0	0.0	0.0		18.6	0.0	18.6	
Volume/Cap:	0.00	0.26	0.26		0.26	0.13	0.00		0.00	0.00	0.00		0.26	0.00	0.14	
Delay/Veh:	0.0	10.4	10.4		37.8	3.9	0.0		0.0	0.0	0.0		35.3	0.0	34.2	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	10.4	10.4		37.8	3.9	0.0		0.0	0.0	0.0		35.3	0.0	34.2	
LOS by Move:	A	B	B		D	A	A		A	A	A		D	A	C	
HCM2kAvgQ:	0	4	4		2	2	0		0	0	0		2	0	1	

Note: Queue reported is the number of cars per lane.

APPENDIX F: POST-PROCESSING WORKSHEETS FUTURE 2035 VOLUMES

Future Turning Movement Calculation Sheet

N/S Street	Nardo Avenue	Time Period	AM
E/W Street	Lomas Santa Fe	Date	12/23/2014
Project	Solana Highlands		

Existing

			0	187		123	0					
				60%	2000	40%						
					310							
0				4	5	178						0
659	53%		0				115		49%			800
	20600	*1251*	578		**1678**		638	*1630*	23300			
592	47%		14				47		51%			830
0				17	8	74						0
					165							
				40%	2000	60%						
			0	66		99	0					

Future

				0		0						
				187	105.6%	123						
				54%	2100	46%						
					326							
0				9	7	179						0
659	58%		0				126		50%			800
	24000	*1457*	577		**1965**		796	*1784*	25500			
592	42%		19				47		50%			830
0	99.2%			46	24	137			104.3%			0
					173							
				42%	2100	58%						
				66	161.3%	99						
				0		0						

Future Turning Movement Calculation Sheet

N/S Street	Nardo Avenue	Time Period	PM
E/W Street	Lomas Santa Fe	Date	1/29/2014
Project	Solana Highlands		

Existing

			0	129		143	0					
				47%	2000	53%						
					272							
0				0	6	123						0
656	49%		4				127		49%			809
	20600	*1343*	671		**1692**		638	*1640*	23300			
687	51%		12				44		51%			831
0				18	12	37						0
					129							
				48%	2000	52%						
			0	62		67	0					

Future

				0		0						
				129	103.0%	143						
				43%	2100	57%						
					286							
0				0	7	123						0
656	54%		17				133		52%			809
	24000	*1565*	703		**1934**		826	*1795*	25500			
687	46%		15				36		48%			831
0	101.2%			22	14	37			103.6%			0
					135							
				43%	2100	57%						
				62	97.3%	67						
				0		0						

Future Turning Movement Calculation Sheet

N/S Street	Stevens Avenue	Time Period	AM
E/W Street	Lomas Santa Fe	Date	1/29/2014
Project	Solana Highlands		

Existing

			0	3		3	0					
				50%	1	50%						
					6							
0				1	1	1						0
855	50%		1				1			55%		1173
	23300	1708	696		2394		748	2128		25700		
853	50%		156				424			45%		955
0				106	1	258						0
					946							
				61%	9700	39%						
			0	581		365	0					

Future

				0		0						
				3	98.1%	3						
				52%	1	48%						
					6							
0				1	1	1						0
855	48%		1				1			54%		1173
	25500	1869	805		2681		792	2451		29600		
853	52%		156				496			46%		955
0	99.3%			102	1	324				98.7%		0
					1092							
				60%	11200	40%						
				581	98.9%	365						
				0		0						

Future Turning Movement Calculation Sheet

N/S Street	Stevens Avenue	Time Period	PM
E/W Street	Lomas Santa Fe	Date	1/29/2014
Project	Solana Highlands		

Existing

			0	3		3	0					
				50%	1	50%						
					6							
0				1	1	1						0
914	51%		1				1			44%		875
	23300	*1794*	763		**2382**		656	*2005*		25700		
880	49%		116				218			56%		1130
0				257	1	366						0
					959							
				35%	9700	65%						
			0	335		624	0					

Future

				0		0						
				3	99.1%	3						
				51%	1	49%						
					6							
0				1	1	1						0
914	50%		1				1			42%		875
	25500	*1963*	871		**2694**		711	*2309*		29600		
880	50%		118				267			58%		1130
0	100.0%			262	1	459				100.0%		0
					1107							
				35%	11200	65%						
				335	100.1%	624						
				0		0						

Future Turning Movement Calculation Sheet

N/S Street	E. Solana Circle	Time Period	AM
E/W Street	Nardo Avenue	Date	1/29/2014
Project	Solana Highlands		

Existing

			0	3		1	0					
				75%	100	25%						
					4							
0				0	1	2						0
99	41%		0				0			37%		96
	2000	242	134		285		83	258		2000		
143	59%		9				13			63%		162
0				16	1	26						0
					66							
				35%	650	65%						
			0	23		43	0					

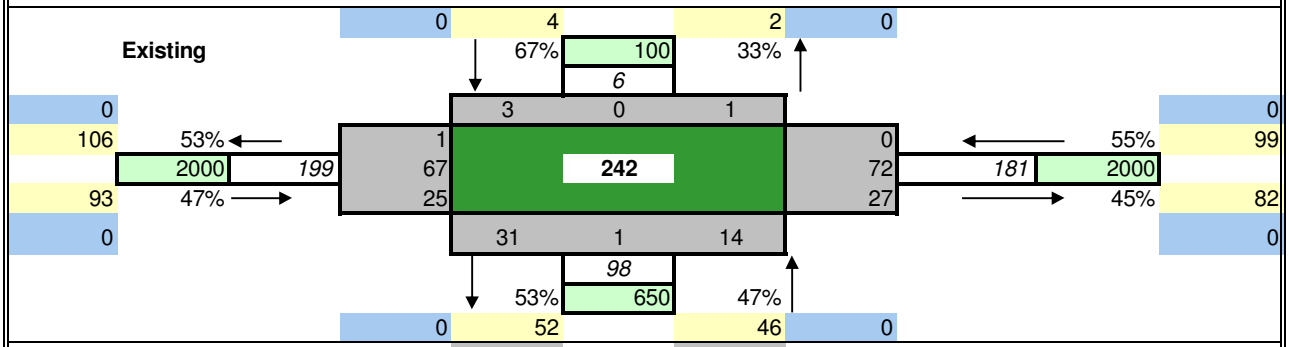
Future

				0		0						
				3	100.0%	1						
				72%	200	28%						
					8							
0				0	2	4						0
99	42%		0				0			38%		96
	2100	254	138		303		89	271		2100		
143	58%		10				14			62%		162
0	99.9%			18	2	27				100.0%		0
					73							
				36%	720	64%						
				23	100.0%	43						
				0		0						

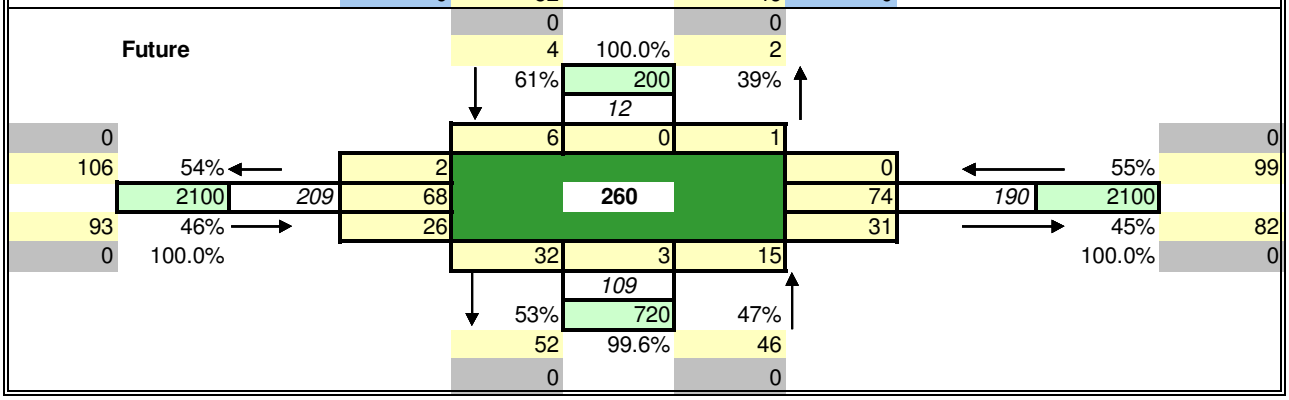
Future Turning Movement Calculation Sheet

N/S Street	E. Solana Circle	Time Period	PM
E/W Street	Nardo Avenue	Date	1/29/2014
Project	Solana Highlands		

Existing



Future



Future Turning Movement Calculation Sheet

N/S Street	Fresca Street	Time Period	AM
E/W Street	Nardo Avenue	Date	1/29/2014
Project	Solana Highlands		

Existing

			0	25		15	0					
				63%	500	38%						
					40							
0				2	1	22						0
85	31%		2				12			31%		95
	2300	276	188		314		82	306		3000		
191	69%		1				1			69%		211
0				1	1	1						0
					6							
				50%	1	50%						
			0	3		3	0					

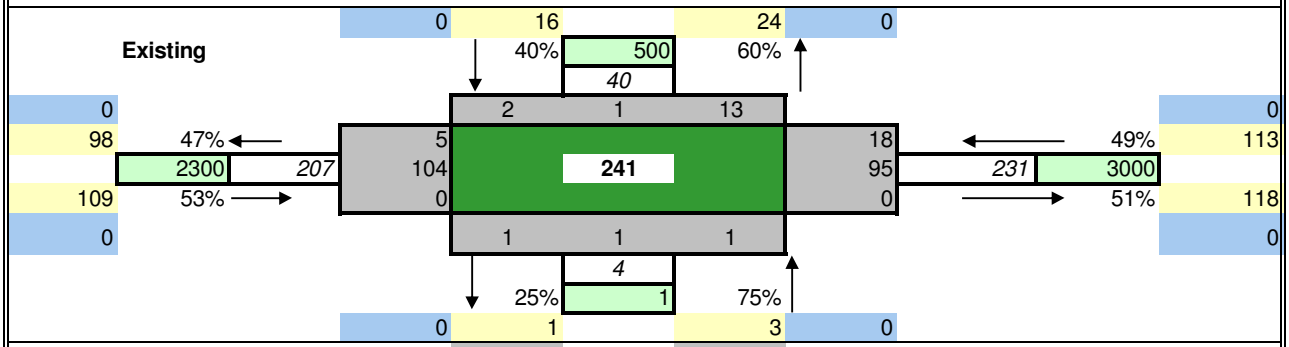
Future

				0		0						
				25	100.0%	15						
				65%	600	35%						
					48							
0				2	1	28						0
85	30%		2				14			32%		95
	2400	288	200		334		83	337		3300		
191	70%		1				1			68%		211
0	100.0%			1	1	1				97.1%		0
					6							
				49%	1	51%						
				3	100.0%	3						
				0		0						

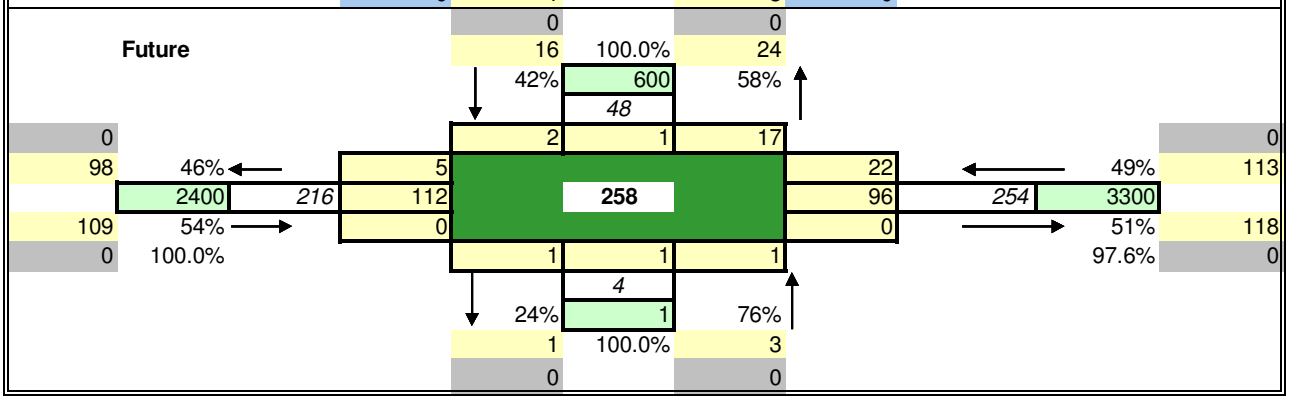
Future Turning Movement Calculation Sheet

N/S Street	Fresca Street	Time Period	PM
E/W Street	Nardo Avenue	Date	1/29/2014
Project	Solana Highlands		

Existing



Future



Future Turning Movement Calculation Sheet

N/S Street	Stevens Avenue	Time Period	AM
E/W Street	Nardo Avenue	Date	1/29/2014
Project	Solana Highlands		

Existing

			0	405		501	0					
				45%	9700	55%						
					906							
0				68	337	0						0
105	29%		106				0			100%		1
	3000	*363*	0		**1096**		0		*1*	10		
258	71%		152				1			0%		0
0				37	395	0						0
					922							
				53%	10200	47%						
			0	490		432	0					

Future

				0		0						
				405	100.0%	501						
				43%	11200	57%						
					1046							
0				77	374	0						0
105	29%		126				0			63%		1
	3300	*399*	0		**1244**		0		*1*	11		
258	71%		157				1			37%		0
0	100.1%			39	469	0				136.5%		0
					1040							
				51%	11500	49%						
				490	100.0%	432						
				0		0						

Future Turning Movement Calculation Sheet

N/S Street	Stevens Avenue	Time Period	PM
E/W Street	Nardo Avenue	Date	1/29/2014
Project	Solana Highlands		

Existing

			1	472		377	1					
				56%	9700	44%						
					849							
1				67	403	2						1
156	59%		41				0			0%		0
	3000	*263*	0		**1004**		0		*2*	10		
107	41%		66				0			100%		2
1				89	336	0						1
					894							
				52%	10200	48%						
			1	469		425	1					

Future

				1		1						
				472	99.8%	377						
				55%	11200	45%						
					980							
1				79	451	2						1
156	59%		50				0			0%		0
	3300	*289*	0		**1139**		0		*2*	11		
107	41%		68				0			100%		2
1	100.0%			93	396	0				100.0%		1
					1008							
				52%	11500	48%						
				469	100.0%	425						
				1		1						

Future Turning Movement Calculation Sheet

N/S Street	E. Solana Circle	Time Period	AM
E/W Street	Via De La Valle	Date	1/29/2014
Project	Solana Highlands		

Existing

			0	61		43	0					
				59%	650	41%						
					104							
0				23	0	38						0
455	37%		15				27			37%		458
	19700	*1214*	744		**1281**		431		*1241*	18400		
759	63%		0				0			63%		783
0				1	1	1						0
					3							
				0%	1	100%						
			0	0		3	0					

Future

				0		0						
				61	100.4%	43						
				59%	720	41%						
					115							
0				24	0	44						0
455	36%		16				31			36%		458
	22100	*1362*	856		**1445**		472		*1403*	20800		
759	64%		0				0			64%		783
0	100.5%			1	1	1				100.1%		0
					3							
				0%	1	100%						
				0	100.0%	3						
				0		0						

Future Turning Movement Calculation Sheet

N/S Street	E. Solana Circle	Time Period	PM
E/W Street	Via De La Valle	Date	1/29/2014
Project	Solana Highlands		

Existing

			0	32		71	0					
				31%	650	69%						
					103							
0				18	0	14						0
659	54%		16				54			55%		694
	19700	*1228*	553		**1298**		640		*1262*	18400		
569	46%		0				0			45%		568
0				1	1	1						0
					3							
				0%	1	100%						
			0	0		3	0					

Future

				0		0						
				32	100.5%	71						
				30%	720	70%						
					114							
0				19	0	16						0
659	53%		17				62			54%		694
	22100	*1378*	643		**1465**		705		*1427*	20800		
569	47%		0				0			46%		568
0	100.5%			1	1	1				100.0%		0
					3							
				0%	1	100%						
				0	100.0%	3						
				0		0						

Future Turning Movement Calculation Sheet

N/S Street	Valley Ave-Jimmy Durant B	Time Period	AM
E/W Street	Via De La Valle	Date	1/29/2014
Project	Solana Highlands		

Existing

			0	555		397	0					
				58%	10200	42%						
					952							
0				51	72	432						0
653	46%		43				312			48%		1227
	18400	1411	674		2812		584	2545		41200		
758	54%		41				331			52%		1318
0				18	42	212						0
					716							
				62%	20200	38%						
			0	444		272	0					

Future

				0		0						
				555	99.7%	397						
				60%	11500	40%						
					1073							
0				55	75	513						0
653	45%		43				341			47%		1227
	20800	1595	811		3177		640	2934		47500		
758	55%		39				363			53%		1318
0	100.6%			19	44	236				99.0%		0
					766							
				62%	21600	38%						
				444	101.2%	272						
				0		0						

Future Turning Movement Calculation Sheet

N/S Street	Valley Avenue-Jimmy Dura	Time Period	PM
E/W Street	Via De La Valle	Date	1/29/2014
Project	Solana Highlands		

Existing

			0	578		542	0					
				52%	10200	48%						
					1120							
0				70	100	408						0
787	57%		47				346			47%		1248
	18400	1387	530		3109		648	2651		41200		
600	43%		23				254			53%		1403
0				69	149	465						0
					1060							
				36%	20200	64%						
			0	377		683	0					

Future

				0		0						
				578	100.1%	542						
				52%	11500	48%						
					1263							
0				70	105	486						0
787	55%		48				399			47%		1248
	20800	1568	634		3501		723	3056		47500		
600	45%		23				274			53%		1403
0	100.2%			72	156	511				99.0%		0
					1133							
				35%	21600	65%						
				377	100.6%	683						
				0		0						

Future Turning Movement Calculation Sheet

N/S Street	Stevens Ave	Time Period	AM
E/W Street	Valley Ave	Date	9/17/2014
Project	Solana Highlands		

Existing

			0	461		419	0					
				52%	10200	48%						
					880							
0				1	390	70						0
3	50%		1				110			70%		261
	10	*6*	1		**1074**		1		*372*	4000		
3	50%		1				150			30%		111
0				1	308	40						0
					890							
				61%	10200	39%						
			0	541		349	0					

Future

				0		0						
				461	100.0%	419						
				52%	11500	48%						
					992							
0				2	442	77						0
3	52%		2				121			70%		261
	15	*9*	1		**1207**		2		*409*	4400		
3	48%		2				165			30%		111
0	100.0%			2	349	44				100.0%		0
					1003							
				61%	11500	39%						
				541	100.0%	349						
				0		0						

Future Turning Movement Calculation Sheet

N/S Street	Stevens Ave	Time Period	PM
E/W Street	Valley Ave	Date	9/17/2014
Project	Solana Highlands		

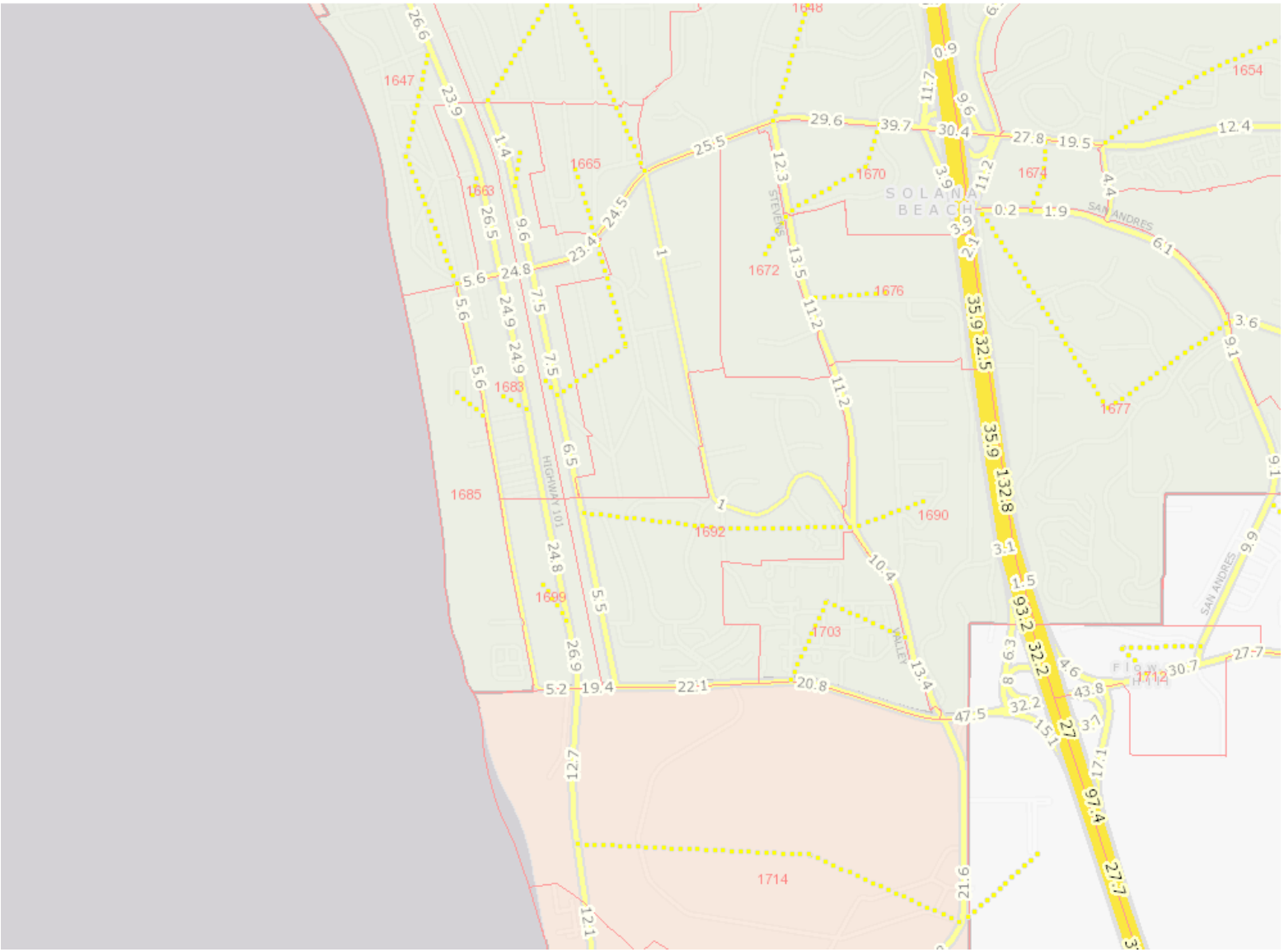
Existing

			0	401		447	0					
				47%	10200	53%						
					848							
0				1	330	70						0
3	50%		1				40			41%		111
	10	*6*	1		**1012**		1		*272*	4000		
3	50%		1				70			59%		161
0				1	406	90						0
					898							
				45%	10200	55%						
			0	401		497	0					

Future

				0		0						
				401	100.0%	447						
				47%	11500	53%						
					956							
0				2	374	76						0
3	52%		2				44			41%		111
	15	*9*	1		**1138**		2		*299*	4400		
3	48%		2				77			59%		161
0	100.0%			2	459	99				100.0%		0
					1012							
				45%	11500	55%						
				401	100.0%	497						
				0		0						

SANDAG SERIES 12 2035 MODEL



APPENDIX G: TRAFFIX WORKSHEETS-HORIZON YEAR (2035) CONDITIONS

Horizon Year Plus Project
AM

Scenario Report

Scenario:	Horizon Year Plus Project AM
Command:	Horizon Year Plus Project AM
Volume:	Horizon Year AM
Geometry:	Horizon Year AM
Impact Fee:	Default Impact Fee
Trip Generation:	Project AM
Trip Distribution:	Project
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Horizon Year Plus Project
AM

Trip Generation Report

Forecast for Project AM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1	Project	1.00	Project	8.00	34.00	8	34	42	100.0
	Zone 1 Subtotal		.....			8	34	42	100.0
TOTAL			.....			8	34	42	100.0

Horizon Year Plus Project
AM

Trip Distribution Report

Percent Of Trips Project

Zone	To Gates 1	2	3	4	5	6
1	10.0	5.0	35.0	10.0	10.0	30.0

Horizon Year Plus Project
AM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 S. Nardo Ave & Lomas Santa Fe	B	15.6	0.491	B	15.6	0.491	+ 0.000 D/V
# 2 Stevens Ave/Glencrest Ave & Lo	C	26.3	0.700	C	26.6	0.705	+ 0.267 D/V
# 3 S. Nardo Ave & E. Solana Circl	B	11.3	0.260	B	11.3	0.260	+ 0.015 D/V
# 4 Fresca St & S. Nardo Ave	B	11.2	0.063	B	11.3	0.064	+ 0.118 D/V
# 5 Stevens Ave & S. Nardo Ave	B	18.0	0.306	B	18.8	0.322	+ 0.816 D/V
# 6 E. Solana Circle & Via De La V	E	37.1	0.354	E	36.6	0.356	-0.434 D/V
# 7 Stevens Ave/Valley Ave & Via D	C	30.8	0.665	C	31.0	0.670	+ 0.199 D/V
# 20 Driveway A	A	0.6	0.000	A	0.7	0.000	+ 0.000 D/V
# 21 Driveway B	A	0.5	0.000	A	0.7	0.000	+ 0.000 D/V
# 24 Stevens Ave-Valley Ave/Valley	B	19.4	0.315	B	19.3	0.316	-0.099 D/V

Horizon Year Plus Project
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 S. Nardo Ave & Lomas Santa Fe

Cycle (sec):	69	Critical Vol./Cap.(X):	0.491
Loss Time (sec):	12	Average Delay (sec/veh):	15.6
Optimal Cycle:	45	Level Of Service:	B

Street Name:	S. Nardo Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	8	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	0 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	46	24	137	185	7	9	0	600	19	50	796	126
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	46	24	137	185	7	9	0	600	19	50	796	126
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	46	24	137	185	7	9	0	600	19	50	796	126
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	55	29	165	223	8	11	0	723	23	60	959	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	29	165	223	8	11	0	723	23	60	959	152
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	55	29	165	223	8	11	0	723	23	60	959	152
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.85	0.85	0.71	0.92	0.92	1.00	0.95	0.95	0.95	0.93	0.93
Lanes:	0.22	0.12	0.66	1.00	0.44	0.56	1.00	1.94	0.06	1.00	1.73	0.27
Final Sat.:	359	187	1070	1355	761	979	1900	3482	110	1805	3051	483
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.15	0.16	0.01	0.01	0.00	0.21	0.21	0.03	0.31	0.31
Crit Moves:				****				****		****		
Green Time:	23.0	23.0	23.0	23.0	23.0	23.0	0.0	29.0	29.0	5.0	34.0	34.0
Volume/Cap:	0.46	0.46	0.46	0.49	0.03	0.03	0.00	0.49	0.49	0.46	0.64	0.64
Delay/Veh:	18.8	18.8	18.8	19.2	15.5	15.5	0.0	14.9	14.9	33.3	13.7	13.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.8	18.8	18.8	19.2	15.5	15.5	0.0	14.9	14.9	33.3	13.7	13.7
LOS by Move:	B	B	B	B	B	B	A	B	B	C	B	B
HCM2kAvgQ:	5	5	5	4	0	0	0	6	6	1	9	9

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Stevens Ave/Glencrest Ave & Lomas Santa Fe

Cycle (sec):	112	Critical Vol./Cap.(X):	0.705
Loss Time (sec):	14	Average Delay (sec/veh):	26.6
Optimal Cycle:	67	Level Of Service:	C

Street Name:	Stevens Ave/Glencrest Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	8	1	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1! 0	1	0 0	0 0	0	1 0	1 1	0	2 0	2 0	0
Volume Module:												
Base Vol:	110	0	324	0	0	0	0	805	160	496	792	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	0	324	0	0	0	0	805	160	496	792	0
Added Vol:	0	0	10	0	0	0	0	0	0	2	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	110	0	334	0	0	0	0	805	160	498	792	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	128	0	388	0	0	0	0	936	186	579	921	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	0	388	0	0	0	0	936	186	579	921	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	0	388	0	0	0	0	936	186	579	921	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	1.00	1.00	1.00	1.00	0.93	0.93	0.92	0.95	1.00
Lanes:	1.25	0.00	1.75	0.00	0.00	0.00	1.00	1.67	0.33	2.00	2.00	0.00
Final Sat.:	2078	0	2918	0	0	0	1900	2936	584	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.13	0.00	0.00	0.00	0.00	0.32	0.32	0.17	0.26	0.00
Crit Moves:			****					****		****		
Green Time:	21.1	0.0	21.1	0.0	0.0	0.0	0.0	50.6	50.6	26.3	76.9	0.0
Volume/Cap:	0.33	0.00	0.71	0.00	0.00	0.00	0.00	0.71	0.71	0.71	0.37	0.00
Delay/Veh:	39.4	0.0	45.7	0.0	0.0	0.0	0.0	26.2	26.2	42.1	7.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.4	0.0	45.7	0.0	0.0	0.0	0.0	26.2	26.2	42.1	7.5	0.0
LOS by Move:	D	A	D	A	A	A	A	C	C	D	A	A
HCM2kAvgQ:	3	0	7	0	0	0	0	16	16	11	7	0

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 S. Nardo Ave & E. Solana Circle/Nardito Ln

Average Delay (sec/veh): 9.8 Worst Case Level Of Service: B[11.3]

Street Name:	S. Nardo Ave									E. Solana Circle/Nardito Ln							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	18	2	27	4	2	0	0	138	10	14	89	0								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	18	2	27	4	2	0	0	138	10	14	89	0								
Added Vol:	0	0	1	0	0	0	0	0	0	3	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	18	2	28	4	2	0	0	138	10	17	89	0								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69								
PHF Volume:	26	3	41	6	3	0	0	200	14	25	129	0								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	26	3	41	6	3	0	0	200	14	25	129	0								
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	6.5	6.2	7.1	6.5	xxxxx								
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	4.0	3.3	3.5	4.0	xxxxx								
Capacity Module:																				
Cnflict Vol:	3	xxxx	xxxxx	43	xxxx	xxxxx	xxxx	110	3	197	90	xxxxx								
Potent Cap.:	1632	xxxx	xxxxx	1578	xxxx	xxxxx	xxxx	784	1087	766	804	xxxxx								
Move Cap.:	1632	xxxx	xxxxx	1578	xxxx	xxxxx	xxxx	768	1087	595	788	xxxxx								
Volume/Cap:	0.02	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	0.26	0.01	0.04	0.16	xxxx								
Level Of Service Module:																				
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Control Del:	7.2	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*								
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT										
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	784	749	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	1.1	0.8	xxxx	xxxxx								
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	11.3	11.0	xxxx	xxxxx								
Shared LOS:	*	*	*	A	*	*	*	*	B	B	*	*								
ApproachDel:	xxxxxx			xxxxxx			11.3			11.0										
ApproachLOS:	*			*			B			B										

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Fresca St & S. Nardo Ave

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: B[11.3]

Street Name:	Fresca St									Nardo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0	0	0	28	0	2	2	200	0	0	83	14								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	0	0	0	28	0	2	2	200	0	0	83	14								
Added Vol:	0	0	0	0	0	0	0	7	0	0	3	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	0	0	0	28	0	2	2	207	0	0	86	14								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73								
PHF Volume:	0	0	0	38	0	3	3	284	0	0	118	19								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	0	0	0	38	0	3	3	284	0	0	118	19								
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx	416	416	127	137	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Potent Cap.:	xxxx	xxxx	xxxxx	597	530	928	1459	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Move Cap.:	xxxx	xxxx	xxxxx	596	529	928	1459	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	xxxx	xxxx	xxxx	0.06	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*								
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT										
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	610	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	11.3	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*								
ApproachDel:	xxxxxx			11.3			xxxxxx			xxxxxx										
ApproachLOS:	*			B			*			*										

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Stevens Ave & S. Nardo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.322
Loss Time (sec): 12 Average Delay (sec/veh): 18.8
Optimal Cycle: 32 Level Of Service: B

Street Name:	Stevens Ave									S. Nardo Ave		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 0	1	0 1	1 0	1	0 0	0 1	1	0 0	0 0
Volume Module:												
Base Vol:	39	469	0	0	374	77	126	0	157	1	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	39	469	0	0	374	77	126	0	157	1	0	0
Added Vol:	4	0	0	0	0	2	10	0	17	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	43	469	0	0	374	79	136	0	174	1	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	47	510	0	0	407	86	148	0	189	1	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	510	0	0	407	86	148	0	189	1	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	47	510	0	0	407	86	148	0	189	1	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.93	0.93	0.95	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	2.00	0.00	1.00	1.65	0.35	1.00	0.00	1.00	1.00	0.00	0.00
Final Sat.:	1805	3610	0	1900	2903	613	1805	0	1615	1805	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.00	0.00	0.14	0.14	0.08	0.00	0.12	0.00	0.00	0.00
Crit Moves:	****				****				****	****		
Green Time:	8.0	51.5	0.0	0.0	43.4	43.4	36.5	0.0	36.3	0.2	0.0	0.0
Volume/Cap:	0.32	0.27	0.00	0.00	0.32	0.32	0.22	0.00	0.32	0.32	0.00	0.00
Delay/Veh:	44.7	13.8	0.0	0.0	18.7	18.7	22.1	0.0	23.3	98.1	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.7	13.8	0.0	0.0	18.7	18.7	22.1	0.0	23.3	98.1	0.0	0.0
LOS by Move:	D	B	A	A	B	B	C	A	C	F	A	A
HCM2kAvgQ:	1	4	0	0	5	5	3	0	4	0	0	0

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 E. Solana Circle & Via De La Valle

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: E[36.6]

Street Name:	E. Solana Circle								Via De La Valle			
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L - T - R				L - T - R				L - T - R				L - T - R			
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0
Volume Module:																	
Base Vol:	0	0	0	44	0	24	16	856	0	0	472	31					
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Initial Bse:	0	0	0	44	0	24	16	856	0	0	472	31					
Added Vol:	0	0	0	0	0	3	1	0	0	0	0	0					
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0					
Initial Fut:	0	0	0	44	0	27	17	856	0	0	472	31					
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92					
PHF Volume:	0	0	0	48	0	29	18	930	0	0	513	34					
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0					
FinalVolume:	0	0	0	48	0	29	18	930	0	0	513	34					
Critical Gap Module:																	
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Capacity Module:																	
Cnflict Vol:	xxxx	xxxx	xxxxx	1497	1497	530	547	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Potent Cap.:	xxxx	xxxx	xxxxx	136	124	553	1033	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Move Cap.:	xxxx	xxxx	xxxxx	134	122	553	1033	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Volume/Cap:	xxxx	xxxx	xxxx	0.36	0.00	0.05	0.02	xxxx	xxxx	xxxx	xxxx	xxxx					
Level Of Service Module:																	
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*					
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT							
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	189	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	36.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Shared LOS:	*	*	*	*	E	*	*	*	*	*	*	*					
ApproachDel:	xxxxxx				36.6		xxxxxx			xxxxxx							
ApproachLOS:		*			E			*			*						

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Stevens Ave/Valley Ave & Via De La Valle

Cycle (sec): 98 Critical Vol./Cap.(X): 0.670
Loss Time (sec): 12 Average Delay (sec/veh): 31.0
Optimal Cycle: 55 Level Of Service: C

Street Name:	Stevens Ave/Valley Ave						Via De La Valle					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	5	0	5	0	0	5	10	0	5	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	19	44	236	513	75	55	45	811	45	363	640	341
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	44	236	513	75	55	45	811	45	363	640	341
Added Vol:	0	0	0	15	2	0	0	0	0	0	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	44	236	528	77	55	45	811	45	363	640	345
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	19	45	241	539	79	56	46	828	46	370	653	352
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	45	241	539	79	56	46	828	46	370	653	352
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	45	241	539	79	56	46	828	46	370	653	352
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.75	0.92	1.00	0.85	0.95	0.94	0.94	0.92	0.90	0.90
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.89	0.11	2.00	1.30	0.70
Final Sat.:	1805	1900	2842	3502	1900	1615	1805	3393	188	3502	2224	1199
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.08	0.15	0.04	0.03	0.03	0.24	0.24	0.11	0.29	0.29
Crit Moves:			****	****				****		****		
Green Time:	12.4	12.4	12.4	22.5	22.5	22.5	7.6	35.7	35.7	15.5	43.6	43.6
Volume/Cap:	0.08	0.19	0.67	0.67	0.18	0.15	0.33	0.67	0.67	0.67	0.66	0.66
Delay/Veh:	38.0	38.7	45.7	36.6	30.5	30.3	44.2	27.6	27.6	42.1	22.5	22.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.0	38.7	45.7	36.6	30.5	30.3	44.2	27.6	27.6	42.1	22.5	22.5
LOS by Move:	D	D	D	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	1	1	5	8	2	1	2	12	12	7	13	13

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
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Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A

Street Name:	Driveway A									Nardo Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	11	0	30	0	0	0	0	202	5	6	87	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	0	30	0	0	0	0	202	5	6	87	0
Added Vol:	5	0	7	0	0	0	0	0	1	2	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	0	37	0	0	0	0	202	6	8	89	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	17	0	40	0	0	0	0	220	7	9	97	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	17	0	40	0	0	0	0	220	7	9	97	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	19	0	44	0	0	0	0	220	7	10	97	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	328	xxxx	223	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	226	xxxx	xxxxx
Potent Cap.:	684	xxxx	1068	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1338	xxxx	xxxxx
Adj Cap:	0.99	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	678	xxxx	1068	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1338	xxxx	xxxxx
Level Of Service Module:												
Control Del:	5.4	xxxx	3.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	910	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1338	xxxx	xxxxx
Shrd ConDel:	xxxxx	4.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.9	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:		4.2			xxxxxx			0.0			0.2	
ApproachLOS:		A			*			A			A	

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Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A

Street Name:	Driveway B									Nardo Avenue							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	3		0		28	0		0		0	0		265		2	19		109		0
Growth Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	3		0		28	0		0		0	0		265		2	19		109		0
Added Vol:	2		0		20	0		0		0	0		7		0	5		2		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	5		0		48	0		0		0	0		272		2	24		111		0
User Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92		0.92
PHF Volume:	5		0		52	0		0		0	0		296		2	26		121		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	5		0		52	0		0		0	0		296		2	26		121		0
Adjusted Volume Module:																				
Grade:	0%					0%					0%					0%				
% Cycle/Cars:	xxxx		xxxx			xxxx		xxxx			xxxx		xxxx			xxxx		xxxx		
% Truck/Comb:	xxxx		xxxx			xxxx		xxxx			xxxx		xxxx			xxxx		xxxx		
PCE Adj:	1.10		1.10		1.10	1.10		1.10		1.10	1.10		1.00		1.00	1.10		1.00		1.00
Cycl/Car PCE:	xxxx		xxxx			xxxx		xxxx			xxxx		xxxx			xxxx		xxxx		
Trck/Cmb PCE:	xxxx		xxxx			xxxx		xxxx			xxxx		xxxx			xxxx		xxxx		
Adj Vol.:	6		0		57	0		0		0	0		296		2	29		121		0
Critical Gap Module:																				
MoveUp Time:	3.4	xxxx		2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.1	xxxx	xxxxx						
Critical Gp:	6.5	xxxx		5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		5.0	xxxx	xxxxx						
Capacity Module:																				
Cnflict Vol:	443	xxxx		297	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		298	xxxx	xxxxx						
Potent Cap.:	586	xxxx		979	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1236	xxxx	xxxxx						
Adj Cap:	0.98	xxxx		1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1.00	xxxx	xxxxx						
Move Cap.:	572	xxxx		979	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1236	xxxx	xxxxx						
Level Of Service Module:																				
Control Del:	6.4	xxxx		3.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.0	xxxx	xxxxx						
LOS by Move:	*		*		*	*		*		*	*		*		*	A		*		*
Movement:	LT -		LTR -		RT	LT -		LTR -		RT	LT -		LTR -		RT	LT -		LTR -		RT
Shared Cap.:	xxxx		918	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1236	xxxx	xxxxx					
Shrd ConDel:	xxxxx		4.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.3	xxxx	xxxxx						
Shared LOS:	*		A		*	*		*		*	*		A		*	*				
ApproachDel:			4.2			xxxxxx					0.0					0.6				
ApproachLOS:			A					*			A					A				

Horizon Year Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Stevens Ave-Valley Ave/Valley Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.316
Loss Time (sec): 8 Average Delay (sec/veh): 19.3
Optimal Cycle: 24 Level Of Service: B

Street Name:	Stevens Ave-Valley Ave									Valley Ave							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Permitted					Permitted				
Rights:	Include					Include					Include					Include				
Min. Green:	0		0		0	0		0		0	0		0		0	0		0		0
Y+R:	4.0		4.0		4.0	4.0		4.0		4.0	4.0		4.0		4.0	4.0		4.0		4.0
Lanes:	0	0	1	1	0	1	0	2	0	0	0	0	0	0	0	1	0	0	0	1
Volume Module:																				
Base Vol:	0		349		44	77		442		0	0		0		0	165		0		121
Growth Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0		349		44	77		442		0	0		0		0	165		0		121
Added Vol:	0		4		0	0		17		0	0		0		0	0		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	0		353		44	77		459		0	0		0		0	165		0		121
User Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92		0.92
PHF Volume:	0		384		48	84		499		0	0		0		0	179		0		132
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	0		384		48	84		499		0	0		0		0	179		0		132
PCE Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
FinalVolume:	0		384		48	84		499		0	0		0		0	179		0		132
Saturation Flow Module:																				
Sat/Lane:	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900		1900
Adjustment:	1.00		0.93		0.93	0.95		0.95		1.00	1.00		1.00		1.00	0.77		1.00		0.85
Lanes:	0.00		1.78		0.22	1.00		2.00		0.00	0.00		0.00		0.00	1.00		0.00		1.00
Final Sat.:	0		3155		393	1805		3610		0	0		0		0	1461		0		1615
Capacity Analysis Module:																				
Vol/Sat:	0.00		0.12		0.12	0.05		0.14		0.00	0.00		0.00		0.00	0.12		0.00		0.08
Crit Moves:			****			****										****				
Green Time:	0.0		38.5		38.5	14.7		53.2		0.0	0.0		0.0		0.0	38.8		0.0		38.8
Volume/Cap:	0.00		0.32		0.32	0.32		0.26		0.00	0.00		0.00		0.00	0.32		0.00		0.21
Delay/Veh:	0.0		21.7		21.7	38.9		12.8		0.0	0.0		0.0		0.0	21.6		0.0		20.5
User DelAdj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	0.0		21.7		21.7	38.9		12.8		0.0	0.0		0.0		0.0	21.6		0.0		20.5
LOS by Move:	A		C		C	D		B		A	A		A		A	C		A		C
HCM2kAvgQ:	0		5		5	2		4		0	0		0		0	4		0		3

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
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Scenario Report

Scenario:	Horizon Year Plus Project PM
Command:	Horizon Year PM
Volume:	Horizon Year PM
Geometry:	Horizon Year PM
Impact Fee:	Default Impact Fee
Trip Generation:	Project PM
Trip Distribution:	Project
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Horizon Year Plus Project
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Trip Generation Report

Forecast for Project PM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1	Project	1.00	Project	37.00	16.00	37	16	53	100.0
	Zone 1 Subtotal					37	16	53	100.0
TOTAL						37	16	53	100.0

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Trip Distribution Report

Percent Of Trips Project

Zone	To Gates 1	2	3	4	5	6
1	10.0	5.0	35.0	10.0	10.0	30.0

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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 S. Nardo Ave & Lomas Santa Fe	B	11.8	0.418	B	11.8	0.418	+ 0.000 D/V
# 2 Stevens Ave/Glencrest Ave & Lo	C	25.9	0.628	C	26.2	0.634	+ 0.256 D/V
# 3 S. Nardo Ave & E. Solana Circl	B	10.7	0.114	B	10.7	0.114	+ 0.051 D/V
# 4 Fresca St & S. Nardo Ave	A	9.9	0.026	B	10.0	0.026	+ 0.087 D/V
# 5 Stevens Ave & S. Nardo Ave	B	14.4	0.313	B	15.6	0.338	+ 1.232 D/V
# 6 E. Solana Circle & Via De La V	D	26.0	0.128	D	25.9	0.130	-0.125 D/V
# 7 Stevens Ave/Valley Ave & Via D	D	36.3	0.825	D	36.7	0.834	+ 0.408 D/V
# 20 Driveway A	A	0.4	0.000	A	0.5	0.000	+ 0.000 D/V
# 21 Driveway B	A	0.5	0.000	A	0.7	0.000	+ 0.000 D/V
# 24 Stevens Ave-Valley Ave/Valley	B	13.0	0.299	B	12.8	0.305	-0.214 D/V

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 S. Nardo Ave & Lomas Santa Fe

Cycle (sec): 69 Critical Vol./Cap.(X): 0.418
Loss Time (sec): 12 Average Delay (sec/veh): 11.8
Optimal Cycle: 45 Level Of Service: B

Street Name:	S. Nardo Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	8	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0	0	1	0	1	0	1
Volume Module:												
Base Vol:	22	14	40	130	7	0	17	703	15	45	826	133
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	22	14	40	130	7	0	17	703	15	45	826	133
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	22	14	40	130	7	0	17	703	15	45	826	133
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	23	15	42	137	7	0	18	740	16	47	869	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	15	42	137	7	0	18	740	16	47	869	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	15	42	137	7	0	18	740	16	47	869	140
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.84	0.84	0.84	0.78	1.00	1.00	0.95	0.95	0.95	0.95	0.93	0.93
Lanes:	0.29	0.18	0.53	1.00	1.00	0.00	1.00	1.96	0.04	1.00	1.72	0.28
Final Sat.:	462	294	840	1480	1900	0	1805	3524	75	1805	3044	490
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.05	0.09	0.00	0.00	0.01	0.21	0.21	0.03	0.29	0.29
Crit Moves:		****					****				****	
Green Time:	8.0	8.0	8.0	8.0	8.0	0.0	5.0	39.2	39.2	9.8	44.0	44.0
Volume/Cap:	0.43	0.43	0.43	0.80	0.03	0.00	0.14	0.37	0.37	0.18	0.45	0.45
Delay/Veh:	30.0	30.0	30.0	52.1	27.1	0.0	30.5	8.3	8.3	26.4	6.5	6.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.0	30.0	30.0	52.1	27.1	0.0	30.5	8.3	8.3	26.4	6.5	6.5
LOS by Move:	C	C	C	D	C	A	C	A	A	C	A	A
HCM2kAvgQ:	2	2	2	5	0	0	0	5	5	1	6	6

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Stevens Ave/Glencrest Ave & Lomas Santa Fe

Cycle (sec): 112 Critical Vol./Cap.(X): 0.634
Loss Time (sec): 14 Average Delay (sec/veh): 26.2
Optimal Cycle: 57 Level Of Service: C

Street Name:	Stevens Ave/Glencrest Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	8	1	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	0	1	0	1
Volume Module:												
Base Vol:	262	0	459	0	0	0	0	871	120	267	711	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	262	0	459	0	0	0	0	871	120	267	711	0
Added Vol:	0	0	5	0	0	0	0	0	0	11	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	262	0	464	0	0	0	0	871	120	278	711	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	276	0	488	0	0	0	0	917	126	293	748	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	276	0	488	0	0	0	0	917	126	293	748	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	276	0	488	0	0	0	0	917	126	293	748	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	0.93	0.93	0.92	0.95	1.00
Lanes:	1.36	0.00	1.64	0.00	0.00	0.00	1.00	1.76	0.24	2.00	2.00	0.00
Final Sat.:	2295	0	2765	0	0	0	1900	3116	429	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.12	0.00	0.18	0.00	0.00	0.00	0.00	0.29	0.29	0.08	0.21	0.00
Crit Moves:			****					****		****		
Green Time:	31.2	0.0	31.2	0.0	0.0	0.0	0.0	52.0	52.0	14.8	66.8	0.0
Volume/Cap:	0.43	0.00	0.63	0.00	0.00	0.00	0.00	0.63	0.63	0.63	0.35	0.00
Delay/Veh:	33.3	0.0	36.5	0.0	0.0	0.0	0.0	23.6	23.6	48.9	11.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.3	0.0	36.5	0.0	0.0	0.0	0.0	23.6	23.6	48.9	11.6	0.0
LOS by Move:	C	A	D	A	A	A	A	C	C	D	B	A
HCM2kAvgQ:	6	0	9	0	0	0	0	14	14	6	7	0

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 S. Nardo Ave & E. Solana Circle/Nardito Ln

Average Delay (sec/veh): 8.9 Worst Case Level Of Service: B[10.7]

Street Name:	S. Nardo Ave									E. Solana Circle/Nardito Ln								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	1	0	0	0
Volume Module:																				
Base Vol:	32		3		15	1		0		6	2		68		26	31		74		0
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	32		3		15	1		0		6	2		68		26	31		74		0
Added Vol:	0		0		4	0		0		0	0		0		0	2		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	32		3		19	1		0		6	2		68		26	33		74		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.84	0.84		0.84		0.84	0.84		0.84		0.84	0.84		0.84		0.84	0.84		0.84	
PHF Volume:	38		4		23	1		0		7	2		81		31	39		88		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	38		4		23	1		0		7	2		81		31	39		88		0
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx			4.1	xxxx	xxxxx			7.1		6.5		6.2	7.1		6.5	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx			2.2	xxxx	xxxxx			3.5		4.0		3.3	3.5		4.0	xxxxx	
Capacity Module:																				
Cnflict Vol:	7	xxxx	xxxxx			26	xxxx	xxxxx			141		108		4	153		101	xxxxx	
Potent Cap.:	1627	xxxx	xxxxx			1601	xxxx	xxxxx			833		786		1086	819		793	xxxxx	
Move Cap.:	1627	xxxx	xxxxx			1601	xxxx	xxxxx			747		766		1086	717		774	xxxxx	
Volume/Cap:	0.02	xxxx		xxxx		0.00	xxxx		xxxx		0.00		0.11		0.03	0.05		0.11		xxxx
Level Of Service Module:																				
2Way95thQ:	0.1	xxxx	xxxxx			0.0	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Control Del:	7.3	xxxx	xxxxx			7.3	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
LOS by Move:	A		*		*	A		*		*	*		*		*	*		*		*
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx		832	xxxxx		755	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx		0.5	xxxxx		0.6	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx		10.0	xxxxx		10.7	xxxx	xxxxx		
Shared LOS:	*		*		*	*		*		*	*		B		*	B		*		*
ApproachDel:	xxxxxx					xxxxxx					10.0					10.7				
ApproachLOS:	*					*					B					B				

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Fresca St & S. Nardo Ave

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[10.0]

Street Name:	Fresca St									Nardo Ave								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0		0		0	17		0		2	5		112		0	0		96		22
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	0		0		0	17		0		2	5		112		0	0		96		22
Added Vol:	0		0		0	0		0		0	0		4		0	0		8		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	0		0		0	17		0		2	5		116		0	0		104		22
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	0		0		0	19		0		2	6		129		0	0		116		24
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	0		0		0	19		0		2	6		129		0	0		116		24
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx			6.4		6.5		6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx			3.5		4.0		3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx			268		268		128	140	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx			726		642		928	1456	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx			724		639		928	1456	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx		xxxx		0.03	0.00		0.00		0.00	xxxx		xxxx	xxxx		xxxx			
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.0	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*		*		*	*		*		*	A		*		*	*		*		*
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx		741	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx		0.1	xxxxx		0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx			xxxxx		10.0	xxxxx		7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*		*		*	*		B		*	A		*		*	*		*		*
ApproachDel:	xxxxxx					10.0					xxxxxx					xxxxxx				
ApproachLOS:	*					B					*					*				

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Stevens Ave & S. Nardo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.338
Loss Time (sec): 12 Average Delay (sec/veh): 15.6
Optimal Cycle: 32 Level Of Service: B

Street Name:	Stevens Ave									S. Nardo Ave		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 0	1	0 1	1 0	1	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	93	396	0	2	457	79	50	0	68	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	93	396	0	2	457	79	50	0	68	0	0	0
Added Vol:	19	0	0	0	0	11	5	0	8	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	112	396	0	2	457	90	55	0	76	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	126	445	0	2	513	101	62	0	85	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	445	0	2	513	101	62	0	85	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	126	445	0	2	513	101	62	0	85	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	0.95	0.93	0.93	0.95	1.00	0.85	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	1.00	1.67	0.33	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1805	3610	0	1805	2941	579	1805	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.12	0.00	0.00	0.17	0.17	0.03	0.00	0.05	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green Time:	20.6	71.6	0.0	0.7	51.7	51.7	15.7	0.0	15.7	0.0	0.0	0.0
Volume/Cap:	0.34	0.17	0.00	0.17	0.34	0.34	0.22	0.00	0.34	0.00	0.00	0.00
Delay/Veh:	34.4	4.6	0.0	55.5	14.2	14.2	37.2	0.0	38.4	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.4	4.6	0.0	55.5	14.2	14.2	37.2	0.0	38.4	0.0	0.0	0.0
LOS by Move:	C	A	A	E	B	B	D	A	D	A	A	A
HCM2kAvgQ:	3	2	0	0	6	6	2	0	3	0	0	0

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 E. Solana Circle & Via De La Valle

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: D[25.9]

Street Name:	E. Solana Circle								Via De La Valle			
Approach:	North Bound				South Bound				East Bound			West Bound
Movement:	L - T - R				L - T - R				L - T - R			L - T - R
Control:	Stop Sign				Stop Sign				Uncontrolled			Uncontrolled
Rights:	Include				Include				Include			Include
Lanes:	0 0	0	0	0	0 0	1!	0	0	1 0	0	1	0 0 0 0 1 0
Volume Module:												
Base Vol:	0	0	0	16	0	19	17	643	0	0	705	62
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	16	0	19	17	643	0	0	705	62
Added Vol:	0	0	0	0	0	2	4	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	16	0	21	21	643	0	0	705	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	0	0	17	0	22	22	684	0	0	750	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	17	0	22	22	684	0	0	750	66
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1512	1512	783	816	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	134	121	397	821	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	131	118	397	821	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.13	0.00	0.06	0.03	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	211	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	25.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	D	*	*	*	*	*	*	*
ApproachDel:	xxxxxx				25.9		xxxxxx			xxxxxx		
ApproachLOS:		*			D			*			*	

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Stevens Ave/Valley Ave & Via De La Valle

Cycle (sec): 98 Critical Vol./Cap.(X): 0.834
Loss Time (sec): 12 Average Delay (sec/veh): 36.7
Optimal Cycle: 85 Level Of Service: D

Street Name:	Stevens Ave/Valley Ave						Via De La Valle					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	5	0	5	0	0	5	10	0	5	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	72	156	511	486	105	75	48	634	23	274	723	399
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	72	156	511	486	105	75	48	634	23	274	723	399
Added Vol:	0	2	0	7	1	0	0	0	0	0	0	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	72	158	511	493	106	75	48	634	23	274	723	416
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	77	170	549	530	114	81	52	682	25	295	777	447
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	170	549	530	114	81	52	682	25	295	777	447
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	170	549	530	114	81	52	682	25	295	777	447
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.75	0.92	1.00	0.85	0.95	0.95	0.95	0.92	0.90	0.90
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.93	0.07	2.00	1.27	0.73
Final Sat.:	1805	1900	2842	3502	1900	1615	1805	3466	126	3502	2165	1246
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.19	0.15	0.06	0.05	0.03	0.20	0.20	0.08	0.36	0.36
Crit Moves:			****	****			****				****	
Green Time:	22.3	22.3	22.3	17.4	17.4	17.4	5.0	32.4	32.4	13.9	41.3	41.3
Volume/Cap:	0.19	0.39	0.85	0.85	0.34	0.28	0.56	0.59	0.59	0.59	0.85	0.85
Delay/Veh:	30.8	32.7	46.8	49.9	35.8	35.4	53.0	28.1	28.1	41.4	30.6	30.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.8	32.7	46.8	49.9	35.8	35.4	53.0	28.1	28.1	41.4	30.6	30.6
LOS by Move:	C	C	D	D	D	D	D	C	C	D	C	C
HCM2kAvgQ:	2	5	12	9	3	2	2	10	10	5	20	20

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
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Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: A

Street Name:	Driveway A									Nardo Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	3	0	19	0	0	0	0	119	7	10	99	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	0	19	0	0	0	0	119	7	10	99	0
Added Vol:	2	0	3	0	0	0	0	1	3	7	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	22	0	0	0	0	120	10	17	100	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	5	0	24	0	0	0	0	130	11	18	109	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	5	0	24	0	0	0	0	130	11	18	109	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	6	0	26	0	0	0	0	130	11	20	109	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	263	xxxx	136	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	141	xxxx	xxxxx
Potent Cap.:	746	xxxx	1182	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1468	xxxx	xxxxx
Adj Cap:	0.99	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	735	xxxx	1182	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1468	xxxx	xxxxx
Level Of Service Module:												
Control Del:	4.9	xxxx	3.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	1062	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1468	xxxx	xxxxx
Shrd ConDel:	xxxxx	3.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.7	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	3.5			xxxxxx			0.0			0.4		
ApproachLOS:	A			*			A			A		

Horizon Year Plus Project
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Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A

Street Name:	Driveway B									Nardo Avenue							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	4		0		22	0		0		0	0		129		3	29		157		0
Growth Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	4		0		22	0		0		0	0		129		3	29		157		0
Added Vol:	1		0		10	0		0		0	0		3		1	22		7		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	5		0		32	0		0		0	0		132		4	51		164		0
User Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92		0.92
PHF Volume:	5		0		35	0		0		0	0		143		4	55		178		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	5		0		35	0		0		0	0		143		4	55		178		0
Adjusted Volume Module:																				
Grade:	0%					0%					0%					0%				
% Cycle/Cars:	xxxx		xxxx			xxxx		xxxx			xxxx		xxxx			xxxx		xxxx		
% Truck/Comb:	xxxx		xxxx			xxxx		xxxx			xxxx		xxxx			xxxx		xxxx		
PCE Adj:	1.10		1.10		1.10	1.10		1.10		1.10	1.10		1.00		1.00	1.10		1.00		1.00
Cycl/Car PCE:	xxxx		xxxx			xxxx		xxxx			xxxx		xxxx			xxxx		xxxx		
Trck/Cmb PCE:	xxxx		xxxx			xxxx		xxxx			xxxx		xxxx			xxxx		xxxx		
Adj Vol.:	6		0		38	0		0		0	0		143		4	61		178		0
Critical Gap Module:																				
MoveUp Time:	3.4	xxxx		2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.1	xxxx	xxxxx						
Critical Gp:	6.5	xxxx		5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		5.0	xxxx	xxxxx						
Capacity Module:																				
Cnflict Vol:	379	xxxx		146	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		148	xxxx	xxxxx						
Potent Cap.:	638	xxxx		1168	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1458	xxxx	xxxxx						
Adj Cap:	0.95	xxxx		1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1.00	xxxx	xxxxx						
Move Cap.:	609	xxxx		1168	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1458	xxxx	xxxxx						
Level Of Service Module:																				
Control Del:	6.0	xxxx		3.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.6	xxxx	xxxxx						
LOS by Move:	*		*		*	*		*		*	*		*		*	A		*		*
Movement:	LT -	LTR -	RT			LT -	LTR -	RT			LT -	LTR -	RT			LT -	LTR -	RT		
Shared Cap.:	xxxx	1039	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			1458	xxxx	xxxxx		
Shrd ConDel:	xxxxx	3.6	xxxxx	xxxxx		xxxx	xxxx	xxxxx	xxxxx		xxxx	xxxx	xxxxx			2.9	xxxx	xxxxx		
Shared LOS:	*		A		*	*		*		*	*		*		*	A		*		*
ApproachDel:		3.6					xxxxxx					0.0					0.7			
ApproachLOS:		A					*					A					A			

Horizon Year Plus Project
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Stevens Ave-Valley Ave/Valley Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.305
Loss Time (sec): 8 Average Delay (sec/veh): 12.8
Optimal Cycle: 24 Level Of Service: B

Street Name:	Stevens Ave-Valley Ave									Valley Ave							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Permitted					Permitted				
Rights:	Include					Include					Include					Include				
Min. Green:	0		0		0	0		0		0	0		0		0	0		0		0
Y+R:	4.0		4.0		4.0	4.0		4.0		4.0	4.0		4.0		4.0	4.0		4.0		4.0
Lanes:	0	0	1	1	0	1	0	2	0	0	0	0	0	0	0	1	0	0	0	1
Volume Module:																				
Base Vol:	0		459		99	76		374		0	0		0		0	77		0		44
Growth Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0		459		99	76		374		0	0		0		0	77		0		44
Added Vol:	0		19		0	0		8		0	0		0		0	0		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	0		478		99	76		382		0	0		0		0	77		0		44
User Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92		0.92
PHF Volume:	0		520		108	83		415		0	0		0		0	84		0		48
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	0		520		108	83		415		0	0		0		0	84		0		48
PCE Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
FinalVolume:	0		520		108	83		415		0	0		0		0	84		0		48
Saturation Flow Module:																				
Sat/Lane:	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900		1900
Adjustment:	1.00		0.93		0.93	0.95		0.95		1.00	1.00		1.00		1.00	0.78		1.00		0.85
Lanes:	0.00		1.66		0.34	1.00		2.00		0.00	0.00		0.00		0.00	1.00		0.00		1.00
Final Sat.:	0		2913		603	1805		3610		0	0		0		0	1480		0		1615
Capacity Analysis Module:																				
Vol/Sat:	0.00		0.18		0.18	0.05		0.12		0.00	0.00		0.00		0.00	0.06		0.00		0.03
Crit Moves:			****			****										****				
Green Time:	0.0		58.5		58.5	15.0		73.5		0.0	0.0		0.0		0.0	18.5		0.0		18.5
Volume/Cap:	0.00		0.31		0.31	0.31		0.16		0.00	0.00		0.00		0.00	0.31		0.00		0.16
Delay/Veh:	0.0		10.6		10.6	38.5		4.0		0.0	0.0		0.0		0.0	35.8		0.0		34.4
User DelAdj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	0.0		10.6		10.6	38.5		4.0		0.0	0.0		0.0		0.0	35.8		0.0		34.4
LOS by Move:	A		B		B	D		A		A	A		A		A	D		A		C
HCM2kAvgQ:	0		5		5	2		2		0	0		0		0	2		0		1

Note: Queue reported is the number of cars per lane.

APPENDIX H: TRAFFIX WORKSHEETS-HORIZON YEAR (2035) PLUS PROJECT CONDITIONS

Horizon Year Plus Project
AM

Scenario Report

Scenario:	Horizon Year Plus Project AM
Command:	Horizon Year Plus Project AM
Volume:	Horizon Year AM
Geometry:	Horizon Year AM
Impact Fee:	Default Impact Fee
Trip Generation:	Project AM
Trip Distribution:	Project
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Horizon Year Plus Project
AM

Trip Generation Report

Forecast for Project AM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1	Project	1.00	Project	8.00	34.00	8	34	42	100.0
	Zone 1 Subtotal					8	34	42	100.0
TOTAL						8	34	42	100.0

Horizon Year Plus Project
AM

Trip Distribution Report

Percent Of Trips Project

Zone	To Gates 1	2	3	4	5	6
1	10.0	5.0	35.0	10.0	10.0	30.0

Horizon Year Plus Project
AM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 S. Nardo Ave & Lomas Santa Fe	B	15.6	0.491	B	15.6	0.491	+ 0.000 D/V
# 2 Stevens Ave/Glencrest Ave & Lo	C	26.3	0.700	C	26.6	0.705	+ 0.267 D/V
# 3 S. Nardo Ave & E. Solana Circl	B	11.3	0.260	B	11.3	0.260	+ 0.015 D/V
# 4 Fresca St & S. Nardo Ave	B	11.2	0.063	B	11.3	0.064	+ 0.118 D/V
# 5 Stevens Ave & S. Nardo Ave	B	18.0	0.306	B	18.8	0.322	+ 0.816 D/V
# 6 E. Solana Circle & Via De La V	E	37.1	0.354	E	36.6	0.356	-0.434 D/V
# 7 Stevens Ave/Valley Ave & Via D	C	30.8	0.665	C	31.0	0.670	+ 0.199 D/V
# 20 Driveway A	A	0.0	0.000	A	0.2	0.000	+ 0.000 D/V
# 21 Driveway B	A	0.0	0.000	A	0.3	0.000	+ 0.000 D/V
# 24 Stevens Ave-Valley Ave/Valley	B	19.4	0.315	B	19.3	0.316	-0.099 D/V

Horizon Year Plus Project
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 S. Nardo Ave & Lomas Santa Fe

Cycle (sec): 69 Critical Vol./Cap.(X): 0.491
Loss Time (sec): 12 Average Delay (sec/veh): 15.6
Optimal Cycle: 45 Level Of Service: B

Street Name:	S. Nardo Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	8	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0	0	1	0	1	0	1
Volume Module:												
Base Vol:	46	24	137	185	7	9	0	600	19	50	796	126
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	46	24	137	185	7	9	0	600	19	50	796	126
Added Vol:	3	0	0	0	0	0	0	0	1	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	49	24	137	185	7	9	0	600	20	50	796	126
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	59	29	165	223	8	11	0	723	24	60	959	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	29	165	223	8	11	0	723	24	60	959	152
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	59	29	165	223	8	11	0	723	24	60	959	152
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.85	0.85	0.71	0.92	0.92	1.00	0.95	0.95	0.95	0.93	0.93
Lanes:	0.23	0.11	0.66	1.00	0.44	0.56	1.00	1.94	0.06	1.00	1.73	0.27
Final Sat.:	376	184	1051	1357	761	979	1900	3476	116	1805	3051	483
Capacity Analysis Module:												
Vol/Sat:	0.16	0.16	0.16	0.16	0.01	0.01	0.00	0.21	0.21	0.03	0.31	0.31
Crit Moves:				****				****		****		
Green Time:	23.0	23.0	23.0	23.0	23.0	23.0	0.0	29.0	29.0	5.0	34.0	34.0
Volume/Cap:	0.47	0.47	0.47	0.49	0.03	0.03	0.00	0.49	0.49	0.46	0.64	0.64
Delay/Veh:	18.9	18.9	18.9	19.2	15.6	15.6	0.0	14.9	14.9	33.3	13.7	13.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.9	18.9	18.9	19.2	15.6	15.6	0.0	14.9	14.9	33.3	13.7	13.7
LOS by Move:	B	B	B	B	B	B	A	B	B	C	B	B
HCM2kAvgQ:	5	5	5	4	0	0	0	6	6	1	9	9

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Stevens Ave/Glencrest Ave & Lomas Santa Fe

Cycle (sec): 112 Critical Vol./Cap.(X): 0.705
Loss Time (sec): 14 Average Delay (sec/veh): 26.6
Optimal Cycle: 67 Level Of Service: C

Street Name:	Stevens Ave/Glencrest Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	8	1	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	0	1	0	1
Volume Module:												
Base Vol:	110	0	324	0	0	0	0	805	160	496	792	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	0	324	0	0	0	0	805	160	496	792	0
Added Vol:	0	0	10	0	0	0	0	0	0	2	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	110	0	334	0	0	0	0	805	160	498	792	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	128	0	388	0	0	0	0	936	186	579	921	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	0	388	0	0	0	0	936	186	579	921	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	0	388	0	0	0	0	936	186	579	921	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	1.00	1.00	1.00	1.00	0.93	0.93	0.92	0.95	1.00
Lanes:	1.25	0.00	1.75	0.00	0.00	0.00	1.00	1.67	0.33	2.00	2.00	0.00
Final Sat.:	2078	0	2918	0	0	0	1900	2936	584	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.13	0.00	0.00	0.00	0.00	0.32	0.32	0.17	0.26	0.00
Crit Moves:			****					****		****		
Green Time:	21.1	0.0	21.1	0.0	0.0	0.0	0.0	50.6	50.6	26.3	76.9	0.0
Volume/Cap:	0.33	0.00	0.71	0.00	0.00	0.00	0.00	0.71	0.71	0.71	0.37	0.00
Delay/Veh:	39.4	0.0	45.7	0.0	0.0	0.0	0.0	26.2	26.2	42.1	7.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.4	0.0	45.7	0.0	0.0	0.0	0.0	26.2	26.2	42.1	7.5	0.0
LOS by Move:	D	A	D	A	A	A	A	C	C	D	A	A
HCM2kAvgQ:	3	0	7	0	0	0	0	16	16	11	7	0

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 S. Nardo Ave & E. Solana Circle/Nardito Ln

Average Delay (sec/veh): 9.8 Worst Case Level Of Service: B[11.3]

Street Name:	S. Nardo Ave									E. Solana Circle/Nardito Ln							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign				
Rights:	Include				Include				Include				Include				
Lanes:	0	0	1!	0	0	0	1	0	0	0	0	1	0	0	0	0	0
Volume Module:																	
Base Vol:	18	2	27	4	2	0	0	138	10	14	89	0					
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Initial Bse:	18	2	27	4	2	0	0	138	10	14	89	0					
Added Vol:	0	0	1	0	0	0	0	0	0	3	0	0					
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0					
Initial Fut:	18	2	28	4	2	0	0	138	10	17	89	0					
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
PHF Adj:	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69					
PHF Volume:	26	3	41	6	3	0	0	200	14	25	129	0					
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0					
FinalVolume:	26	3	41	6	3	0	0	200	14	25	129	0					
Critical Gap Module:																	
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	6.5	6.2	7.1	6.5	xxxxx					
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	4.0	3.3	3.5	4.0	xxxxx					
Capacity Module:																	
Cnflict Vol:	3	xxxx	xxxxx	43	xxxx	xxxxx	xxxx	110	3	197	90	xxxxx					
Potent Cap.:	1632	xxxx	xxxxx	1578	xxxx	xxxxx	xxxx	784	1087	766	804	xxxxx					
Move Cap.:	1632	xxxx	xxxxx	1578	xxxx	xxxxx	xxxx	768	1087	595	788	xxxxx					
Volume/Cap:	0.02	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	0.26	0.01	0.04	0.16	xxxx					
Level Of Service Module:																	
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Control Del:	7.2	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*					
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT					
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	784	749	xxxx	xxxxx					
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	1.1	0.8	xxxx	xxxxx					
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	11.3	11.0	xxxx	xxxxx					
Shared LOS:	*	*	*	A	*	*	*	*	B	B	*	*					
ApproachDel:	xxxxxx			xxxxxx			11.3			11.0							
ApproachLOS:	*			*			B			B							

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Fresca St & S. Nardo Ave

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: B[11.3]

Street Name:	Fresca St									Nardo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled				
Rights:	Include				Include				Include				Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	0	1	0	0	0	1	0
Volume Module:																	
Base Vol:	0	0	0	28	0	2	2	200	0	0	83	14					
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Initial Bse:	0	0	0	28	0	2	2	200	0	0	83	14					
Added Vol:	0	0	0	0	0	0	0	7	0	0	3	0					
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0					
Initial Fut:	0	0	0	28	0	2	2	207	0	0	86	14					
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
PHF Adj:	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73					
PHF Volume:	0	0	0	38	0	3	3	284	0	0	118	19					
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0					
FinalVolume:	0	0	0	38	0	3	3	284	0	0	118	19					
Critical Gap Module:																	
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Capacity Module:																	
Cnflict Vol:	xxxx	xxxx	xxxxx	416	416	127	137	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Potent Cap.:	xxxx	xxxx	xxxxx	597	530	928	1459	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Move Cap.:	xxxx	xxxx	xxxxx	596	529	928	1459	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Volume/Cap:	xxxx	xxxx	xxxx	0.06	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx					
Level Of Service Module:																	
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*					
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT					
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	610	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	11.3	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*					
ApproachDel:	xxxxxx			11.3			xxxxxx			xxxxxx							
ApproachLOS:	*			B			*			*							

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Stevens Ave & S. Nardo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.322
Loss Time (sec): 12 Average Delay (sec/veh): 18.8
Optimal Cycle: 32 Level Of Service: B

Street Name:	Stevens Ave								S. Nardo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0		
Lanes:	1	0	2	0	0	1	0	1	1	0	1	0	0	0	1	1	0	0	0	0
Volume Module:																				
Base Vol:	39	469	0			0	374	77			126	0	157			1	0	0		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	39	469	0			0	374	77			126	0	157			1	0	0		
Added Vol:	4	0	0			0	0	2			10	0	17			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	43	469	0			0	374	79			136	0	174			1	0	0		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.92	0.92	0.92			0.92	0.92	0.92			0.92	0.92	0.92			0.92	0.92	0.92		
PHF Volume:	47	510	0			0	407	86			148	0	189			1	0	0		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	47	510	0			0	407	86			148	0	189			1	0	0		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	47	510	0			0	407	86			148	0	189			1	0	0		
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900		
Adjustment:	0.95	0.95	1.00			1.00	0.93	0.93			0.95	1.00	0.85			0.95	1.00	1.00		
Lanes:	1.00	2.00	0.00			1.00	1.65	0.35			1.00	0.00	1.00			1.00	0.00	0.00		
Final Sat.:	1805	3610	0			1900	2903	613			1805	0	1615			1805	0	0		
Capacity Analysis Module:																				
Vol/Sat:	0.03	0.14	0.00			0.00	0.14	0.14			0.08	0.00	0.12			0.00	0.00	0.00		
Crit Moves:	****						****						****			****				
Green Time:	8.0	51.5	0.0			0.0	43.4	43.4			36.5	0.0	36.3			0.2	0.0	0.0		
Volume/Cap:	0.32	0.27	0.00			0.00	0.32	0.32			0.22	0.00	0.32			0.32	0.00	0.00		
Delay/Veh:	44.7	13.8	0.0			0.0	18.7	18.7			22.1	0.0	23.3			98.1	0.0	0.0		
User DelAdj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
AdjDel/Veh:	44.7	13.8	0.0			0.0	18.7	18.7			22.1	0.0	23.3			98.1	0.0	0.0		
LOS by Move:	D	B	A			A	B	B			C	A	C			F	A	A		
HCM2kAvgQ:	1	4	0			0	5	5			3	0	4			0	0	0		

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 E. Solana Circle & Via De La Valle

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: E[36.6]

Street Name:	E. Solana Circle								Via De La Valle							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	1	0	0	1	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0	0	0			44	0	24			16	856	0			0	472	31		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	0	0	0			44	0	24			16	856	0			0	472	31		
Added Vol:	0	0	0			0	0	3			1	0	0			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	0	0	0			44	0	27			17	856	0			0	472	31		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.92	0.92	0.92			0.92	0.92	0.92			0.92	0.92	0.92			0.92	0.92	0.92		
PHF Volume:	0	0	0			48	0	29			18	930	0			0	513	34		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
FinalVolume:	0	0	0			48	0	29			18	930	0			0	513	34		
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx			6.4	6.5	6.2			4.1	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	xxxxx			3.5	4.0	3.3			2.2	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx			1497	1497	530			547	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Potent Cap.:	xxxx	xxxx	xxxxx			136	124	553			1033	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Move Cap.:	xxxx	xxxx	xxxxx			134	122	553			1033	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Volume/Cap:	xxxx	xxxx	xxxx			0.36	0.00	0.05			0.02	xxxx	xxxx			xxxx	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.1	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			8.5	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*			*	*	*			A	*	*			*	*	*		
Movement:	LT -	LTR -	RT			LT -	LTR -	RT			LT -	LTR -	RT			LT -	LTR -	RT		
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	189	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx	1.8	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx			xxxxx	36.6	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*			*	E	*			*	*	*			*	*	*		
ApproachDel:	xxxxxx					36.6					xxxxxx					xxxxxx				
ApproachLOS:		*					E					*					*			

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #7 Stevens Ave/Valley Ave & Via De La Valle

****

Cycle (sec): 98 Critical Vol./Cap.(X): 0.670
Loss Time (sec): 12 Average Delay (sec/veh): 31.0
Optimal Cycle: 55 Level Of Service: C

****

Street Name:	Stevens Ave/Valley Ave									Via De La Valle		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	5	0	5	0	0	5	10	0	5	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	19	44	236	513	75	55	45	811	45	363	640	341
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	44	236	513	75	55	45	811	45	363	640	341
Added Vol:	0	0	0	15	2	0	0	0	0	0	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	44	236	528	77	55	45	811	45	363	640	345
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	19	45	241	539	79	56	46	828	46	370	653	352
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	45	241	539	79	56	46	828	46	370	653	352
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	45	241	539	79	56	46	828	46	370	653	352
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.75	0.92	1.00	0.85	0.95	0.94	0.94	0.92	0.90	0.90
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.89	0.11	2.00	1.30	0.70
Final Sat.:	1805	1900	2842	3502	1900	1615	1805	3393	188	3502	2224	1199
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.08	0.15	0.04	0.03	0.03	0.24	0.24	0.11	0.29	0.29
Crit Moves:			****	****				****		****		
Green Time:	12.4	12.4	12.4	22.5	22.5	22.5	7.6	35.7	35.7	15.5	43.6	43.6
Volume/Cap:	0.08	0.19	0.67	0.67	0.18	0.15	0.33	0.67	0.67	0.67	0.66	0.66
Delay/Veh:	38.0	38.7	45.7	36.6	30.5	30.3	44.2	27.6	27.6	42.1	22.5	22.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.0	38.7	45.7	36.6	30.5	30.3	44.2	27.6	27.6	42.1	22.5	22.5
LOS by Move:	D	D	D	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	1	1	5	8	2	1	2	12	12	7	13	13

****

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
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Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #20 Driveway A

****

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: A

****

Street Name:	Driveway A									Nardo Avenue		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	202	0	0	87	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	202	0	0	87	0
Added Vol:	5	0	7	0	0	0	0	0	1	2	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	7	0	0	0	0	202	1	2	89	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	5	0	8	0	0	0	0	220	1	2	97	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	5	0	8	0	0	0	0	220	1	2	97	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	6	0	8	0	0	0	0	220	1	2	97	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	319	xxxx	220	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	221	xxxx	xxxxx
Potent Cap.:	692	xxxx	1071	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1346	xxxx	xxxxx
Adj Cap:	1.00	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	691	xxxx	1071	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1346	xxxx	xxxxx
Level Of Service Module:												
Control Del:	5.3	xxxx	3.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	871	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1346	xxxx	xxxxx
Shrd ConDel:	xxxxx	4.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.9	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	4.2			xxxxxx			0.0			0.1		
ApproachLOS:	A			*			A			A		

Horizon Year Plus Project
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Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: A

Street Name:	Driveway B									Nardo Avenue							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled				
Rights:	Include				Include				Include				Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Volume Module:																	
Base Vol:	0	0	0	0	0	0	0	234	0	0	95	0					
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Initial Bse:	0	0	0	0	0	0	0	234	0	0	95	0					
Added Vol:	2	0	20	0	0	0	0	7	0	5	2	0					
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0					
Initial Fut:	2	0	20	0	0	0	0	241	0	5	97	0					
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92					
PHF Volume:	2	0	22	0	0	0	0	262	0	5	105	0					
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0					
FinalVolume:	2	0	22	0	0	0	0	262	0	5	105	0					
Adjusted Volume Module:																	
Grade:	0%				0%				0%				0%				
% Cycle/Cars:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			
% Truck/Comb:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00					
Cycl/Car PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			
Trck/Cmb PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			
Adj Vol.:	2	0	24	0	0	0	0	262	0	6	105	0					
Critical Gap Module:																	
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx					
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx					
Capacity Module:																	
Cnflict Vol:	373	xxxx	262	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	262	xxxx	xxxxx					
Potent Cap.:	644	xxxx	1020	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1286	xxxx	xxxxx					
Adj Cap:	1.00	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx					
Move Cap.:	641	xxxx	1020	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1286	xxxx	xxxxx					
Level Of Service Module:																	
Control Del:	5.6	xxxx	3.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.8	xxxx	xxxxx					
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*					
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT					
Shared Cap.:	xxxx	968	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1286	xxxx	xxxxx					
Shrd ConDel:	xxxxx	3.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.1	xxxx	xxxxx					
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*					
ApproachDel:	3.8			xxxxxx			0.0			0.2							
ApproachLOS:	A			*			A			A							

Horizon Year Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Stevens Ave-Valley Ave/Valley Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.316
Loss Time (sec):	8	Average Delay (sec/veh):	19.3
Optimal Cycle:	24	Level Of Service:	B

Street Name:	Stevens Ave-Valley Ave									Valley Ave							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected				Protected				Permitted				Permitted				
Rights:	Include				Include				Include				Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0					
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0					
Lanes:	0	0	1	1	0	1	0	2	0	0	0	0	0	0	1	0	0	0	0	1
Volume Module:																	
Base Vol:	0	349	44	77	442	0	0	0	0	0	165	0	121				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Initial Bse:	0	349	44	77	442	0	0	0	0	165	0	121					
Added Vol:	0	4	0	0	17	0	0	0	0	0	0	0					
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0					
Initial Fut:	0	353	44	77	459	0	0	0	0	165	0	121					
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92					
PHF Volume:	0	384	48	84	499	0	0	0	0	179	0	132					
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0					
Reduced Vol:	0	384	48	84	499	0	0	0	0	179	0	132					
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
FinalVolume:	0	384	48	84	499	0	0	0	0	179	0	132					
Saturation Flow Module:																	
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900					
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.77	1.00	0.85					
Lanes:	0.00	1.78	0.22	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00					
Final Sat.:	0	3155	393	1805	3610	0	0	0	0	1461	0	1615					
Capacity Analysis Module:																	
Vol/Sat:	0.00	0.12	0.12	0.05	0.14	0.00	0.00	0.00	0.00	0.12	0.00	0.08					
Crit Moves:		****		****						****							
Green Time:	0.0	38.5	38.5	14.7	53.2	0.0	0.0	0.0	0.0	38.8	0.0	38.8					
Volume/Cap:	0.00	0.32	0.32	0.32	0.26	0.00	0.00	0.00	0.00	0.32	0.00	0.21					
Delay/Veh:	0.0	21.7	21.7	38.9	12.8	0.0	0.0	0.0	0.0	21.6	0.0	20.5					
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
AdjDel/Veh:	0.0	21.7	21.7	38.9	12.8	0.0	0.0	0.0	0.0	21.6	0.0	20.5					
LOS by Move:	A	C	C	D	B	A	A	A	A	C	A	C					
HCM2kAvgQ:	0	5	5	2	4	0	0	0	0	4	0	3					

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
PM

Scenario Report

Scenario:	Horizon Year Plus Project PM
Command:	Horizon Year PM
Volume:	Horizon Year PM
Geometry:	Horizon Year PM
Impact Fee:	Default Impact Fee
Trip Generation:	Project PM
Trip Distribution:	Project
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Horizon Year Plus Project
PM

Trip Generation Report

Forecast for Project PM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1	Project	1.00	Project	37.00	16.00	37	16	53	100.0
	Zone 1 Subtotal					37	16	53	100.0
TOTAL						37	16	53	100.0

Horizon Year Plus Project
PM

Trip Distribution Report

Percent Of Trips Project

Zone	To Gates 1	2	3	4	5	6
1	10.0	5.0	35.0	10.0	10.0	30.0

Horizon Year Plus Project
PM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 S. Nardo Ave & Lomas Santa Fe	B	11.8	0.418	B	11.8	0.418	+ 0.000 D/V
# 2 Stevens Ave/Glencrest Ave & Lo	C	25.9	0.628	C	26.2	0.634	+ 0.256 D/V
# 3 S. Nardo Ave & E. Solana Circl	B	10.7	0.114	B	10.7	0.114	+ 0.051 D/V
# 4 Fresca St & S. Nardo Ave	A	9.9	0.026	B	10.0	0.026	+ 0.087 D/V
# 5 Stevens Ave & S. Nardo Ave	B	14.4	0.313	B	15.6	0.338	+ 1.232 D/V
# 6 E. Solana Circle & Via De La V	D	26.0	0.128	D	25.9	0.130	-0.125 D/V
# 7 Stevens Ave/Valley Ave & Via D	D	36.3	0.825	D	36.7	0.834	+ 0.408 D/V
# 20 Driveway A	A	0.0	0.000	A	0.2	0.000	+ 0.000 D/V
# 21 Driveway B	A	0.0	0.000	A	0.3	0.000	+ 0.000 D/V
# 24 Stevens Ave-Valley Ave/Valley	B	13.0	0.299	B	12.8	0.305	-0.214 D/V

Horizon Year Plus Project
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #1 S. Nardo Ave & Lomas Santa Fe

****

Cycle (sec): 69 Critical Vol./Cap.(X): 0.420
Loss Time (sec): 12 Average Delay (sec/veh): 11.8
Optimal Cycle: 45 Level Of Service: B

****

Street Name:	S. Nardo Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	8	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0	0	1	0	1	0	1	1	0	1	0	1	1	0
Volume Module:												
Base Vol:	22	14	40	130	7	0	17	703	15	45	826	133
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	22	14	40	130	7	0	17	703	15	45	826	133
Added Vol:	2	0	0	0	0	0	0	0	4	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	14	40	130	7	0	17	703	19	45	826	133
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	25	15	42	137	7	0	18	740	20	47	869	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	15	42	137	7	0	18	740	20	47	869	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	25	15	42	137	7	0	18	740	20	47	869	140
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.83	0.83	0.78	1.00	1.00	0.95	0.95	0.95	0.95	0.93	0.93
Lanes:	0.31	0.18	0.51	1.00	1.00	0.00	1.00	1.95	0.05	1.00	1.72	0.28
Final Sat.:	488	284	813	1486	1900	0	1805	3501	95	1805	3044	490
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.05	0.09	0.00	0.00	0.01	0.21	0.21	0.03	0.29	0.29
Crit Moves:		****					****				****	
Green Time:	8.0	8.0	8.0	8.0	8.0	0.0	5.0	39.2	39.2	9.8	44.0	44.0
Volume/Cap:	0.45	0.45	0.45	0.79	0.03	0.00	0.14	0.37	0.37	0.18	0.45	0.45
Delay/Veh:	30.2	30.2	30.2	51.6	27.1	0.0	30.5	8.3	8.3	26.4	6.5	6.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.2	30.2	30.2	51.6	27.1	0.0	30.5	8.3	8.3	26.4	6.5	6.5
LOS by Move:	C	C	C	D	C	A	C	A	A	C	A	A
HCM2kAvgQ:	2	2	2	5	0	0	0	5	5	1	6	6

****

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #2 Stevens Ave/Glencrest Ave & Lomas Santa Fe

****

Cycle (sec): 112 Critical Vol./Cap.(X): 0.634
Loss Time (sec): 14 Average Delay (sec/veh): 26.2
Optimal Cycle: 57 Level Of Service: C

****

Street Name:	Stevens Ave/Glencrest Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	8	1	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	0	1	0	1	1	0	2	0	2	0	0
Volume Module:												
Base Vol:	262	0	459	0	0	0	0	871	120	267	711	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	262	0	459	0	0	0	0	871	120	267	711	0
Added Vol:	0	0	5	0	0	0	0	0	0	11	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	262	0	464	0	0	0	0	871	120	278	711	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	276	0	488	0	0	0	0	917	126	293	748	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	276	0	488	0	0	0	0	917	126	293	748	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	276	0	488	0	0	0	0	917	126	293	748	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	0.93	0.93	0.92	0.95	1.00
Lanes:	1.36	0.00	1.64	0.00	0.00	0.00	1.00	1.76	0.24	2.00	2.00	0.00
Final Sat.:	2295	0	2765	0	0	0	1900	3116	429	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.12	0.00	0.18	0.00	0.00	0.00	0.00	0.29	0.29	0.08	0.21	0.00
Crit Moves:			****					****		****		
Green Time:	31.2	0.0	31.2	0.0	0.0	0.0	0.0	52.0	52.0	14.8	66.8	0.0
Volume/Cap:	0.43	0.00	0.63	0.00	0.00	0.00	0.00	0.63	0.63	0.63	0.35	0.00
Delay/Veh:	33.3	0.0	36.5	0.0	0.0	0.0	0.0	23.6	23.6	48.9	11.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.3	0.0	36.5	0.0	0.0	0.0	0.0	23.6	23.6	48.9	11.6	0.0
LOS by Move:	C	A	D	A	A	A	A	C	C	D	B	A
HCM2kAvgQ:	6	0	9	0	0	0	0	14	14	6	7	0

****

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 S. Nardo Ave & E. Solana Circle/Nardito Ln

Average Delay (sec/veh): 9.0 Worst Case Level Of Service: B[10.8]

Street Name:	S. Nardo Ave						E. Solana Circle/Nardito Ln					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	32	3	15	1	0	6	2	68	26	31	74	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	3	15	1	0	6	2	68	26	31	74	0
Added Vol:	0	0	4	4	0	0	0	0	0	2	0	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	3	19	5	0	6	2	68	26	33	74	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	38	4	23	6	0	7	2	81	31	39	88	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	38	4	23	6	0	7	2	81	31	39	88	2
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	7	xxxx	xxxxx	26	xxxx	xxxxx	152	118	4	163	110	15
Potent Cap.:	1627	xxxx	xxxxx	1601	xxxx	xxxxx	820	776	1086	807	784	1071
Move Cap.:	1627	xxxx	xxxxx	1601	xxxx	xxxxx	730	755	1086	705	762	1071
Volume/Cap:	0.02	xxxx	xxxx	0.00	xxxx	xxxx	0.00	0.11	0.03	0.06	0.12	0.00
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.3	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	822	xxxxx	xxxx	748	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	0.6	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.1	xxxxx	xxxxx	10.8	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			10.1			10.8		
ApproachLOS:	*			*			B			B		

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Fresca St & S. Nardo Ave

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[10.0]

Street Name:	Fresca St						Nardo Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	17	0	2	5	112	0	0	96	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	17	0	2	5	112	0	0	96	22
Added Vol:	0	0	0	0	0	0	0	5	0	0	8	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	17	0	2	5	117	0	0	104	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	19	0	2	6	130	0	0	116	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	19	0	2	6	130	0	0	116	24
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	269	269	128	140	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	725	641	928	1456	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	723	638	928	1456	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.03	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	740	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	10.0	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			10.0			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #5 Stevens Ave & S. Nardo Ave

****

Cycle (sec): 100 Critical Vol./Cap.(X): 0.338
Loss Time (sec): 12 Average Delay (sec/veh): 15.6
Optimal Cycle: 32 Level Of Service: B

****

Street Name:	Stevens Ave								S. Nardo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0		
Lanes:	1	0	2	0	0	1	0	1	1	0	1	0	0	0	1	0	0	0	0	0
Volume Module:																				
Base Vol:	93	396	0			2	457	79			50	0	68			0	0	0		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	93	396	0			2	457	79			50	0	68			0	0	0		
Added Vol:	19	0	0			0	0	11			5	0	8			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	112	396	0			2	457	90			55	0	76			0	0	0		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.89	0.89	0.89			0.89	0.89	0.89			0.89	0.89	0.89			0.89	0.89	0.89		
PHF Volume:	126	445	0			2	513	101			62	0	85			0	0	0		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	126	445	0			2	513	101			62	0	85			0	0	0		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	126	445	0			2	513	101			62	0	85			0	0	0		
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900		
Adjustment:	0.95	0.95	1.00			0.95	0.93	0.93			0.95	1.00	0.85			1.00	1.00	1.00		
Lanes:	1.00	2.00	0.00			1.00	1.67	0.33			1.00	0.00	1.00			0.00	0.00	0.00		
Final Sat.:	1805	3610	0			1805	2941	579			1805	0	1615			0	0	0		
Capacity Analysis Module:																				
Vol/Sat:	0.07	0.12	0.00			0.00	0.17	0.17			0.03	0.00	0.05			0.00	0.00	0.00		
Crit Moves:	****						****						****							
Green Time:	20.6	71.6	0.0			0.7	51.7	15.7			0.0	0.0	15.7			0.0	0.0	0.0		
Volume/Cap:	0.34	0.17	0.00			0.17	0.34	0.34			0.22	0.00	0.34			0.00	0.00	0.00		
Delay/Veh:	34.4	4.6	0.0			55.5	14.2	14.2			37.2	0.0	38.4			0.0	0.0	0.0		
User DelAdj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
AdjDel/Veh:	34.4	4.6	0.0			55.5	14.2	14.2			37.2	0.0	38.4			0.0	0.0	0.0		
LOS by Move:	C	A	A			E	B	B			D	A	D			A	A	A		
HCM2kAvgQ:	3	2	0			0	6	6			2	0	3			0	0	0		

****

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #6 E. Solana Circle & Via De La Valle

****

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: D[25.9]

****

Street Name:	E. Solana Circle								Via De La Valle							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	1	0	0	1	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0	0	0			16	0	19			17	643	0			0	705	62		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	0	0	0			16	0	19			17	643	0			0	705	62		
Added Vol:	0	0	0			0	0	2			4	0	0			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	0	0	0			16	0	21			21	643	0			0	705	62		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.94	0.94	0.94			0.94	0.94	0.94			0.94	0.94	0.94			0.94	0.94	0.94		
PHF Volume:	0	0	0			17	0	22			22	684	0			0	750	66		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
FinalVolume:	0	0	0			17	0	22			22	684	0			0	750	66		
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx			6.4	6.5	6.2			4.1	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	xxxxx			3.5	4.0	3.3			2.2	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx			1512	1512	783			816	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Potent Cap.:	xxxx	xxxx	xxxxx			134	121	397			821	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Move Cap.:	xxxx	xxxx	xxxxx			131	118	397			821	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Volume/Cap:	xxxx	xxxx	xxxx			0.13	0.00	0.06			0.03	xxxx	xxxx			xxxx	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.1	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			9.5	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*			*	*	*			A	*	*			*	*	*		
Movement:	LT -	LTR -	RT			LT -	LTR -	RT			LT -	LTR -	RT			LT -	LTR -	RT		
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	211	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx	0.7	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx			xxxxx	25.9	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*			*	D	*			*	*	*			*	*	*		
ApproachDel:	xxxxxx					25.9					xxxxxx					xxxxxx				
ApproachLOS:	*						D					*					*			

****

Note: Queue reported is the number of cars per lane.

****

Horizon Year Plus Project
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #7 Stevens Ave/Valley Ave & Via De La Valle

****

Cycle (sec): 98 Critical Vol./Cap.(X): 0.834
Loss Time (sec): 12 Average Delay (sec/veh): 36.7
Optimal Cycle: 85 Level Of Service: D

****

Street Name:	Stevens Ave/Valley Ave									Via De La Valle		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	5	0	5	0	0	5	10	0	5	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	72	156	511	486	105	75	48	634	23	274	723	399
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	72	156	511	486	105	75	48	634	23	274	723	399
Added Vol:	0	2	0	7	1	0	0	0	0	0	0	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	72	158	511	493	106	75	48	634	23	274	723	416
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	77	170	549	530	114	81	52	682	25	295	777	447
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	170	549	530	114	81	52	682	25	295	777	447
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	170	549	530	114	81	52	682	25	295	777	447
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.75	0.92	1.00	0.85	0.95	0.95	0.95	0.92	0.90	0.90
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.93	0.07	2.00	1.27	0.73
Final Sat.:	1805	1900	2842	3502	1900	1615	1805	3466	126	3502	2165	1246
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.19	0.15	0.06	0.05	0.03	0.20	0.20	0.08	0.36	0.36
Crit Moves:			****	****			****				****	
Green Time:	22.3	22.3	22.3	17.4	17.4	17.4	5.0	32.4	32.4	13.9	41.3	41.3
Volume/Cap:	0.19	0.39	0.85	0.85	0.34	0.28	0.56	0.59	0.59	0.59	0.85	0.85
Delay/Veh:	30.8	32.7	46.8	49.9	35.8	35.4	53.0	28.1	28.1	41.4	30.6	30.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.8	32.7	46.8	49.9	35.8	35.4	53.0	28.1	28.1	41.4	30.6	30.6
LOS by Move:	C	C	D	D	D	D	D	C	C	D	C	C
HCM2kAvgQ:	2	5	12	9	3	2	2	10	10	5	20	20

****

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
PM

Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #20 Driveway A

****

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: A

****

Street Name:	Driveway A						Nardo Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	119	0	0	99	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	119	0	0	99	0
Added Vol:	2	0	3	0	0	0	0	2	6	7	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	0	3	0	0	0	0	121	6	7	100	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	2	0	3	0	0	0	0	132	7	8	109	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	2	0	3	0	0	0	0	132	7	8	109	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	2	0	4	0	0	0	0	132	7	8	109	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	251	xxxx	135	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	138	xxxx	xxxxx
Potent Cap.:	758	xxxx	1183	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1473	xxxx	xxxxx
Adj Cap:	0.99	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	753	xxxx	1183	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1473	xxxx	xxxxx
Level Of Service Module:												
Control Del:	4.8	xxxx	3.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	963	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1473	xxxx	xxxxx
Shrd ConDel:	xxxxx	3.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.7	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	3.8			xxxxxx			0.0			0.2		

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ApproachLOS: A * A A

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Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #21 Driveway B

****

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: A

****

Street Name:	Driveway B								Nardo Avenue							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	0	0	0		0	0	0		0	0	0		0	132	0	0	125		0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
Initial Bse:	0	0	0		0	0	0		0	0	0		0	132	0	0	125		0	
Added Vol:	1	0	10		0	0	0		0	0	3		1	22	7	0				
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	0				
Initial Fut:	1	0	10		0	0	0		0	0	135		1	22	132	0				
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00				
PHF Adj:	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92	0.92				
PHF Volume:	1	0	11		0	0	0		0	147	1		24	143	0					
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0					
FinalVolume:	1	0	11		0	0	0		0	147	1		24	143	0					
Adjusted Volume Module:																				
Grade:	0%					0%					0%					0%				
% Cycle/Cars:	xxxx	xxxx				xxxx	xxxx				xxxx	xxxx				xxxx	xxxx			
% Truck/Comb:	xxxx	xxxx				xxxx	xxxx				xxxx	xxxx				xxxx	xxxx			
PCE Adj:	1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.00	1.00		1.10	1.00	1.00					
Cycl/Car PCE:	xxxx	xxxx				xxxx	xxxx				xxxx	xxxx				xxxx	xxxx			
Trck/Cmb PCE:	xxxx	xxxx				xxxx	xxxx				xxxx	xxxx				xxxx	xxxx			
Adj Vol.:	1	0	12		0	0	0		0	147	1		26	143	0					
Critical Gap Module:																				
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx								
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	315	xxxx	147	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	148	xxxx	xxxxx								
Potent Cap.:	696	xxxx	1166	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1458	xxxx	xxxxx								
Adj Cap:	0.98	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx								
Move Cap.:	682	xxxx	1166	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1458	xxxx	xxxxx								
Level Of Service Module:																				
Control Del:	5.3	xxxx	3.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.5	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	1095	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1458	xxxx	xxxxx								
Shrd ConDel:	xxxxx	3.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.8	xxxx	xxxxx								
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*								
ApproachDel:	3.3			xxxxxx				0.0				0.4								
ApproachLOS:	A			*				A				A								

Horizon Year Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #24 Stevens Ave-Valley Ave/Valley Ave

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.305
Loss Time (sec):	8	Average Delay (sec/veh):	12.8
Optimal Cycle:	24	Level Of Service:	B

****

Street Name:	Stevens Ave-Valley Ave							Valley Ave							
Approach:	North Bound				South Bound			East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Permitted				
Rights:	Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0		
Lanes:	0	0	1	1	0	1	0	2	0	0	0	0	0	0	0
Volume Module:															
Base Vol:	0	459	99			76	374	0			0	0	0		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	0	459	99			76	374	0			0	0	0		
Added Vol:	0	19	0			0	8	0			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0		
Initial Fut:	0	478	99			76	382	0			0	0	0		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.92	0.92	0.92			0.92	0.92	0.92			0.92	0.92	0.92		
PHF Volume:	0	520	108			83	415	0			0	0	0		
Reduct Vol:	0	0	0			0	0	0			0	0	0		
Reduced Vol:	0	520	108			83	415	0			0	0	0		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	0	520	108			83	415	0			0	0	0		
Saturation Flow Module:															
Sat/Lane:	1900	1900	1900			1900	1900	1900			1900	1900	1900		
Adjustment:	1.00	0.93	0.93			0.95	0.95	1.00			1.00	0.78	1.00		
Lanes:	0.00	1.66	0.34			1.00	2.00	0.00			0.00	1.00	0.00		
Final Sat.:	0	2913	603			1805	3610	0			0	1480	0		
Capacity Analysis Module:															
Vol/Sat:	0.00	0.18	0.18			0.05	0.12	0.00			0.00	0.06	0.00		
Crit Moves:		****				****						****			
Green Time:	0.0	58.5	58.5			15.0	73.5	0.0			0.0	18.5	0.0		
Volume/Cap:	0.00	0.31	0.31			0.31	0.16	0.00			0.00	0.31	0.00		
Delay/Veh:	0.0	10.6	10.6			38.5	4.0	0.0			0.0	35.8	0.0		
User DelAdj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
AdjDel/Veh:	0.0	10.6	10.6			38.5	4.0	0.0			0.0	35.8	0.0		
LOS by Move:	A	B	B			D	A	A			A	D	A		
HCM2kAvgQ:	0	5	5			2	2	0			0	2	0		

****

Note: Queue reported is the number of cars per lane.

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to FEHR & PEERS, SAN DIEGO

APPENDIX I: RACE SEASON ADT VOLUMES

Prepared by NDS/ATD

VOLUME

E Solana Cir

Day: Friday
Date: 8/22/2014

City: Solana Beach
Project #: CA14_4218_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	314	557	871

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			2		13		15	
00:15			0		0		0		12:15			3		14		17	
00:30			2		0		2		12:30			9		7		16	
00:45			0	2	0		0	2	12:45			4	18	12	46	16	64
01:00			0		0		0		13:00			4		11		15	
01:15			2		0		2		13:15			5		10		15	
01:30			0		0		0		13:30			3		9		12	
01:45			0	2	0		0	2	13:45			4	16	14	44	18	60
02:00			0		0		0		14:00			2		11		13	
02:15			0		0		0		14:15			2		18		20	
02:30			0		0		0		14:30			2		6		8	
02:45			0		0		0		14:45			5	11	8	43	13	54
03:00			0		0		0		15:00			6		11		17	
03:15			0		0		0		15:15			6		13		19	
03:30			0		0		0		15:30			3		8		11	
03:45			0		0		0		15:45			6	21	11	43	17	64
04:00			0		0		0		16:00			4		8		12	
04:15			0		0		0		16:15			8		5		13	
04:30			0		0		0		16:30			6		12		18	
04:45			0		1	1	1	1	16:45			12	30	13	38	25	68
05:00			0		0		0		17:00			11		4		15	
05:15			0		2		2		17:15			7		5		12	
05:30			0		2		2		17:30			11		3		14	
05:45			2	2	4	8	6	10	17:45			4	33	6	18	10	51
06:00			0		2		2		18:00			5		8		13	
06:15			0		4		4		18:15			7		10		17	
06:30			1		1		2		18:30			4		7		11	
06:45			5	6	6	13	11	19	18:45			6	22	8	33	14	55
07:00			6		5		11		19:00			3		8		11	
07:15			3		10		13		19:15			7		14		21	
07:30			2		5		7		19:30			14		16		30	
07:45			5	16	14	34	19	50	19:45			16	40	6	44	22	84
08:00			4		7		11		20:00			7		6		13	
08:15			4		8		12		20:15			6		3		9	
08:30			1		8		9		20:30			3		6		9	
08:45			2	11	11	34	13	45	20:45			6	22	3	18	9	40
09:00			3		8		11		21:00			3		4		7	
09:15			0		5		5		21:15			2		2		4	
09:30			3		10		13		21:30			1		2		3	
09:45			0	6	9	32	9	38	21:45			0	6	4	12	4	18
10:00			1		8		9		22:00			2		2		4	
10:15			2		8		10		22:15			3		5		8	
10:30			2		15		17		22:30			2		3		5	
10:45			9	14	13	44	22	58	22:45			2	9	0	10	2	19
11:00			8		8		16		23:00			1		1		2	
11:15			4		14		18		23:15			0		0		0	
11:30			5		10		15		23:30			1		0		1	
11:45			6	23	9	41	15	64	23:45			2	4	0	1	2	5
TOTALS				82		207		289	TOTALS				232		350		582
SPLIT %				28.4%		71.6%		33.2%	SPLIT %				39.9%		60.1%		66.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	314	557	871

AM Peak Hour			10:45	10:30	10:30	PM Peak Hour			19:15	13:30	19:15
AM Pk Volume			26	50	73	PM Pk Volume			44	52	86
Pk Hr Factor			0.722	0.833	0.830	Pk Hr Factor			0.688	0.722	0.717
7 - 9 Volume	0	0	27	68	95	4 - 6 Volume	0	0	63	56	119
7 - 9 Peak Hour			07:00	07:45	07:45	4 - 6 Peak Hour			16:45	16:00	16:15
7 - 9 Pk Volume	0	0	16	37	51	4 - 6 Pk Volume	0	0	41	38	71
Pk Hr Factor	0.000	0.000	0.667	0.661	0.671	Pk Hr Factor	0.000	0.000	0.854	0.731	0.710

Prepared by NDS/ATD

VOLUME

E Solana Cir

Day: Saturday
Date: 8/23/2014

City: Solana Beach
Project #: CA14_4218_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	346	492	838

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		2		2		12:00			4		21		25	
00:15			1		0		1		12:15			6		10		16	
00:30			0		2		2		12:30			10		8		18	
00:45			0	1	0	4	0	5	12:45			7	27	7	46	14	73
01:00			0		0		0		13:00			9		15		24	
01:15			0		0		0		13:15			4		11		15	
01:30			0		2		2		13:30			5		13		18	
01:45			1	1	0	2	1	3	13:45			3	21	11	50	14	71
02:00			0		1		1		14:00			8		9		17	
02:15			0		0		0		14:15			7		5		12	
02:30			0		0		0		14:30			3		11		14	
02:45			0		0	1	0	1	14:45			5	23	7	32	12	55
03:00			0		0		0		15:00			6		9		15	
03:15			0		0		0		15:15			6		8		14	
03:30			0		1		1		15:30			4		8		12	
03:45			0		0	1	0	1	15:45			3	19	11	36	14	55
04:00			1		1		2		16:00			8		10		18	
04:15			0		0		0		16:15			6		10		16	
04:30			0		1		1		16:30			11		4		15	
04:45			0	1	0	2	0	3	16:45			10	35	6	30	16	65
05:00			0		0		0		17:00			6		7		13	
05:15			0		0		0		17:15			13		5		18	
05:30			0		1		1		17:30			7		4		11	
05:45			0		1	2	1	2	17:45			7	33	11	27	18	60
06:00			0		5		5		18:00			13		3		16	
06:15			0		5		5		18:15			7		7		14	
06:30			0		2		2		18:30			8		3		11	
06:45			0		2	14	2	14	18:45			13	41	3	16	16	57
07:00			1		6		7		19:00			14		3		17	
07:15			1		7		8		19:15			6		2		8	
07:30			1		8		9		19:30			2		2		4	
07:45			1	4	2	23	3	27	19:45			6	28	2	9	8	37
08:00			1		8		9		20:00			4		5		9	
08:15			1		15		16		20:15			6		1		7	
08:30			1		8		9		20:30			4		3		7	
08:45			2	5	5	36	7	41	20:45			6	20	4	13	10	33
09:00			1		9		10		21:00			1		1		2	
09:15			5		10		15		21:15			1		0		1	
09:30			6		7		13		21:30			4		2		6	
09:45			5	17	6	32	11	49	21:45			5	11	0	3	5	14
10:00			6		18		24		22:00			3		0		3	
10:15			3		7		10		22:15			3		5		8	
10:30			5		16		21		22:30			2		1		3	
10:45			7	21	7	48	14	69	22:45			3	11	0	6	3	17
11:00			8		15		23		23:00			1		0		1	
11:15			6		18		24		23:15			0		2		2	
11:30			5		11		16		23:30			1		1		2	
11:45			6	25	10	54	16	79	23:45			0	2	2	5	2	7
TOTALS				75		219		294	TOTALS				271		273		544
SPLIT %				25.5%		74.5%		35.1%	SPLIT %				49.8%		50.2%		64.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	346	492	838

AM Peak Hour			10:30	11:15	10:30	PM Peak Hour			18:15	13:00	12:00
AM Pk Volume			26	60	82	PM Pk Volume			42	50	73
Pk Hr Factor			0.813	0.714	0.854	Pk Hr Factor			0.750	0.833	0.730
7 - 9 Volume	0	0	9	59	68	4 - 6 Volume	0	0	68	57	125
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:30	16:00	16:00
7 - 9 Pk Volume	0	0	5	36	41	4 - 6 Pk Volume	0	0	40	30	65
Pk Hr Factor	0.000	0.000	0.625	0.600	0.641	Pk Hr Factor	0.000	0.000	0.769	0.750	0.903

Prepared by NDS/ATD

VOLUME

E Solana Cir

Day: Sunday
Date: 8/24/2014

City: Solana Beach
Project #: CA14_4218_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	374	460	834

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			5		10		15	
00:15			2		0		2		12:15			3		6		9	
00:30			0		0		0		12:30			3		12		15	
00:45			1	3	0		1	3	12:45			3	14	11	39	14	53
01:00			0		0		0		13:00			4		12		16	
01:15			0		0		0		13:15			5		10		15	
01:30			0		0		0		13:30			2		10		12	
01:45			0		0		0		13:45			5	16	9	41	14	57
02:00			0		1		1		14:00			2		6		8	
02:15			0		0		0		14:15			2		11		13	
02:30			0		0		0		14:30			6		6		12	
02:45			1	1	0	1	1	2	14:45			2	12	5	28	7	40
03:00			0		0		0		15:00			5		5		10	
03:15			0		0		0		15:15			5		4		9	
03:30			0		0		0		15:30			3		7		10	
03:45			1	1	0		1	1	15:45			5	18	2	18	7	36
04:00			0		0		0		16:00			5		4		9	
04:15			0		0		0		16:15			2		11		13	
04:30			0		0		0		16:30			6		6		12	
04:45			0		0		0		16:45			6	19	9	30	15	49
05:00			0		0		0		17:00			9		10		19	
05:15			0		1		1		17:15			12		10		22	
05:30			1		0		1		17:30			9		9		18	
05:45			0	1	1	2	1	3	17:45			15	45	12	41	27	86
06:00			0		0		0		18:00			19		15		34	
06:15			0		5		5		18:15			14		17		31	
06:30			0		1		1		18:30			19		14		33	
06:45			2	2	1	7	3	9	18:45			7	59	13	59	20	118
07:00			2		1		3		19:00			6		15		21	
07:15			1		1		2		19:15			6		13		19	
07:30			2		2		4		19:30			7		13		20	
07:45			6	11	2	6	8	17	19:45			7	26	4	45	11	71
08:00			3		4		7		20:00			4		2		6	
08:15			2		2		4		20:15			6		2		8	
08:30			6		4		10		20:30			8		3		11	
08:45			3	14	0	10	3	24	20:45			6	24	6	13	12	37
09:00			2		7		9		21:00			11		2		13	
09:15			2		7		9		21:15			11		11		22	
09:30			2		4		6		21:30			11		7		18	
09:45			2	8	10	28	12	36	21:45			7	40	7	27	14	67
10:00			2		4		6		22:00			7		6		13	
10:15			4		8		12		22:15			6		2		8	
10:30			5		4		9		22:30			4		0		4	
10:45			5	16	15	31	20	47	22:45			2	19	2	10	4	29
11:00			6		7		13		23:00			4		1		5	
11:15			2		4		6		23:15			2		0		2	
11:30			5		8		13		23:30			2		0		2	
11:45			2	15	4	23	6	38	23:45			2	10	0	1	2	11
TOTALS				72		108		180	TOTALS				302		352		654
SPLIT %				40.0%		60.0%		21.6%	SPLIT %				46.2%		53.8%		78.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	374	460	834

AM Peak Hour			10:15	10:15	10:15	PM Peak Hour			17:45	18:00	17:45
AM Pk Volume			20	34	54	PM Pk Volume			67	59	125
Pk Hr Factor			0.833	0.567	0.675	Pk Hr Factor			0.882	0.868	0.919
7 - 9 Volume	0	0	25	16	41	4 - 6 Volume	0	0	64	71	135
7 - 9 Peak Hour			07:45	07:45	07:45	4 - 6 Peak Hour			17:00	17:00	17:00
7 - 9 Pk Volume	0	0	17	12	29	4 - 6 Pk Volume	0	0	45	41	86
Pk Hr Factor	0.000	0.000	0.708	0.750	0.725	Pk Hr Factor	0.000	0.000	0.750	0.854	0.796

Prepared by NDS/ATD

VOLUME

E Solana Cir

Day: Monday
Date: 8/25/2014

City: Solana Beach
Project #: CA14_4218_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	301	526	827

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		1		1		12:00			5		9		14	
00:15			0		1		1		12:15			2		16		18	
00:30			1		0		1		12:30			4		16		20	
00:45			0	1	2	4	2	5	12:45			1	12	8	49	9	61
01:00			1		0		1		13:00			2		13		15	
01:15			0		0		0		13:15			3		12		15	
01:30			0		0		0		13:30			5		13		18	
01:45			0	1	0		0	1	13:45			4	14	7	45	11	59
02:00			0		0		0		14:00			5		6		11	
02:15			0		3		3		14:15			3		9		12	
02:30			0		1		1		14:30			2		15		17	
02:45			0		0	4	0	4	14:45			3	13	11	41	14	54
03:00			0		1		1		15:00			7		12		19	
03:15			0		0		0		15:15			8		8		16	
03:30			0		0		0		15:30			7		14		21	
03:45			0		0	1	0	1	15:45			5	27	11	45	16	72
04:00			0		1		1		16:00			5		13		18	
04:15			0		0		0		16:15			9		9		18	
04:30			0		1		1		16:30			7		5		12	
04:45			0		0	2	0	2	16:45			9	30	5	32	14	62
05:00			1		0		1		17:00			14		7		21	
05:15			1		0		1		17:15			8		6		14	
05:30			0		1		1		17:30			10		5		15	
05:45			0	2	5	6	5	8	17:45			17	49	6	24	23	73
06:00			1		7		8		18:00			12		5		17	
06:15			2		4		6		18:15			7		6		13	
06:30			1		7		8		18:30			4		5		9	
06:45			1	5	9	27	10	32	18:45			5	28	5	21	10	49
07:00			5		4		9		19:00			3		5		8	
07:15			2		10		12		19:15			5		4		9	
07:30			5		10		15		19:30			4		4		8	
07:45			6	18	9	33	15	51	19:45			2	14	2	15	4	29
08:00			4		7		11		20:00			5		5		10	
08:15			4		16		20		20:15			2		4		6	
08:30			2		9		11		20:30			2		3		5	
08:45			10	20	12	44	22	64	20:45			3	12	1	13	4	25
09:00			7		7		14		21:00			1		1		2	
09:15			3		7		10		21:15			2		0		2	
09:30			4		14		18		21:30			5		2		7	
09:45			3	17	7	35	10	52	21:45			3	11	0	3	3	14
10:00			2		5		7		22:00			5		1		6	
10:15			3		14		17		22:15			0		2		2	
10:30			1		9		10		22:30			1		0		1	
10:45			3	9	10	38	13	47	22:45			0	6	0	3	0	9
11:00			2		8		10		23:00			1		2		3	
11:15			3		5		8		23:15			0		1		1	
11:30			2		14		16		23:30			1		0		1	
11:45			2	9	10	37	12	46	23:45			1	3	1	4	2	7
TOTALS				82		231		313	TOTALS				219		295		514
SPLIT %				26.2%		73.8%		37.8%	SPLIT %				42.6%		57.4%		62.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	301	526	827

AM Peak Hour			08:45	11:45	08:15	PM Peak Hour			17:00	12:15	15:30
AM Pk Volume			24	51	67	PM Pk Volume			49	53	73
Pk Hr Factor			0.600	0.797	0.761	Pk Hr Factor			0.721	0.828	0.869
7 - 9 Volume	0	0	38	77	115	4 - 6 Volume	0	0	79	56	135
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			17:00	16:00	17:00
7 - 9 Pk Volume	0	0	20	44	64	4 - 6 Pk Volume	0	0	49	32	73
Pk Hr Factor	0.000	0.000	0.500	0.688	0.727	Pk Hr Factor	0.000	0.000	0.721	0.615	0.793

Prepared by NDS/ATD

VOLUME

E Solana Cir

Day: Tuesday
Date: 8/26/2014

City: Solana Beach
Project #: CA14_4218_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	295	456	751

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			6		2		8	
00:15			0		0		0		12:15			3		8		11	
00:30			0		0		0		12:30			8		3		11	
00:45			0		0		0		12:45			5	22	10	23	15	45
01:00			0		0		0		13:00			10		8		18	
01:15			0		0		0		13:15			9		5		14	
01:30			0		0		0		13:30			7		6		13	
01:45			0		0		0		13:45			7	33	9	28	16	61
02:00			0		0		0		14:00			4		4		8	
02:15			0		0		0		14:15			4		6		10	
02:30			0		0		0		14:30			8		7		15	
02:45			0		1	1	1	1	14:45			6	22	11	28	17	50
03:00			0		2		2		15:00			4		6		10	
03:15			0		0		0		15:15			5		4		9	
03:30			0		0		0		15:30			8		5		13	
03:45			0		0	2	0	2	15:45			6	23	3	18	9	41
04:00			0		0		0		16:00			6		7		13	
04:15			0		1		1		16:15			5		5		10	
04:30			0		0		0		16:30			8		6		14	
04:45			0		2	3	2	3	16:45			9	28	2	20	11	48
05:00			0		0		0		17:00			7		5		12	
05:15			0		1		1		17:15			10		6		16	
05:30			0		2		2		17:30			8		8		16	
05:45			0		3	6	3	6	17:45			6	31	11	30	17	61
06:00			0		2		2		18:00			6		3		9	
06:15			0		8		8		18:15			10		10		20	
06:30			2		6		8		18:30			7		4		11	
06:45			2	4	5	21	7	25	18:45			5	28	3	20	8	48
07:00			0		10		10		19:00			2		8		10	
07:15			1		8		9		19:15			4		8		12	
07:30			2		7		9		19:30			4		7		11	
07:45			2	5	17	42	19	47	19:45			3	13	5	28	8	41
08:00			3		14		17		20:00			4		4		8	
08:15			3		9		12		20:15			1		2		3	
08:30			4		8		12		20:30			6		6		12	
08:45			3	13	9	40	12	53	20:45			3	14	2	14	5	28
09:00			2		5		7		21:00			5		8		13	
09:15			1		10		11		21:15			1		9		10	
09:30			1		10		11		21:30			2		3		5	
09:45			3	7	8	33	11	40	21:45			5	13	3	23	8	36
10:00			3		8		11		22:00			1		0		1	
10:15			4		13		17		22:15			2		1		3	
10:30			3		6		9		22:30			0		1		1	
10:45			4	14	10	37	14	51	22:45			1	4	3	5	4	9
11:00			5		8		13		23:00			0		0		0	
11:15			4		9		13		23:15			0		0		0	
11:30			4		8		12		23:30			1		1		2	
11:45			7	20	8	33	15	53	23:45			0	1	0	1	0	2
TOTALS				63		218		281	TOTALS				232		238		470
SPLIT %				22.4%		77.6%		37.4%	SPLIT %				49.4%		50.6%		62.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	295	456	751

AM Peak Hour			11:45	07:45	07:45	PM Peak Hour			16:30	17:30	17:30
AM Pk Volume			24	48	60	PM Pk Volume			34	32	62
Pk Hr Factor			0.750	0.706	0.789	Pk Hr Factor			0.850	0.727	0.775
7 - 9 Volume	0	0	18	82	100	4 - 6 Volume	0	0	59	50	109
7 - 9 Peak Hour			08:00	07:45	07:45	4 - 6 Peak Hour			16:30	17:00	17:00
7 - 9 Pk Volume	0	0	13	48	60	4 - 6 Pk Volume	0	0	34	30	61
Pk Hr Factor	0.000	0.000	0.813	0.706	0.789	Pk Hr Factor	0.000	0.000	0.850	0.682	0.897

Prepared by NDS/ATD

VOLUME

E Solana Cir

Day: Wednesday
Date: 8/27/2014

City: Solana Beach
Project #: CA14_4218_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	332	443	775

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			3		9		12	
00:15			0		0		0		12:15			6		11		17	
00:30			0		0		0		12:30			3		9		12	
00:45			0		0		0		12:45			4	16	13	42	17	58
01:00			0		0		0		13:00			14		9		23	
01:15			1		1		2		13:15			14		8		22	
01:30			0		0		0		13:30			11		12		23	
01:45			0	1	0	1	0	2	13:45			8	47	11	40	19	87
02:00			0		0		0		14:00			6		4		10	
02:15			0		0		0		14:15			3		16		19	
02:30			0		0		0		14:30			1		8		9	
02:45			0		0		0		14:45			5	15	11	39	16	54
03:00			0		0		0		15:00			8		8		16	
03:15			0		0		0		15:15			6		9		15	
03:30			0		0		0		15:30			6		6		12	
03:45			0		0		0		15:45			2	22	8	31	10	53
04:00			1		0		1		16:00			6		4		10	
04:15			0		0		0		16:15			10		3		13	
04:30			0		0		0		16:30			6		4		10	
04:45			0	1	0		0	1	16:45			10	32	5	16	15	48
05:00			0		0		0		17:00			10		5		15	
05:15			0		1		1		17:15			14		5		19	
05:30			0		2		2		17:30			8		11		19	
05:45			0		2	5	2	5	17:45			12	44	9	30	21	74
06:00			1		5		6		18:00			11		4		15	
06:15			0		6		6		18:15			15		9		24	
06:30			0		3		3		18:30			10		11		21	
06:45			2	3	6	20	8	23	18:45			4	40	2	26	6	66
07:00			1		7		8		19:00			4		8		12	
07:15			2		11		13		19:15			2		3		5	
07:30			3		13		16		19:30			2		5		7	
07:45			1	7	6	37	7	44	19:45			6	14	4	20	10	34
08:00			2		5		7		20:00			6		3		9	
08:15			3		9		12		20:15			2		1		3	
08:30			5		9		14		20:30			10		6		16	
08:45			1	11	9	32	10	43	20:45			2	20	1	11	3	31
09:00			1		9		10		21:00			8		4		12	
09:15			1		3		4		21:15			1		2		3	
09:30			2		5		7		21:30			1		1		2	
09:45			3	7	4	21	7	28	21:45			4	14	1	8	5	22
10:00			1		6		7		22:00			4		1		5	
10:15			1		4		5		22:15			4		2		6	
10:30			4		9		13		22:30			2		1		3	
10:45			4	10	5	24	9	34	22:45			1	11	2	6	3	17
11:00			7		9		16		23:00			0		1		1	
11:15			2		7		9		23:15			0		0		0	
11:30			3		11		14		23:30			1		0		1	
11:45			4	16	6	33	10	49	23:45			0	1	0	1	0	2
TOTALS				56		173		229	TOTALS				276		270		546
SPLIT %				24.5%		75.5%		29.5%	SPLIT %				50.5%		49.5%		70.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	332	443	775

AM Peak Hour			10:30	06:45	11:30	PM Peak Hour			17:45	13:30	13:00
AM Pk Volume			17	37	53	PM Pk Volume			48	43	87
Pk Hr Factor			0.607	0.712	0.779	Pk Hr Factor			0.800	0.672	0.946
7 - 9 Volume	0	0	18	69	87	4 - 6 Volume	0	0	76	46	122
7 - 9 Peak Hour			07:45	07:00	07:00	4 - 6 Peak Hour			17:00	17:00	17:00
7 - 9 Pk Volume	0	0	11	37	44	4 - 6 Pk Volume	0	0	44	30	74
Pk Hr Factor	0.000	0.000	0.550	0.712	0.688	Pk Hr Factor	0.000	0.000	0.786	0.682	0.881

Prepared by NDS/ATD

VOLUME

E Solana Cir

Day: Thursday
Date: 8/28/2014

City: Solana Beach
Project #: CA14_4218_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	368	412	780

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			2		0		2		12:00			5		5		10	
00:15			1		0		1		12:15			6		16		22	
00:30			0		1		1		12:30			3		10		13	
00:45			0	3	0	1	0	4	12:45			5	19	5	36	10	55
01:00			0		0		0		13:00			6		3		9	
01:15			0		0		0		13:15			9		9		18	
01:30			0		0		0		13:30			1		15		16	
01:45			0		0		0		13:45			6	22	8	35	14	57
02:00			1		1		2		14:00			6		11		17	
02:15			0		0		0		14:15			4		5		9	
02:30			0		0		0		14:30			4		8		12	
02:45			0	1	0	1	0	2	14:45			6	20	11	35	17	55
03:00			0		0		0		15:00			7		8		15	
03:15			0		0		0		15:15			9		13		22	
03:30			0		0		0		15:30			3		8		11	
03:45			0		0		0		15:45			3	22	10	39	13	61
04:00			0		0		0		16:00			5		4		9	
04:15			0		0		0		16:15			5		6		11	
04:30			0		0		0		16:30			5		3		8	
04:45			0		0		0		16:45			12	27	4	17	16	44
05:00			1		0		1		17:00			9		11		20	
05:15			0		3		3		17:15			9		8		17	
05:30			0		2		2		17:30			13		3		16	
05:45			2	3	0	5	2	8	17:45			16	47	13	35	29	82
06:00			0		1		1		18:00			11		8		19	
06:15			2		10		12		18:15			8		5		13	
06:30			3		0		3		18:30			16		1		17	
06:45			5	10	3	14	8	24	18:45			12	47	4	18	16	65
07:00			6		4		10		19:00			7		3		10	
07:15			4		8		12		19:15			9		1		10	
07:30			8		5		13		19:30			6		4		10	
07:45			8	26	8	25	16	51	19:45			9	31	4	12	13	43
08:00			4		4		8		20:00			6		6		12	
08:15			3		4		7		20:15			6		1		7	
08:30			4		6		10		20:30			6		0		6	
08:45			4	15	9	23	13	38	20:45			6	24	3	10	9	34
09:00			5		5		10		21:00			3		2		5	
09:15			4		5		9		21:15			3		1		4	
09:30			4		8		12		21:30			0		0		0	
09:45			2	15	7	25	9	40	21:45			2	8	0	3	2	11
10:00			3		5		8		22:00			2		1		3	
10:15			2		11		13		22:15			2		1		3	
10:30			2		7		9		22:30			0		1		1	
10:45			3	10	10	33	13	43	22:45			2	6	1	4	3	10
11:00			4		11		15		23:00			3		0		3	
11:15			2		8		10		23:15			0		0		0	
11:30			1		11		12		23:30			1		1		2	
11:45			1	8	10	40	11	48	23:45			0	4	0	1	0	5
TOTALS				91		167		258	TOTALS				277		245		522
SPLIT %				35.3%		64.7%		33.1%	SPLIT %				53.1%		46.9%		66.9%

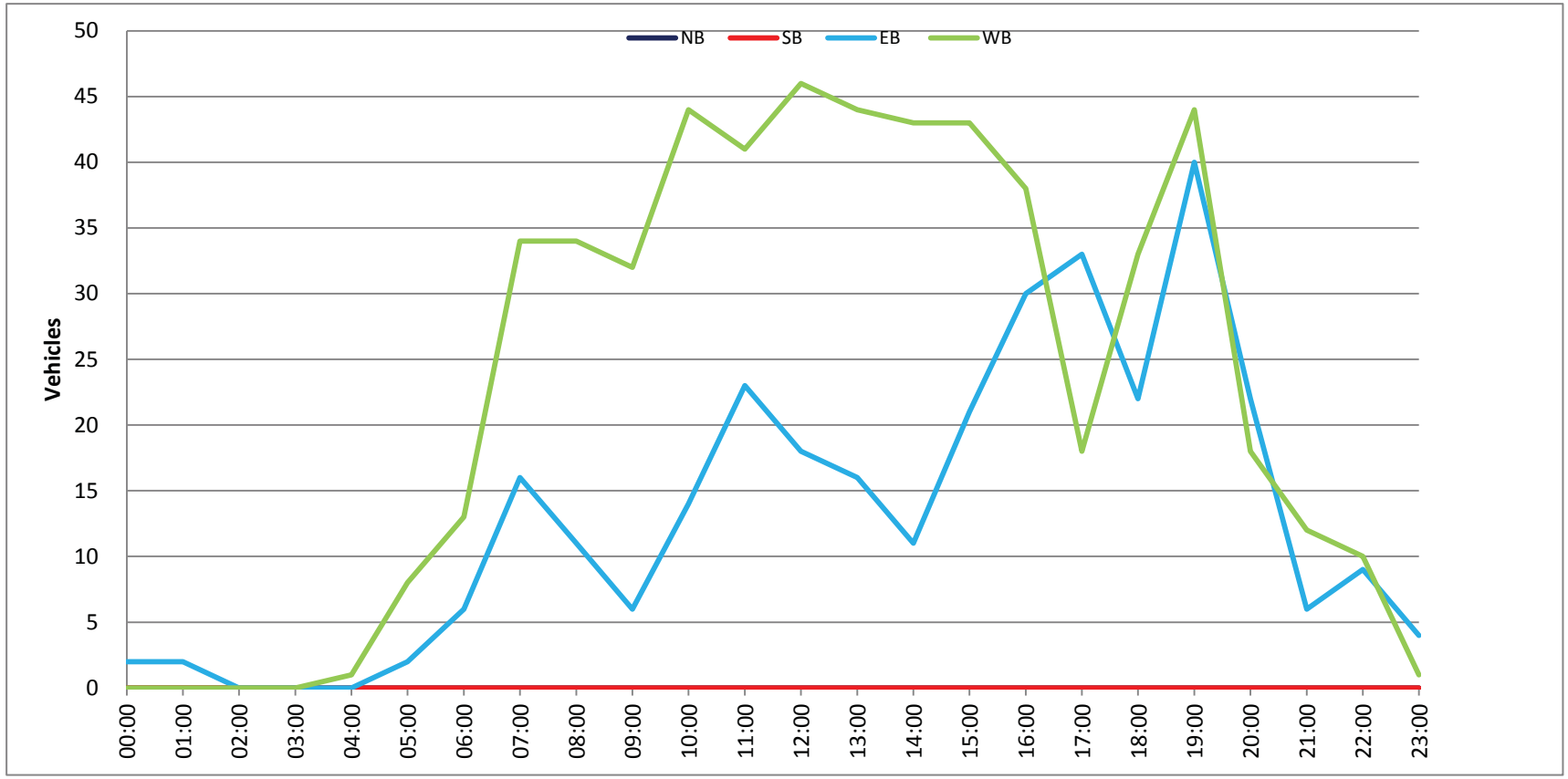
DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	368	412	780

AM Peak Hour			07:00	11:30	11:45	PM Peak Hour			17:45	13:15	17:00
AM Pk Volume			26	42	56	PM Pk Volume			51	43	82
Pk Hr Factor			0.813	0.656	0.636	Pk Hr Factor			0.797	0.717	0.707
7 - 9 Volume	0	0	41	48	89	4 - 6 Volume	0	0	74	52	126
7 - 9 Peak Hour			07:00	07:00	07:00	4 - 6 Peak Hour			17:00	17:00	17:00
7 - 9 Pk Volume	0	0	26	25	51	4 - 6 Pk Volume	0	0	47	35	82
Pk Hr Factor	0.000	0.000	0.813	0.781	0.797	Pk Hr Factor	0.000	0.000	0.734	0.673	0.707

Prepared by NDS/ATD

Project #: CA14_4218_001 **City:** Solana Beach

Location: E Solana Cir **Date:** 8/22/2014



Prepared by NDS/ATD

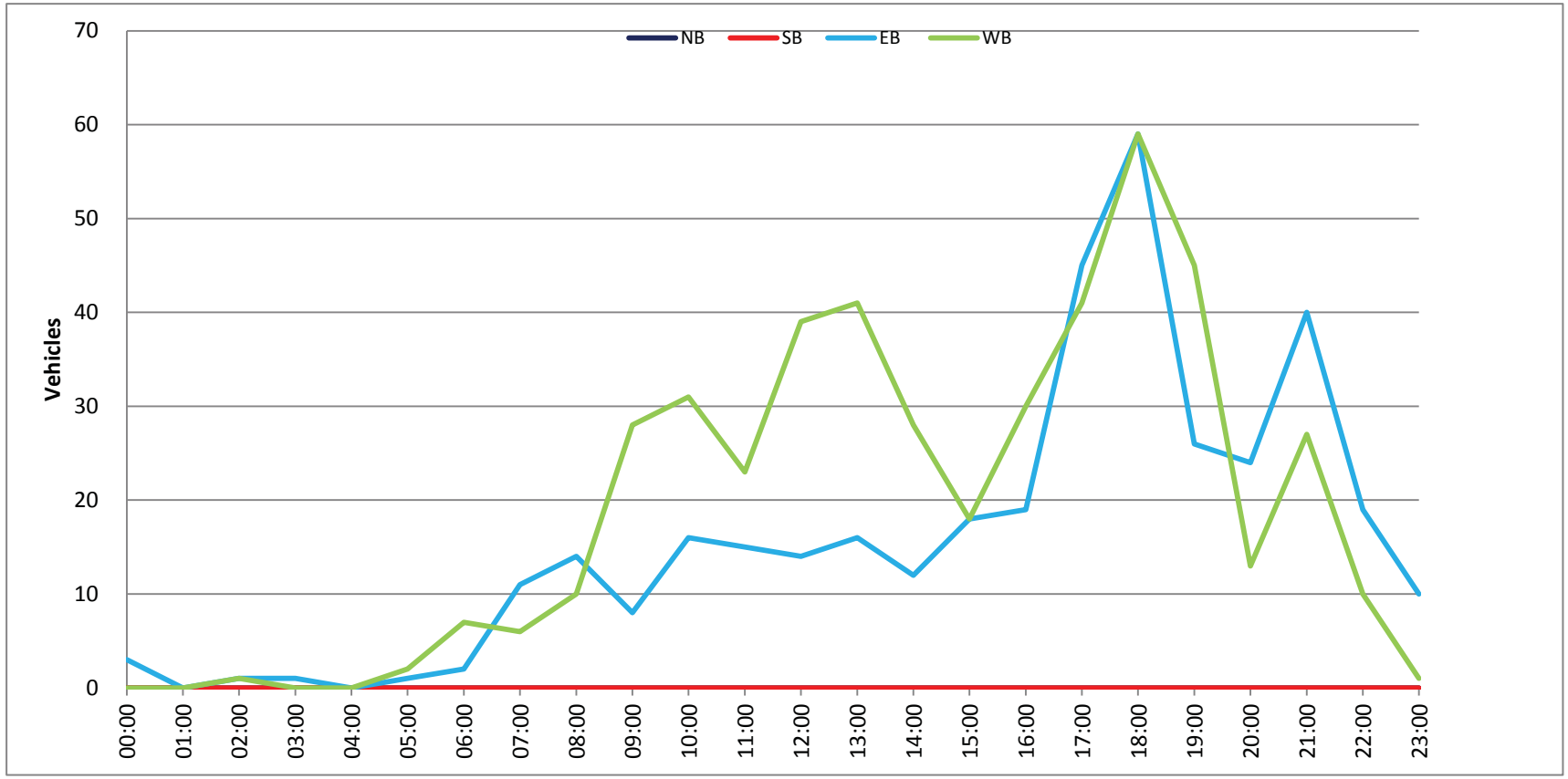
Project #: CA14_4218_001 **City:** Solana Beach

Location: E Solana Cir **Date:** 8/23/2014

Prepared by NDS/ATD

Project #: CA14_4218_001 **City:** Solana Beach

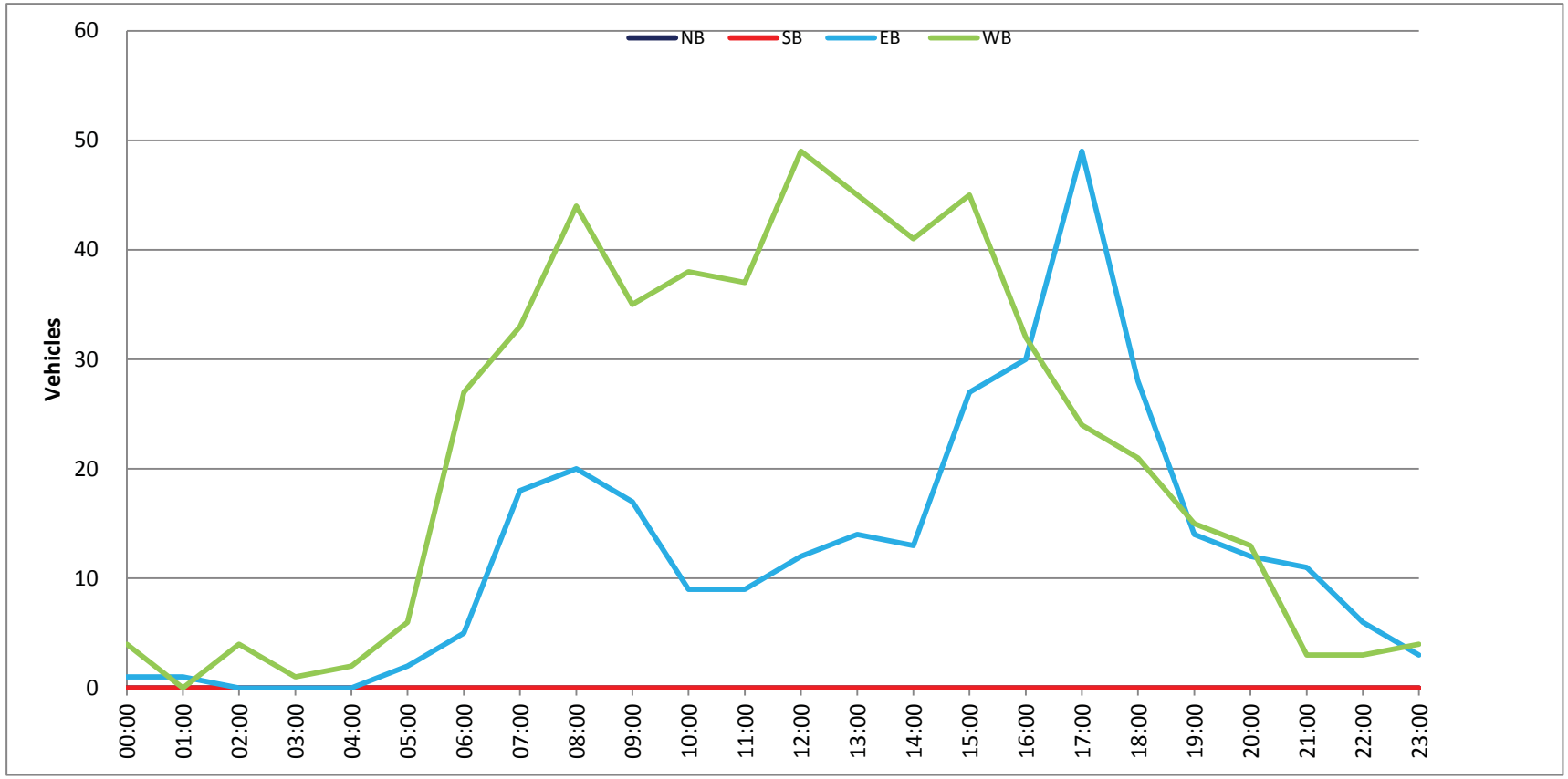
Location: E Solana Cir **Date:** 8/24/2014



Prepared by NDS/ATD

Project #: CA14_4218_001 **City:** Solana Beach

Location: E Solana Cir **Date:** 8/25/2014



Prepared by NDS/ATD

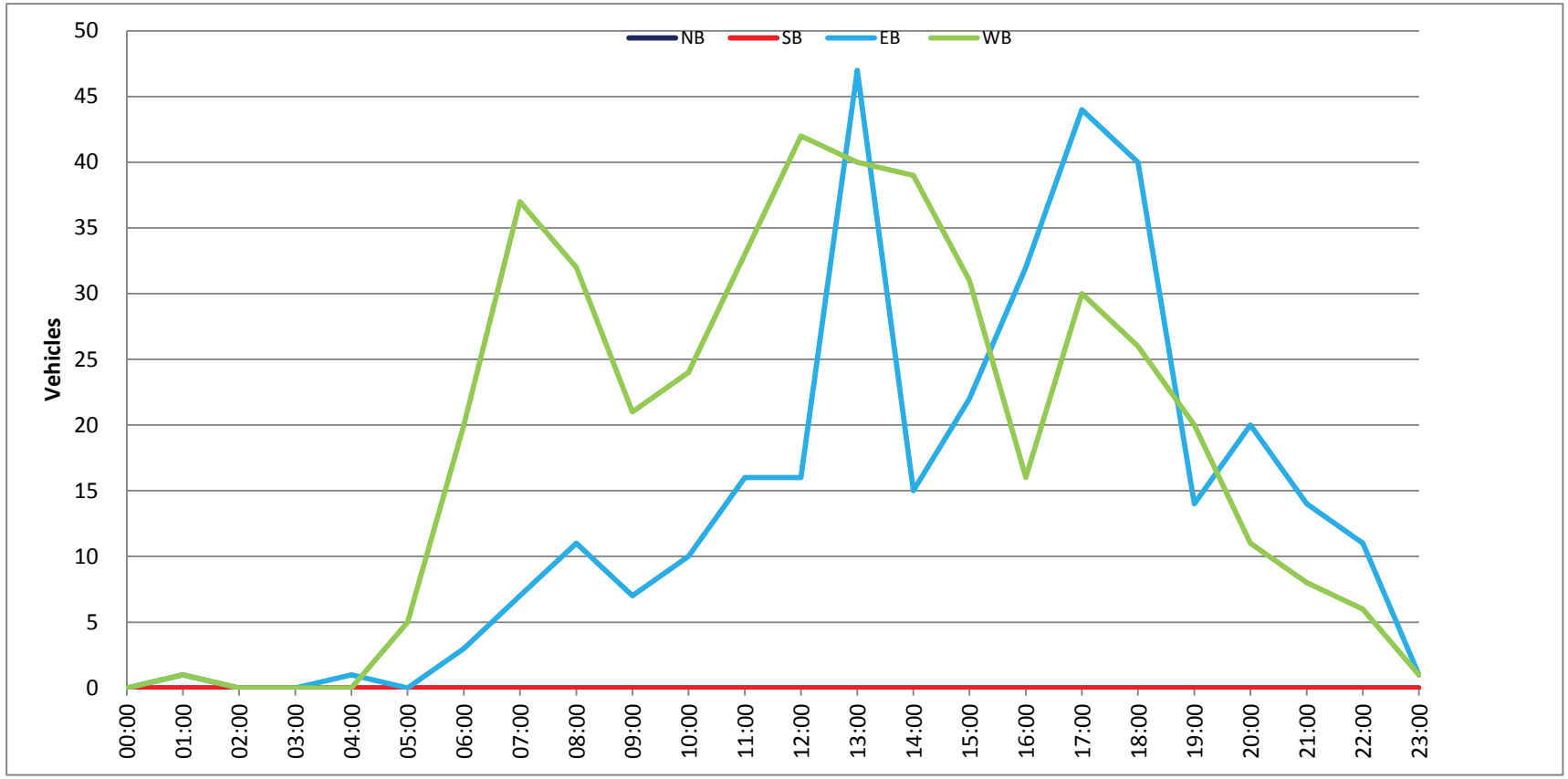
Project #: CA14_4218_001 **City:** Solana Beach

Location: E Solana Cir **Date:** 8/26/2014

Prepared by NDS/ATD

Project #: CA14_4218_001 **City:** Solana Beach

Location: E Solana Cir **Date:** 8/27/2014



Prepared by NDS/ATD

Project #: CA14_4218_001 **City:** Solana Beach

Location: E Solana Cir **Date:** 8/28/2014

Prepared by NDS/ATD

VOLUME

Nardo Ave btwn Corto St & Lirio St

Day: Friday
Date: 8/22/2014

City: Solana Beach
Project #: CA14_4218_002

DAILY TOTALS	NB	SB	EB	WB	Total
	910	1,141	0	0	2,051

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		1						1		12:00	25		17						42	
00:15	1		1						2		12:15	12		27						39	
00:30	0		1						1		12:30	22		21						43	
00:45	1	2	0	3					1	5	12:45	13	72	19	84					32	156
01:00	0		1						1		13:00	6		21						27	
01:15	1		1						2		13:15	13		24						37	
01:30	0		0						0		13:30	20		24						44	
01:45	0	1	0	2					0	3	13:45	10	49	30	99					40	148
02:00	1		1						2		14:00	10		22						32	
02:15	0		0						0		14:15	20		24						44	
02:30	0		0						0		14:30	20		20						40	
02:45	0	1	0	1					0	2	14:45	27	77	20	86					47	163
03:00	0		0						0		15:00	11		18						29	
03:15	0		2						2		15:15	24		23						47	
03:30	0		0						0		15:30	20		17						37	
03:45	0		0	2					0	2	15:45	11	66	28	86					39	152
04:00	1		1						2		16:00	22		17						39	
04:15	0		0						0		16:15	22		25						47	
04:30	0		2						2		16:30	14		17						31	
04:45	0	1	0	3					0	4	16:45	18	76	20	79					38	155
05:00	0		0						0		17:00	16		27						43	
05:15	0		1						1		17:15	10		29						39	
05:30	3		1						4		17:30	13		31						44	
05:45	2	5	5	7					7	12	17:45	17	56	20	107					37	163
06:00	2		3						5		18:00	25		18						43	
06:15	5		4						9		18:15	15		20						35	
06:30	8		5						13		18:30	8		19						27	
06:45	12	27	5	17					17	44	18:45	12	60	15	72					27	132
07:00	9		10						19		19:00	14		12						26	
07:15	9		17						26		19:15	24		10						34	
07:30	14		17						31		19:30	17		16						33	
07:45	9	41	32	76					41	117	19:45	13	68	14	52					27	120
08:00	7		18						25		20:00	8		5						13	
08:15	24		16						40		20:15	9		9						18	
08:30	13		21						34		20:30	10		10						20	
08:45	18	62	10	65					28	127	20:45	6	33	5	29					11	62
09:00	10		10						20		21:00	5		5						10	
09:15	12		20						32		21:15	8		4						12	
09:30	17		18						35		21:30	2		18						20	
09:45	10	49	15	63					25	112	21:45	2	17	15	42					17	59
10:00	15		11						26		22:00	2		9						11	
10:15	16		15						31		22:15	11		4						15	
10:30	12		16						28		22:30	4		6						10	
10:45	14	57	19	61					33	118	22:45	2	19	4	23					6	42
11:00	16		18						34		23:00	4		5						9	
11:15	14		15						29		23:15	2		2						4	
11:30	18		18						36		23:30	3		5						8	
11:45	14	62	18	69					32	131	23:45	0	9	1	13					1	22
TOTALS		308		369						677	TOTALS		602		772						1374
SPLIT %		45.5%		54.5%						33.0%	SPLIT %		43.8%		56.2%						67.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	910	1,141	0	0	2,051

AM Peak Hour	11:45	07:45			11:45	PM Peak Hour	14:30	16:45			16:45
AM Pk Volume	73	87			156	PM Pk Volume	82	107			164
Pk Hr Factor	0.730	0.680			0.907	Pk Hr Factor	0.759	0.863			0.932
7 - 9 Volume	103	141	0	0	244	4 - 6 Volume	132	186	0	0	318
7 - 9 Peak Hour	08:00	07:45			07:45	4 - 6 Peak Hour	16:00	16:45			16:45
7 - 9 Pk Volume	62	87	0	0	140	4 - 6 Pk Volume	76	107	0	0	164
Pk Hr Factor	0.646	0.680	0.000	0.000	0.854	Pk Hr Factor	0.864	0.863	0.000	0.000	0.932

Prepared by NDS/ATD

VOLUME

Nardo Ave btwn Corto St & Lirio St

Day: Saturday
Date: 8/23/2014

City: Solana Beach
Project #: CA14_4218_002

DAILY TOTALS	NB	SB	EB	WB	Total
	833	1,020	0	0	1,853

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	2		4						6		12:00	14		23						37	
00:15	0		0						0		12:15	11		16						27	
00:30	1		2						3		12:30	11		21						32	
00:45	1	4	1	7					2	11	12:45	10	46	25	85					35	131
01:00	0		1						1		13:00	13		23						36	
01:15	0		0						0		13:15	16		28						44	
01:30	0		1						1		13:30	14		28						42	
01:45	0		1	3					1	3	13:45	11	54	19	98					30	152
02:00	2		2						4		14:00	20		14						34	
02:15	0		0						0		14:15	17		19						36	
02:30	0		0						0		14:30	6		20						26	
02:45	1	3	1	3					2	6	14:45	16	59	12	65					28	124
03:00	0		0						0		15:00	16		18						34	
03:15	0		0						0		15:15	8		18						26	
03:30	1		1						2		15:30	10		22						32	
03:45	0	1	1	2					1	3	15:45	17	51	21	79					38	130
04:00	0		1						1		16:00	10		18						28	
04:15	1		1						2		16:15	18		20						38	
04:30	0		0						0		16:30	20		34						54	
04:45	0	1	1	3					1	4	16:45	15	63	45	117					60	180
05:00	2		0						2		17:00	12		24						36	
05:15	0		1						1		17:15	22		12						34	
05:30	1		1						2		17:30	8		16						24	
05:45	2	5	1	3					3	8	17:45	42	84	16	68					58	152
06:00	1		1						2		18:00	24		14						38	
06:15	6		3						9		18:15	11		18						29	
06:30	6		5						11		18:30	13		18						31	
06:45	6	19	5	14					11	33	18:45	15	63	13	63					28	126
07:00	6		7						13		19:00	15		11						26	
07:15	6		7						13		19:15	13		7						20	
07:30	14		12						26		19:30	9		8						17	
07:45	6	32	8	34					14	66	19:45	8	45	11	37					19	82
08:00	7		11						18		20:00	8		13						21	
08:15	8		17						25		20:15	9		8						17	
08:30	15		16						31		20:30	9		6						15	
08:45	14	44	16	60					30	104	20:45	10	36	8	35					18	71
09:00	5		8						13		21:00	3		7						10	
09:15	17		13						30		21:15	7		6						13	
09:30	17		8						25		21:30	5		8						13	
09:45	9	48	14	43					23	91	21:45	8	23	8	29					16	52
10:00	21		17						38		22:00	3		8						11	
10:15	14		16						30		22:15	5		6						11	
10:30	9		12						21		22:30	5		6						11	
10:45	19	63	17	62					36	125	22:45	6	19	3	23					9	42
11:00	18		22						40		23:00	3		5						8	
11:15	13		13						26		23:15	4		8						12	
11:30	14		17						31		23:30	5		1						6	
11:45	11	56	15	67					26	123	23:45	2	14	6	20					8	34
TOTALS		276		301						577	TOTALS		557		719						1276
SPLIT %		47.8%		52.2%						31.1%	SPLIT %		43.7%		56.3%						68.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	833	1,020	0	0	1,853

AM Peak Hour	09:15	11:45			10:45	PM Peak Hour	17:15	16:15			16:15
AM Pk Volume	64	75			133	PM Pk Volume	96	123			188
Pk Hr Factor	0.762	0.815			0.831	Pk Hr Factor	0.571	0.683			0.783
7 - 9 Volume	76	94	0	0	170	4 - 6 Volume	147	185	0	0	332
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	17:00	16:15			16:15
7 - 9 Pk Volume	44	60	0	0	104	4 - 6 Pk Volume	84	123	0	0	188
Pk Hr Factor	0.733	0.882	0.000	0.000	0.839	Pk Hr Factor	0.500	0.683	0.000	0.000	0.783

Prepared by NDS/ATD

VOLUME

Nardo Ave btwn Corto St & Lirio St

Day: Sunday
Date: 8/24/2014

City: Solana Beach
Project #: CA14_4218_002

DAILY TOTALS	NB	SB	EB	WB	Total
	943	1,025	0	0	1,968

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	3		4						7		12:00	11		17						28	
00:15	1		1						2		12:15	30		20						50	
00:30	1		1						2		12:30	27		11						38	
00:45	1	6	0	6					1	12	12:45	13	81	16	64					29	145
01:00	0		0						0		13:00	16		17						33	
01:15	0		3						3		13:15	13		18						31	
01:30	0		0						0		13:30	15		15						30	
01:45	1	1	1	4					2	5	13:45	11	55	19	69					30	124
02:00	0		0						0		14:00	12		9						21	
02:15	0		0						0		14:15	14		10						24	
02:30	3		0						3		14:30	6		20						26	
02:45	0	3	0						0	3	14:45	18	50	19	58					37	108
03:00	0		1						1		15:00	9		21						30	
03:15	0		2						2		15:15	9		15						24	
03:30	0		0						0		15:30	18		14						32	
03:45	1	1	1	4					2	5	15:45	18	54	10	60					28	114
04:00	0		0						0		16:00	15		17						32	
04:15	0		3						3		16:15	16		19						35	
04:30	0		0						0		16:30	17		14						31	
04:45	0		0	3					0	3	16:45	14	62	12	62					26	124
05:00	0		1						1		17:00	15		14						29	
05:15	1		0						1		17:15	15		22						37	
05:30	3		0						3		17:30	12		32						44	
05:45	1	5	0	1					1	6	17:45	13	55	43	111					56	166
06:00	0		5						5		18:00	27		15						42	
06:15	2		3						5		18:15	22		8						30	
06:30	5		6						11		18:30	31		13						44	
06:45	9	16	3	17					12	33	18:45	22	102	12	48					34	150
07:00	2		25						27		19:00	43		13						56	
07:15	7		20						27		19:15	26		11						37	
07:30	4		8						12		19:30	8		12						20	
07:45	8	21	16	69					24	90	19:45	10	87	10	46					20	133
08:00	7		8						15		20:00	8		7						15	
08:15	31		11						42		20:15	6		7						13	
08:30	21		26						47		20:30	13		8						21	
08:45	8	67	43	88					51	155	20:45	5	32	8	30					13	62
09:00	7		15						22		21:00	6		9						15	
09:15	11		13						24		21:15	5		5						10	
09:30	16		7						23		21:30	6		8						14	
09:45	28	62	10	45					38	107	21:45	3	20	5	27					8	47
10:00	40		17						57		22:00	6		6						12	
10:15	23		18						41		22:15	2		6						8	
10:30	15		18						33		22:30	1		1						2	
10:45	17	95	19	72					36	167	22:45	3	12	2	15					5	27
11:00	9		19						28		23:00	1		6						7	
11:15	14		41						55		23:15	3		5						8	
11:30	13		28						41		23:30	0		2						2	
11:45	15	51	25	113					40	164	23:45	1	5	0	13					1	18
TOTALS		328		422						750	TOTALS		615		603						1218
SPLIT %		43.7%		56.3%						38.1%	SPLIT %		50.5%		49.5%						61.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	943	1,025	0	0	1,968

AM Peak Hour	09:30	11:00			09:45	PM Peak Hour	18:30	17:15			17:15
AM Pk Volume	107	113			169	PM Pk Volume	122	112			179
Pk Hr Factor	0.669	0.689			0.741	Pk Hr Factor	0.709	0.651			0.799
7 - 9 Volume	88	157	0	0	245	4 - 6 Volume	117	173	0	0	290
7 - 9 Peak Hour	07:45	08:00			08:00	4 - 6 Peak Hour	16:00	17:00			17:00
7 - 9 Pk Volume	67	88	0	0	155	4 - 6 Pk Volume	62	111	0	0	166
Pk Hr Factor	0.540	0.512	0.000	0.000	0.760	Pk Hr Factor	0.912	0.645	0.000	0.000	0.741

Prepared by NDS/ATD

VOLUME

Nardo Ave btwn Corto St & Lirio St

Day: Monday
Date: 8/25/2014

City: Solana Beach
Project #: CA14_4218_002

DAILY TOTALS	NB	SB	EB	WB	Total
	987	1,102	0	0	2,089

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		2						2		12:00	44		23						67	
00:15	3		1						4		12:15	22		18						40	
00:30	0		1						1		12:30	22		15						37	
00:45	1	4	0	4					1	8	12:45	12	100	16	72					28	172
01:00	1		0						1		13:00	11		13						24	
01:15	0		0						0		13:15	15		25						40	
01:30	0		0						0		13:30	18		18						36	
01:45	0	1	0						0	1	13:45	10	54	20	76					30	130
02:00	0		0						0		14:00	14		11						25	
02:15	1		0						1		14:15	10		18						28	
02:30	0		0						0		14:30	22		14						36	
02:45	0	1	0						0	1	14:45	10	56	12	55					22	111
03:00	1		0						1		15:00	13		41						54	
03:15	0		2						2		15:15	28		22						50	
03:30	0		0						0		15:30	13		20						33	
03:45	0	1	1	3					1	4	15:45	19	73	22	105					41	178
04:00	0		2						2		16:00	18		23						41	
04:15	1		0						1		16:15	13		15						28	
04:30	0		1						1		16:30	17		21						38	
04:45	0	1	2	5					2	6	16:45	9	57	11	70					20	127
05:00	0		0						0		17:00	24		26						50	
05:15	2		1						3		17:15	20		13						33	
05:30	2		2						4		17:30	23		15						38	
05:45	3	7	2	5					5	12	17:45	26	93	8	62					34	155
06:00	2		3						5		18:00	13		15						28	
06:15	6		4						10		18:15	13		12						25	
06:30	7		10						17		18:30	6		12						18	
06:45	8	23	11	28					19	51	18:45	11	43	14	53					25	96
07:00	11		15						26		19:00	10		13						23	
07:15	12		34						46		19:15	12		17						29	
07:30	19		57						76		19:30	14		13						27	
07:45	15	57	37	143					52	200	19:45	10	46	12	55					22	101
08:00	24		16						40		20:00	8		17						25	
08:15	33		20						53		20:15	9		3						12	
08:30	32		17						49		20:30	9		9						18	
08:45	15	104	12	65					27	169	20:45	8	34	6	35					14	69
09:00	26		22						48		21:00	2		4						6	
09:15	23		12						35		21:15	5		6						11	
09:30	17		12						29		21:30	5		2						7	
09:45	17	83	16	62					33	145	21:45	1	13	7	19					8	32
10:00	14		14						28		22:00	5		4						9	
10:15	18		18						36		22:15	2		0						2	
10:30	10		16						26		22:30	3		3						6	
10:45	15	57	15	63					30	120	22:45	2	12	0	7					2	19
11:00	16		18						34		23:00	1		3						4	
11:15	15		18						33		23:15	1		1						2	
11:30	9		40						49		23:30	0		1						1	
11:45	25	65	32	108					57	173	23:45	0	2	2	7					2	9
TOTALS		404		486						**890**	**TOTALS**		583		616						**1199**
SPLIT %		45.4%		54.6%						**42.6%**	**SPLIT %**		48.6%		51.4%						**57.4%**

DAILY TOTALS	NB	SB	EB	WB	Total
	987	1,102	0	0	2,089

AM Peak Hour	11:45	07:15			**07:30**	**PM Peak Hour**	12:00	15:00			**15:00**
AM Pk Volume	113	144			**221**	**PM Pk Volume**	100	105			**178**
Pk Hr Factor	0.642	0.632			**0.727**	**Pk Hr Factor**	0.568	0.640			**0.824**
7 - 9 Volume	161	208	0	0	**369**	**4 - 6 Volume**	150	132	0	0	**282**
7 - 9 Peak Hour	07:45	07:15			**07:30**	**4 - 6 Peak Hour**	17:00	16:15			**17:00**
7 - 9 Pk Volume	104	144	0	0	**221**	**4 - 6 Pk Volume**	93	73	0	0	**155**
Pk Hr Factor	0.788	0.632	0.000	0.000	**0.727**	**Pk Hr Factor**	0.894	0.702	0.000	0.000	**0.775**

Prepared by NDS/ATD

VOLUME

Nardo Ave btwn Corto St & Lirio St

Day: Tuesday
Date: 8/26/2014

City: Solana Beach
Project #: CA14_4218_002

DAILY TOTALS	NB	SB	EB	WB	Total
	989	1,183	0	0	2,172

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		1						1		12:00	14		20						34	
00:15	0		1						1		12:15	24		15						39	
00:30	1		0						1		12:30	11		21						32	
00:45	1	2	0	2					1	4	12:45	19	68	17	73					36	141
01:00	0		0						0		13:00	15		18						33	
01:15	0		0						0		13:15	16		21						37	
01:30	0		0						0		13:30	10		13						23	
01:45	0		1	1					1	1	13:45	22	63	18	70					40	133
02:00	0		0						0		14:00	13		17						30	
02:15	0		0						0		14:15	16		27						43	
02:30	0		0						0		14:30	27		47						74	
02:45	0		0						0		14:45	44	100	28	119					72	219
03:00	0		0						0		15:00	24		35						59	
03:15	0		1						1		15:15	16		22						38	
03:30	0		0						0		15:30	26		17						43	
03:45	0		0	1					0	1	15:45	23	89	20	94					43	183
04:00	0		1						1		16:00	16		23						39	
04:15	3		0						3		16:15	18		26						44	
04:30	1		1						2		16:30	10		20						30	
04:45	0	4	0	2					0	6	16:45	10	54	22	91					32	145
05:00	1		2						3		17:00	20		17						37	
05:15	1		1						2		17:15	14		20						34	
05:30	2		0						2		17:30	27		19						46	
05:45	3	7	4	7					7	14	17:45	15	76	28	84					43	160
06:00	2		1						3		18:00	18		15						33	
06:15	11		4						15		18:15	17		21						38	
06:30	4		14						18		18:30	11		12						23	
06:45	19	36	14	33					33	69	18:45	14	60	13	61					27	121
07:00	12		23						35		19:00	6		19						25	
07:15	17		36						53		19:15	11		9						20	
07:30	31		54						85		19:30	8		12						20	
07:45	33	93	40	153					73	246	19:45	10	35	8	48					18	83
08:00	32		23						55		20:00	9		6						15	
08:15	24		24						48		20:15	3		6						9	
08:30	26		14						40		20:30	4		8						12	
08:45	13	95	18	79					31	174	20:45	5	21	10	30					15	51
09:00	8		16						24		21:00	10		7						17	
09:15	11		21						32		21:15	10		8						18	
09:30	11		17						28		21:30	5		4						9	
09:45	17	47	12	66					29	113	21:45	2	27	5	24					7	51
10:00	13		14						27		22:00	2		2						4	
10:15	13		17						30		22:15	2		8						10	
10:30	12		14						26		22:30	3		6						9	
10:45	11	49	10	55					21	104	22:45	3	10	4	20					7	30
11:00	10		10						20		23:00	1		4						5	
11:15	11		14						25		23:15	1		3						4	
11:30	20		18						38		23:30	1		1						2	
11:45	8	49	18	60					26	109	23:45	1	4	2	10					3	14
TOTALS		382		459						841	TOTALS		607		724						1331
SPLIT %		45.4%		54.6%						38.7%	SPLIT %		45.6%		54.4%						61.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	989	1,183	0	0	2,172

AM Peak Hour	07:30	07:00			07:15	PM Peak Hour	14:15	14:15			14:15
AM Pk Volume	120	153			266	PM Pk Volume	111	137			248
Pk Hr Factor	0.909	0.708			0.782	Pk Hr Factor	0.631	0.729			0.838
7 - 9 Volume	188	232	0	0	420	4 - 6 Volume	130	175	0	0	305
7 - 9 Peak Hour	07:30	07:00			07:15	4 - 6 Peak Hour	17:00	16:00			17:00
7 - 9 Pk Volume	120	153	0	0	266	4 - 6 Pk Volume	76	91	0	0	160
Pk Hr Factor	0.909	0.708	0.000	0.000	0.782	Pk Hr Factor	0.704	0.875	0.000	0.000	0.870

Prepared by NDS/ATD

VOLUME

Nardo Ave btwn Corto St & Lirio St

Day: Wednesday
Date: 8/27/2014

City: Solana Beach
Project #: CA14_4218_002

DAILY TOTALS	NB	SB	EB	WB	Total
	998	1,233	0	0	2,231

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	5		1						6		12:00	12		11						23	
00:15	0		0						0		12:15	11		14						25	
00:30	0		1						1		12:30	16		21						37	
00:45	1	6	0	2					1	8	12:45	11	50	19	65					30	115
01:00	0		0						0		13:00	17		19						36	
01:15	0		2						2		13:15	19		22						41	
01:30	0		0						0		13:30	14		29						43	
01:45	0		0	2					0	2	13:45	21	71	23	93					44	164
02:00	0		0						0		14:00	14		20						34	
02:15	0		0						0		14:15	17		32						49	
02:30	0		0						0		14:30	15		48						63	
02:45	0		0						0		14:45	43	89	27	127					70	216
03:00	0		0						0		15:00	26		21						47	
03:15	0		1						1		15:15	23		20						43	
03:30	0		0						0		15:30	21		17						38	
03:45	0		0	1					0	1	15:45	22	92	34	92					56	184
04:00	0		0						0		16:00	16		24						40	
04:15	0		1						1		16:15	25		23						48	
04:30	1		1						2		16:30	15		21						36	
04:45	0	1	0	2					0	3	16:45	23	79	32	100					55	179
05:00	0		0						0		17:00	22		25						47	
05:15	2		0						2		17:15	24		27						51	
05:30	1		1						2		17:30	23		24						47	
05:45	3	6	2	3					5	9	17:45	23	92	26	102					49	194
06:00	3		2						5		18:00	17		15						32	
06:15	6		2						8		18:15	21		20						41	
06:30	8		16						24		18:30	25		13						38	
06:45	14	31	15	35					29	66	18:45	16	79	9	57					25	136
07:00	15		21						36		19:00	9		14						23	
07:15	17		44						61		19:15	7		16						23	
07:30	22		41						63		19:30	7		13						20	
07:45	16	70	45	151					61	221	19:45	10	33	8	51					18	84
08:00	29		20						49		20:00	12		6						18	
08:15	25		19						44		20:15	2		12						14	
08:30	19		27						46		20:30	3		12						15	
08:45	11	84	22	88					33	172	20:45	3	20	7	37					10	57
09:00	12		14						26		21:00	6		7						13	
09:15	14		16						30		21:15	7		2						9	
09:30	12		16						28		21:30	4		5						9	
09:45	13	51	14	60					27	111	21:45	3	20	5	19					8	39
10:00	14		17						31		22:00	2		1						3	
10:15	17		14						31		22:15	6		3						9	
10:30	14		21						35		22:30	3		2						5	
10:45	16	61	17	69					33	130	22:45	3	14	2	8					5	22
11:00	16		15						31		23:00	2		2						4	
11:15	13		16						29		23:15	1		1						2	
11:30	10		16						26		23:30	1		2						3	
11:45	5	44	17	64					22	108	23:45	1	5	0	5					1	10
TOTALS		354		477						831	TOTALS		644		756						1400
SPLIT %		42.6%		57.4%						37.2%	SPLIT %		46.0%		54.0%						62.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	998	1,233	0	0	2,231

AM Peak Hour	07:30	07:00			07:15	PM Peak Hour	14:45	14:15			14:15
AM Pk Volume	92	151			234	PM Pk Volume	113	128			229
Pk Hr Factor	0.793	0.839			0.929	Pk Hr Factor	0.657	0.667			0.818
7 - 9 Volume	154	239	0	0	393	4 - 6 Volume	171	202	0	0	373
7 - 9 Peak Hour	07:30	07:00			07:15	4 - 6 Peak Hour	16:45	16:45			16:45
7 - 9 Pk Volume	92	151	0	0	234	4 - 6 Pk Volume	92	108	0	0	200
Pk Hr Factor	0.793	0.839	0.000	0.000	0.929	Pk Hr Factor	0.958	0.844	0.000	0.000	0.909

Prepared by NDS/ATD

VOLUME

Nardo Ave btwn Corto St & Lirio St

Day: Thursday
Date: 8/28/2014

City: Solana Beach
Project #: CA14_4218_002

DAILY TOTALS	NB	SB	EB	WB	Total
	1,045	1,211	0	0	2,256

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	1		2						3		12:00	19		20						39	
00:15	1		1						2		12:15	15		20						35	
00:30	0		0						0		12:30	14		15						29	
00:45	0	2	0	3					0	5	12:45	13	61	15	70					28	131
01:00	0		0						0		13:00	10		17						27	
01:15	0		2						2		13:15	12		15						27	
01:30	0		1						1		13:30	9		14						23	
01:45	0		0	3					0	3	13:45	9	40	17	63					26	103
02:00	0		0						0		14:00	8		24						32	
02:15	1		0						1		14:15	22		34						56	
02:30	1		0						1		14:30	27		31						58	
02:45	0	2	1	1					1	3	14:45	30	87	37	126					67	213
03:00	0		0						0		15:00	25		36						61	
03:15	0		1						1		15:15	23		24						47	
03:30	0		1						1		15:30	24		24						48	
03:45	0		0	2					0	2	15:45	19	91	10	94					29	185
04:00	1		0						1		16:00	29		24						53	
04:15	0		2						2		16:15	20		18						38	
04:30	0		1						1		16:30	24		20						44	
04:45	1	2	1	4					2	6	16:45	20	93	33	95					53	188
05:00	0		1						1		17:00	14		24						38	
05:15	2		4						6		17:15	24		23						47	
05:30	1		0						1		17:30	19		20						39	
05:45	2	5	2	7					4	12	17:45	24	81	19	86					43	167
06:00	2		0						2		18:00	31		21						52	
06:15	10		3						13		18:15	25		15						40	
06:30	4		9						13		18:30	16		20						36	
06:45	9	25	11	23					20	48	18:45	15	87	14	70					29	157
07:00	17		25						42		19:00	11		21						32	
07:15	18		35						53		19:15	12		15						27	
07:30	28		53						81		19:30	12		18						30	
07:45	27	90	35	148					62	238	19:45	13	48	10	64					23	112
08:00	27		10						37		20:00	7		8						15	
08:15	20		21						41		20:15	9		4						13	
08:30	22		28						50		20:30	11		5						16	
08:45	12	81	20	79					32	160	20:45	8	35	7	24					15	59
09:00	13		16						29		21:00	11		9						20	
09:15	11		14						25		21:15	12		4						16	
09:30	18		15						33		21:30	8		6						14	
09:45	21	63	16	61					37	124	21:45	6	37	3	22					9	59
10:00	12		18						30		22:00	3		5						8	
10:15	13		21						34		22:15	4		5						9	
10:30	13		15						28		22:30	1		6						7	
10:45	11	49	17	71					28	120	22:45	2	10	2	18					4	28
11:00	8		16						24		23:00	0		1						1	
11:15	13		17						30		23:15	1		2						3	
11:30	18		19						37		23:30	2		6						8	
11:45	11	50	16	68					27	118	23:45	3	6	0	9					3	15
TOTALS		369		470						839	TOTALS		676		741						1417
SPLIT %		44.0%		56.0%						37.2%	SPLIT %		47.7%		52.3%						62.8%

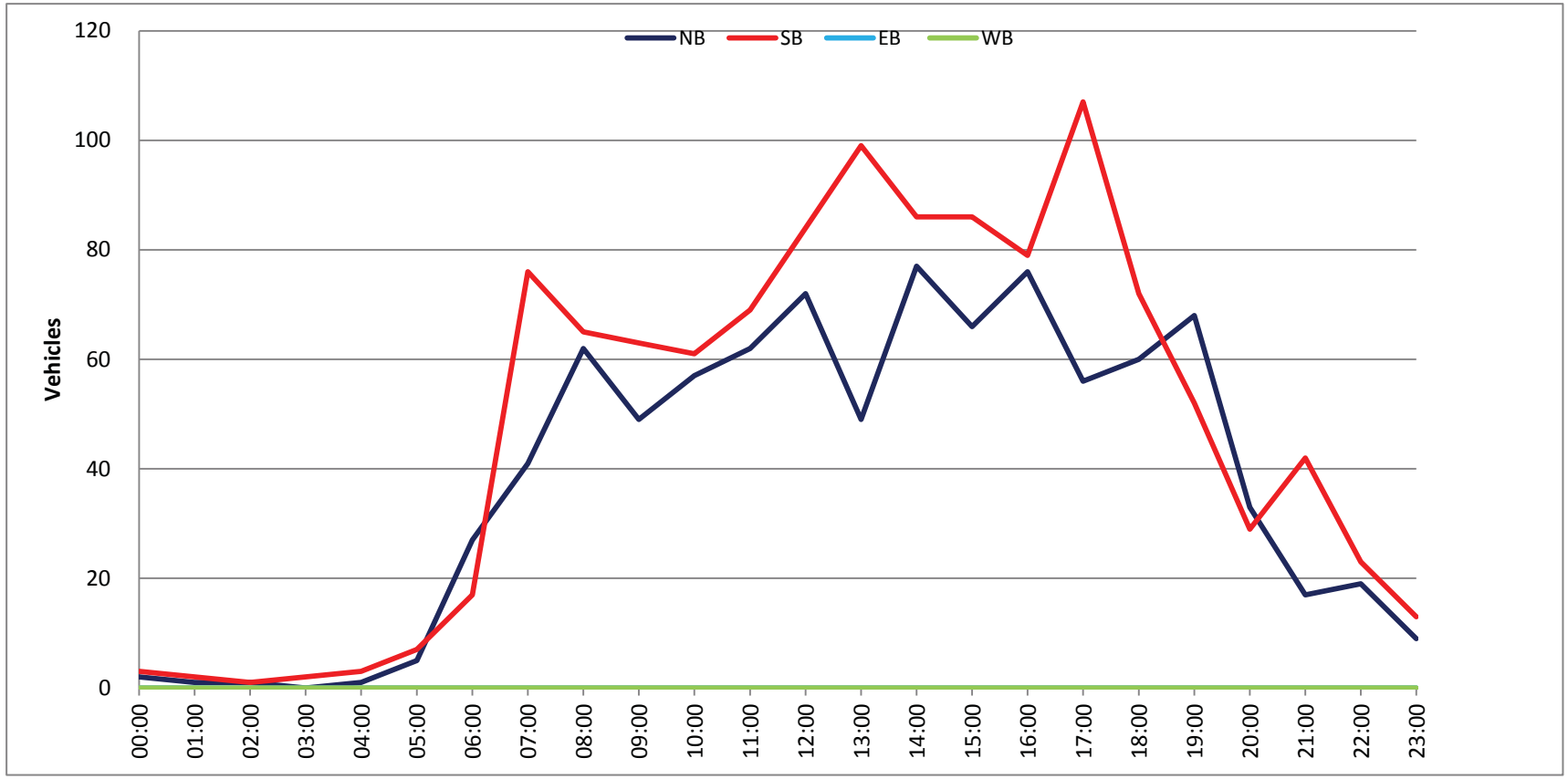
DAILY TOTALS	NB	SB	EB	WB	Total
	1,045	1,211	0	0	2,256

AM Peak Hour	07:30	07:00			07:00	PM Peak Hour	14:30	14:15			14:15
AM Pk Volume	102	148			238	PM Pk Volume	105	138			242
Pk Hr Factor	0.911	0.698			0.735	Pk Hr Factor	0.875	0.932			0.903
7 - 9 Volume	171	227	0	0	398	4 - 6 Volume	174	181	0	0	355
7 - 9 Peak Hour	07:30	07:00			07:00	4 - 6 Peak Hour	16:00	16:30			16:00
7 - 9 Pk Volume	102	148	0	0	238	4 - 6 Pk Volume	93	100	0	0	188
Pk Hr Factor	0.911	0.698	0.000	0.000	0.735	Pk Hr Factor	0.802	0.758	0.000	0.000	0.887

Prepared by NDS/ATD

Project #: CA14_4218_002 **City:** Solana Beach

Location: Nardo Ave btwn Corto St & Lirio St **Date:** 8/22/2014



Prepared by NDS/ATD

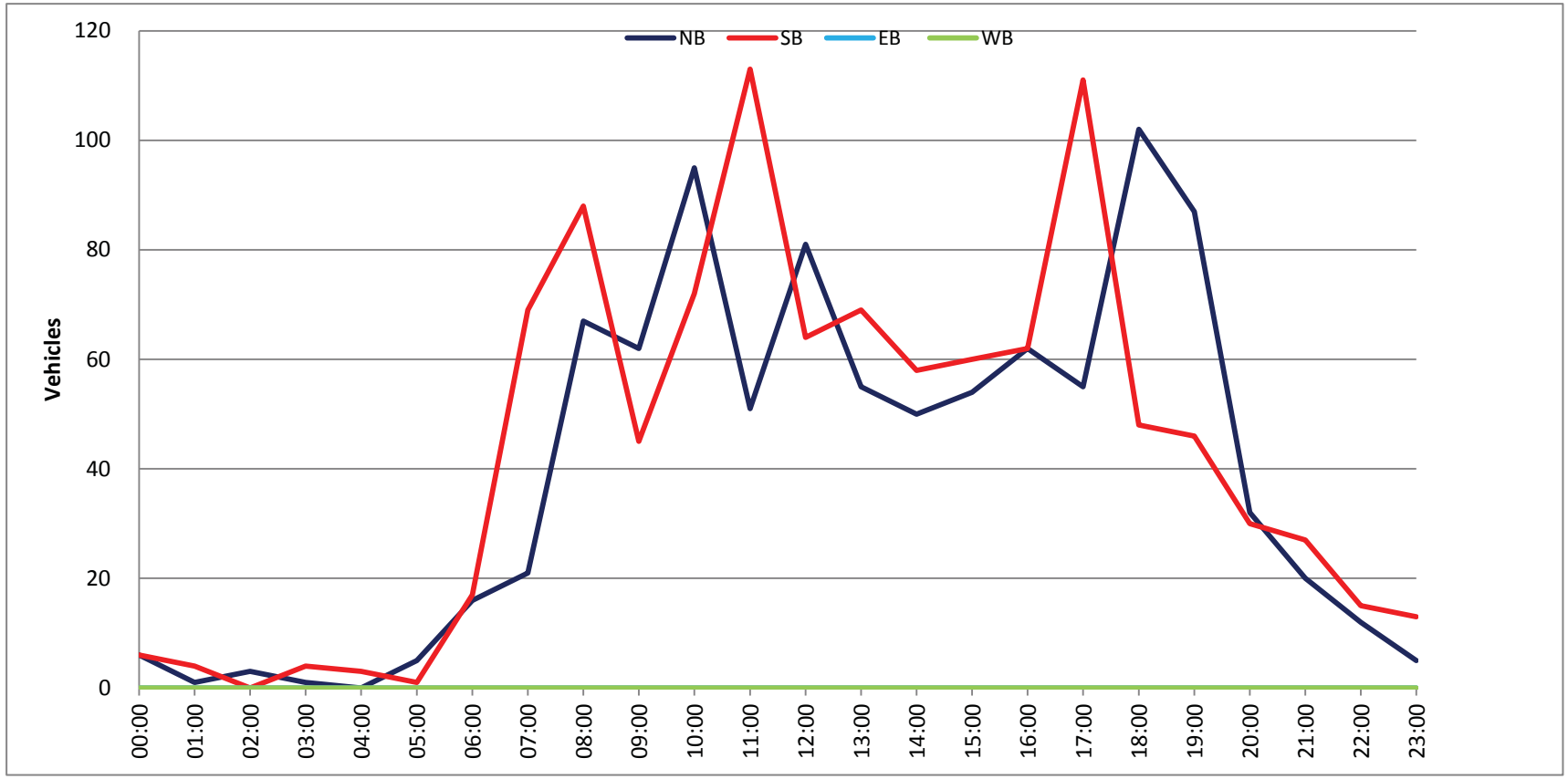
Project #: CA14_4218_002 **City:** Solana Beach

Location: Nardo Ave btwn Corto St & Lirio St **Date:** 8/23/2014

Prepared by NDS/ATD

Project #: CA14_4218_002 **City:** Solana Beach

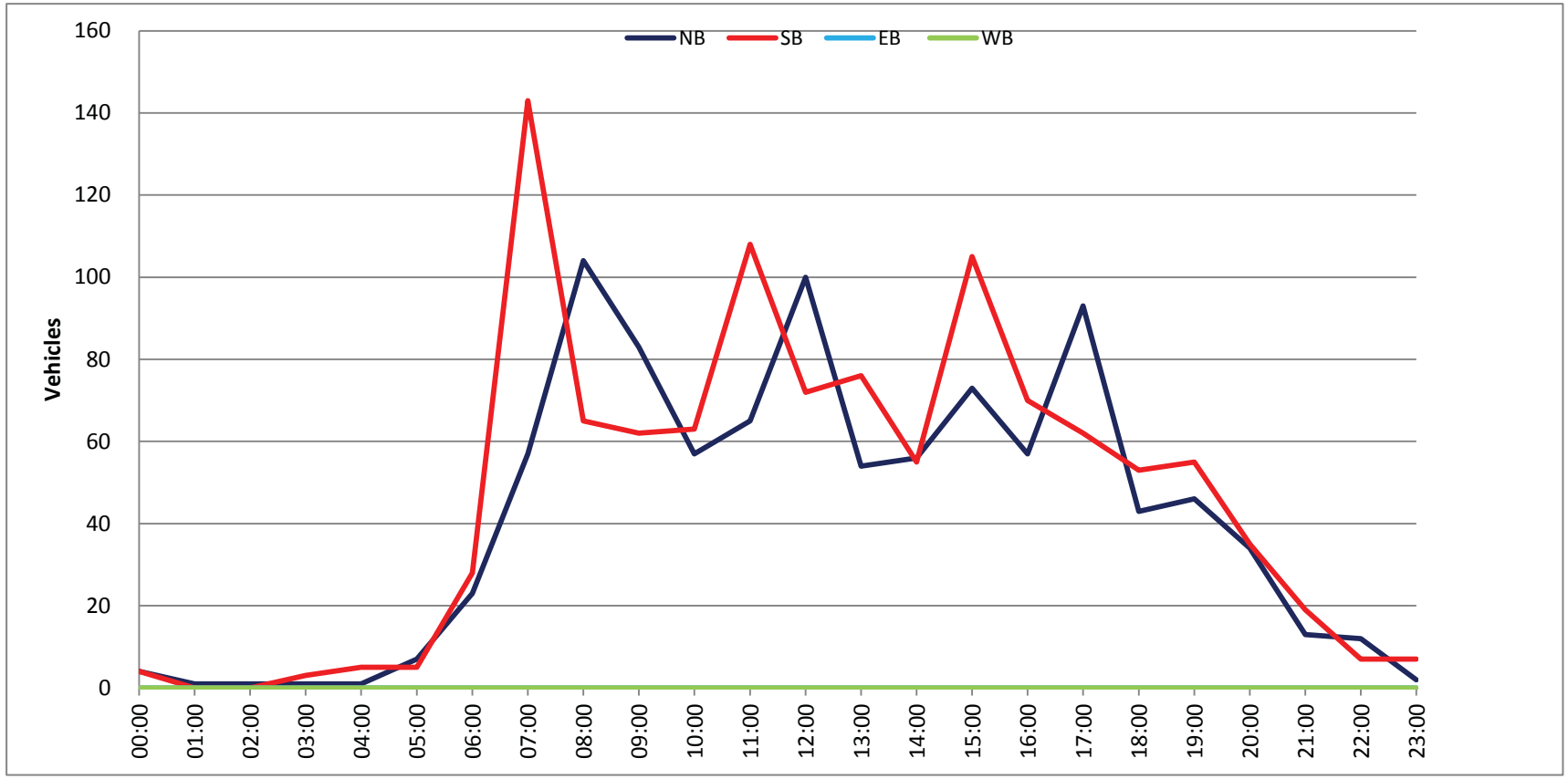
Location: Nardo Ave btwn Corto St & Lirio St **Date:** 8/24/2014



Prepared by NDS/ATD

Project #: CA14_4218_002 **City:** Solana Beach

Location: Nardo Ave btwn Corto St & Lirio St **Date:** 8/25/2014



Prepared by NDS/ATD

Project #: CA14_4218_002 **City:** Solana Beach

Location: Nardo Ave btwn Corto St & Lirio St **Date:** 8/26/2014

Prepared by NDS/ATD

Project #: CA14_4218_002 **City:** Solana Beach

Location: Nardo Ave btwn Corto St & Lirio St **Date:** 8/27/2014

Prepared by NDS/ATD

Project #: CA14_4218_002 **City:** Solana Beach

Location: Nardo Ave btwn Corto St & Lirio St **Date:** 8/28/2014

Prepared by NDS/ATD

VOLUME

Stevens Ave n/o Nardo Ave

Day: Friday
Date: 8/22/2014

City: Solana Beach
Project #: CA14_4218_003

DAILY TOTALS	NB	SB	EB	WB	Total
	4,793	4,814	0	0	9,607

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	9		3						12		12:00	96		106						202	
00:15	8		5						13		12:15	88		88						176	
00:30	8		2						10		12:30	70		91						161	
00:45	1	26	2	12					3	38	12:45	91	345	87	372					178	717
01:00	3		1						4		13:00	97		90						187	
01:15	3		5						8		13:15	90		97						187	
01:30	3		2						5		13:30	93		101						194	
01:45	1	10	2	10					3	20	13:45	88	368	131	419					219	787
02:00	2		0						2		14:00	74		96						170	
02:15	1		2						3		14:15	73		81						154	
02:30	0		2						2		14:30	95		105						200	
02:45	5	8	0	4					5	12	14:45	88	330	108	390					196	720
03:00	0		2						2		15:00	88		94						182	
03:15	1		2						3		15:15	96		121						217	
03:30	0		1						1		15:30	96		92						188	
03:45	0	1	0	5					0	6	15:45	101	381	91	398					192	779
04:00	1		4						5		16:00	98		99						197	
04:15	2		3						5		16:15	103		68						171	
04:30	3		4						7		16:30	96		105						201	
04:45	3	9	3	14					6	23	16:45	72	369	88	360					160	729
05:00	5		6						11		17:00	80		85						165	
05:15	6		7						13		17:15	81		88						169	
05:30	9		10						19		17:30	85		90						175	
05:45	8	28	12	35					20	63	17:45	78	324	63	326					141	650
06:00	18		14						32		18:00	69		56						125	
06:15	25		18						43		18:15	55		61						116	
06:30	30		32						62		18:30	47		59						106	
06:45	77	150	30	94					107	244	18:45	58	229	59	235					117	464
07:00	75		49						124		19:00	82		55						137	
07:15	108		86						194		19:15	91		56						147	
07:30	81		96						177		19:30	65		66						131	
07:45	67	331	82	313					149	644	19:45	69	307	60	237					129	544
08:00	71		73						144		20:00	68		48						116	
08:15	71		55						126		20:15	37		42						79	
08:30	63		61						124		20:30	54		40						94	
08:45	81	286	58	247					139	533	20:45	21	180	38	168					59	348
09:00	73		57						130		21:00	22		40						62	
09:15	74		66						140		21:15	20		32						52	
09:30	86		68						154		21:30	28		37						65	
09:45	84	317	64	255					148	572	21:45	29	99	45	154					74	253
10:00	73		76						149		22:00	20		47						67	
10:15	61		69						130		22:15	15		17						32	
10:30	69		74						143		22:30	18		25						43	
10:45	76	279	87	306					163	585	22:45	9	62	14	103					23	165
11:00	82		68						150		23:00	13		10						23	
11:15	65		86						151		23:15	17		12						29	
11:30	83		90						173		23:30	17		7						24	
11:45	66	296	77	321					143	617	23:45	11	58	7	36					18	94
TOTALS		1741		1616						3357	TOTALS		3052		3198						6250
SPLIT %		51.9%		48.1%						34.9%	SPLIT %		48.8%		51.2%						65.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,793	4,814	0	0	9,607

AM Peak Hour	06:45	11:45			11:30	PM Peak Hour	15:30	14:30			14:30
AM Pk Volume	341	362			694	PM Pk Volume	398	428			795
Pk Hr Factor	0.789	0.854			0.859	Pk Hr Factor	0.966	0.884			0.916
7 - 9 Volume	617	560	0	0	1177	4 - 6 Volume	693	686	0	0	1379
7 - 9 Peak Hour	07:00	07:15			07:15	4 - 6 Peak Hour	16:00	16:30			16:00
7 - 9 Pk Volume	331	337	0	0	664	4 - 6 Pk Volume	369	366	0	0	729
Pk Hr Factor	0.766	0.878	0.000	0.000	0.856	Pk Hr Factor	0.896	0.871	0.000	0.000	0.907

Prepared by NDS/ATD

VOLUME

Stevens Ave n/o Nardo Ave

Day: Saturday
Date: 8/23/2014

City: Solana Beach
Project #: CA14_4218_003

DAILY TOTALS	NB	SB	EB	WB	Total
	3,402	3,694	0	0	7,096

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	12		5						17		12:00	81		97						178	
00:15	8		5						13		12:15	59		111						170	
00:30	10		8						18		12:30	51		85						136	
00:45	4	34	5	23					9	57	12:45	41	232	91	384					132	616
01:00	6		1						7		13:00	54		98						152	
01:15	6		1						7		13:15	51		74						125	
01:30	4		1						5		13:30	52		94						146	
01:45	4	20	4	7					8	27	13:45	67	224	92	358					159	582
02:00	3		3						6		14:00	53		82						135	
02:15	3		1						4		14:15	55		82						137	
02:30	0		5						5		14:30	46		68						114	
02:45	6	12	4	13					10	25	14:45	52	206	71	303					123	509
03:00	3		3						6		15:00	47		66						113	
03:15	3		2						5		15:15	58		76						134	
03:30	1		0						1		15:30	53		68						121	
03:45	2	9	7	12					9	21	15:45	52	210	67	277					119	487
04:00	2		5						7		16:00	52		54						106	
04:15	1		1						2		16:15	62		49						111	
04:30	2		4						6		16:30	50		52						102	
04:45	4	9	3	13					7	22	16:45	60	224	60	215					120	439
05:00	3		6						9		17:00	45		65						110	
05:15	2		7						9		17:15	55		48						103	
05:30	6		3						9		17:30	45		57						102	
05:45	4	15	6	22					10	37	17:45	61	206	61	231					122	437
06:00	5		8						13		18:00	68		55						123	
06:15	5		9						14		18:15	52		36						88	
06:30	15		17						32		18:30	48		53						101	
06:45	12	37	19	53					31	90	18:45	69	237	47	191					116	428
07:00	22		22						44		19:00	72		43						115	
07:15	20		34						54		19:15	63		37						100	
07:30	30		31						61		19:30	56		40						96	
07:45	37	109	41	128					78	237	19:45	32	223	39	159					71	382
08:00	30		37						67		20:00	31		39						70	
08:15	52		46						98		20:15	40		45						85	
08:30	49		49						98		20:30	24		30						54	
08:45	56	187	50	182					106	369	20:45	30	125	21	135					51	260
09:00	61		41						102		21:00	23		32						55	
09:15	57		61						118		21:15	18		20						38	
09:30	75		52						127		21:30	17		16						33	
09:45	77	270	50	204					127	474	21:45	11	69	18	86					29	155
10:00	84		62						146		22:00	17		19						36	
10:15	59		65						124		22:15	22		15						37	
10:30	61		69						130		22:30	17		26						43	
10:45	102	306	86	282					188	588	22:45	16	72	9	69					25	141
11:00	77		67						144		23:00	11		13						24	
11:15	80		68						148		23:15	16		14						30	
11:30	74		82						156		23:30	16		8						24	
11:45	80	311	86	303					166	614	23:45	12	55	9	44					21	99
TOTALS		1319		1242						2561	TOTALS		2083		2452						4535
SPLIT %		51.5%		48.5%						36.1%	SPLIT %		45.9%		54.1%						63.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	3,402	3,694	0	0	7,096

AM Peak Hour	10:45	11:45			11:30	PM Peak Hour	18:45	12:15			12:00
AM Pk Volume	333	379			670	PM Pk Volume	260	385			616
Pk Hr Factor	0.816	0.854			0.941	Pk Hr Factor	0.903	0.867			0.865
7 - 9 Volume	296	310	0	0	606	4 - 6 Volume	430	446	0	0	876
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:00	17:00			16:15
7 - 9 Pk Volume	187	182	0	0	369	4 - 6 Pk Volume	224	231	0	0	443
Pk Hr Factor	0.835	0.910	0.000	0.000	0.870	Pk Hr Factor	0.903	0.888	0.000	0.000	0.923

Prepared by NDS/ATD

VOLUME

Stevens Ave n/o Nardo Ave

Day: Sunday
Date: 8/24/2014

City: Solana Beach
Project #: CA14_4218_003

DAILY TOTALS	NB	SB	EB	WB	Total
	3,014	3,235	0	0	6,249

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	10		8						18		12:00	44		87						131	
00:15	9		10						19		12:15	61		84						145	
00:30	9		5						14		12:30	65		78						143	
00:45	9	37	1	24					10	61	12:45	57	227	83	332					140	559
01:00	3		1						4		13:00	72		68						140	
01:15	4		1						5		13:15	49		53						102	
01:30	5		5						10		13:30	54		71						125	
01:45	5	17	5	12					10	29	13:45	53	228	61	253					114	481
02:00	3		1						4		14:00	38		49						87	
02:15	3		1						4		14:15	42		45						87	
02:30	6		3						9		14:30	39		63						102	
02:45	3	15	0	5					3	20	14:45	38	157	56	213					94	370
03:00	0		1						1		15:00	55		56						111	
03:15	0		2						2		15:15	54		61						115	
03:30	3		3						6		15:30	50		55						105	
03:45	0	3	0	6					0	9	15:45	39	198	47	219					86	417
04:00	2		0						2		16:00	40		47						87	
04:15	0		5						5		16:15	48		48						96	
04:30	2		1						3		16:30	37		55						92	
04:45	3	7	4	10					7	17	16:45	42	167	39	189					81	356
05:00	0		0						0		17:00	48		41						89	
05:15	1		2						3		17:15	43		38						81	
05:30	2		6						8		17:30	36		43						79	
05:45	4	7	10	18					14	25	17:45	64	191	44	166					108	357
06:00	7		10						17		18:00	91		40						131	
06:15	10		13						23		18:15	76		51						127	
06:30	6		16						22		18:30	81		28						109	
06:45	22	45	18	57					40	102	18:45	63	311	66	185					129	496
07:00	22		19						41		19:00	83		39						122	
07:15	22		18						40		19:15	53		44						97	
07:30	15		23						38		19:30	33		48						81	
07:45	26	85	26	86					52	171	19:45	29	198	34	165					63	363
08:00	21		27						48		20:00	36		37						73	
08:15	57		33						90		20:15	32		26						58	
08:30	72		42						114		20:30	26		32						58	
08:45	44	194	35	137					79	331	20:45	18	112	22	117					40	229
09:00	50		38						88		21:00	22		28						50	
09:15	44		43						87		21:15	16		16						32	
09:30	44		49						93		21:30	16		16						32	
09:45	49	187	55	185					104	372	21:45	17	71	15	75					32	146
10:00	56		85						141		22:00	16		14						30	
10:15	61		73						134		22:15	16		8						24	
10:30	60		64						124		22:30	13		11						24	
10:45	71	248	84	306					155	554	22:45	14	59	11	44					25	103
11:00	54		75						129		23:00	6		12						18	
11:15	55		110						165		23:15	10		12						22	
11:30	54		106						160		23:30	3		1						4	
11:45	60	223	110	401					170	624	23:45	8	27	5	30					13	57
TOTALS		1068		1247						2315	TOTALS		1946		1988						3934
SPLIT %		46.1%		53.9%						37.0%	SPLIT %		49.5%		50.5%						63.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	3,014	3,235	0	0	6,249

AM Peak Hour	10:00	11:15			11:15	PM Peak Hour	17:45	12:00			12:15
AM Pk Volume	248	413			626	PM Pk Volume	312	332			568
Pk Hr Factor	0.873	0.939			0.921	Pk Hr Factor	0.857	0.954			0.979
7 - 9 Volume	279	223	0	0	502	4 - 6 Volume	358	355	0	0	713
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	17:00	16:00			16:15
7 - 9 Pk Volume	194	137	0	0	331	4 - 6 Pk Volume	191	189	0	0	358
Pk Hr Factor	0.674	0.815	0.000	0.000	0.726	Pk Hr Factor	0.746	0.859	0.000	0.000	0.932

Prepared by NDS/ATD

VOLUME

Stevens Ave n/o Nardo Ave

Day: Monday
Date: 8/25/2014

City: Solana Beach
Project #: CA14_4218_003

DAILY TOTALS	NB	SB	EB	WB	Total
	4,335	4,463	0	0	8,798

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	4		2						6		12:00	82		109						191	
00:15	4		3						7		12:15	52		76						128	
00:30	3		2						5		12:30	72		84						156	
00:45	10	21	9	16					19	37	12:45	80	286	71	340					151	626
01:00	5		2						7		13:00	61		75						136	
01:15	1		0						1		13:15	62		81						143	
01:30	3		1						4		13:30	65		78						143	
01:45	1	10	3	6					4	16	13:45	84	272	77	311					161	583
02:00	0		0						0		14:00	76		81						157	
02:15	0		2						2		14:15	95		59						154	
02:30	3		0						3		14:30	97		76						173	
02:45	3	6	2	4					5	10	14:45	80	348	132	348					212	696
03:00	2		1						3		15:00	91		127						218	
03:15	0		3						3		15:15	85		99						184	
03:30	2		0						2		15:30	66		90						156	
03:45	2	6	1	5					3	11	15:45	82	324	91	407					173	731
04:00	1		1						2		16:00	73		105						178	
04:15	3		3						6		16:15	92		103						195	
04:30	5		4						9		16:30	100		81						181	
04:45	2	11	3	11					5	22	16:45	98	363	101	390					199	753
05:00	4		7						11		17:00	96		105						201	
05:15	7		9						16		17:15	83		70						153	
05:30	4		12						16		17:30	94		97						191	
05:45	21	36	8	36					29	72	17:45	88	361	91	363					179	724
06:00	21		21						42		18:00	71		71						142	
06:15	22		15						37		18:15	65		58						123	
06:30	24		34						58		18:30	46		43						89	
06:45	52	119	36	106					88	225	18:45	44	226	56	228					100	454
07:00	82		55						137		19:00	30		44						74	
07:15	129		78						207		19:15	38		47						85	
07:30	89		120						209		19:30	40		44						84	
07:45	78	378	80	333					158	711	19:45	32	140	38	173					70	313
08:00	68		56						124		20:00	34		35						69	
08:15	75		69						144		20:15	31		42						73	
08:30	86		81						167		20:30	18		33						51	
08:45	75	304	86	292					161	596	20:45	18	101	30	140					48	241
09:00	76		101						177		21:00	17		23						40	
09:15	63		62						125		21:15	22		20						42	
09:30	78		68						146		21:30	18		16						34	
09:45	77	294	65	296					142	590	21:45	12	69	18	77					30	146
10:00	57		55						112		22:00	15		17						32	
10:15	73		55						128		22:15	12		7						19	
10:30	71		69						140		22:30	11		6						17	
10:45	77	278	51	230					128	508	22:45	4	42	4	34					8	76
11:00	72		74						146		23:00	16		10						26	
11:15	76		74						150		23:15	5		4						9	
11:30	83		65						148		23:30	5		2						7	
11:45	78	309	86	299					164	608	23:45	5	31	2	18					7	49
TOTALS		1772		1634						3406	TOTALS		2563		2829						5392
SPLIT %		52.0%		48.0%						38.7%	SPLIT %		47.5%		52.5%						61.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,335	4,463	0	0	8,798

AM Peak Hour	07:00	11:45			07:00	PM Peak Hour	16:15	14:45			14:30
AM Pk Volume	378	355			711	PM Pk Volume	386	448			787
Pk Hr Factor	0.733	0.814			0.850	Pk Hr Factor	0.965	0.848			0.903
7 - 9 Volume	682	625	0	0	1307	4 - 6 Volume	724	753	0	0	1477
7 - 9 Peak Hour	07:00	07:15			07:00	4 - 6 Peak Hour	16:15	16:00			16:15
7 - 9 Pk Volume	378	334	0	0	711	4 - 6 Pk Volume	386	390	0	0	776
Pk Hr Factor	0.733	0.696	0.000	0.000	0.850	Pk Hr Factor	0.965	0.929	0.000	0.000	0.965

Prepared by NDS/ATD

VOLUME

Stevens Ave n/o Nardo Ave

Day: Tuesday
Date: 8/26/2014

City: Solana Beach
Project #: CA14_4218_003

DAILY TOTALS	NB	SB	EB	WB	Total
	5,006	5,012	0	0	10,018

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	8		4						12		12:00	76		76						152	
00:15	1		4						5		12:15	80		76						156	
00:30	1		3						4		12:30	89		80						169	
00:45	2	12	0	11					2	23	12:45	73	318	85	317					158	635
01:00	1		1						2		13:00	72		72						144	
01:15	0		1						1		13:15	84		74						158	
01:30	1		0						1		13:30	72		76						148	
01:45	1	3	1	3					2	6	13:45	99	327	83	305					182	632
02:00	0		0						0		14:00	100		89						189	
02:15	1		1						2		14:15	123		143						266	
02:30	0		1						1		14:30	114		111						225	
02:45	3	4	1	3					4	7	14:45	128	465	177	520					305	985
03:00	4		2						6		15:00	101		138						239	
03:15	1		1						2		15:15	105		109						214	
03:30	0		1						1		15:30	108		68						176	
03:45	2	7	2	6					4	13	15:45	113	427	108	423					221	850
04:00	1		0						1		16:00	97		95						192	
04:15	3		4						7		16:15	102		88						190	
04:30	6		5						11		16:30	110		90						200	
04:45	4	14	4	13					8	27	16:45	95	404	112	385					207	789
05:00	2		4						6		17:00	106		108						214	
05:15	9		4						13		17:15	108		95						203	
05:30	7		8						15		17:30	117		84						201	
05:45	17	35	16	32					33	67	17:45	108	439	90	377					198	816
06:00	18		23						41		18:00	81		70						151	
06:15	25		19						44		18:15	89		81						170	
06:30	49		44						93		18:30	56		60						116	
06:45	82	174	62	148					144	322	18:45	50	276	60	271					110	547
07:00	146		108						254		19:00	39		79						118	
07:15	142		126						268		19:15	44		65						109	
07:30	114		156						270		19:30	44		51						95	
07:45	81	483	97	487					178	970	19:45	46	173	62	257					108	430
08:00	78		83						161		20:00	33		50						83	
08:15	78		67						145		20:15	28		33						61	
08:30	83		94						177		20:30	24		35						59	
08:45	82	321	88	332					170	653	20:45	19	104	42	160					61	264
09:00	63		80						143		21:00	28		22						50	
09:15	80		52						132		21:15	24		34						58	
09:30	74		63						137		21:30	16		11						27	
09:45	86	303	63	258					149	561	21:45	8	76	12	79					20	155
10:00	67		59						126		22:00	7		9						16	
10:15	64		64						128		22:15	15		16						31	
10:30	67		78						145		22:30	10		0						10	
10:45	84	282	69	270					153	552	22:45	11	43	12	37					23	80
11:00	60		63						123		23:00	5		7						12	
11:15	73		73						146		23:15	11		8						19	
11:30	78		72						150		23:30	3		6						9	
11:45	80	291	83	291					163	582	23:45	6	25	6	27					12	52
TOTALS		1929		1854						3783	TOTALS		3077		3158						6235
SPLIT %		51.0%		49.0%						37.8%	SPLIT %		49.4%		50.6%						62.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	5,006	5,012	0	0	10,018

AM Peak Hour	06:45	07:00			07:00	PM Peak Hour	14:15	14:15			14:15
AM Pk Volume	484	487			970	PM Pk Volume	466	569			1035
Pk Hr Factor	0.829	0.780			0.898	Pk Hr Factor	0.910	0.804			0.848
7 - 9 Volume	804	819	0	0	1623	4 - 6 Volume	843	762	0	0	1605
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	17:00	16:30			16:45
7 - 9 Pk Volume	483	487	0	0	970	4 - 6 Pk Volume	439	405	0	0	825
Pk Hr Factor	0.827	0.780	0.000	0.000	0.898	Pk Hr Factor	0.938	0.904	0.000	0.000	0.964

Prepared by NDS/ATD

VOLUME

Stevens Ave n/o Nardo Ave

Day: Wednesday
Date: 8/27/2014

City: Solana Beach
Project #: CA14_4218_003

DAILY TOTALS	NB	SB	EB	WB	Total
	5,064	5,378	0	0	10,442

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	4		6						10		12:00	72		106						178	
00:15	4		2						6		12:15	68		94						162	
00:30	4		4						8		12:30	65		102						167	
00:45	2	14	2	14					4	28	12:45	67	272	108	410					175	682
01:00	5		2						7		13:00	81		131						212	
01:15	0		1						1		13:15	83		97						180	
01:30	1		0						1		13:30	77		100						177	
01:45	0	6	2	5					2	11	13:45	86	327	93	421					179	748
02:00	0		0						0		14:00	119		78						197	
02:15	2		1						3		14:15	108		124						232	
02:30	0		2						2		14:30	102		100						202	
02:45	1	3	1	4					2	7	14:45	107	436	175	477					282	913
03:00	1		1						2		15:00	98		148						246	
03:15	0		1						1		15:15	89		108						197	
03:30	2		0						2		15:30	94		84						178	
03:45	1	4	1	3					2	7	15:45	106	387	99	439					205	826
04:00	1		4						5		16:00	95		105						200	
04:15	2		1						3		16:15	86		114						200	
04:30	1		5						6		16:30	91		94						185	
04:45	6	10	1	11					7	21	16:45	111	383	116	429					227	812
05:00	7		10						17		17:00	126		102						228	
05:15	8		11						19		17:15	129		89						218	
05:30	12		8						20		17:30	101		90						191	
05:45	15	42	11	40					26	82	17:45	121	477	82	363					203	840
06:00	30		31						61		18:00	108		90						198	
06:15	30		33						63		18:15	99		74						173	
06:30	42		45						87		18:30	94		53						147	
06:45	75	177	56	165					131	342	18:45	66	367	64	281					130	648
07:00	128		115						243		19:00	47		47						94	
07:15	145		173						318		19:15	49		66						115	
07:30	111		128						239		19:30	45		57						102	
07:45	94	478	90	506					184	984	19:45	31	172	57	227					88	399
08:00	81		81						162		20:00	27		41						68	
08:15	98		85						183		20:15	26		79						105	
08:30	84		89						173		20:30	27		77						104	
08:45	80	343	77	332					157	675	20:45	26	106	34	231					60	337
09:00	79		57						136		21:00	21		22						43	
09:15	62		56						118		21:15	26		23						49	
09:30	90		74						164		21:30	16		21						37	
09:45	69	300	73	260					142	560	21:45	15	78	22	88					37	166
10:00	60		74						134		22:00	18		12						30	
10:15	72		68						140		22:15	16		9						25	
10:30	74		73						147		22:30	5		11						16	
10:45	91	297	76	291					167	588	22:45	13	52	5	37					18	89
11:00	78		82						160		23:00	7		7						14	
11:15	76		85						161		23:15	11		2						13	
11:30	73		73						146		23:30	6		1						7	
11:45	79	306	91	331					170	637	23:45	3	27	3	13					6	40
TOTALS		1980		1962						3942	TOTALS		3084		3416						6500
SPLIT %		50.2%		49.8%						37.8%	SPLIT %		47.4%		52.6%						62.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	5,064	5,378	0	0	10,442

AM Peak Hour	07:00	07:00			07:00	PM Peak Hour	17:00	14:15			14:15
AM Pk Volume	478	506			984	PM Pk Volume	477	547			962
Pk Hr Factor	0.824	0.731			0.774	Pk Hr Factor	0.924	0.781			0.853
7 - 9 Volume	821	838	0	0	1659	4 - 6 Volume	860	792	0	0	1652
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	17:00	16:00			16:45
7 - 9 Pk Volume	478	506	0	0	984	4 - 6 Pk Volume	477	429	0	0	864
Pk Hr Factor	0.824	0.731	0.000	0.000	0.774	Pk Hr Factor	0.924	0.925	0.000	0.000	0.947

Prepared by NDS/ATD

VOLUME

Stevens Ave n/o Nardo Ave

Day: Thursday
Date: 8/28/2014

City: Solana Beach
Project #: CA14_4218_003

DAILY TOTALS	NB	SB	EB	WB	Total
	5,096	5,154	0	0	10,250

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	6		3						9		12:00	66		114						180	
00:15	3		3						6		12:15	89		94						183	
00:30	1		1						2		12:30	80		77						157	
00:45	3	13	1	8					4	21	12:45	65	300	113	398					178	698
01:00	2		3						5		13:00	78		94						172	
01:15	1		4						5		13:15	81		95						176	
01:30	1		3						4		13:30	73		86						159	
01:45	1	5	0	10					1	15	13:45	70	302	88	363					158	665
02:00	1		0						1		14:00	96		100						196	
02:15	3		3						6		14:15	92		117						209	
02:30	1		2						3		14:30	120		94						214	
02:45	1	6	0	5					1	11	14:45	104	412	173	484					277	896
03:00	0		0						0		15:00	99		117						216	
03:15	1		1						2		15:15	108		105						213	
03:30	0		0						0		15:30	107		108						215	
03:45	1	2	1	2					2	4	15:45	95	409	96	426					191	835
04:00	0		0						0		16:00	113		112						225	
04:15	4		4						8		16:15	94		104						198	
04:30	2		5						7		16:30	105		103						208	
04:45	5	11	3	12					8	23	16:45	112	424	82	401					194	825
05:00	6		5						11		17:00	97		99						196	
05:15	6		15						21		17:15	117		83						200	
05:30	9		9						18		17:30	129		91						220	
05:45	14	35	12	41					26	76	17:45	142	485	73	346					215	831
06:00	19		23						42		18:00	130		61						191	
06:15	21		21						42		18:15	90		70						160	
06:30	40		34						74		18:30	71		61						132	
06:45	68	148	55	133					123	281	18:45	64	355	49	241					113	596
07:00	111		123						234		19:00	49		56						105	
07:15	157		173						330		19:15	35		60						95	
07:30	103		140						243		19:30	40		46						86	
07:45	87	458	77	513					164	971	19:45	37	161	53	215					90	376
08:00	90		79						169		20:00	37		37						74	
08:15	81		58						139		20:15	23		53						76	
08:30	94		94						188		20:30	26		92						118	
08:45	79	344	70	301					149	645	20:45	25	111	40	222					65	333
09:00	85		63						148		21:00	25		32						57	
09:15	79		76						155		21:15	32		26						58	
09:30	82		61						143		21:30	17		27						44	
09:45	82	328	77	277					159	605	21:45	18	92	11	96					29	188
10:00	63		57						120		22:00	10		16						26	
10:15	81		69						150		22:15	16		9						25	
10:30	58		77						135		22:30	16		10						26	
10:45	81	283	80	283					161	566	22:45	14	56	10	45					24	101
11:00	73		81						154		23:00	17		5						22	
11:15	85		84						169		23:15	4		8						12	
11:30	77		72						149		23:30	12		6						18	
11:45	82	317	73	310					155	627	23:45	6	39	3	22					9	61
TOTALS		1950		1895						3845	TOTALS		3146		3259						6405
SPLIT %		50.7%		49.3%						37.5%	SPLIT %		49.1%		50.9%						62.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	5,096	5,154	0	0	10,250

AM Peak Hour	07:00	07:00			07:00	PM Peak Hour	17:15	14:45			14:45
AM Pk Volume	458	513			971	PM Pk Volume	518	503			921
Pk Hr Factor	0.729	0.741			0.736	Pk Hr Factor	0.912	0.727			0.831
7 - 9 Volume	802	814	0	0	1616	4 - 6 Volume	909	747	0	0	1656
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	17:00	16:00			17:00
7 - 9 Pk Volume	458	513	0	0	971	4 - 6 Pk Volume	485	401	0	0	831
Pk Hr Factor	0.729	0.741	0.000	0.000	0.736	Pk Hr Factor	0.854	0.895	0.000	0.000	0.944

Prepared by NDS/ATD

Project #: CA14_4218_003 **City:** Solana Beach

Location: Stevens Ave n/o Nardo Ave **Date:** 8/22/2014

Prepared by NDS/ATD

Project #: CA14_4218_003 **City:** Solana Beach

Location: Stevens Ave n/o Nardo Ave **Date:** 8/23/2014

Prepared by NDS/ATD

Project #: CA14_4218_003 **City:** Solana Beach

Location: Stevens Ave n/o Nardo Ave **Date:** 8/24/2014

Prepared by NDS/ATD

Project #: CA14_4218_003 **City:** Solana Beach

Location: Stevens Ave n/o Nardo Ave **Date:** 8/25/2014

Prepared by NDS/ATD

Project #: CA14_4218_003 **City:** Solana Beach

Location: Stevens Ave n/o Nardo Ave **Date:** 8/26/2014

Prepared by NDS/ATD

Project #: CA14_4218_003 **City:** Solana Beach

Location: Stevens Ave n/o Nardo Ave **Date:** 8/27/2014

Prepared by NDS/ATD

Project #: CA14_4218_003 **City:** Solana Beach

Location: Stevens Ave n/o Nardo Ave **Date:** 8/28/2014

Prepared by NDS/ATD

VOLUME

Nardo Ave btwn Fresca St & Stevens Ave

Day: Thursday
Date: 8/28/2014

City: Solana Beach
Project #: CA14_4218_004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,860	1,538	3,398

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			4		9		13		12:00			23		22		45	
00:15			2		3		5		12:15			37		24		61	
00:30			1		2		3		12:30			18		20		38	
00:45			1	8	0	14	1	22	12:45			26	104	22	88	48	192
01:00			3		5		8		13:00			27		18		45	
01:15			3		0		3		13:15			29		18		47	
01:30			1		2		3		13:30			28		21		49	
01:45			1	8	1	8	2	16	13:45			29	113	17	74	46	187
02:00			0		0		0		14:00			37		25		62	
02:15			0		1		1		14:15			25		31		56	
02:30			0		1		1		14:30			34		39		73	
02:45			0		0	2	0	2	14:45			60	156	40	135	100	291
03:00			0		0		0		15:00			38		35		73	
03:15			1		0		1		15:15			31		41		72	
03:30			0		0		0		15:30			34		32		66	
03:45			1	2	0		1	2	15:45			32	135	24	132	56	267
04:00			0		0		0		16:00			30		34		64	
04:15			2		0		2		16:15			30		31		61	
04:30			2		1		3		16:30			26		31		57	
04:45			1	5	2	3	3	8	16:45			28	114	27	123	55	237
05:00			3		1		4		17:00			33		34		67	
05:15			9		1		10		17:15			21		25		46	
05:30			8		1		9		17:30			27		41		68	
05:45			8	28	1	4	9	32	17:45			31	112	30	130	61	242
06:00			14		5		19		18:00			26		30		56	
06:15			17		8		25		18:15			32		30		62	
06:30			23		12		35		18:30			26		26		52	
06:45			32	86	13	38	45	124	18:45			31	115	32	118	63	233
07:00			52		13		65		19:00			20		25		45	
07:15			43		17		60		19:15			21		14		35	
07:30			69		38		107		19:30			15		27		42	
07:45			56	220	21	89	77	309	19:45			16	72	20	86	36	158
08:00			54		14		68		20:00			7		21		28	
08:15			43		22		65		20:15			10		12		22	
08:30			42		25		67		20:30			9		11		20	
08:45			28	167	23	84	51	251	20:45			18	44	19	63	37	107
09:00			33		11		44		21:00			17		17		34	
09:15			38		15		53		21:15			8		22		30	
09:30			22		14		36		21:30			10		18		28	
09:45			20	113	24	64	44	177	21:45			3	38	12	69	15	107
10:00			27		10		37		22:00			8		10		18	
10:15			25		14		39		22:15			1		4		5	
10:30			18		15		33		22:30			2		11		13	
10:45			26	96	20	59	46	155	22:45			2	13	8	33	10	46
11:00			30		18		48		23:00			7		11		18	
11:15			19		22		41		23:15			3		2		5	
11:30			28		26		54		23:30			2		7		9	
11:45			22	99	31	97	53	196	23:45			0	12	5	25	5	37
TOTALS				832		462		1294	TOTALS				1028		1076		2104
SPLIT %				64.3%		35.7%		38.1%	SPLIT %				48.9%		51.1%		61.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,860	1,538	3,398

AM Peak Hour			07:15	11:30	07:30	PM Peak Hour			14:30	14:30	14:30
AM Pk Volume			222	103	317	PM Pk Volume			163	155	318
Pk Hr Factor			0.804	0.831	0.741	Pk Hr Factor			0.679	0.945	0.795
7 - 9 Volume	0	0	387	173	560	4 - 6 Volume	0	0	226	253	479
7 - 9 Peak Hour			07:15	07:30	07:30	4 - 6 Peak Hour			16:15	17:00	17:00
7 - 9 Pk Volume	0	0	222	95	317	4 - 6 Pk Volume	0	0	117	130	242
Pk Hr Factor	0.000	0.000	0.804	0.625	0.741	Pk Hr Factor	0.000	0.000	0.886	0.793	0.890

Prepared by NDS/ATD

VOLUME

Nardo Ave btwn Fresca St & Stevens Ave

Day: Friday
Date: 8/22/2014

City: Solana Beach
Project #: CA14_4218_004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,817	1,443	3,260

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			4		4		8		12:00			18		31		49	
00:15			1		4		5		12:15			35		21		56	
00:30			1		5		6		12:30			24		19		43	
00:45			1	7	0	13	1	20	12:45			35	112	16	87	51	199
01:00			1		3		4		13:00			23		16		39	
01:15			5		1		6		13:15			26		24		50	
01:30			0		1		1		13:30			28		25		53	
01:45			0	6	0	5	0	11	13:45			30	107	22	87	52	194
02:00			0		1		1		14:00			18		21		39	
02:15			0		0		0		14:15			30		26		56	
02:30			0		0		0		14:30			30		25		55	
02:45			0		3	4	3	4	14:45			24	102	34	106	58	208
03:00			0		0		0		15:00			34		37		71	
03:15			1		1		2		15:15			27		33		60	
03:30			0		0		0		15:30			32		24		56	
03:45			0	1	0	1	0	2	15:45			32	125	29	123	61	248
04:00			3		1		4		16:00			21		34		55	
04:15			1		0		1		16:15			39		42		81	
04:30			4		0		4		16:30			35		31		66	
04:45			0	8	2	3	2	11	16:45			40	135	24	131	64	266
05:00			7		3		10		17:00			27		22		49	
05:15			2		0		2		17:15			28		31		59	
05:30			6		0		6		17:30			34		39		73	
05:45			8	23	0	3	8	26	17:45			28	117	37	129	65	246
06:00			7		3		10		18:00			26		38		64	
06:15			14		5		19		18:15			31		22		53	
06:30			19		1		20		18:30			16		19		35	
06:45			15	55	11	20	26	75	18:45			28	101	18	97	46	198
07:00			36		13		49		19:00			26		19		45	
07:15			28		7		35		19:15			41		23		64	
07:30			30		13		43		19:30			44		19		63	
07:45			42	136	14	47	56	183	19:45			37	148	17	78	54	226
08:00			40		12		52		20:00			15		25		40	
08:15			40		15		55		20:15			9		16		25	
08:30			39		17		56		20:30			12		24		36	
08:45			27	146	10	54	37	200	20:45			15	51	9	74	24	125
09:00			25		16		41		21:00			10		15		25	
09:15			31		23		54		21:15			12		17		29	
09:30			25		19		44		21:30			25		13		38	
09:45			25	106	18	76	43	182	21:45			11	58	12	57	23	115
10:00			33		18		51		22:00			10		9		19	
10:15			26		18		44		22:15			8		16		24	
10:30			28		19		47		22:30			8		14		22	
10:45			25	112	26	81	51	193	22:45			9	35	9	48	18	83
11:00			26		19		45		23:00			6		12		18	
11:15			28		24		52		23:15			3		8		11	
11:30			31		25		56		23:30			3		12		15	
11:45			26	111	11	79	37	190	23:45			3	15	8	40	11	55
TOTALS				711		386		1097	TOTALS				1106		1057		2163
SPLIT %				64.8%		35.2%		33.7%	SPLIT %				51.1%		48.9%		66.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,817	1,443	3,260

AM Peak Hour			07:45	10:45	07:45	PM Peak Hour			19:00	17:15	16:00
AM Pk Volume			161	94	219	PM Pk Volume			148	145	266
Pk Hr Factor			0.958	0.904	0.978	Pk Hr Factor			0.841	0.929	0.821
7 - 9 Volume	0	0	282	101	383	4 - 6 Volume	0	0	252	260	512
7 - 9 Peak Hour			07:45	07:45	07:45	4 - 6 Peak Hour			16:15	16:00	16:00
7 - 9 Pk Volume	0	0	161	58	219	4 - 6 Pk Volume	0	0	141	131	266
Pk Hr Factor	0.000	0.000	0.958	0.853	0.978	Pk Hr Factor	0.000	0.000	0.881	0.780	0.821

Prepared by NDS/ATD

VOLUME

Nardo Ave btwn Fresca St & Stevens Ave

Day: Saturday
Date: 8/23/2014

City: Solana Beach
Project #: CA14_4218_004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,637	1,332	2,969

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			6		7		13		12:00			46		29		75	
00:15			2		4		6		12:15			35		17		52	
00:30			1		6		7		12:30			39		17		56	
00:45			2	11	2	19	4	30	12:45			21	141	19	82	40	223
01:00			0		2		2		13:00			25		23		48	
01:15			0		2		2		13:15			29		21		50	
01:30			0		4		4		13:30			37		33		70	
01:45			4	4	3	11	7	15	13:45			30	121	22	99	52	220
02:00			2		2		4		14:00			26		27		53	
02:15			1		1		2		14:15			33		22		55	
02:30			0		0		0		14:30			17		18		35	
02:45			0	3	7	10	7	13	14:45			32	108	16	83	48	191
03:00			2		0		2		15:00			26		23		49	
03:15			1		1		2		15:15			27		27		54	
03:30			2		0		2		15:30			41		26		67	
03:45			3	8	2	3	5	11	15:45			39	133	26	102	65	235
04:00			3		0		3		16:00			25		31		56	
04:15			1		1		2		16:15			31		32		63	
04:30			3		2		5		16:30			27		27		54	
04:45			1	8	0	3	1	11	16:45			28	111	32	122	60	233
05:00			5		0		5		17:00			25		22		47	
05:15			4		1		5		17:15			12		27		39	
05:30			2		2		4		17:30			27		13		40	
05:45			2	13	3	6	5	19	17:45			55	119	25	87	80	206
06:00			2		1		3		18:00			47		11		58	
06:15			9		5		14		18:15			24		17		41	
06:30			13		10		23		18:30			24		19		43	
06:45			15	39	3	19	18	58	18:45			19	114	17	64	36	178
07:00			15		8		23		19:00			21		21		42	
07:15			18		6		24		19:15			11		13		24	
07:30			24		14		38		19:30			11		16		27	
07:45			16	73	17	45	33	118	19:45			15	58	14	64	29	122
08:00			26		12		38		20:00			15		18		33	
08:15			26		12		38		20:15			17		15		32	
08:30			32		10		42		20:30			8		21		29	
08:45			33	117	9	43	42	160	20:45			13	53	13	67	26	120
09:00			23		10		33		21:00			5		11		16	
09:15			26		14		40		21:15			8		9		17	
09:30			36		17		53		21:30			4		8		12	
09:45			26	111	20	61	46	172	21:45			3	20	10	38	13	58
10:00			27		27		54		22:00			12		21		33	
10:15			23		27		50		22:15			6		13		19	
10:30			29		19		48		22:30			13		9		22	
10:45			27	106	30	103	57	209	22:45			6	37	12	55	18	92
11:00			24		29		53		23:00			6		11		17	
11:15			31		38		69		23:15			6		12		18	
11:30			21		19		40		23:30			3		10		13	
11:45			34	110	18	104	52	214	23:45			4	19	9	42	13	61
TOTALS				603		427		1030	TOTALS				1034		905		1939
SPLIT %				58.5%		41.5%		34.7%	SPLIT %				53.3%		46.7%		65.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,637	1,332	2,969

AM Peak Hour			11:45	10:30	11:15	PM Peak Hour			17:30	16:00	15:30
AM Pk Volume			154	116	236	PM Pk Volume			153	122	251
Pk Hr Factor			0.837	0.763	0.787	Pk Hr Factor			0.695	0.953	0.937
7 - 9 Volume	0	0	190	88	278	4 - 6 Volume	0	0	230	209	439
7 - 9 Peak Hour			08:00	07:30	08:00	4 - 6 Peak Hour			17:00	16:00	16:00
7 - 9 Pk Volume	0	0	117	55	160	4 - 6 Pk Volume	0	0	119	122	233
Pk Hr Factor	0.000	0.000	0.886	0.809	0.952	Pk Hr Factor	0.000	0.000	0.541	0.953	0.925

Prepared by NDS/ATD

VOLUME

Nardo Ave btwn Fresca St & Stevens Ave

Day: Sunday
Date: 8/24/2014

City: Solana Beach
Project #: CA14_4218_004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,521	1,273	2,794

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			7		10		17		12:00			25		22		47	
00:15			4		2		6		12:15			29		32		61	
00:30			0		3		3		12:30			47		19		66	
00:45			1	12	3	18	4	30	12:45			31	132	25	98	56	230
01:00			2		3		5		13:00			27		28		55	
01:15			0		2		2		13:15			20		19		39	
01:30			2		3		5		13:30			17		17		34	
01:45			4	8	4	12	8	20	13:45			19	83	20	84	39	167
02:00			1		2		3		14:00			18		23		41	
02:15			0		2		2		14:15			18		23		41	
02:30			2		3		5		14:30			28		13		41	
02:45			0	3	0	7	0	10	14:45			25	89	22	81	47	170
03:00			0		0		0		15:00			27		21		48	
03:15			2		0		2		15:15			23		17		40	
03:30			1		2		3		15:30			21		29		50	
03:45			1	4	0	2	1	6	15:45			19	90	19	86	38	176
04:00			0		1		1		16:00			15		12		27	
04:15			5		0		5		16:15			21		23		44	
04:30			3		2		5		16:30			30		17		47	
04:45			1	9	1	4	2	13	16:45			24	90	27	79	51	169
05:00			3		0		3		17:00			13		26		39	
05:15			0		1		1		17:15			21		22		43	
05:30			1		0		1		17:30			33		19		52	
05:45			4	8	3	4	7	12	17:45			17	84	35	102	52	186
06:00			7		1		8		18:00			26		30		56	
06:15			6		4		10		18:15			21		19		40	
06:30			10		7		17		18:30			34		20		54	
06:45			10	33	9	21	19	54	18:45			58	139	9	78	67	217
07:00			15		20		35		19:00			35		29		64	
07:15			10		15		25		19:15			29		16		45	
07:30			9		2		11		19:30			23		16		39	
07:45			15	49	9	46	24	95	19:45			11	98	19	80	30	178
08:00			23		3		26		20:00			19		18		37	
08:15			38		11		49		20:15			9		16		25	
08:30			19		19		38		20:30			11		15		26	
08:45			23	103	26	59	49	162	20:45			8	47	8	57	16	104
09:00			20		12		32		21:00			11		17		28	
09:15			18		9		27		21:15			3		6		9	
09:30			20		19		39		21:30			15		12		27	
09:45			28	86	19	59	47	145	21:45			8	37	11	46	19	83
10:00			64		25		89		22:00			11		11		22	
10:15			38		21		59		22:15			3		7		10	
10:30			35		21		56		22:30			9		7		16	
10:45			20	157	26	93	46	250	22:45			8	31	9	34	17	65
11:00			21		22		43		23:00			4		5		9	
11:15			24		40		64		23:15			10		10		20	
11:30			36		17		53		23:30			0		0		0	
11:45			30	111	21	100	51	211	23:45			4	18	8	23	12	41
TOTALS				583		425		1008	TOTALS				938		848		1786
SPLIT %				57.8%		42.2%		36.1%	SPLIT %				52.5%		47.5%		63.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,521	1,273	2,794

AM Peak Hour			09:45	10:30	09:45	PM Peak Hour			18:30	17:15	12:15
AM Pk Volume			165	109	251	PM Pk Volume			156	106	238
Pk Hr Factor			0.645	0.681	0.705	Pk Hr Factor			0.672	0.757	0.902
7 - 9 Volume	0	0	152	105	257	4 - 6 Volume	0	0	174	181	355
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:45	17:00	17:00
7 - 9 Pk Volume	0	0	103	59	162	4 - 6 Pk Volume	0	0	91	102	186
Pk Hr Factor	0.000	0.000	0.678	0.567	0.827	Pk Hr Factor	0.000	0.000	0.689	0.729	0.894

Prepared by NDS/ATD

VOLUME

Nardo Ave btwn Fresca St & Stevens Ave

Day: Monday
Date: 8/25/2014

City: Solana Beach
Project #: CA14_4218_004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,768	1,500	3,268

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			3		4		7		12:00			50		22		72	
00:15			2		4		6		12:15			29		17		46	
00:30			1		3		4		12:30			43		36		79	
00:45			4	10	7	18	11	28	12:45			16	138	15	90	31	228
01:00			0		2		2		13:00			18		18		36	
01:15			0		2		2		13:15			22		15		37	
01:30			0		1		1		13:30			26		15		41	
01:45			2	2	1	6	3	8	13:45			31	97	19	67	50	164
02:00			1		1		2		14:00			29		28		57	
02:15			0		0		0		14:15			37		31		68	
02:30			0		1		1		14:30			32		26		58	
02:45			2	3	0	2	2	5	14:45			26	124	27	112	53	236
03:00			0		0		0		15:00			43		29		72	
03:15			2		0		2		15:15			31		33		64	
03:30			0		1		1		15:30			36		29		65	
03:45			0	2	0	1	0	3	15:45			24	134	32	123	56	257
04:00			0		0		0		16:00			29		29		58	
04:15			1		0		1		16:15			27		24		51	
04:30			4		1		5		16:30			24		23		47	
04:45			1	6	0	1	1	7	16:45			18	98	30	106	48	204
05:00			7		0		7		17:00			29		36		65	
05:15			4		4		8		17:15			20		37		57	
05:30			11		1		12		17:30			23		42		65	
05:45			10	32	2	7	12	39	17:45			22	94	37	152	59	246
06:00			10		2		12		18:00			18		29		47	
06:15			7		6		13		18:15			22		23		45	
06:30			27		10		37		18:30			12		26		38	
06:45			26	70	9	27	35	97	18:45			17	69	34	112	51	181
07:00			33		10		43		19:00			21		17		38	
07:15			35		20		55		19:15			22		16		38	
07:30			43		40		83		19:30			19		26		45	
07:45			52	163	16	86	68	249	19:45			17	79	21	80	38	159
08:00			47		15		62		20:00			12		23		35	
08:15			51		18		69		20:15			16		15		31	
08:30			57		25		82		20:30			16		13		29	
08:45			36	191	21	79	57	270	20:45			14	58	20	71	34	129
09:00			40		21		61		21:00			8		9		17	
09:15			28		21		49		21:15			4		16		20	
09:30			25		14		39		21:30			9		17		26	
09:45			29	122	19	75	48	197	21:45			11	32	8	50	19	82
10:00			26		24		50		22:00			10		16		26	
10:15			26		20		46		22:15			4		6		10	
10:30			20		17		37		22:30			4		6		10	
10:45			23	95	25	86	48	181	22:45			2	20	5	33	7	53
11:00			26		15		41		23:00			4		8		12	
11:15			26		22		48		23:15			3		6		9	
11:30			24		25		49		23:30			1		3		4	
11:45			45	121	34	96	79	217	23:45			0	8	3	20	3	28
TOTALS				817		484		1301	TOTALS				951		1016		1967
SPLIT %				62.8%		37.2%		39.8%	SPLIT %				48.3%		51.7%		60.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,768	1,500	3,268

AM Peak Hour			07:45	11:45	07:30	PM Peak Hour			12:00	17:00	15:00
AM Pk Volume			207	109	282	PM Pk Volume			138	152	257
Pk Hr Factor			0.908	0.757	0.849	Pk Hr Factor			0.690	0.905	0.892
7 - 9 Volume	0	0	354	165	519	4 - 6 Volume	0	0	192	258	450
7 - 9 Peak Hour			07:45	07:15	07:30	4 - 6 Peak Hour			16:00	17:00	17:00
7 - 9 Pk Volume	0	0	207	91	282	4 - 6 Pk Volume	0	0	98	152	246
Pk Hr Factor	0.000	0.000	0.908	0.569	0.849	Pk Hr Factor	0.000	0.000	0.845	0.905	0.946

Prepared by NDS/ATD

VOLUME

Nardo Ave btwn Fresca St & Stevens Ave

Day: Tuesday
Date: 8/26/2014

City: Solana Beach
Project #: CA14_4218_004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,846	1,532	3,378

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			4		7		11		12:00			22		17		39	
00:15			3		5		8		12:15			21		25		46	
00:30			1		2		3		12:30			31		23		54	
00:45			0	8	2	16	2	24	12:45			26	100	23	88	49	188
01:00			0		0		0		13:00			22		19		41	
01:15			0		0		0		13:15			26		23		49	
01:30			0		0		0		13:30			18		17		35	
01:45			1	1	0		1	1	13:45			31	97	24	83	55	180
02:00			0		0		0		14:00			28		19		47	
02:15			0		0		0		14:15			32		33		65	
02:30			0		0		0		14:30			45		34		79	
02:45			0		2	2	2	2	14:45			53	158	46	132	99	290
03:00			1		2		3		15:00			49		46		95	
03:15			1		0		1		15:15			42		39		81	
03:30			0		0		0		15:30			30		35		65	
03:45			0	2	1	3	1	5	15:45			23	144	31	151	54	295
04:00			0		0		0		16:00			35		27		62	
04:15			3		2		5		16:15			27		32		59	
04:30			4		3		7		16:30			37		34		71	
04:45			2	9	0	5	2	14	16:45			36	135	32	125	68	260
05:00			3		0		3		17:00			35		27		62	
05:15			1		1		2		17:15			30		22		52	
05:30			9		5		14		17:30			28		33		61	
05:45			11	24	4	10	15	34	17:45			24	117	37	119	61	236
06:00			13		1		14		18:00			24		30		54	
06:15			13		4		17		18:15			26		27		53	
06:30			29		12		41		18:30			24		21		45	
06:45			46	101	17	34	63	135	18:45			19	93	21	99	40	192
07:00			48		16		64		19:00			19		25		44	
07:15			35		14		49		19:15			17		20		37	
07:30			49		35		84		19:30			16		22		38	
07:45			70	202	21	86	91	288	19:45			18	70	22	89	40	159
08:00			49		15		64		20:00			17		25		42	
08:15			42		18		60		20:15			11		13		24	
08:30			26		26		52		20:30			11		13		24	
08:45			32	149	20	79	52	228	20:45			14	53	16	67	30	120
09:00			23		14		37		21:00			6		23		29	
09:15			27		20		47		21:15			7		16		23	
09:30			26		16		42		21:30			4		17		21	
09:45			25	101	20	70	45	171	21:45			4	21	8	64	12	85
10:00			23		15		38		22:00			1		9		10	
10:15			28		20		48		22:15			10		12		22	
10:30			23		15		38		22:30			3		8		11	
10:45			29	103	22	72	51	175	22:45			8	22	10	39	18	61
11:00			27		15		42		23:00			4		4		8	
11:15			24		16		40		23:15			5		12		17	
11:30			35		28		63		23:30			3		2		5	
11:45			34	120	20	79	54	199	23:45			4	16	2	20	6	36
TOTALS				820		456		1276	TOTALS				1026		1076		2102
SPLIT %				64.3%		35.7%		37.8%	SPLIT %				48.8%		51.2%		62.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,846	1,532	3,378

AM Peak Hour			07:30	11:30	07:30	PM Peak Hour			14:30	14:45	14:30
AM Pk Volume			210	90	299	PM Pk Volume			189	166	354
Pk Hr Factor			0.750	0.804	0.821	Pk Hr Factor			0.892	0.902	0.894
7 - 9 Volume	0	0	351	165	516	4 - 6 Volume	0	0	252	244	496
7 - 9 Peak Hour			07:30	07:30	07:30	4 - 6 Peak Hour			16:30	16:00	16:00
7 - 9 Pk Volume	0	0	210	89	299	4 - 6 Pk Volume	0	0	138	125	260
Pk Hr Factor	0.000	0.000	0.750	0.636	0.821	Pk Hr Factor	0.000	0.000	0.932	0.919	0.915

Prepared by NDS/ATD

VOLUME

Nardo Ave btwn Fresca St & Stevens Ave

Day: Wednesday
Date: 8/27/2014

City: Solana Beach
Project #: CA14_4218_004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,918	1,573	3,491

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			1		3		4		12:00			22		21		43	
00:15			1		4		5		12:15			32		17		49	
00:30			4		2		6		12:30			23		21		44	
00:45			0	6	1	10	1	16	12:45			27	104	29	88	56	192
01:00			0		2		2		13:00			33		29		62	
01:15			1		0		1		13:15			28		33		61	
01:30			0		0		0		13:30			37		23		60	
01:45			0	1	0	2	0	3	13:45			29	127	17	102	46	229
02:00			0		2		2		14:00			29		35		64	
02:15			1		0		1		14:15			39		22		61	
02:30			0		0		0		14:30			37		37		74	
02:45			0	1	0	2	0	3	14:45			61	166	42	136	103	302
03:00			0		0		0		15:00			40		35		75	
03:15			1		0		1		15:15			30		29		59	
03:30			0		1		1		15:30			30		33		63	
03:45			0	1	0	1	0	2	15:45			39	139	42	139	81	278
04:00			2		1		3		16:00			40		34		74	
04:15			2		1		3		16:15			45		28		73	
04:30			7		2		9		16:30			35		29		64	
04:45			0	11	3	7	3	18	16:45			38	158	27	118	65	276
05:00			7		0		7		17:00			27		33		60	
05:15			2		1		3		17:15			31		31		62	
05:30			3		1		4		17:30			28		33		61	
05:45			8	20	1	3	9	23	17:45			28	114	31	128	59	242
06:00			20		3		23		18:00			25		24		49	
06:15			14		4		18		18:15			22		26		48	
06:30			31		12		43		18:30			25		44		69	
06:45			40	105	14	33	54	138	18:45			21	93	17	111	38	204
07:00			36		14		50		19:00			18		21		39	
07:15			44		25		69		19:15			16		25		41	
07:30			50		30		80		19:30			17		17		34	
07:45			66	196	30	99	96	295	19:45			10	61	16	79	26	140
08:00			56		21		77		20:00			15		26		41	
08:15			56		26		82		20:15			8		16		24	
08:30			48		27		75		20:30			17		12		29	
08:45			30	190	25	99	55	289	20:45			11	51	21	75	32	126
09:00			30		16		46		21:00			13		16		29	
09:15			24		13		37		21:15			3		14		17	
09:30			26		20		46		21:30			4		11		15	
09:45			22	102	17	66	39	168	21:45			8	28	9	50	17	78
10:00			28		14		42		22:00			7		12		19	
10:15			23		20		43		22:15			6		10		16	
10:30			28		20		48		22:30			3		6		9	
10:45			30	109	24	78	54	187	22:45			3	19	9	37	12	56
11:00			31		21		52		23:00			3		9		12	
11:15			25		32		57		23:15			2		7		9	
11:30			25		17		42		23:30			2		6		8	
11:45			26	107	17	87	43	194	23:45			2	9	1	23	3	32
TOTALS				849		487		1336	TOTALS				1069		1086		2155
SPLIT %				63.5%		36.5%		38.3%	SPLIT %				49.6%		50.4%		61.7%

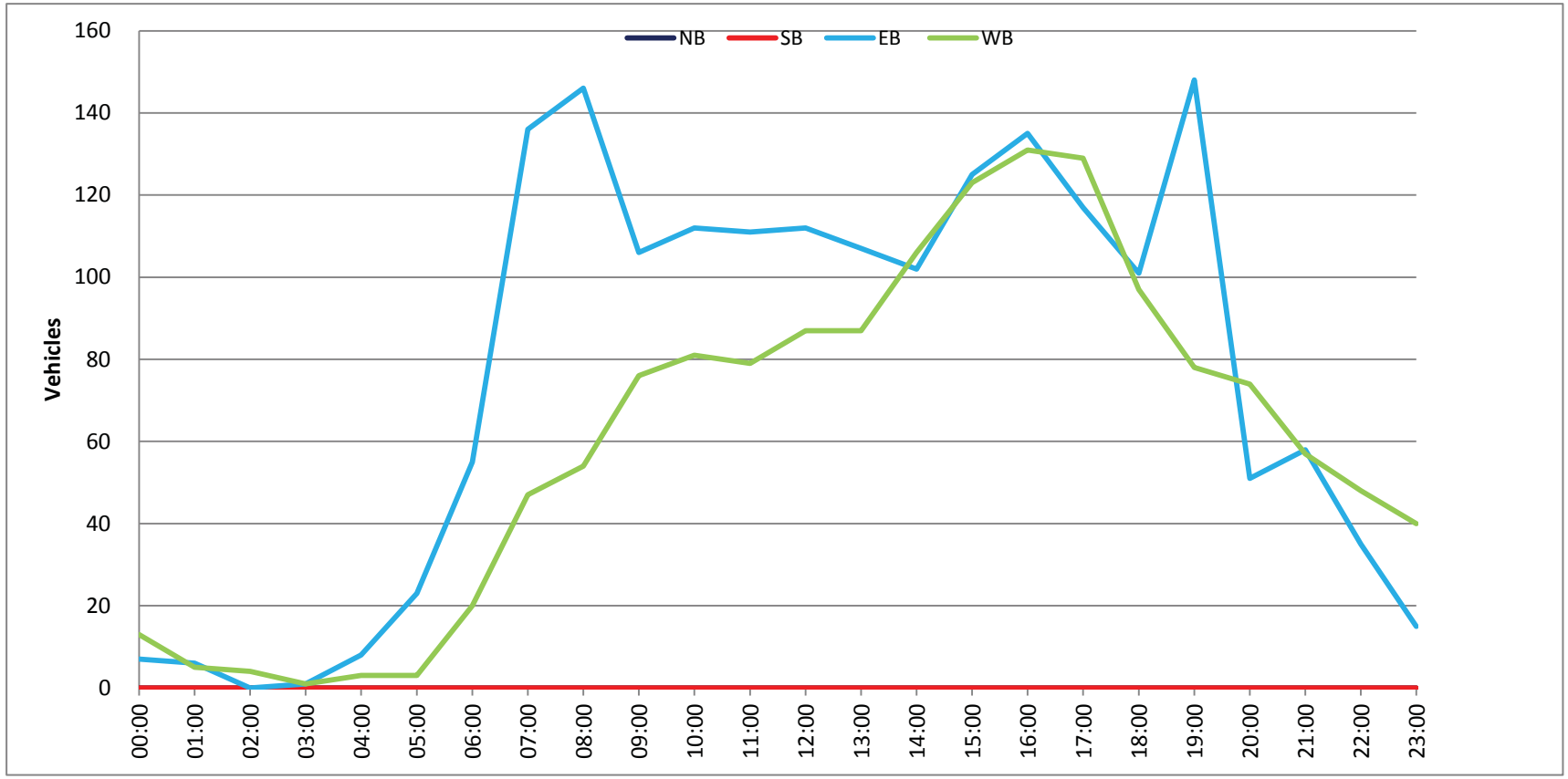
DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,918	1,573	3,491

AM Peak Hour			07:30	07:30	07:30	PM Peak Hour			14:15	14:30	14:15
AM Pk Volume			228	107	335	PM Pk Volume			177	143	313
Pk Hr Factor			0.864	0.892	0.872	Pk Hr Factor			0.725	0.851	0.760
7 - 9 Volume	0	0	386	198	584	4 - 6 Volume	0	0	272	246	518
7 - 9 Peak Hour			07:30	07:30	07:30	4 - 6 Peak Hour			16:00	17:00	16:00
7 - 9 Pk Volume	0	0	228	107	335	4 - 6 Pk Volume	0	0	158	128	276
Pk Hr Factor	0.000	0.000	0.864	0.892	0.872	Pk Hr Factor	0.000	0.000	0.878	0.970	0.932

Prepared by NDS/ATD

Project #: CA14_4218_004 **City:** Solana Beach

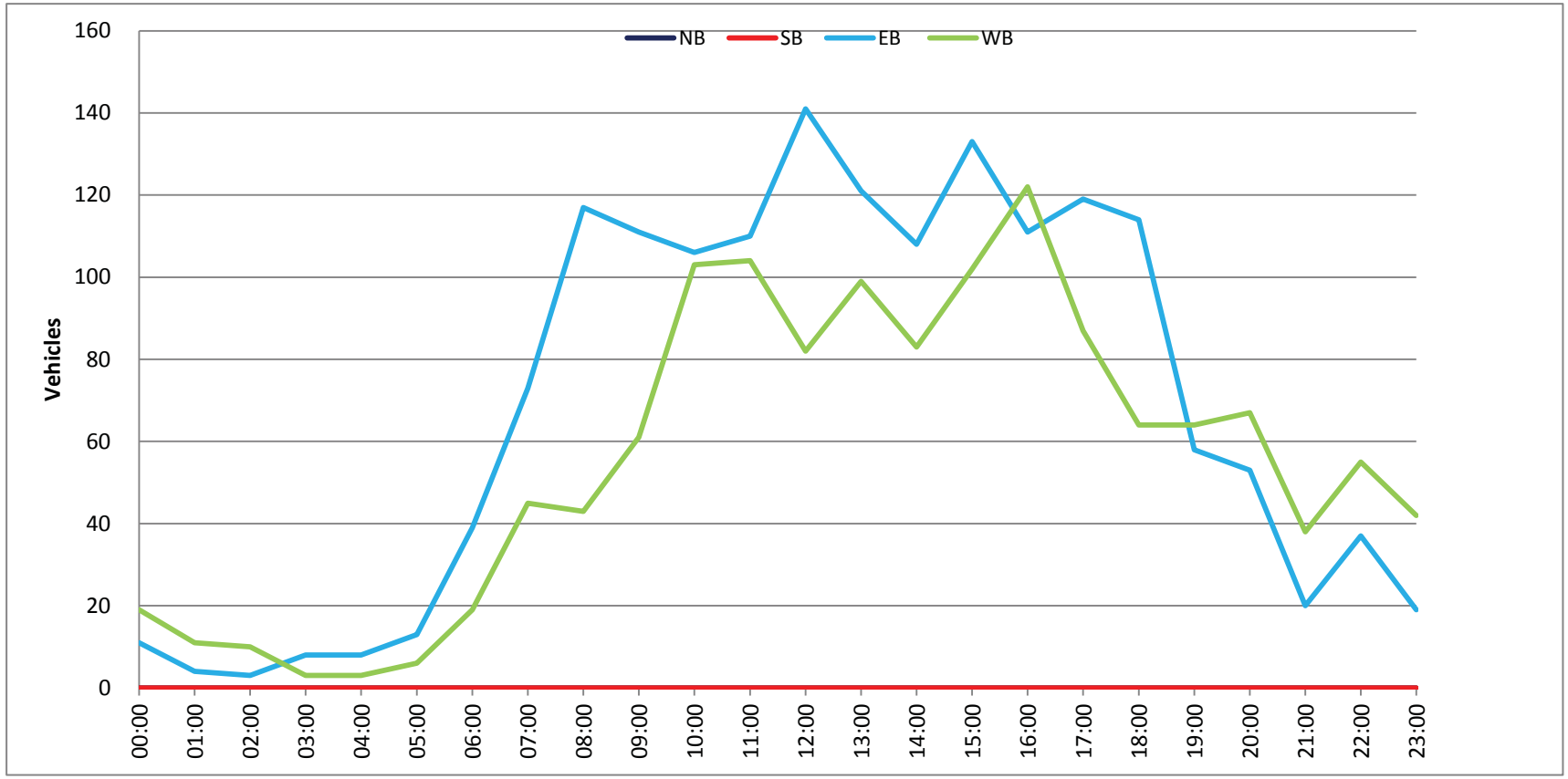
Location: Nardo Ave btwn Fresca St & Stevens Ave **Date:** 8/22/2014



Prepared by NDS/ATD

Project #: CA14_4218_004 **City:** Solana Beach

Location: Nardo Ave btwn Fresca St & Stevens Ave **Date:** 8/23/2014



Prepared by NDS/ATD

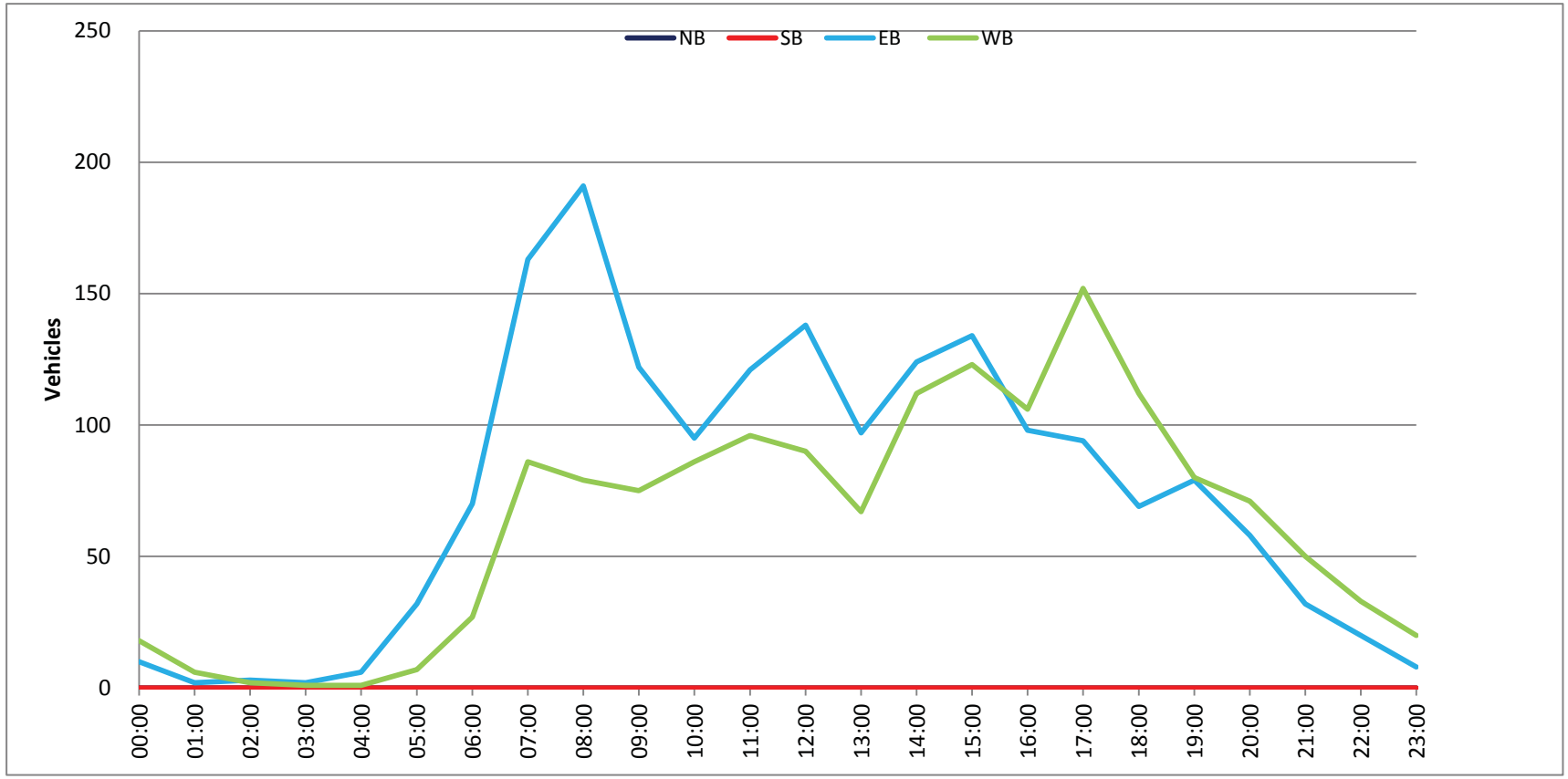
Project #: CA14_4218_004 **City:** Solana Beach

Location: Nardo Ave btwn Fresca St & Stevens Ave **Date:** 8/24/2014

Prepared by NDS/ATD

Project #: CA14_4218_004 **City:** Solana Beach

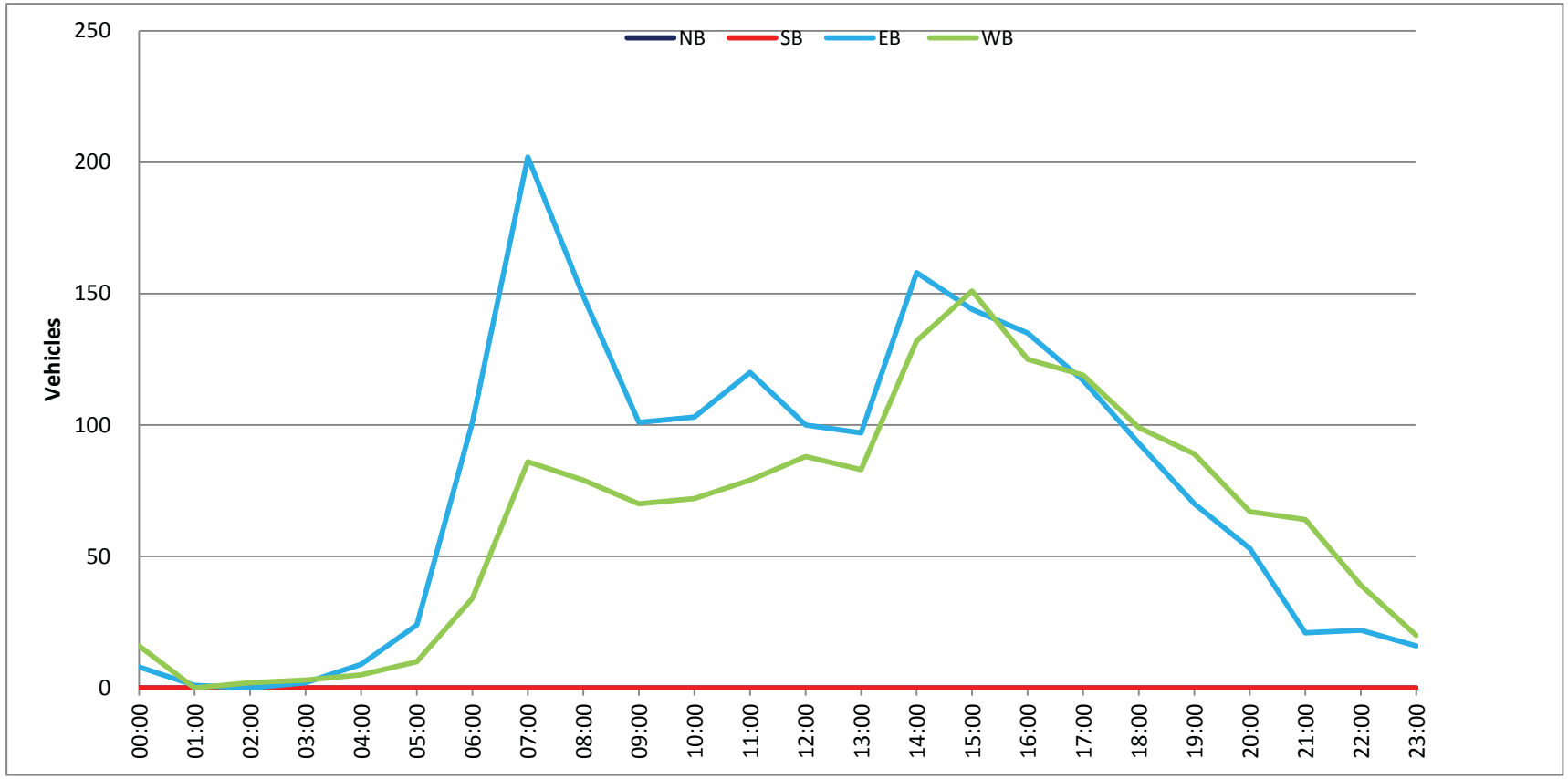
Location: Nardo Ave btwn Fresca St & Stevens Ave **Date:** 8/25/2014



Prepared by NDS/ATD

Project #: CA14_4218_004 **City:** Solana Beach

Location: Nardo Ave btwn Fresca St & Stevens Ave **Date:** 8/26/2014



Prepared by NDS/ATD

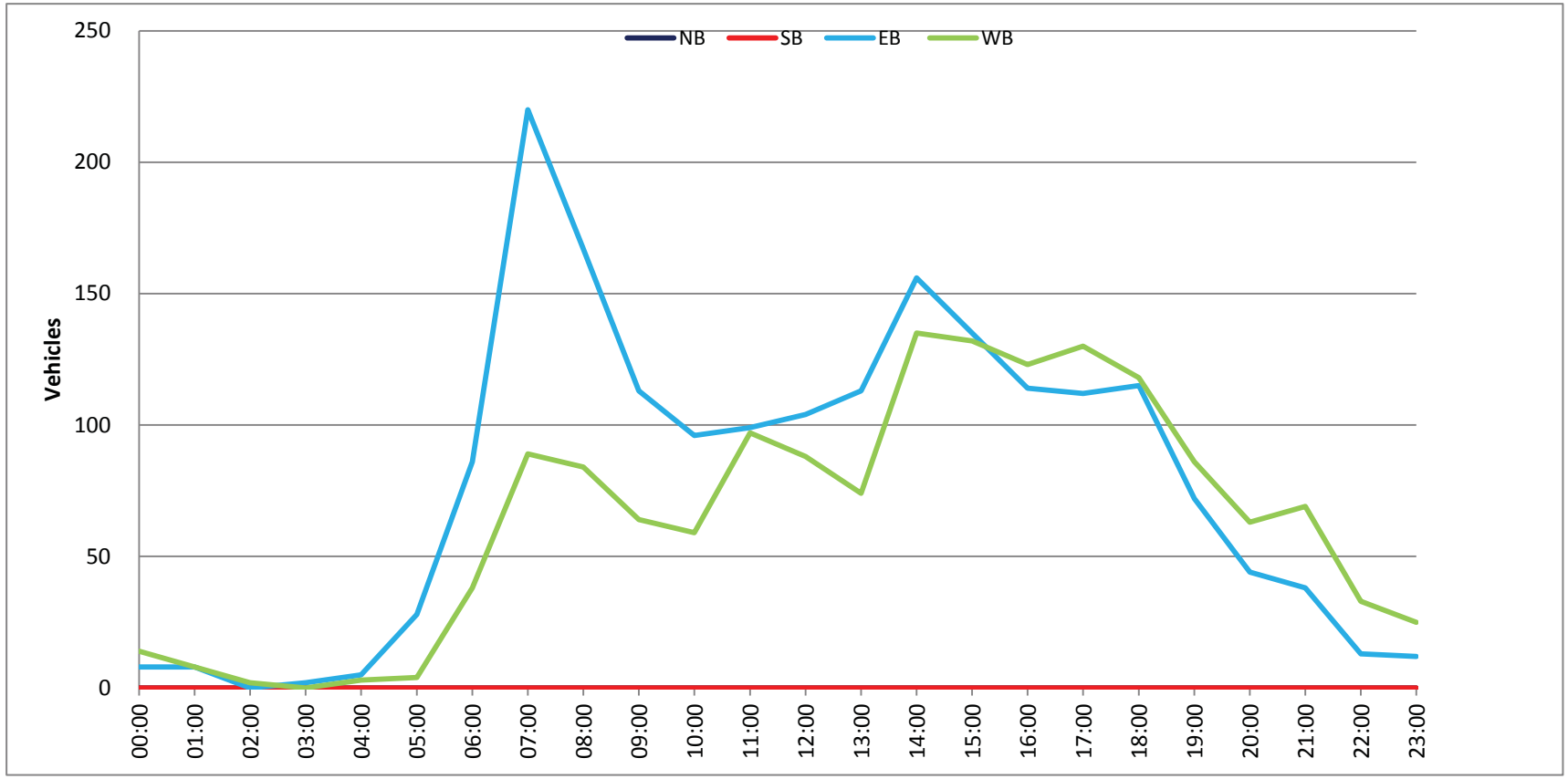
Project #: CA14_4218_004 **City:** Solana Beach

Location: Nardo Ave btwn Fresca St & Stevens Ave **Date:** 8/27/2014

Prepared by NDS/ATD

Project #: CA14_4218_004 **City:** Solana Beach

Location: Nardo Ave btwn Fresca St & Stevens Ave **Date:** 8/28/2014



Prepared by NDS/ATD

VOLUME

Stevens Ave s/o Genevieve St

Day: Friday
Date: 8/22/2014

City: Solana Beach
Project #: CA14_4218_005

DAILY TOTALS	NB	SB	EB	WB	Total
	4,762	4,380	0	0	9,142

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	6		1						7		12:00	85		109						194	
00:15	5		5						10		12:15	99		85						184	
00:30	1		0						1		12:30	77		89						166	
00:45	0	12	0	6					0	18	12:45	96	357	84	367					180	724
01:00	1		1						2		13:00	101		85						186	
01:15	4		3						7		13:15	86		87						173	
01:30	1		2						3		13:30	98		102						200	
01:45	1	7	1	7					2	14	13:45	96	381	129	403					225	784
02:00	1		1						2		14:00	72		95						167	
02:15	1		1						2		14:15	75		83						158	
02:30	0		2						2		14:30	87		97						184	
02:45	2	4	0	4					2	8	14:45	77	311	101	376					178	687
03:00	0		2						2		15:00	87		99						186	
03:15	0		2						2		15:15	86		117						203	
03:30	0		1						1		15:30	91		76						167	
03:45	0		0	5					0	5	15:45	102	366	91	383					193	749
04:00	0		2						2		16:00	90		101						191	
04:15	2		2						4		16:15	101		77						178	
04:30	6		1						7		16:30	92		96						188	
04:45	2	10	4	9					6	19	16:45	70	353	78	352					148	705
05:00	5		2						7		17:00	89		74						163	
05:15	5		5						10		17:15	70		86						156	
05:30	11		5						16		17:30	81		93						174	
05:45	10	31	3	15					13	46	17:45	64	304	59	312					123	616
06:00	19		6						25		18:00	63		67						130	
06:15	28		13						41		18:15	46		48						94	
06:30	33		16						49		18:30	41		56						97	
06:45	75	155	20	55					95	210	18:45	59	209	52	223					111	432
07:00	90		35						125		19:00	74		50						124	
07:15	116		64						180		19:15	99		50						149	
07:30	80		77						157		19:30	86		55						141	
07:45	78	364	53	229					131	593	19:45	76	335	43	198					119	533
08:00	81		45						126		20:00	53		47						100	
08:15	71		34						105		20:15	31		41						72	
08:30	74		48						122		20:30	42		38						80	
08:45	90	316	42	169					132	485	20:45	24	150	39	165					63	315
09:00	77		56						133		21:00	21		38						59	
09:15	79		64						143		21:15	11		26						37	
09:30	87		59						146		21:30	24		25						49	
09:45	95	338	65	244					160	582	21:45	24	80	42	131					66	211
10:00	86		64						150		22:00	12		44						56	
10:15	71		68						139		22:15	5		12						17	
10:30	76		71						147		22:30	8		24						32	
10:45	76	309	89	292					165	601	22:45	4	29	12	92					16	121
11:00	85		65						150		23:00	5		7						12	
11:15	73		90						163		23:15	9		11						20	
11:30	84		90						174		23:30	1		7						8	
11:45	82	324	68	313					150	637	23:45	2	17	5	30					7	47
TOTALS		1870		1348						3218	TOTALS		2892		3032						5924
SPLIT %		58.1%		41.9%						35.2%	SPLIT %		48.8%		51.2%						64.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,762	4,380	0	0	9,142

AM Peak Hour	07:00	11:15			11:30	PM Peak Hour	15:45	14:30			13:00
AM Pk Volume	364	357			702	PM Pk Volume	385	414			784
Pk Hr Factor	0.784	0.819			0.905	Pk Hr Factor	0.944	0.885			0.871
7 - 9 Volume	680	398	0	0	1078	4 - 6 Volume	657	664	0	0	1321
7 - 9 Peak Hour	07:00	07:15			07:15	4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	364	239	0	0	594	4 - 6 Pk Volume	353	352	0	0	705
Pk Hr Factor	0.784	0.776	0.000	0.000	0.825	Pk Hr Factor	0.874	0.871	0.000	0.000	0.923

Prepared by NDS/ATD

VOLUME

Stevens Ave s/o Genevieve St

Day: Saturday
Date: 8/23/2014

City: Solana Beach
Project #: CA14_4218_005

DAILY TOTALS	NB	SB	EB	WB	Total
	3,409	3,381	0	0	6,790

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	5		2						7		12:00	95		87						182	
00:15	4		3						7		12:15	59		96						155	
00:30	2		6						8		12:30	66		80						146	
00:45	2	13	3	14					5	27	12:45	49	269	97	360					146	629
01:00	4		2						6		13:00	59		98						157	
01:15	5		2						7		13:15	56		73						129	
01:30	0		1						1		13:30	51		92						143	
01:45	3	12	2	7					5	19	13:45	64	230	88	351					152	581
02:00	2		1						3		14:00	57		81						138	
02:15	1		0						1		14:15	54		79						133	
02:30	0		5						5		14:30	50		65						115	
02:45	2	5	4	10					6	15	14:45	54	215	58	283					112	498
03:00	3		1						4		15:00	40		64						104	
03:15	1		1						2		15:15	51		74						125	
03:30	2		0						2		15:30	63		59						122	
03:45	0	6	3	5					3	11	15:45	53	207	64	261					117	468
04:00	1		1						2		16:00	47		57						104	
04:15	1		1						2		16:15	64		46						110	
04:30	5		5						10		16:30	51		50						101	
04:45	4	11	2	9					6	20	16:45	55	217	58	211					113	428
05:00	3		1						4		17:00	39		53						92	
05:15	1		3						4		17:15	45		49						94	
05:30	6		2						8		17:30	56		53						109	
05:45	4	14	5	11					9	25	17:45	78	218	53	208					131	426
06:00	4		5						9		18:00	91		36						127	
06:15	5		5						10		18:15	48		31						79	
06:30	19		14						33		18:30	46		50						96	
06:45	12	40	11	35					23	75	18:45	71	256	45	162					116	418
07:00	28		16						44		19:00	68		38						106	
07:15	20		18						38		19:15	62		35						97	
07:30	34		15						49		19:30	49		40						89	
07:45	34	116	38	87					72	203	19:45	29	208	36	149					65	357
08:00	36		33						69		20:00	31		39						70	
08:15	52		28						80		20:15	31		41						72	
08:30	63		34						97		20:30	14		36						50	
08:45	60	211	33	128					93	339	20:45	25	101	17	133					42	234
09:00	79		45						124		21:00	14		31						45	
09:15	60		45						105		21:15	12		19						31	
09:30	83		46						129		21:30	11		11						22	
09:45	92	314	55	191					147	505	21:45	8	45	21	82					29	127
10:00	86		61						147		22:00	8		22						30	
10:15	68		73						141		22:15	14		16						30	
10:30	69		66						135		22:30	12		21						33	
10:45	105	328	84	284					189	612	22:45	4	38	6	65					10	103
11:00	65		57						122		23:00	5		13						18	
11:15	78		69						147		23:15	4		9						13	
11:30	82		95						177		23:30	9		8						17	
11:45	87	312	76	297					163	609	23:45	5	23	8	38					13	61
TOTALS		1382		1078						2460	TOTALS		2027		2303						4330
SPLIT %		56.2%		43.8%						36.2%	SPLIT %		46.8%		53.2%						63.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	3,409	3,381	0	0	6,790

AM Peak Hour	11:15	11:30			11:30	PM Peak Hour	17:30	12:15			12:00
AM Pk Volume	342	354			677	PM Pk Volume	273	371			629
Pk Hr Factor	0.900	0.922			0.930	Pk Hr Factor	0.750	0.946			0.864
7 - 9 Volume	327	215	0	0	542	4 - 6 Volume	435	419	0	0	854
7 - 9 Peak Hour	08:00	07:45			08:00	4 - 6 Peak Hour	17:00	16:45			16:00
7 - 9 Pk Volume	211	133	0	0	339	4 - 6 Pk Volume	218	213	0	0	428
Pk Hr Factor	0.837	0.875	0.000	0.000	0.874	Pk Hr Factor	0.699	0.918	0.000	0.000	0.947

Prepared by NDS/ATD

VOLUME

Stevens Ave s/o Genevieve St

Day: Sunday
Date: 8/24/2014

City: Solana Beach
Project #: CA14_4218_005

DAILY TOTALS	NB	SB	EB	WB	Total
	2,997	2,977	0	0	5,974

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	5		6						11		12:00	45		78						123	
00:15	5		8						13		12:15	59		90						149	
00:30	6		5						11		12:30	90		75						165	
00:45	3	19	3	22					6	41	12:45	57	251	80	323					137	574
01:00	3		3						6		13:00	68		64						132	
01:15	1		1						2		13:15	54		62						116	
01:30	5		3						8		13:30	47		65						112	
01:45	0	9	1	8					1	17	13:45	52	221	57	248					109	469
02:00	3		1						4		14:00	40		57						97	
02:15	0		1						1		14:15	37		50						87	
02:30	3		1						4		14:30	44		52						96	
02:45	3	9	0	3					3	12	14:45	36	157	55	214					91	371
03:00	0		1						1		15:00	53		43						96	
03:15	0		0						0		15:15	53		50						103	
03:30	1		2						3		15:30	45		56						101	
03:45	1	2	0	3					1	5	15:45	38	189	50	199					88	388
04:00	1		0						1		16:00	46		51						97	
04:15	1		1						2		16:15	57		57						114	
04:30	5		1						6		16:30	38		45						83	
04:45	2	9	2	4					4	13	16:45	39	180	38	191					77	371
05:00	1		0						1		17:00	37		40						77	
05:15	1		0						1		17:15	38		36						74	
05:30	2		5						7		17:30	44		39						83	
05:45	3	7	7	12					10	19	17:45	55	174	55	170					110	344
06:00	7		6						13		18:00	84		40						124	
06:15	8		9						17		18:15	74		43						117	
06:30	6		7						13		18:30	87		26						113	
06:45	15	36	11	33					26	69	18:45	88	333	47	156					135	489
07:00	17		19						36		19:00	87		36						123	
07:15	17		20						37		19:15	61		34						95	
07:30	18		19						37		19:30	31		41						72	
07:45	21	73	9	67					30	140	19:45	21	200	36	147					57	347
08:00	30		15						45		20:00	31		34						65	
08:15	71		18						89		20:15	26		24						50	
08:30	71		34						105		20:30	16		27						43	
08:45	48	220	42	109					90	329	20:45	12	85	18	103					30	188
09:00	54		31						85		21:00	11		26						37	
09:15	50		39						89		21:15	11		20						31	
09:30	44		45						89		21:30	10		13						23	
09:45	61	209	55	170					116	379	21:45	9	41	12	71					21	112
10:00	79		67						146		22:00	13		11						24	
10:15	68		56						124		22:15	13		13						26	
10:30	80		67						147		22:30	10		11						21	
10:45	66	293	80	270					146	563	22:45	8	44	6	41					14	85
11:00	51		79						130		23:00	2		10						12	
11:15	50		107						157		23:15	2		4						6	
11:30	64		103						167		23:30	4		1						5	
11:45	60	225	107	396					167	621	23:45	3	11	2	17					5	28
TOTALS		1111		1097						2208	TOTALS		1886		1880						3766
SPLIT %		50.3%		49.7%						37.0%	SPLIT %		50.1%		49.9%						63.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	2,997	2,977	0	0	5,974

AM Peak Hour	10:00	11:00			11:00	PM Peak Hour	18:15	12:00			12:15
AM Pk Volume	293	396			621	PM Pk Volume	336	323			583
Pk Hr Factor	0.916	0.925			0.930	Pk Hr Factor	0.955	0.897			0.883
7 - 9 Volume	293	176	0	0	469	4 - 6 Volume	354	361	0	0	715
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	220	109	0	0	329	4 - 6 Pk Volume	180	191	0	0	371
Pk Hr Factor	0.775	0.649	0.000	0.000	0.783	Pk Hr Factor	0.789	0.838	0.000	0.000	0.814

Prepared by NDS/ATD

VOLUME

Stevens Ave s/o Genevieve St

Day: Monday
Date: 8/25/2014

City: Solana Beach
Project #: CA14_4218_005

DAILY TOTALS	NB	SB	EB	WB	Total
	4,291	4,122	0	0	8,413

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	2		2						4		12:00	99		90						189	
00:15	1		1						2		12:15	71		76						147	
00:30	1		2						3		12:30	72		86						158	
00:45	3	7	5	10					8	17	12:45	89	331	74	326					163	657
01:00	2		2						4		13:00	66		84						150	
01:15	0		1						1		13:15	56		71						127	
01:30	2		1						3		13:30	80		72						152	
01:45	0	4	0	4					0	8	13:45	87	289	73	300					160	589
02:00	1		1						2		14:00	75		75						150	
02:15	0		2						2		14:15	88		58						146	
02:30	2		0						2		14:30	110		75						185	
02:45	4	7	0	3					4	10	14:45	79	352	135	343					214	695
03:00	1		1						2		15:00	88		123						211	
03:15	0		1						1		15:15	81		97						178	
03:30	1		0						1		15:30	62		82						144	
03:45	2	4	1	3					3	7	15:45	67	298	82	384					149	682
04:00	1		0						1		16:00	77		104						181	
04:15	3		2						5		16:15	94		100						194	
04:30	8		4						12		16:30	95		77						172	
04:45	3	15	1	7					4	22	16:45	91	357	107	388					198	745
05:00	5		2						7		17:00	86		101						187	
05:15	7		6						13		17:15	74		81						155	
05:30	9		5						14		17:30	83		110						193	
05:45	18	39	0	13					18	52	17:45	74	317	82	374					156	691
06:00	25		14						39		18:00	66		75						141	
06:15	26		12						38		18:15	56		54						110	
06:30	24		10						34		18:30	37		56						93	
06:45	51	126	17	53					68	179	18:45	36	195	66	251					102	446
07:00	83		38						121		19:00	35		42						77	
07:15	137		64						201		19:15	40		49						89	
07:30	84		97						181		19:30	31		45						76	
07:45	98	402	59	258					157	660	19:45	28	134	39	175					67	309
08:00	81		37						118		20:00	32		43						75	
08:15	88		49						137		20:15	21		37						58	
08:30	116		64						180		20:30	17		29						46	
08:45	79	364	74	224					153	588	20:45	15	85	31	140					46	225
09:00	78		88						166		21:00	11		19						30	
09:15	67		57						124		21:15	13		22						35	
09:30	77		56						133		21:30	10		16						26	
09:45	81	303	55	256					136	559	21:45	7	41	11	68					18	109
10:00	54		61						115		22:00	4		13						17	
10:15	75		46						121		22:15	7		6						13	
10:30	73		64						137		22:30	3		3						6	
10:45	69	271	53	224					122	495	22:45	1	15	2	24					3	39
11:00	69		61						130		23:00	5		7						12	
11:15	87		68						155		23:15	3		6						9	
11:30	81		71						152		23:30	2		2						4	
11:45	85	322	77	277					162	599	23:45	3	13	2	17					5	30
TOTALS		1864		1332						3196	TOTALS		2427		2790						5217
SPLIT %		58.3%		41.7%						38.0%	SPLIT %		46.5%		53.5%						62.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,291	4,122	0	0	8,413

AM Peak Hour	07:00	11:45			07:00	PM Peak Hour	16:15	14:45			14:30
AM Pk Volume	402	329			660	PM Pk Volume	366	437			788
Pk Hr Factor	0.734	0.914			0.821	Pk Hr Factor	0.963	0.809			0.921
7 - 9 Volume	766	482	0	0	1248	4 - 6 Volume	674	762	0	0	1436
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	16:15	16:45			16:15
7 - 9 Pk Volume	402	258	0	0	660	4 - 6 Pk Volume	366	399	0	0	751
Pk Hr Factor	0.734	0.665	0.000	0.000	0.821	Pk Hr Factor	0.963	0.907	0.000	0.000	0.948

Prepared by NDS/ATD

VOLUME

Stevens Ave s/o Genevieve St

Day: Tuesday
Date: 8/26/2014

City: Solana Beach
Project #: CA14_4218_005

DAILY TOTALS	NB	SB	EB	WB	Total
	4,866	4,604	0	0	9,470

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	3		4						7		12:00	80		74						154	
00:15	1		4						5		12:15	66		78						144	
00:30	0		3						3		12:30	88		71						159	
00:45	0	4	0	11					0	15	12:45	80	314	86	309					166	623
01:00	0		1						1		13:00	69		61						130	
01:15	0		1						1		13:15	85		70						155	
01:30	1		0						1		13:30	70		79						149	
01:45	1	2	0	2					1	4	13:45	102	326	79	289					181	615
02:00	0		0						0		14:00	98		94						192	
02:15	1		1						2		14:15	116		134						250	
02:30	0		1						1		14:30	116		113						229	
02:45	1	2	1	3					2	5	14:45	121	451	165	506					286	957
03:00	3		3						6		15:00	101		140						241	
03:15	2		0						2		15:15	92		108						200	
03:30	0		1						1		15:30	93		61						154	
03:45	2	7	0	4					2	11	15:45	102	388	126	435					228	823
04:00	1		0						1		16:00	102		75						177	
04:15	0		1						1		16:15	92		95						187	
04:30	5		3						8		16:30	109		89						198	
04:45	4	10	2	6					6	16	16:45	95	398	102	361					197	759
05:00	3		0						3		17:00	108		104						212	
05:15	9		5						14		17:15	119		91						210	
05:30	9		6						15		17:30	90		78						168	
05:45	14	35	6	17					20	52	17:45	95	412	88	361					183	773
06:00	22		13						35		18:00	74		64						138	
06:15	30		14						44		18:15	73		73						146	
06:30	52		24						76		18:30	43		55						98	
06:45	80	184	38	89					118	273	18:45	57	247	60	252					117	499
07:00	164		80						244		19:00	38		76						114	
07:15	148		102						250		19:15	37		60						97	
07:30	109		130						239		19:30	38		56						94	
07:45	96	517	58	370					154	887	19:45	40	153	63	255					103	408
08:00	89		46						135		20:00	29		59						88	
08:15	90		53						143		20:15	28		35						63	
08:30	87		94						181		20:30	17		33						50	
08:45	86	352	83	276					169	628	20:45	17	91	42	169					59	260
09:00	65		72						137		21:00	11		19						30	
09:15	75		42						117		21:15	10		36						46	
09:30	82		51						133		21:30	8		16						24	
09:45	88	310	55	220					143	530	21:45	4	33	15	86					19	119
10:00	77		53						130		22:00	4		16						20	
10:15	67		64						131		22:15	6		11						17	
10:30	70		69						139		22:30	5		3						8	
10:45	83	297	62	248					145	545	22:45	3	18	7	37					10	55
11:00	65		58						123		23:00	3		7						10	
11:15	71		71						142		23:15	2		5						7	
11:30	89		76						165		23:30	0		3						3	
11:45	82	307	76	281					158	588	23:45	3	8	2	17					5	25
TOTALS		2027		1527						3554	TOTALS		2839		3077						5916
SPLIT %		57.0%		43.0%						37.5%	SPLIT %		48.0%		52.0%						62.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,866	4,604	0	0	9,470

AM Peak Hour	07:00	07:00			07:00	PM Peak Hour	14:15	14:15			14:15
AM Pk Volume	517	370			887	PM Pk Volume	454	552			1006
Pk Hr Factor	0.788	0.712			0.887	Pk Hr Factor	0.938	0.836			0.879
7 - 9 Volume	869	646	0	0	1515	4 - 6 Volume	810	722	0	0	1532
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	16:30	16:15			16:30
7 - 9 Pk Volume	517	370	0	0	887	4 - 6 Pk Volume	431	390	0	0	817
Pk Hr Factor	0.788	0.712	0.000	0.000	0.887	Pk Hr Factor	0.905	0.938	0.000	0.000	0.963

Prepared by NDS/ATD

VOLUME

Stevens Ave s/o Genevieve St

Day: Wednesday
Date: 8/27/2014

City: Solana Beach
Project #: CA14_4218_005

DAILY TOTALS	NB	SB	EB	WB	Total
	5,119	5,023	0	0	10,142

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	2		6						8		12:00	73		102						175	
00:15	2		2						4		12:15	76		87						163	
00:30	2		1						3		12:30	73		102						175	
00:45	2	8	3	12					5	20	12:45	68	290	112	403					180	693
01:00	3		1						4		13:00	82		128						210	
01:15	0		0						0		13:15	87		105						192	
01:30	1		0						1		13:30	82		88						170	
01:45	0	4	2	3					2	7	13:45	85	336	84	405					169	741
02:00	0		0						0		14:00	122		86						208	
02:15	1		1						2		14:15	108		113						221	
02:30	0		2						2		14:30	112		105						217	
02:45	1	2	0	3					1	5	14:45	105	447	158	462					263	909
03:00	1		1						2		15:00	98		146						244	
03:15	0		0						0		15:15	85		107						192	
03:30	1		0						1		15:30	98		87						185	
03:45	1	3	1	2					2	5	15:45	99	380	93	433					192	813
04:00	0		1						1		16:00	85		94						179	
04:15	1		0						1		16:15	95		107						202	
04:30	4		4						8		16:30	86		88						174	
04:45	6	11	2	7					8	18	16:45	120	386	105	394					225	780
05:00	10		5						15		17:00	119		106						225	
05:15	8		10						18		17:15	122		85						207	
05:30	11		4						15		17:30	104		90						194	
05:45	14	43	5	24					19	67	17:45	102	447	79	360					181	807
06:00	32		14						46		18:00	107		78						185	
06:15	34		26						60		18:15	90		67						157	
06:30	50		17						67		18:30	98		71						169	
06:45	75	191	28	85					103	276	18:45	68	363	56	272					124	635
07:00	143		100						243		19:00	41		46						87	
07:15	163		167						330		19:15	47		73						120	
07:30	111		94						205		19:30	43		60						103	
07:45	104	521	58	419					162	940	19:45	31	162	59	238					90	400
08:00	95		53						148		20:00	21		48						69	
08:15	108		64						172		20:15	19		80						99	
08:30	108		86						194		20:30	27		80						107	
08:45	94	405	72	275					166	680	20:45	17	84	39	247					56	331
09:00	86		49						135		21:00	21		25						46	
09:15	63		51						114		21:15	13		28						41	
09:30	90		65						155		21:30	8		22						30	
09:45	78	317	72	237					150	554	21:45	8	50	19	94					27	144
10:00	66		72						138		22:00	7		12						19	
10:15	75		65						140		22:15	13		7						20	
10:30	79		73						152		22:30	3		9						12	
10:45	91	311	78	288					169	599	22:45	2	25	2	30					4	55
11:00	87		73						160		23:00	3		6						9	
11:15	70		84						154		23:15	6		4						10	
11:30	86		73						159		23:30	1		2						3	
11:45	80	323	87	317					167	640	23:45	0	10	1	13					1	23
TOTALS		2139		1672						3811	TOTALS		2980		3351						6331
SPLIT %		56.1%		43.9%						37.6%	SPLIT %		47.1%		52.9%						62.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	5,119	5,023	0	0	10,142

AM Peak Hour	07:00	07:00			07:00	PM Peak Hour	16:45	14:15			14:15
AM Pk Volume	521	419			940	PM Pk Volume	465	522			945
Pk Hr Factor	0.799	0.627			0.712	Pk Hr Factor	0.953	0.826			0.898
7 - 9 Volume	926	694	0	0	1620	4 - 6 Volume	833	754	0	0	1587
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	16:45	16:15			16:45
7 - 9 Pk Volume	521	419	0	0	940	4 - 6 Pk Volume	465	406	0	0	851
Pk Hr Factor	0.799	0.627	0.000	0.000	0.712	Pk Hr Factor	0.953	0.949	0.000	0.000	0.946

Prepared by NDS/ATD

VOLUME

Stevens Ave s/o Genevieve St

Day: Thursday
Date: 8/28/2014

City: Solana Beach
Project #: CA14_4218_005

DAILY TOTALS	NB	SB	EB	WB	Total
	5,092	4,783	0	0	9,875

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	1		6						7		12:00	67		110						177	
00:15	1		2						3		12:15	95		84						179	
00:30	0		1						1		12:30	79		80						159	
00:45	3	5	1	10					4	15	12:45	66	307	115	389					181	696
01:00	0		4						4		13:00	87		92						179	
01:15	1		0						1		13:15	74		84						158	
01:30	0		3						3		13:30	77		79						156	
01:45	1	2	0	7					1	9	13:45	76	314	82	337					158	651
02:00	0		0						0		14:00	102		106						208	
02:15	1		2						3		14:15	98		125						223	
02:30	0		2						2		14:30	112		92						204	
02:45	1	2	0	4					1	6	14:45	106	418	148	471					254	889
03:00	0		0						0		15:00	94		116						210	
03:15	1		0						1		15:15	97		104						201	
03:30	0		0						0		15:30	102		97						199	
03:45	2	3	1	1					3	4	15:45	103	396	90	407					193	803
04:00	0		0						0		16:00	111		114						225	
04:15	3		1						4		16:15	92		99						191	
04:30	4		6						10		16:30	96		104						200	
04:45	4	11	4	11					8	22	16:45	107	406	79	396					186	802
05:00	5		2						7		17:00	95		94						189	
05:15	6		7						13		17:15	122		86						208	
05:30	13		4						17		17:30	107		93						200	
05:45	16	40	3	16					19	56	17:45	144	468	68	341					212	809
06:00	22		17						39		18:00	133		59						192	
06:15	25		13						38		18:15	93		64						157	
06:30	42		16						58		18:30	64		62						126	
06:45	74	163	39	85					113	248	18:45	65	355	47	232					112	587
07:00	113		87						200		19:00	49		60						109	
07:15	175		160						335		19:15	33		56						89	
07:30	115		108						223		19:30	36		53						89	
07:45	104	507	52	407					156	914	19:45	37	155	61	230					98	385
08:00	102		48						150		20:00	29		48						77	
08:15	98		52						150		20:15	21		49						70	
08:30	111		82						193		20:30	24		85						109	
08:45	70	381	60	242					130	623	20:45	23	97	45	227					68	324
09:00	96		48						144		21:00	17		27						44	
09:15	86		58						144		21:15	13		31						44	
09:30	87		58						145		21:30	10		20						30	
09:45	83	352	76	240					159	592	21:45	8	48	16	94					24	142
10:00	66		42						108		22:00	4		15						19	
10:15	85		62						147		22:15	12		10						22	
10:30	64		79						143		22:30	3		8						11	
10:45	79	294	69	252					148	546	22:45	5	24	10	43					15	67
11:00	74		78						152		23:00	9		2						11	
11:15	86		86						172		23:15	3		4						7	
11:30	82		75						157		23:30	3		3						6	
11:45	85	327	88	327					173	654	23:45	2	17	5	14					7	31
TOTALS		2087		1602						3689	TOTALS		3005		3181						6186
SPLIT %		56.6%		43.4%						37.4%	SPLIT %		48.6%		51.4%						62.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	5,092	4,783	0	0	9,875

AM Peak Hour	07:00	07:00			07:00	PM Peak Hour	17:15	14:15			14:15
AM Pk Volume	507	407			914	PM Pk Volume	506	481			891
Pk Hr Factor	0.724	0.636			0.682	Pk Hr Factor	0.878	0.813			0.877
7 - 9 Volume	888	649	0	0	1537	4 - 6 Volume	874	737	0	0	1611
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	17:00	16:00			17:00
7 - 9 Pk Volume	507	407	0	0	914	4 - 6 Pk Volume	468	396	0	0	809
Pk Hr Factor	0.724	0.636	0.000	0.000	0.682	Pk Hr Factor	0.813	0.868	0.000	0.000	0.954

Prepared by NDS/ATD

Project #: CA14_4218_005 **City:** Solana Beach

Location: Stevens Ave s/o Genevieve St **Date:** 8/22/2014

Prepared by NDS/ATD

Project #: CA14_4218_005 **City:** Solana Beach

Location: Stevens Ave s/o Genevieve St **Date:** 8/23/2014

Prepared by NDS/ATD

Project #: CA14_4218_005 **City:** Solana Beach

Location: Stevens Ave s/o Genevieve St **Date:** 8/24/2014

Prepared by NDS/ATD

Project #: CA14_4218_005 **City:** Solana Beach

Location: Stevens Ave s/o Genevieve St **Date:** 8/25/2014

Prepared by NDS/ATD

Project #: CA14_4218_005 **City:** Solana Beach

Location: Stevens Ave s/o Genevieve St **Date:** 8/26/2014

Prepared by NDS/ATD

Project #: CA14_4218_005 **City:** Solana Beach

Location: Stevens Ave s/o Genevieve St **Date:** 8/27/2014

Prepared by NDS/ATD

Project #: CA14_4218_005 **City:** Solana Beach

Location: Stevens Ave s/o Genevieve St **Date:** 8/28/2014

Prepared by NDS/ATD

VOLUME

Lomas Santa Fe Dr btwn Stevens Ave & Solana Hills Dr

Day: Wednesday
Date: 8/27/2014

City: Solana Beach
Project #: CA14_4218_006

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	13,289	13,804	27,093

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			34		11		45		12:00			264		256		520	
00:15			26		8		34		12:15			236		264		500	
00:30			15		5		20		12:30			237		256		493	
00:45			13	88	8	32	21	120	12:45			236	973	315	1091	551	2064
01:00			10		3		13		13:00			261		293		554	
01:15			8		2		10		13:15			260		271		531	
01:30			3		1		4		13:30			268		268		536	
01:45			3	24	2	8	5	32	13:45			248	1037	256	1088	504	2125
02:00			2		3		5		14:00			241		255		496	
02:15			3		2		5		14:15			302		256		558	
02:30			1		4		5		14:30			278		275		553	
02:45			0	6	2	11	2	17	14:45			303	1124	304	1090	607	2214
03:00			3		2		5		15:00			261		274		535	
03:15			3		1		4		15:15			243		227		470	
03:30			3		1		4		15:30			243		255		498	
03:45			1	10	3	7	4	17	15:45			250	997	217	973	467	1970
04:00			1		1		2		16:00			232		208		440	
04:15			3		1		4		16:15			267		219		486	
04:30			8		7		15		16:30			205		220		425	
04:45			8	20	13	22	21	42	16:45			260	964	272	919	532	1883
05:00			18		13		31		17:00			326		232		558	
05:15			13		30		43		17:15			298		204		502	
05:30			17		58		75		17:30			237		253		490	
05:45			23	71	66	167	89	238	17:45			255	1116	216	905	471	2021
06:00			43		93		136		18:00			251		179		430	
06:15			68		160		228		18:15			221		179		400	
06:30			81		116		197		18:30			221		189		410	
06:45			109	301	201	570	310	871	18:45			184	877	203	750	387	1627
07:00			147		291		438		19:00			159		154		313	
07:15			182		329		511		19:15			210		141		351	
07:30			222		236		458		19:30			151		114		265	
07:45			216	767	207	1063	423	1830	19:45			151	671	110	519	261	1190
08:00			248		212		460		20:00			151		98		249	
08:15			160		293		453		20:15			154		76		230	
08:30			179		313		492		20:30			185		80		265	
08:45			191	778	288	1106	479	1884	20:45			78	568	66	320	144	888
09:00			198		216		414		21:00			75		64		139	
09:15			190		214		404		21:15			76		78		154	
09:30			181		235		416		21:30			96		63		159	
09:45			180	749	213	878	393	1627	21:45			57	304	39	244	96	548
10:00			176		222		398		22:00			58		29		87	
10:15			178		204		382		22:15			44		33		77	
10:30			168		239		407		22:30			42		29		71	
10:45			201	723	221	886	422	1609	22:45			47	191	19	110	66	301
11:00			214		238		452		23:00			32		17		49	
11:15			186		253		439		23:15			24		13		37	
11:30			231		244		475		23:30			20		12		32	
11:45			208	839	255	990	463	1829	23:45			15	91	13	55	28	146
TOTALS				4376		5740		10116	TOTALS				8913		8064		16977
SPLIT %				43.3%		56.7%		37.3%	SPLIT %				52.5%		47.5%		62.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	13,289	13,804	27,093

AM Peak Hour			11:45	08:15	11:45	PM Peak Hour			14:15	12:45	14:15
AM Pk Volume			945	1110	1976	PM Pk Volume			1144	1147	2253
Pk Hr Factor			0.895	0.887	0.950	Pk Hr Factor			0.944	0.910	0.928
7 - 9 Volume	0	0	1545	2169	3714	4 - 6 Volume	0	0	2080	1824	3904
7 - 9 Peak Hour			07:15	08:00	08:00	4 - 6 Peak Hour			16:45	16:45	16:45
7 - 9 Pk Volume	0	0	868	1106	1884	4 - 6 Pk Volume	0	0	1121	961	2082
Pk Hr Factor	0.000	0.000	0.875	0.883	0.957	Pk Hr Factor	0.000	0.000	0.860	0.883	0.933

Prepared by NDS/ATD

VOLUME

Lomas Santa Fe Dr btwn Stevens Ave & Solana Hills Dr

Day: Friday
Date: 8/22/2014

City: Solana Beach
Project #: CA14_4218_006

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	13,205	14,013	27,218

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			16		9		25		12:00			268		292		560	
00:15			9		15		24		12:15			236		265		501	
00:30			29		11		40		12:30			246		232		478	
00:45			13	67	3	38	16	105	12:45			221	971	308	1097	529	2068
01:00			5		6		11		13:00			233		253		486	
01:15			7		9		16		13:15			227		281		508	
01:30			7		6		13		13:30			239		294		533	
01:45			3	22	5	26	8	48	13:45			338	1037	265	1093	603	2130
02:00			6		5		11		14:00			294		244		538	
02:15			2		2		4		14:15			240		248		488	
02:30			2		6		8		14:30			238		262		500	
02:45			3	13	3	16	6	29	14:45			248	1020	249	1003	497	2023
03:00			1		1		2		15:00			236		248		484	
03:15			3		4		7		15:15			237		245		482	
03:30			3		4		7		15:30			254		271		525	
03:45			5	12	5	14	10	26	15:45			277	1004	237	1001	514	2005
04:00			2		6		8		16:00			228		227		455	
04:15			3		6		9		16:15			265		223		488	
04:30			10		4		14		16:30			209		226		435	
04:45			8	23	9	25	17	48	16:45			244	946	215	891	459	1837
05:00			12		14		26		17:00			259		195		454	
05:15			16		23		39		17:15			214		249		463	
05:30			29		35		64		17:30			195		223		418	
05:45			20	77	54	126	74	203	17:45			187	855	222	889	409	1744
06:00			31		79		110		18:00			194		206		400	
06:15			64		131		195		18:15			244		205		449	
06:30			71		146		217		18:30			154		173		327	
06:45			72	238	180	536	252	774	18:45			184	776	182	766	366	1542
07:00			106		232		338		19:00			166		174		340	
07:15			128		260		388		19:15			229		161		390	
07:30			177		225		402		19:30			277		152		429	
07:45			158	569	233	950	391	1519	19:45			197	869	146	633	343	1502
08:00			165		181		346		20:00			157		114		271	
08:15			172		213		385		20:15			145		117		262	
08:30			160		242		402		20:30			119		111		230	
08:45			187	684	243	879	430	1563	20:45			115	536	91	433	206	969
09:00			170		235		405		21:00			125		74		199	
09:15			186		260		446		21:15			97		64		161	
09:30			219		237		456		21:30			106		95		201	
09:45			168	743	226	958	394	1701	21:45			124	452	90	323	214	775
10:00			213		223		436		22:00			139		63		202	
10:15			213		208		421		22:15			74		58		132	
10:30			194		233		427		22:30			85		69		154	
10:45			205	825	264	928	469	1753	22:45			67	365	57	247	124	612
11:00			201		212		413		23:00			92		45		137	
11:15			203		225		428		23:15			60		29		89	
11:30			212		284		496		23:30			61		27		88	
11:45			219	835	299	1020	518	1855	23:45			53	266	20	121	73	387
TOTALS				4108		5516		9624	TOTALS				9097		8497		17594
SPLIT %				42.7%		57.3%		35.4%	SPLIT %				51.7%		48.3%		64.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	13,205	14,013	27,218

AM Peak Hour			11:45	11:30	11:30	PM Peak Hour			13:30	12:45	13:15
AM Pk Volume			969	1140	2075	PM Pk Volume			1111	1136	2182
Pk Hr Factor			0.904	0.953	0.926	Pk Hr Factor			0.822	0.922	0.905
7 - 9 Volume	0	0	1253	1829	3082	4 - 6 Volume	0	0	1801	1780	3581
7 - 9 Peak Hour			08:00	07:00	08:00	4 - 6 Peak Hour			16:15	16:00	16:00
7 - 9 Pk Volume	0	0	684	950	1563	4 - 6 Pk Volume	0	0	977	891	1837
Pk Hr Factor	0.000	0.000	0.914	0.913	0.909	Pk Hr Factor	0.000	0.000	0.922	0.981	0.941

Prepared by NDS/ATD

VOLUME

Lomas Santa Fe Dr btwn Stevens Ave & Solana Hills Dr

Day: Saturday
Date: 8/23/2014

City: Solana Beach
Project #: CA14_4218_006

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	11,289	11,733	23,022

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			117		17		134		12:00			209		298		507	
00:15			32		14		46		12:15			218		274		492	
00:30			24		19		43		12:30			212		266		478	
00:45			30	203	27	77	57	280	12:45			197	836	272	1110	469	1946
01:00			23		10		33		13:00			225		261		486	
01:15			10		6		16		13:15			186		290		476	
01:30			8		10		18		13:30			222		219		441	
01:45			7	48	5	31	12	79	13:45			199	832	245	1015	444	1847
02:00			10		0		10		14:00			214		218		432	
02:15			5		3		8		14:15			185		211		396	
02:30			8		8		16		14:30			220		205		425	
02:45			4	27	11	22	15	49	14:45			246	865	200	834	446	1699
03:00			7		5		12		15:00			213		190		403	
03:15			6		3		9		15:15			207		170		377	
03:30			3		3		6		15:30			228		187		415	
03:45			4	20	3	14	7	34	15:45			223	871	192	739	415	1610
04:00			2		1		3		16:00			193		163		356	
04:15			3		2		5		16:15			211		169		380	
04:30			6		6		12		16:30			216		198		414	
04:45			4	15	3	12	7	27	16:45			177	797	207	737	384	1534
05:00			10		8		18		17:00			195		161		356	
05:15			10		11		21		17:15			214		177		391	
05:30			11		20		31		17:30			189		165		354	
05:45			4	35	24	63	28	98	17:45			189	787	175	678	364	1465
06:00			18		32		50		18:00			201		148		349	
06:15			31		66		97		18:15			212		190		402	
06:30			52		80		132		18:30			142		136		278	
06:45			41	142	82	260	123	402	18:45			140	695	164	638	304	1333
07:00			67		93		160		19:00			199		146		345	
07:15			64		98		162		19:15			204		117		321	
07:30			98		131		229		19:30			169		93		262	
07:45			84	313	180	502	264	815	19:45			159	731	118	474	277	1205
08:00			90		130		220		20:00			143		113		256	
08:15			96		174		270		20:15			102		132		234	
08:30			155		178		333		20:30			96		96		192	
08:45			134	475	193	675	327	1150	20:45			109	450	101	442	210	892
09:00			148		183		331		21:00			104		91		195	
09:15			169		174		343		21:15			87		85		172	
09:30			175		222		397		21:30			100		67		167	
09:45			185	677	218	797	403	1474	21:45			117	408	71	314	188	722
10:00			206		195		401		22:00			73		76		149	
10:15			200		213		413		22:15			75		62		137	
10:30			176		250		426		22:30			63		73		136	
10:45			208	790	216	874	424	1664	22:45			67	278	44	255	111	533
11:00			212		224		436		23:00			41		42		83	
11:15			217		254		471		23:15			38		40		78	
11:30			190		276		466		23:30			43		35		78	
11:45			222	841	269	1023	491	1864	23:45			31	153	30	147	61	300
TOTALS				3586		4350		**7936**	**TOTALS**				7703		7383		**15086**
SPLIT %				45.2%		54.8%		**34.5%**	**SPLIT %**				51.1%		48.9%		**65.5%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	11,289	11,733	23,022

AM Peak Hour			11:45	11:30	**11:45**	**PM Peak Hour**			14:45	12:00	**12:00**
AM Pk Volume			861	1117	**1968**	**PM Pk Volume**			894	1110	**1946**
Pk Hr Factor			0.970	0.937	**0.970**	**Pk Hr Factor**			0.909	0.931	**0.960**
7 - 9 Volume	0	0	788	1177	**1965**	**4 - 6 Volume**	0	0	1584	1415	**2999**
7 - 9 Peak Hour			08:00	08:00	**08:00**	**4 - 6 Peak Hour**			16:30	16:30	**16:30**
7 - 9 Pk Volume	0	0	475	675	**1150**	**4 - 6 Pk Volume**	0	0	802	743	**1545**
Pk Hr Factor	0.000	0.000	0.766	0.874	**0.863**	**Pk Hr Factor**	0.000	0.000	0.928	0.897	**0.933**

Prepared by NDS/ATD

VOLUME

Lomas Santa Fe Dr btwn Stevens Ave & Solana Hills Dr

Day: Sunday
Date: 8/24/2014

City: Solana Beach
Project #: CA14_4218_006

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	10,665	11,022	21,687

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			38		21		59		12:00			235		314		549	
00:15			33		19		52		12:15			225		238		463	
00:30			38		20		58		12:30			237		235		472	
00:45			24	133	13	73	37	206	12:45			184	881	294	1081	478	1962
01:00			50		11		61		13:00			180		265		445	
01:15			32		13		45		13:15			182		276		458	
01:30			39		11		50		13:30			200		232		432	
01:45			21	142	7	42	28	184	13:45			190	752	273	1046	463	1798
02:00			14		13		27		14:00			186		253		439	
02:15			16		10		26		14:15			181		180		361	
02:30			10		2		12		14:30			197		196		393	
02:45			6	46	4	29	10	75	14:45			190	754	169	798	359	1552
03:00			3		6		9		15:00			200		180		380	
03:15			3		1		4		15:15			175		179		354	
03:30			7		4		11		15:30			199		166		365	
03:45			5	18	1	12	6	30	15:45			205	779	163	688	368	1467
04:00			2		4		6		16:00			226		204		430	
04:15			3		4		7		16:15			207		189		396	
04:30			3		3		6		16:30			207		150		357	
04:45			3	11	2	13	5	24	16:45			202	842	162	705	364	1547
05:00			4		6		10		17:00			190		150		340	
05:15			7		9		16		17:15			202		158		360	
05:30			8		21		29		17:30			168		173		341	
05:45			12	31	33	69	45	100	17:45			180	740	177	658	357	1398
06:00			17		29		46		18:00			243		171		414	
06:15			23		36		59		18:15			264		132		396	
06:30			29		47		76		18:30			235		120		355	
06:45			20	89	65	177	85	266	18:45			231	973	128	551	359	1524
07:00			44		91		135		19:00			211		135		346	
07:15			44		88		132		19:15			218		91		309	
07:30			56		97		153		19:30			154		99		253	
07:45			54	198	105	381	159	579	19:45			159	742	79	404	238	1146
08:00			70		107		177		20:00			138		70		208	
08:15			81		184		265		20:15			116		66		182	
08:30			77		221		298		20:30			77		53		130	
08:45			103	331	182	694	285	1025	20:45			104	435	63	252	167	687
09:00			116		163		279		21:00			89		42		131	
09:15			126		146		272		21:15			70		59		129	
09:30			177		183		360		21:30			72		58		130	
09:45			168	587	209	701	377	1288	21:45			129	360	55	214	184	574
10:00			235		216		451		22:00			40		32		72	
10:15			192		241		433		22:15			34		21		55	
10:30			182		253		435		22:30			32		23		55	
10:45			176	785	254	964	430	1749	22:45			46	152	18	94	64	246
11:00			176		249		425		23:00			21		26		47	
11:15			203		314		517		23:15			16		13		29	
11:30			193		368		561		23:30			17		14		31	
11:45			252	824	381	1312	633	2136	23:45			6	60	11	64	17	124
TOTALS				3195		4467		7662	TOTALS				7470		6555		14025
SPLIT %				41.7%		58.3%		35.3%	SPLIT %				53.3%		46.7%		64.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	10,665	11,022	21,687

AM Peak Hour			11:45	11:15	11:15	PM Peak Hour			18:00	12:00	12:00
AM Pk Volume			949	1377	2260	PM Pk Volume			973	1081	1962
Pk Hr Factor			0.941	0.904	0.893	Pk Hr Factor			0.921	0.861	0.893
7 - 9 Volume	0	0	529	1075	1604	4 - 6 Volume	0	0	1582	1363	2945
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:00	16:00	16:00
7 - 9 Pk Volume	0	0	331	694	1025	4 - 6 Pk Volume	0	0	842	705	1547
Pk Hr Factor	0.000	0.000	0.803	0.785	0.860	Pk Hr Factor	0.000	0.000	0.931	0.864	0.899

Prepared by NDS/ATD

VOLUME

Lomas Santa Fe Dr btwn Stevens Ave & Solana Hills Dr

Day: Monday
Date: 8/25/2014

City: Solana Beach
Project #: CA14_4218_006

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	11,749	12,103	23,852

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			14		10		24		12:00			261		194		455	
00:15			13		11		24		12:15			239		224		463	
00:30			4		6		10		12:30			203		240		443	
00:45			2	33	7	34	9	67	12:45			208	911	212	870	420	1781
01:00			4		3		7		13:00			219		221		440	
01:15			9		3		12		13:15			212		190		402	
01:30			0		8		8		13:30			231		193		424	
01:45			7	20	11	25	18	45	13:45			216	878	207	811	423	1689
02:00			17		6		23		14:00			236		191		427	
02:15			1		6		7		14:15			231		238		469	
02:30			4		1		5		14:30			224		252		476	
02:45			4	26	4	17	8	43	14:45			283	974	286	967	569	1941
03:00			4		5		9		15:00			219		233		452	
03:15			2		2		4		15:15			228		206		434	
03:30			3		3		6		15:30			195		229		424	
03:45			5	14	4	14	9	28	15:45			217	859	199	867	416	1726
04:00			8		5		13		16:00			253		182		435	
04:15			3		5		8		16:15			254		186		440	
04:30			9		6		15		16:30			239		192		431	
04:45			13	33	6	22	19	55	16:45			286	1032	230	790	516	1822
05:00			14		22		36		17:00			267		180		447	
05:15			13		18		31		17:15			235		208		443	
05:30			24		43		67		17:30			250		205		455	
05:45			29	80	45	128	74	208	17:45			194	946	208	801	402	1747
06:00			42		83		125		18:00			219		154		373	
06:15			52		122		174		18:15			217		181		398	
06:30			70		113		183		18:30			152		149		301	
06:45			90	254	171	489	261	743	18:45			141	729	149	633	290	1362
07:00			99		225		324		19:00			159		128		287	
07:15			149		274		423		19:15			134		107		241	
07:30			193		251		444		19:30			133		65		198	
07:45			169	610	222	972	391	1582	19:45			100	526	96	396	196	922
08:00			236		194		430		20:00			96		77		173	
08:15			164		276		440		20:15			78		58		136	
08:30			180		283		463		20:30			83		68		151	
08:45			188	768	272	1025	460	1793	20:45			70	327	54	257	124	584
09:00			195		230		425		21:00			54		57		111	
09:15			178		244		422		21:15			66		50		116	
09:30			159		259		418		21:30			82		30		112	
09:45			182	714	201	934	383	1648	21:45			65	267	36	173	101	440
10:00			180		207		387		22:00			38		40		78	
10:15			200		186		386		22:15			28		27		55	
10:30			185		224		409		22:30			21		17		38	
10:45			204	769	205	822	409	1591	22:45			16	103	16	100	32	203
11:00			202		175		377		23:00			20		12		32	
11:15			181		220		401		23:15			14		12		26	
11:30			214		253		467		23:30			14		13		27	
11:45			216	813	263	911	479	1724	23:45			15	63	8	45	23	108
TOTALS				4134		5393		9527	TOTALS				7615		6710		14325
SPLIT %				43.4%		56.6%		39.9%	SPLIT %				53.2%		46.8%		60.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	11,749	12,103	23,852

AM Peak Hour			11:30	08:15	11:30	PM Peak Hour			16:15	14:15	14:15
AM Pk Volume			930	1061	1864	PM Pk Volume			1046	1009	1966
Pk Hr Factor			0.891	0.937	0.973	Pk Hr Factor			0.914	0.882	0.864
7 - 9 Volume	0	0	1378	1997	3375	4 - 6 Volume	0	0	1978	1591	3569
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:15	16:45	16:45
7 - 9 Pk Volume	0	0	768	1025	1793	4 - 6 Pk Volume	0	0	1046	823	1861
Pk Hr Factor	0.000	0.000	0.814	0.905	0.968	Pk Hr Factor	0.000	0.000	0.914	0.895	0.902

Prepared by NDS/ATD

VOLUME

Lomas Santa Fe Dr btwn Stevens Ave & Solana Hills Dr

Day: Tuesday
Date: 8/26/2014

City: Solana Beach
Project #: CA14_4218_006

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	12,454	12,840	25,294

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			9		14		23		12:00			220		219		439	
00:15			14		12		26		12:15			240		164		404	
00:30			4		5		9		12:30			199		231		430	
00:45			4	31	1	32	5	63	12:45			204	863	215	829	419	1692
01:00			2		1		3		13:00			195		186		381	
01:15			6		4		10		13:15			229		173		402	
01:30			1		1		2		13:30			204		212		416	
01:45			4	13	2	8	6	21	13:45			253	881	260	831	513	1712
02:00			0		0		0		14:00			222		240		462	
02:15			4		3		7		14:15			307		248		555	
02:30			0		3		3		14:30			255		289		544	
02:45			2	6	3	9	5	15	14:45			297	1081	306	1083	603	2164
03:00			2		0		2		15:00			257		222		479	
03:15			5		3		8		15:15			259		214		473	
03:30			4		2		6		15:30			246		218		464	
03:45			0	11	3	8	3	19	15:45			257	1019	208	862	465	1881
04:00			2		2		4		16:00			231		202		433	
04:15			4		7		11		16:15			245		212		457	
04:30			8		3		11		16:30			228		198		426	
04:45			10	24	10	22	20	46	16:45			275	979	216	828	491	1807
05:00			14		14		28		17:00			293		235		528	
05:15			13		33		46		17:15			275		227		502	
05:30			16		49		65		17:30			212		238		450	
05:45			25	68	62	158	87	226	17:45			178	958	223	923	401	1881
06:00			36		74		110		18:00			222		218		440	
06:15			64		132		196		18:15			236		181		417	
06:30			85		145		230		18:30			183		176		359	
06:45			108	293	252	603	360	896	18:45			167	808	188	763	355	1571
07:00			142		290		432		19:00			174		149		323	
07:15			183		328		511		19:15			217		114		331	
07:30			185		236		421		19:30			181		120		301	
07:45			206	716	230	1084	436	1800	19:45			123	695	111	494	234	1189
08:00			264		197		461		20:00			138		92		230	
08:15			189		240		429		20:15			109		72		181	
08:30			174		265		439		20:30			93		85		178	
08:45			190	817	280	982	470	1799	20:45			85	425	81	330	166	755
09:00			160		172		332		21:00			77		65		142	
09:15			187		237		424		21:15			56		79		135	
09:30			177		221		398		21:30			81		65		146	
09:45			178	702	253	883	431	1585	21:45			78	292	51	260	129	552
10:00			158		214		372		22:00			45		60		105	
10:15			189		199		388		22:15			34		28		62	
10:30			184		179		363		22:30			32		28		60	
10:45			204	735	207	799	411	1534	22:45			25	136	26	142	51	278
11:00			197		199		396		23:00			28		15		43	
11:15			183		205		388		23:15			28		20		48	
11:30			207		246		453		23:30			17		9		26	
11:45			216	803	205	855	421	1658	23:45			25	98	8	52	33	150
TOTALS				4219		5443		9662	TOTALS				8235		7397		15632
SPLIT %				43.7%		56.3%		38.2%	SPLIT %				52.7%		47.3%		61.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	12,454	12,840	25,294

AM Peak Hour			11:30	06:45	07:15	PM Peak Hour			14:15	14:00	14:15
AM Pk Volume			883	1106	1829	PM Pk Volume			1116	1083	2181
Pk Hr Factor			0.920	0.843	0.895	Pk Hr Factor			0.909	0.885	0.904
7 - 9 Volume	0	0	1533	2066	3599	4 - 6 Volume	0	0	1937	1751	3688
7 - 9 Peak Hour			07:30	07:00	07:15	4 - 6 Peak Hour			16:30	17:00	16:45
7 - 9 Pk Volume	0	0	844	1084	1829	4 - 6 Pk Volume	0	0	1071	923	1971
Pk Hr Factor	0.000	0.000	0.799	0.826	0.895	Pk Hr Factor	0.000	0.000	0.914	0.970	0.933

Prepared by NDS/ATD

VOLUME

Lomas Santa Fe Dr btwn Stevens Ave & Solana Hills Dr

Day: Thursday
Date: 8/28/2014

City: Solana Beach
Project #: CA14_4218_006

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	13,319	13,927	27,246

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			22		15		37		12:00			253		254		507	
00:15			17		10		27		12:15			239		225		464	
00:30			6		11		17		12:30			212		282		494	
00:45			5	50	5	41	10	91	12:45			223	927	295	1056	518	1983
01:00			6		8		14		13:00			241		230		471	
01:15			5		8		13		13:15			227		265		492	
01:30			2		4		6		13:30			215		243		458	
01:45			2	15	2	22	4	37	13:45			240	923	257	995	497	1918
02:00			3		0		3		14:00			279		275		554	
02:15			4		2		6		14:15			282		234		516	
02:30			0		3		3		14:30			259		254		513	
02:45			0	7	4	9	4	16	14:45			302	1122	309	1072	611	2194
03:00			2		2		4		15:00			283		264		547	
03:15			6		1		7		15:15			266		245		511	
03:30			3		3		6		15:30			250		224		474	
03:45			1	12	3	9	4	21	15:45			241	1040	219	952	460	1992
04:00			4		4		8		16:00			267		231		498	
04:15			6		5		11		16:15			264		200		464	
04:30			5		6		11		16:30			240		216		456	
04:45			11	26	14	29	25	55	16:45			247	1018	250	897	497	1915
05:00			14		21		35		17:00			269		210		479	
05:15			17		28		45		17:15			220		215		435	
05:30			30		42		72		17:30			268		258		526	
05:45			27	88	64	155	91	243	17:45			259	1016	238	921	497	1937
06:00			44		93		137		18:00			247		205		452	
06:15			75		164		239		18:15			253		217		470	
06:30			68		144		212		18:30			179		174		353	
06:45			108	295	182	583	290	878	18:45			170	849	170	766	340	1615
07:00			140		279		419		19:00			173		177		350	
07:15			195		360		555		19:15			209		161		370	
07:30			207		243		450		19:30			183		130		313	
07:45			199	741	226	1108	425	1849	19:45			155	720	102	570	257	1290
08:00			238		206		444		20:00			128		88		216	
08:15			172		289		461		20:15			118		94		212	
08:30			175		332		507		20:30			202		74		276	
08:45			170	755	291	1118	461	1873	20:45			107	555	77	333	184	888
09:00			185		215		400		21:00			72		80		152	
09:15			195		219		414		21:15			111		69		180	
09:30			193		271		464		21:30			77		58		135	
09:45			169	742	221	926	390	1668	21:45			64	324	58	265	122	589
10:00			184		222		406		22:00			61		52		113	
10:15			185		207		392		22:15			79		39		118	
10:30			186		221		407		22:30			63		34		97	
10:45			219	774	240	890	459	1664	22:45			31	234	31	156	62	390
11:00			231		227		458		23:00			56		20		76	
11:15			232		217		449		23:15			44		27		71	
11:30			243		269		512		23:30			21		11		32	
11:45			227	933	263	976	490	1909	23:45			32	153	20	78	52	231
TOTALS				4438		5866		10304	TOTALS				8881		8061		16942
SPLIT %				43.1%		56.9%		37.8%	SPLIT %				52.4%		47.6%		62.2%

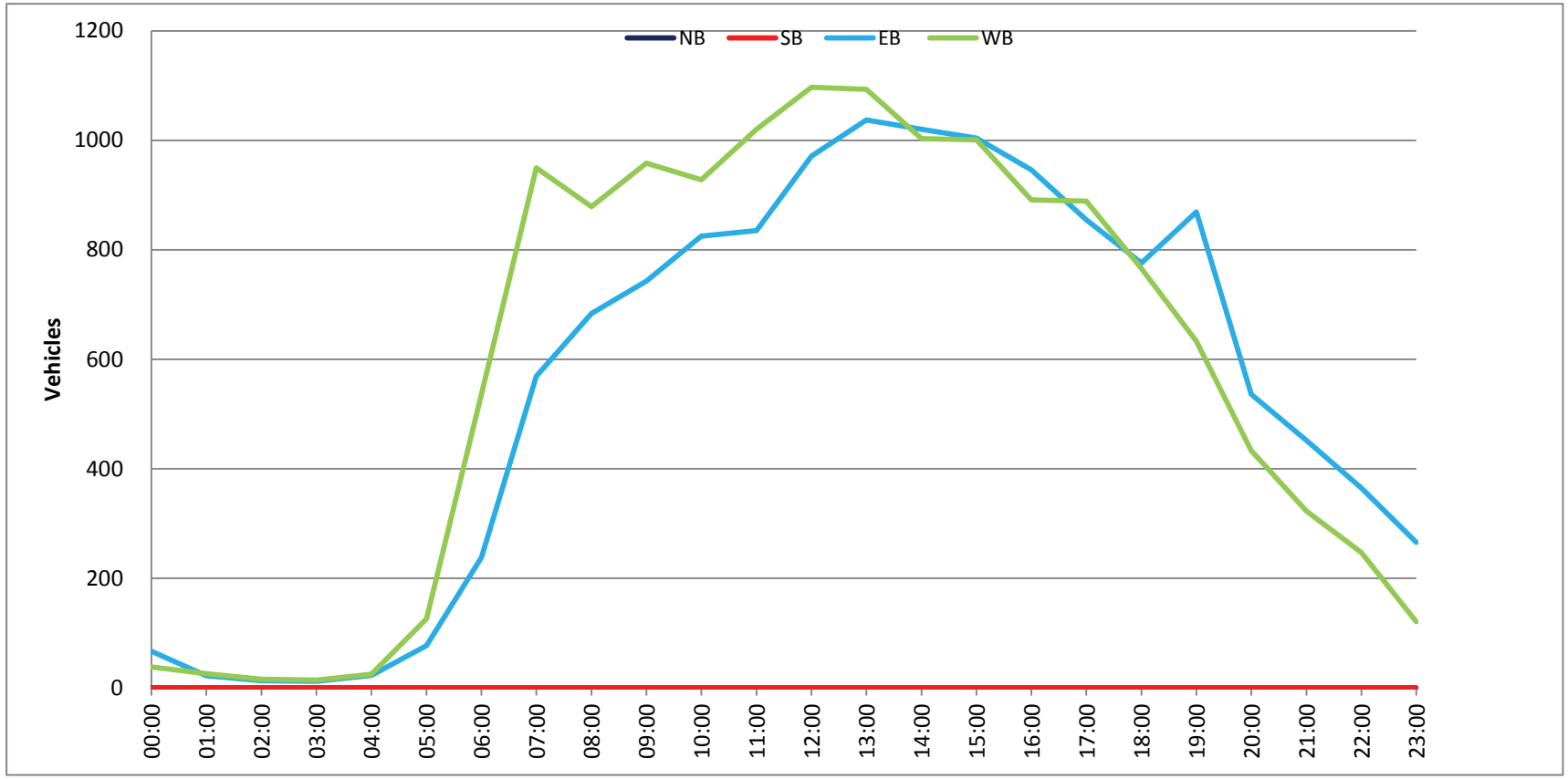
DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	13,319	13,927	27,246

AM Peak Hour			11:30	08:15	11:30	PM Peak Hour			14:15	12:30	14:00
AM Pk Volume			962	1127	1973	PM Pk Volume			1126	1072	2194
Pk Hr Factor			0.951	0.849	0.963	Pk Hr Factor			0.932	0.908	0.898
7 - 9 Volume	0	0	1496	2226	3722	4 - 6 Volume	0	0	2034	1818	3852
7 - 9 Peak Hour			07:15	08:00	07:15	4 - 6 Peak Hour			16:15	16:45	16:45
7 - 9 Pk Volume	0	0	839	1118	1874	4 - 6 Pk Volume	0	0	1020	933	1937
Pk Hr Factor	0.000	0.000	0.881	0.842	0.844	Pk Hr Factor	0.000	0.000	0.948	0.904	0.921

Prepared by NDS/ATD

Project #: CA14_4218_006 **City:** Solana Beach

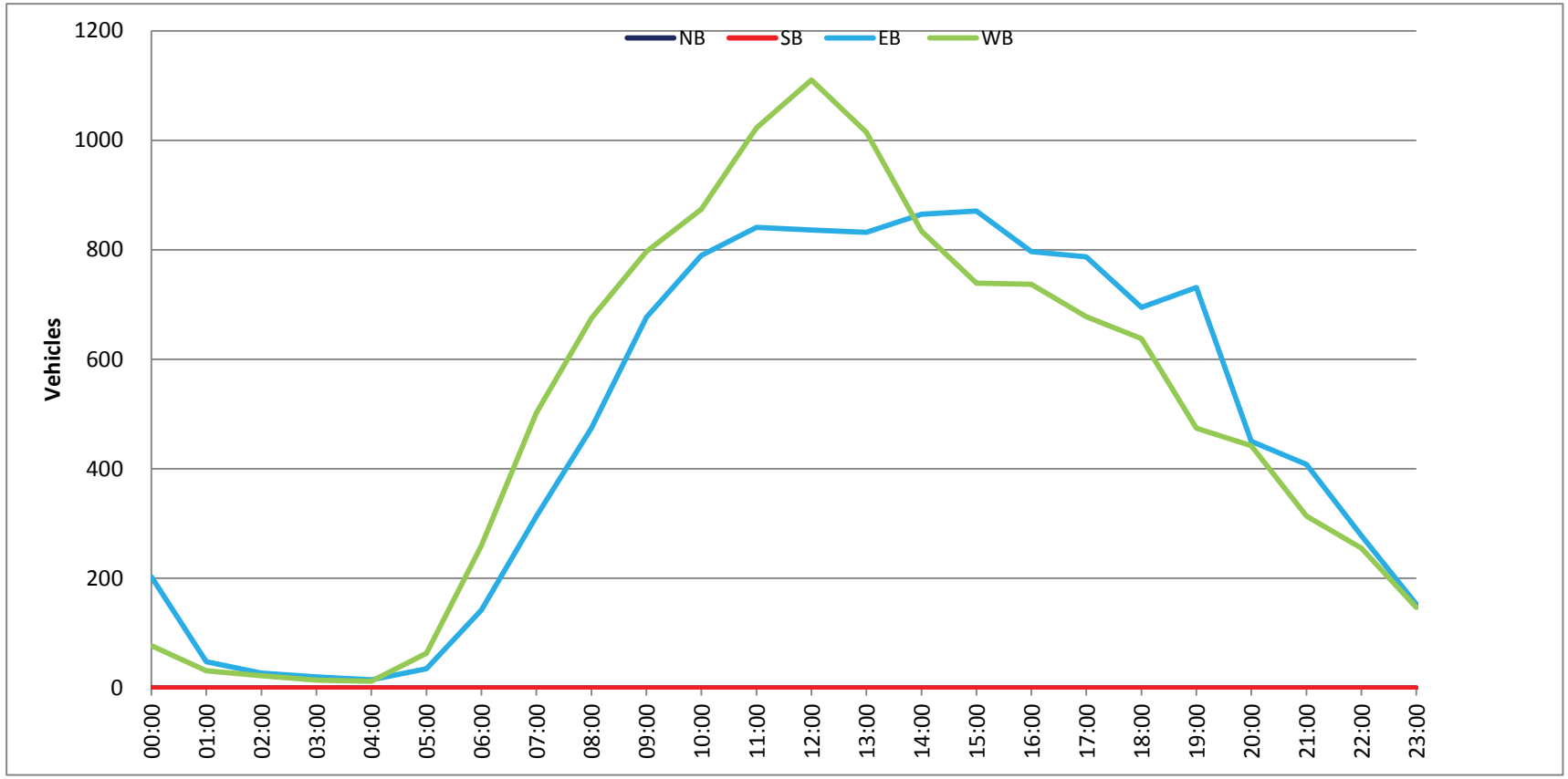
Location: Lomas Santa Fe Dr btwn Stevens Ave & **Date:** 8/22/2014



Prepared by NDS/ATD

Project #: CA14_4218_006 **City:** Solana Beach

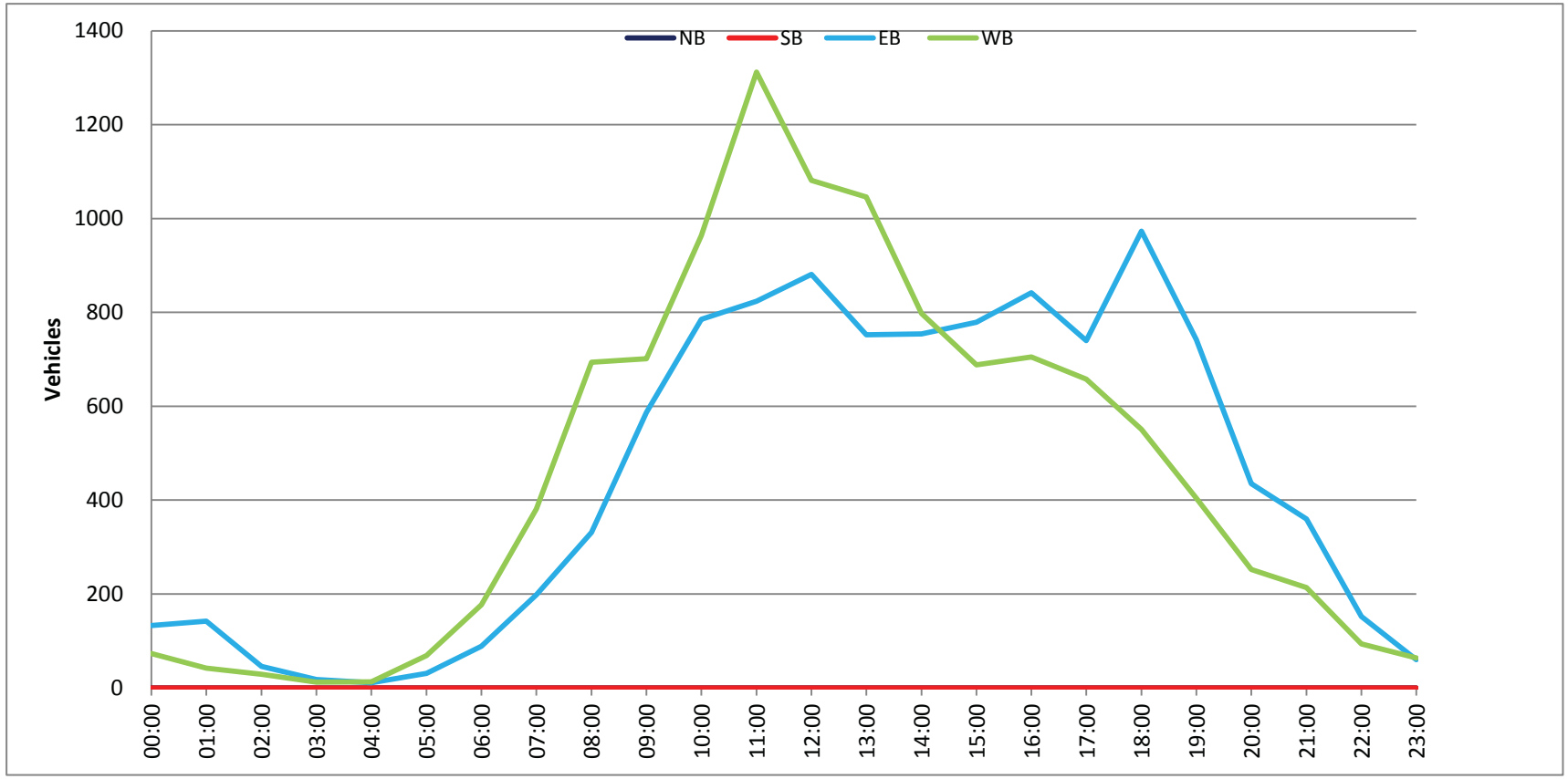
Location: Lomas Santa Fe Dr btwn Stevens Ave & **Date:** 8/23/2014



Prepared by NDS/ATD

Project #: CA14_4218_006 **City:** Solana Beach

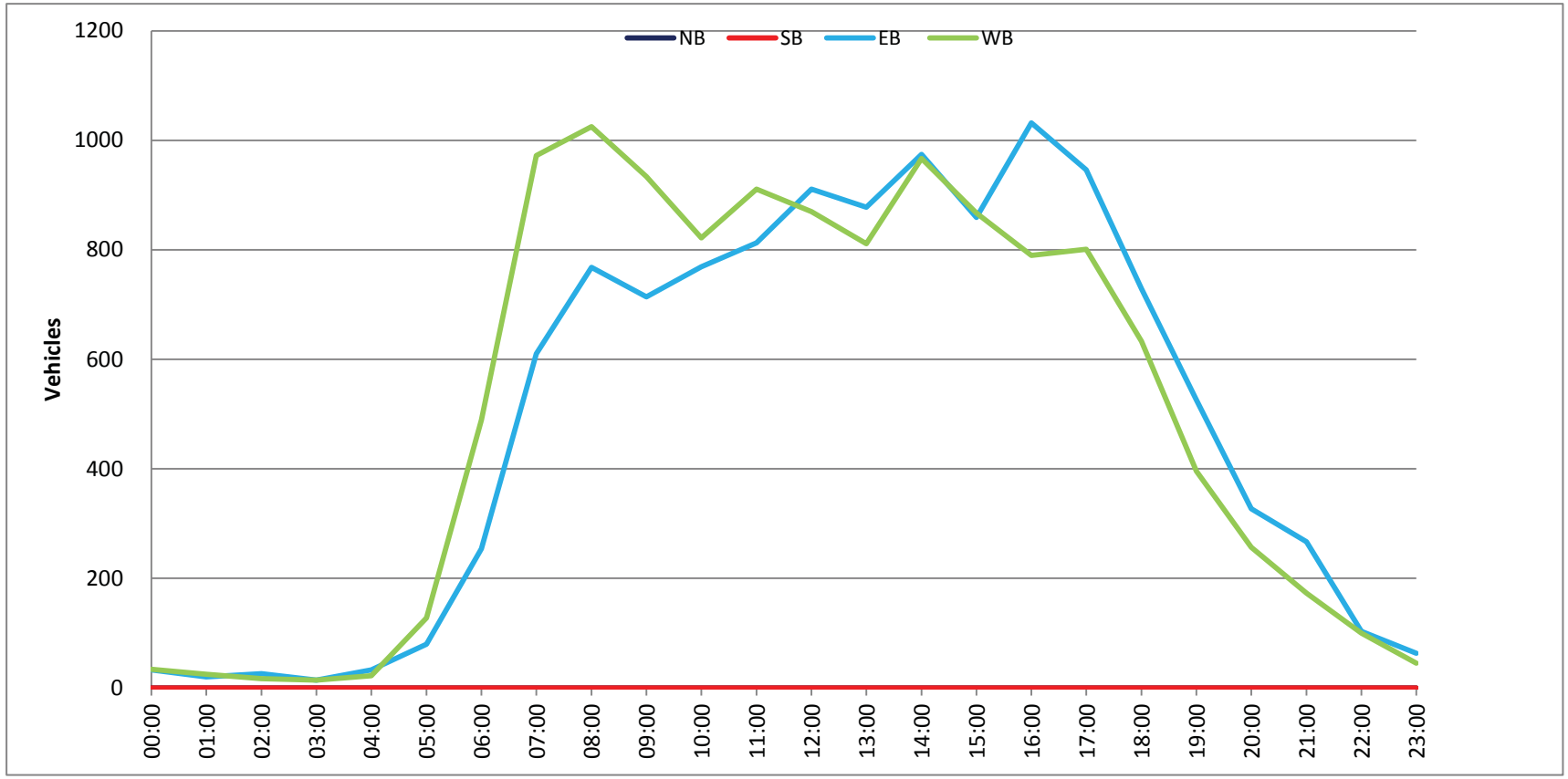
Location: Lomas Santa Fe Dr btwn Stevens Ave & **Date:** 8/24/2014



Prepared by NDS/ATD

Project #: CA14_4218_006 **City:** Solana Beach

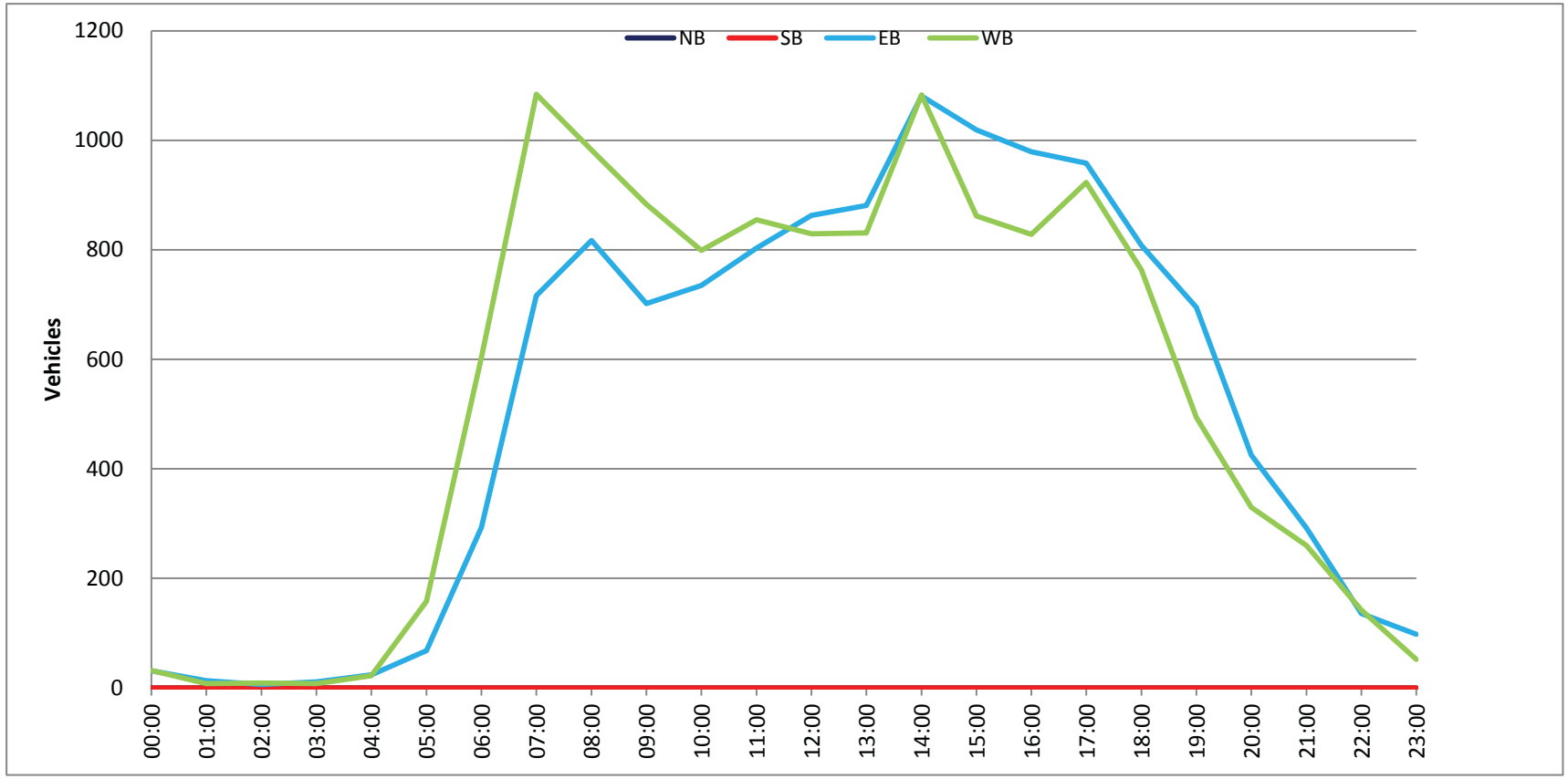
Location: Lomas Santa Fe Dr btwn Stevens Ave & **Date:** 8/25/2014



Prepared by NDS/ATD

Project #: CA14_4218_006 **City:** Solana Beach

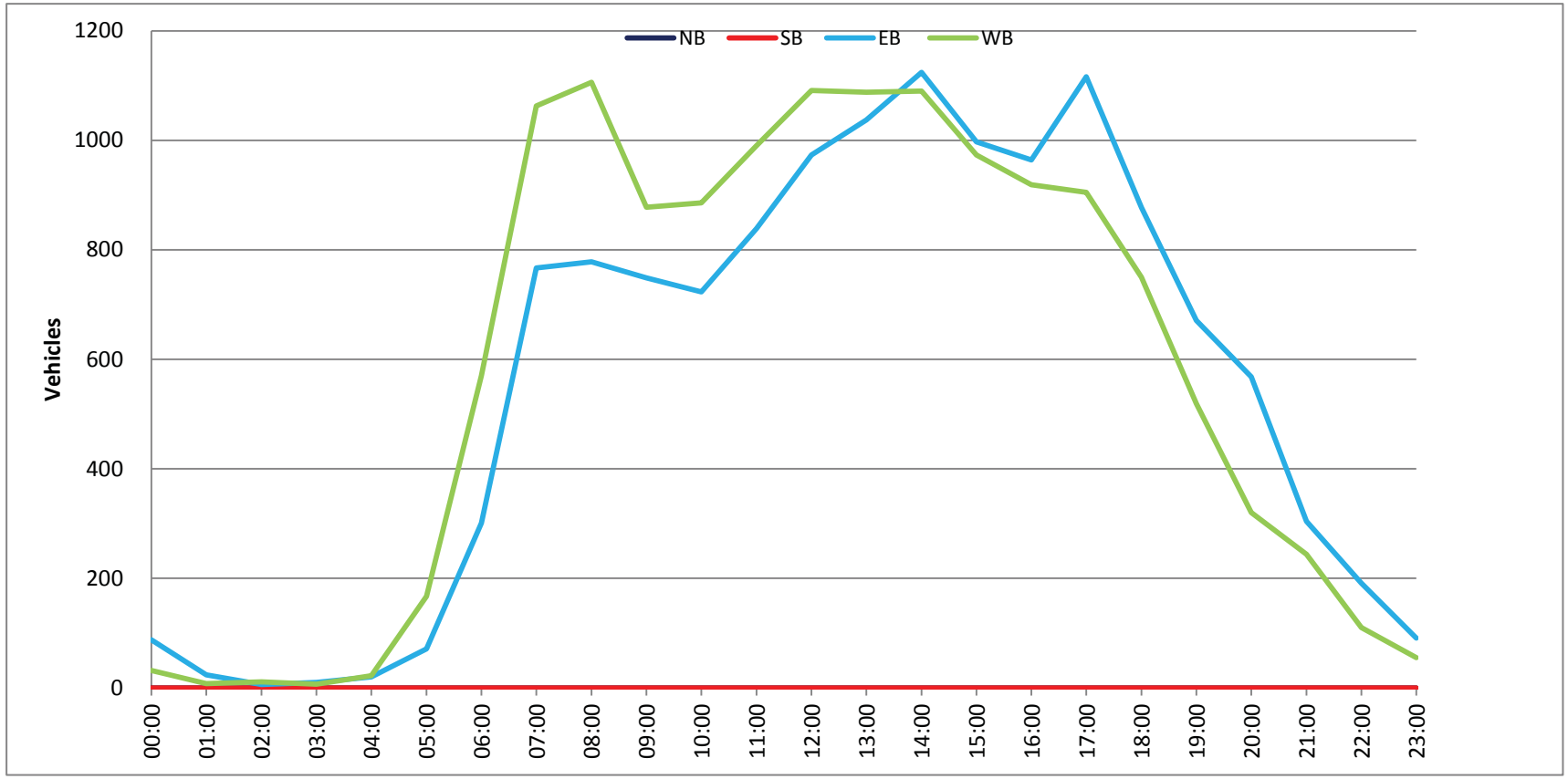
Location: Lomas Santa Fe Dr btwn Stevens Ave & **Date:** 8/26/2014



Prepared by NDS/ATD

Project #: CA14_4218_006 **City:** Solana Beach

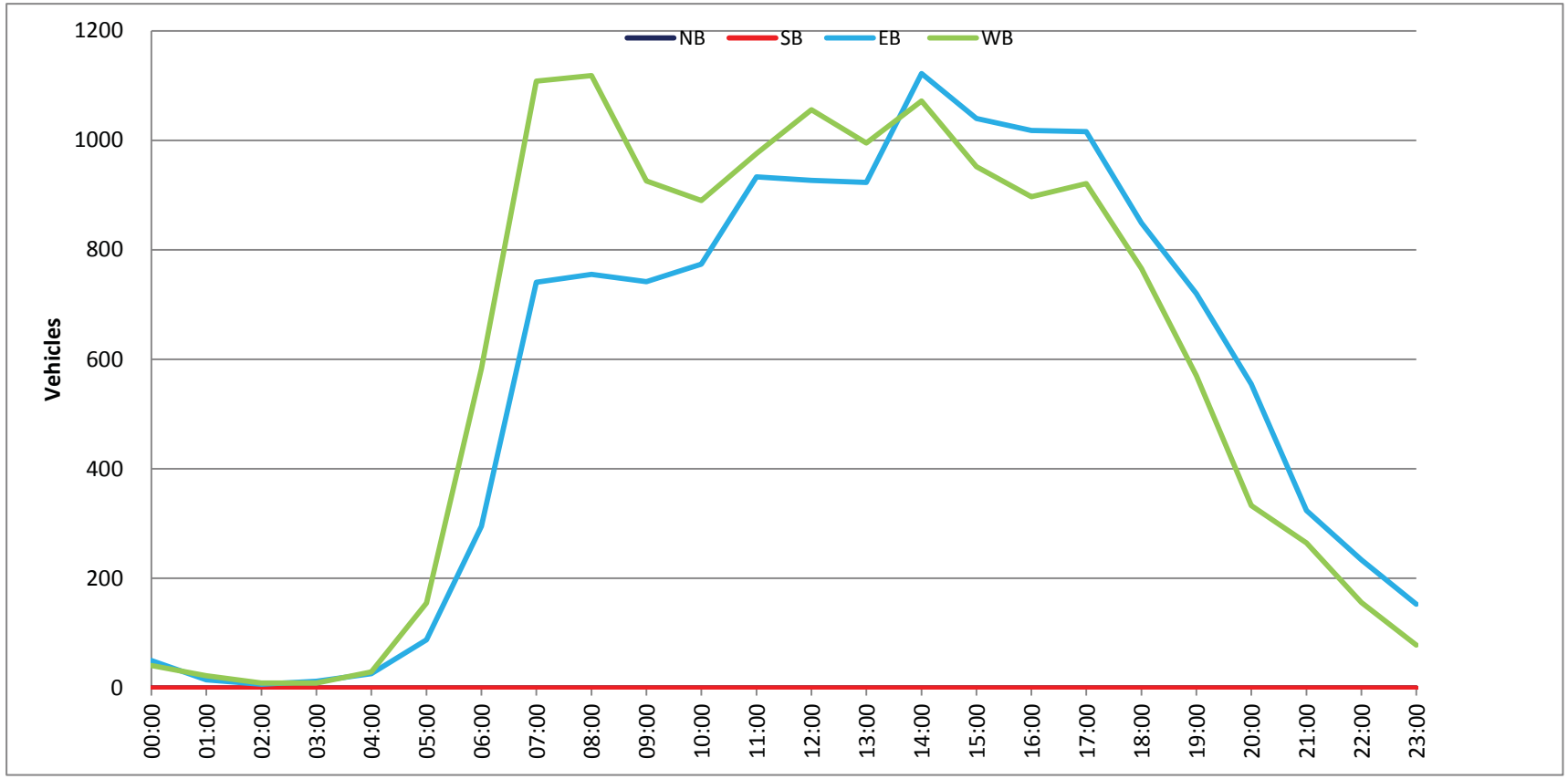
Location: Lomas Santa Fe Dr btwn Stevens Ave & **Date:** 8/27/2014



Prepared by NDS/ATD

Project #: CA14_4218_006 **City:** Solana Beach

Location: Lomas Santa Fe Dr btwn Stevens Ave & **Date:** 8/28/2014



Prepared by NDS/ATD

VOLUME

Via De La Valle w/o Jimmy Durante Blvd

Day: Friday
Date: 8/22/2014

City: Solana Beach
Project #: CA14_4218_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	11,018	11,240	22,258

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			20		8		28		12:00			181		203		384	
00:15			21		19		40		12:15			148		221		369	
00:30			8		8		16		12:30			180		202		382	
00:45			6	55	5	40	11	95	12:45			175	684	221	847	396	1531
01:00			6		5		11		13:00			182		224		406	
01:15			3		7		10		13:15			201		189		390	
01:30			12		5		17		13:30			171		194		365	
01:45			9	30	8	25	17	55	13:45			203	757	217	824	420	1581
02:00			2		1		3		14:00			187		218		405	
02:15			2		6		8		14:15			182		168		350	
02:30			3		4		7		14:30			189		194		383	
02:45			1	8	3	14	4	22	14:45			174	732	214	794	388	1526
03:00			5		2		7		15:00			186		189		375	
03:15			5		3		8		15:15			164		183		347	
03:30			4		2		6		15:30			184		209		393	
03:45			4	18	3	10	7	28	15:45			150	684	238	819	388	1503
04:00			12		4		16		16:00			176		211		387	
04:15			11		3		14		16:15			166		230		396	
04:30			14		6		20		16:30			150		206		356	
04:45			24	61	18	31	42	92	16:45			139	631	200	847	339	1478
05:00			21		11		32		17:00			161		189		350	
05:15			17		19		36		17:15			162		227		389	
05:30			23		28		51		17:30			142		197		339	
05:45			30	91	49	107	79	198	17:45			144	609	196	809	340	1418
06:00			51		43		94		18:00			150		221		371	
06:15			59		61		120		18:15			162		147		309	
06:30			67		83		150		18:30			130		165		295	
06:45			101	278	102	289	203	567	18:45			156	598	153	686	309	1284
07:00			109		94		203		19:00			179		172		351	
07:15			123		103		226		19:15			212		190		402	
07:30			168		154		322		19:30			146		175		321	
07:45			202	602	192	543	394	1145	19:45			234	771	142	679	376	1450
08:00			163		110		273		20:00			179		123		302	
08:15			195		158		353		20:15			136		122		258	
08:30			192		161		353		20:30			127		105		232	
08:45			181	731	173	602	354	1333	20:45			138	580	94	444	232	1024
09:00			157		165		322		21:00			146		103		249	
09:15			157		159		316		21:15			114		65		179	
09:30			159		183		342		21:30			131		77		208	
09:45			172	645	161	668	333	1313	21:45			94	485	78	323	172	808
10:00			163		170		333		22:00			121		62		183	
10:15			147		181		328		22:15			108		61		169	
10:30			159		172		331		22:30			64		52		116	
10:45			158	627	167	690	325	1317	22:45			74	367	54	229	128	596
11:00			186		187		373		23:00			69		48		117	
11:15			179		176		355		23:15			58		35		93	
11:30			187		222		409		23:30			50		27		77	
11:45			183	735	200	785	383	1520	23:45			62	239	25	135	87	374
TOTALS				3881		3804		7685	TOTALS				7137		7436		14573
SPLIT %				50.5%		49.5%		34.5%	SPLIT %				49.0%		51.0%		65.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	11,018	11,240	22,258

AM Peak Hour			07:45	11:30	11:30	PM Peak Hour			19:00	15:30	13:00
AM Pk Volume			752	846	1545	PM Pk Volume			771	888	1581
Pk Hr Factor			0.931	0.953	0.944	Pk Hr Factor			0.824	0.933	0.941
7 - 9 Volume	0	0	1333	1145	2478	4 - 6 Volume	0	0	1240	1656	2896
7 - 9 Peak Hour			07:45	07:45	07:45	4 - 6 Peak Hour			16:00	16:00	16:00
7 - 9 Pk Volume	0	0	752	621	1373	4 - 6 Pk Volume	0	0	631	847	1478
Pk Hr Factor	0.000	0.000	0.931	0.809	0.871	Pk Hr Factor	0.000	0.000	0.896	0.921	0.933

Prepared by NDS/ATD

VOLUME

Via De La Valle w/o Jimmy Durante Blvd

Day: Saturday
Date: 8/23/2014

City: Solana Beach
Project #: CA14_4218_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	10,057	9,456	19,513

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			77		27		104		12:00			157		200		357	
00:15			42		25		67		12:15			159		202		361	
00:30			29		11		40		12:30			175		180		355	
00:45			39	187	17	80	56	267	12:45			129	620	173	755	302	1375
01:00			23		13		36		13:00			175		165		340	
01:15			13		9		22		13:15			165		182		347	
01:30			11		8		19		13:30			152		188		340	
01:45			9	56	8	38	17	94	13:45			178	670	192	727	370	1397
02:00			11		8		19		14:00			149		158		307	
02:15			5		5		10		14:15			173		157		330	
02:30			9		2		11		14:30			183		168		351	
02:45			6	31	8	23	14	54	14:45			166	671	126	609	292	1280
03:00			8		9		17		15:00			149		141		290	
03:15			5		5		10		15:15			174		138		312	
03:30			4		3		7		15:30			173		139		312	
03:45			5	22	7	24	12	46	15:45			172	668	124	542	296	1210
04:00			13		5		18		16:00			160		135		295	
04:15			13		3		16		16:15			174		134		308	
04:30			11		5		16		16:30			159		141		300	
04:45			15	52	6	19	21	71	16:45			174	667	171	581	345	1248
05:00			14		4		18		17:00			172		146		318	
05:15			12		8		20		17:15			172		172		344	
05:30			19		21		40		17:30			142		153		295	
05:45			28	73	24	57	52	130	17:45			226	712	158	629	384	1341
06:00			27		19		46		18:00			199		130		329	
06:15			27		39		66		18:15			175		177		352	
06:30			37		65		102		18:30			172		123		295	
06:45			49	140	53	176	102	316	18:45			207	753	180	610	387	1363
07:00			66		71		137		19:00			174		166		340	
07:15			65		78		143		19:15			209		147		356	
07:30			80		114		194		19:30			149		89		238	
07:45			87	298	121	384	208	682	19:45			144	676	120	522	264	1198
08:00			89		103		192		20:00			148		97		245	
08:15			105		91		196		20:15			111		106		217	
08:30			150		125		275		20:30			105		96		201	
08:45			124	468	139	458	263	926	20:45			91	455	80	379	171	834
09:00			128		145		273		21:00			110		73		183	
09:15			128		167		295		21:15			94		86		180	
09:30			149		185		334		21:30			109		54		163	
09:45			156	561	161	658	317	1219	21:45			99	412	48	261	147	673
10:00			162		170		332		22:00			79		54		133	
10:15			178		185		363		22:15			107		65		172	
10:30			167		211		378		22:30			73		51		124	
10:45			172	679	210	776	382	1455	22:45			65	324	49	219	114	543
11:00			168		176		344		23:00			67		47		114	
11:15			154		181		335		23:15			50		33		83	
11:30			171		205		376		23:30			42		44		86	
11:45			162	655	219	781	381	1436	23:45			48	207	24	148	72	355
TOTALS				3222		3474		6696	TOTALS				6835		5982		12817
SPLIT %				48.1%		51.9%		34.3%	SPLIT %				53.3%		46.7%		65.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	10,057	9,456	19,513

AM Peak Hour			10:15	11:30	11:30	PM Peak Hour			17:45	12:00	13:00
AM Pk Volume			685	826	1475	PM Pk Volume			772	755	1397
Pk Hr Factor			0.962	0.943	0.968	Pk Hr Factor			0.854	0.934	0.944
7 - 9 Volume	0	0	766	842	1608	4 - 6 Volume	0	0	1379	1210	2589
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			17:00	16:45	17:00
7 - 9 Pk Volume	0	0	468	458	926	4 - 6 Pk Volume	0	0	712	642	1341
Pk Hr Factor	0.000	0.000	0.780	0.824	0.842	Pk Hr Factor	0.000	0.000	0.788	0.933	0.873

Prepared by NDS/ATD

VOLUME

Via De La Valle w/o Jimmy Durante Blvd

Day: Sunday
Date: 8/24/2014

City: Solana Beach
Project #: CA14_4218_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	8,769	8,710	17,479

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			50		34		84		12:00			143		206		349	
00:15			37		23		60		12:15			168		189		357	
00:30			36		17		53		12:30			132		168		300	
00:45			30	153	11	85	41	238	12:45			119	562	184	747	303	1309
01:00			31		9		40		13:00			122		175		297	
01:15			20		12		32		13:15			130		202		332	
01:30			12		5		17		13:30			121		193		314	
01:45			16	79	9	35	25	114	13:45			132	505	166	736	298	1241
02:00			10		4		14		14:00			134		166		300	
02:15			8		8		16		14:15			143		169		312	
02:30			4		5		9		14:30			151		202		353	
02:45			4	26	9	26	13	52	14:45			162	590	142	679	304	1269
03:00			7		2		9		15:00			144		131		275	
03:15			3		3		6		15:15			127		148		275	
03:30			7		3		10		15:30			147		117		264	
03:45			6	23	3	11	9	34	15:45			150	568	136	532	286	1100
04:00			9		2		11		16:00			143		105		248	
04:15			11		1		12		16:15			164		109		273	
04:30			7		2		9		16:30			141		134		275	
04:45			15	42	6	11	21	53	16:45			177	625	123	471	300	1096
05:00			11		6		17		17:00			176		125		301	
05:15			10		9		19		17:15			166		142		308	
05:30			16		16		32		17:30			145		150		295	
05:45			13	50	18	49	31	99	17:45			163	650	163	580	326	1230
06:00			24		25		49		18:00			173		154		327	
06:15			25		36		61		18:15			163		130		293	
06:30			40		45		85		18:30			204		159		363	
06:45			44	133	63	169	107	302	18:45			172	712	128	571	300	1283
07:00			44		66		110		19:00			179		128		307	
07:15			53		79		132		19:15			187		120		307	
07:30			49		75		124		19:30			153		99		252	
07:45			67	213	83	303	150	516	19:45			140	659	86	433	226	1092
08:00			74		87		161		20:00			133		75		208	
08:15			131		106		237		20:15			111		73		184	
08:30			114		140		254		20:30			111		63		174	
08:45			108	427	142	475	250	902	20:45			109	464	71	282	180	746
09:00			130		125		255		21:00			74		45		119	
09:15			130		128		258		21:15			83		50		133	
09:30			117		173		290		21:30			68		39		107	
09:45			157	534	193	619	350	1153	21:45			58	283	27	161	85	444
10:00			148		179		327		22:00			54		23		77	
10:15			122		182		304		22:15			51		39		90	
10:30			165		158		323		22:30			42		19		61	
10:45			172	607	230	749	402	1356	22:45			31	178	20	101	51	279
11:00			162		228		390		23:00			31		21		52	
11:15			121		215		336		23:15			40		20		60	
11:30			167		182		349		23:30			18		8		26	
11:45			127	577	198	823	325	1400	23:45			20	109	13	62	33	171
TOTALS				2864		3355		6219	TOTALS				5905		5355		11260
SPLIT %				46.1%		53.9%		35.6%	SPLIT %				52.4%		47.6%		64.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	8,769	8,710	17,479

AM Peak Hour			10:45	10:45	10:45	PM Peak Hour			18:30	12:45	12:00
AM Pk Volume			622	855	1477	PM Pk Volume			742	754	1309
Pk Hr Factor			0.904	0.929	0.919	Pk Hr Factor			0.909	0.933	0.917
7 - 9 Volume	0	0	640	778	1418	4 - 6 Volume	0	0	1275	1051	2326
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:45	17:00	17:00
7 - 9 Pk Volume	0	0	427	475	902	4 - 6 Pk Volume	0	0	664	580	1230
Pk Hr Factor	0.000	0.000	0.815	0.836	0.888	Pk Hr Factor	0.000	0.000	0.938	0.890	0.943

Prepared by NDS/ATD

VOLUME

Via De La Valle w/o Jimmy Durante Blvd

Day: Monday
Date: 8/25/2014

City: Solana Beach
Project #: CA14_4218_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	8,666	8,261	16,927

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			22		5		27		12:00			168		142		310	
00:15			7		8		15		12:15			145		151		296	
00:30			5		7		12		12:30			162		127		289	
00:45			9	43	6	26	15	69	12:45			149	624	166	586	315	1210
01:00			2		0		2		13:00			161		146		307	
01:15			5		4		9		13:15			163		147		310	
01:30			6		3		9		13:30			139		121		260	
01:45			1	14	3	10	4	24	13:45			141	604	151	565	292	1169
02:00			1		3		4		14:00			156		152		308	
02:15			2		2		4		14:15			152		119		271	
02:30			3		3		6		14:30			150		141		291	
02:45			2	8	3	11	5	19	14:45			142	600	136	548	278	1148
03:00			5		1		6		15:00			166		129		295	
03:15			3		3		6		15:15			147		128		275	
03:30			6		1		7		15:30			117		161		278	
03:45			7	21	4	9	11	30	15:45			144	574	127	545	271	1119
04:00			8		3		11		16:00			144		163		307	
04:15			10		3		13		16:15			121		167		288	
04:30			11		4		15		16:30			145		169		314	
04:45			14	43	11	21	25	64	16:45			163	573	147	646	310	1219
05:00			11		8		19		17:00			145		172		317	
05:15			18		18		36		17:15			141		174		315	
05:30			18		23		41		17:30			142		165		307	
05:45			29	76	33	82	62	158	17:45			123	551	164	675	287	1226
06:00			53		35		88		18:00			132		135		267	
06:15			58		62		120		18:15			115		146		261	
06:30			90		77		167		18:30			84		132		216	
06:45			98	299	104	278	202	577	18:45			115	446	133	546	248	992
07:00			134		95		229		19:00			90		105		195	
07:15			151		115		266		19:15			140		85		225	
07:30			192		128		320		19:30			107		87		194	
07:45			166	643	129	467	295	1110	19:45			97	434	75	352	172	786
08:00			193		108		301		20:00			108		61		169	
08:15			187		130		317		20:15			73		71		144	
08:30			157		147		304		20:30			56		54		110	
08:45			151	688	147	532	298	1220	20:45			55	292	58	244	113	536
09:00			123		139		262		21:00			42		80		122	
09:15			165		127		292		21:15			42		52		94	
09:30			150		145		295		21:30			69		46		115	
09:45			146	584	150	561	296	1145	21:45			50	203	27	205	77	408
10:00			156		136		292		22:00			40		39		79	
10:15			134		145		279		22:15			33		20		53	
10:30			114		153		267		22:30			29		21		50	
10:45			162	566	126	560	288	1126	22:45			23	125	12	92	35	217
11:00			161		144		305		23:00			22		21		43	
11:15			141		145		286		23:15			11		10		21	
11:30			153		182		335		23:30			13		11		24	
11:45			148	603	177	648	325	1251	23:45			6	52	10	52	16	104
TOTALS				3588		3205		6793	TOTALS				5078		5056		10134
SPLIT %				52.8%		47.2%		40.1%	SPLIT %				50.1%		49.9%		59.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	8,666	8,261	16,927

AM Peak Hour			07:30	11:30	11:30	PM Peak Hour			12:30	17:00	16:30
AM Pk Volume			738	652	1266	PM Pk Volume			635	675	1256
Pk Hr Factor			0.956	0.896	0.945	Pk Hr Factor			0.974	0.970	0.991
7 - 9 Volume	0	0	1331	999	2330	4 - 6 Volume	0	0	1124	1321	2445
7 - 9 Peak Hour			07:30	08:00	07:30	4 - 6 Peak Hour			16:30	17:00	16:30
7 - 9 Pk Volume	0	0	738	532	1233	4 - 6 Pk Volume	0	0	594	675	1256
Pk Hr Factor	0.000	0.000	0.956	0.905	0.963	Pk Hr Factor	0.000	0.000	0.911	0.970	0.991

Prepared by NDS/ATD

VOLUME

Via De La Valle w/o Jimmy Durante Blvd

Day: Tuesday
Date: 8/26/2014

City: Solana Beach
Project #: CA14_4218_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9,301	8,754	18,055

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			8		3		11		12:00			149		141		290	
00:15			4		3		7		12:15			155		164		319	
00:30			2		4		6		12:30			168		184		352	
00:45			5	19	2	12	7	31	12:45			161	633	142	631	303	1264
01:00			3		0		3		13:00			183		154		337	
01:15			6		1		7		13:15			146		128		274	
01:30			5		3		8		13:30			173		129		302	
01:45			1	15	7	11	8	26	13:45			140	642	145	556	285	1198
02:00			3		1		4		14:00			152		143		295	
02:15			3		3		6		14:15			184		147		331	
02:30			3		2		5		14:30			159		149		308	
02:45			4	13	5	11	9	24	14:45			171	666	189	628	360	1294
03:00			3		2		5		15:00			148		181		329	
03:15			3		4		7		15:15			141		158		299	
03:30			3		2		5		15:30			172		174		346	
03:45			2	11	5	13	7	24	15:45			137	598	155	668	292	1266
04:00			8		2		10		16:00			135		151		286	
04:15			11		2		13		16:15			123		169		292	
04:30			12		6		18		16:30			132		183		315	
04:45			14	45	8	18	22	63	16:45			159	549	138	641	297	1190
05:00			16		14		30		17:00			155		190		345	
05:15			19		17		36		17:15			140		197		337	
05:30			24		24		48		17:30			152		164		316	
05:45			45	104	32	87	77	191	17:45			123	570	201	752	324	1322
06:00			43		34		77		18:00			118		182		300	
06:15			59		66		125		18:15			116		156		272	
06:30			79		76		155		18:30			121		127		248	
06:45			100	281	79	255	179	536	18:45			115	470	133	598	248	1068
07:00			132		93		225		19:00			117		136		253	
07:15			183		123		306		19:15			135		115		250	
07:30			180		115		295		19:30			132		93		225	
07:45			200	695	131	462	331	1157	19:45			114	498	111	455	225	953
08:00			222		132		354		20:00			101		83		184	
08:15			182		126		308		20:15			97		73		170	
08:30			220		131		351		20:30			76		79		155	
08:45			179	803	138	527	317	1330	20:45			106	380	80	315	186	695
09:00			167		135		302		21:00			78		60		138	
09:15			143		141		284		21:15			69		48		117	
09:30			166		152		318		21:30			56		44		100	
09:45			145	621	151	579	296	1200	21:45			53	256	48	200	101	456
10:00			137		140		277		22:00			38		29		67	
10:15			136		122		258		22:15			40		32		72	
10:30			145		162		307		22:30			29		24		53	
10:45			156	574	163	587	319	1161	22:45			33	140	20	105	53	245
11:00			175		144		319		23:00			26		13		39	
11:15			147		143		290		23:15			20		11		31	
11:30			127		155		282		23:30			21		12		33	
11:45			181	630	157	599	338	1229	23:45			21	88	8	44	29	132
TOTALS				3811		3161		6972	TOTALS				5490		5593		11083
SPLIT %				54.7%		45.3%		38.6%	SPLIT %				49.5%		50.5%		61.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9,301	8,754	18,055

AM Peak Hour			07:45	11:45	07:45	PM Peak Hour			12:15	17:00	14:45
AM Pk Volume			824	646	1344	PM Pk Volume			667	752	1334
Pk Hr Factor			0.928	0.878	0.949	Pk Hr Factor			0.911	0.935	0.926
7 - 9 Volume	0	0	1498	989	2487	4 - 6 Volume	0	0	1119	1393	2512
7 - 9 Peak Hour			07:45	08:00	07:45	4 - 6 Peak Hour			16:45	17:00	17:00
7 - 9 Pk Volume	0	0	824	527	1344	4 - 6 Pk Volume	0	0	606	752	1322
Pk Hr Factor	0.000	0.000	0.928	0.955	0.949	Pk Hr Factor	0.000	0.000	0.953	0.935	0.958

Prepared by NDS/ATD

VOLUME

Via De La Valle w/o Jimmy Durante Blvd

Day: Wednesday
Date: 8/27/2014

City: Solana Beach
Project #: CA14_4218_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	10,164	9,754	19,918

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			19		5		24		12:00			164		214		378	
00:15			22		4		26		12:15			159		185		344	
00:30			4		9		13		12:30			159		172		331	
00:45			7	52	5	23	12	75	12:45			173	655	165	736	338	1391
01:00			4		2		6		13:00			93		162		255	
01:15			2		1		3		13:15			163		146		309	
01:30			3		3		6		13:30			158		164		322	
01:45			1	10	2	8	3	18	13:45			183	597	142	614	325	1211
02:00			6		0		6		14:00			155		153		308	
02:15			3		3		6		14:15			157		153		310	
02:30			6		11		17		14:30			155		191		346	
02:45			3	18	3	17	6	35	14:45			179	646	157	654	336	1300
03:00			2		2		4		15:00			174		181		355	
03:15			2		4		6		15:15			177		194		371	
03:30			6		4		10		15:30			154		162		316	
03:45			4	14	4	14	8	28	15:45			145	650	170	707	315	1357
04:00			11		4		15		16:00			148		183		331	
04:15			9		6		15		16:15			182		201		383	
04:30			7		6		13		16:30			179		193		372	
04:45			13	40	7	23	20	63	16:45			177	686	206	783	383	1469
05:00			14		9		23		17:00			177		183		360	
05:15			24		12		36		17:15			167		203		370	
05:30			28		26		54		17:30			150		207		357	
05:45			29	95	47	94	76	189	17:45			166	660	221	814	387	1474
06:00			58		38		96		18:00			154		198		352	
06:15			56		64		120		18:15			209		218		427	
06:30			85		79		164		18:30			172		197		369	
06:45			108	307	82	263	190	570	18:45			154	689	152	765	306	1454
07:00			155		95		250		19:00			150		110		260	
07:15			187		124		311		19:15			165		117		282	
07:30			195		188		383		19:30			166		118		284	
07:45			208	745	140	547	348	1292	19:45			168	649	103	448	271	1097
08:00			186		131		317		20:00			141		80		221	
08:15			220		131		351		20:15			130		84		214	
08:30			201		149		350		20:30			82		89		171	
08:45			181	788	169	580	350	1368	20:45			106	459	67	320	173	779
09:00			187		120		307		21:00			88		59		147	
09:15			195		143		338		21:15			60		48		108	
09:30			162		165		327		21:30			51		33		84	
09:45			153	697	149	577	302	1274	21:45			58	257	37	177	95	434
10:00			134		163		297		22:00			57		39		96	
10:15			155		145		300		22:15			35		33		68	
10:30			139		176		315		22:30			43		27		70	
10:45			165	593	172	656	337	1249	22:45			22	157	22	121	44	278
11:00			153		163		316		23:00			31		24		55	
11:15			128		201		329		23:15			31		21		52	
11:30			177		200		377		23:30			15		12		27	
11:45			146	604	177	741	323	1345	23:45			19	96	15	72	34	168
TOTALS				3963		3543		7506	TOTALS				6201		6211		12412
SPLIT %				52.8%		47.2%		37.7%	SPLIT %				50.0%		50.0%		62.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	10,164	9,754	19,918

AM Peak Hour			07:45	11:15	11:30	PM Peak Hour			16:15	17:30	17:45
AM Pk Volume			815	792	1422	PM Pk Volume			715	844	1535
Pk Hr Factor			0.926	0.925	0.940	Pk Hr Factor			0.982	0.955	0.899
7 - 9 Volume	0	0	1533	1127	2660	4 - 6 Volume	0	0	1346	1597	2943
7 - 9 Peak Hour			07:45	07:30	07:30	4 - 6 Peak Hour			16:15	17:00	16:15
7 - 9 Pk Volume	0	0	815	590	1399	4 - 6 Pk Volume	0	0	715	814	1498
Pk Hr Factor	0.000	0.000	0.926	0.785	0.913	Pk Hr Factor	0.000	0.000	0.982	0.921	0.978

Prepared by NDS/ATD

VOLUME

Via De La Valle w/o Jimmy Durante Blvd

Day: Thursday
Date: 8/28/2014

City: Solana Beach
Project #: CA14_4218_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	10,358	9,799	20,157

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			16		10		26		12:00			176		206		382	
00:15			7		10		17		12:15			178		177		355	
00:30			8		5		13		12:30			150		169		319	
00:45			8	39	3	28	11	67	12:45			176	680	194	746	370	1426
01:00			0		3		3		13:00			169		173		342	
01:15			2		9		11		13:15			184		141		325	
01:30			3		3		6		13:30			169		154		323	
01:45			4	9	5	20	9	29	13:45			185	707	152	620	337	1327
02:00			3		4		7		14:00			171		137		308	
02:15			2		6		8		14:15			169		134		303	
02:30			4		7		11		14:30			168		175		343	
02:45			1	10	2	19	3	29	14:45			190	698	200	646	390	1344
03:00			5		4		9		15:00			161		166		327	
03:15			3		3		6		15:15			182		170		352	
03:30			2		1		3		15:30			175		168		343	
03:45			4	14	1	9	5	23	15:45			160	678	185	689	345	1367
04:00			12		3		15		16:00			160		179		339	
04:15			8		4		12		16:15			145		177		322	
04:30			15		7		22		16:30			155		197		352	
04:45			19	54	7	21	26	75	16:45			176	636	178	731	354	1367
05:00			17		13		30		17:00			174		192		366	
05:15			20		15		35		17:15			177		208		385	
05:30			32		33		65		17:30			193		194		387	
05:45			38	107	41	102	79	209	17:45			233	777	264	858	497	1635
06:00			51		35		86		18:00			184		219		403	
06:15			62		68		130		18:15			156		173		329	
06:30			84		87		171		18:30			133		183		316	
06:45			114	311	88	278	202	589	18:45			138	611	151	726	289	1337
07:00			161		90		251		19:00			141		121		262	
07:15			176		113		289		19:15			166		91		257	
07:30			203		135		338		19:30			135		104		239	
07:45			204	744	164	502	368	1246	19:45			131	573	85	401	216	974
08:00			208		138		346		20:00			138		91		229	
08:15			180		99		279		20:15			142		90		232	
08:30			184		131		315		20:30			98		78		176	
08:45			191	763	159	527	350	1290	20:45			107	485	84	343	191	828
09:00			193		140		333		21:00			74		79		153	
09:15			181		162		343		21:15			63		55		118	
09:30			164		161		325		21:30			49		45		94	
09:45			146	684	176	639	322	1323	21:45			71	257	58	237	129	494
10:00			146		160		306		22:00			67		48		115	
10:15			160		168		328		22:15			41		45		86	
10:30			144		175		319		22:30			34		40		74	
10:45			158	608	178	681	336	1289	22:45			33	175	23	156	56	331
11:00			185		147		332		23:00			44		25		69	
11:15			116		190		306		23:15			23		22		45	
11:30			148		195		343		23:30			18		16		34	
11:45			176	625	207	739	383	1364	23:45			28	113	18	81	46	194
TOTALS				3968		3565		7533	TOTALS				6390		6234		12624
SPLIT %				52.7%		47.3%		37.4%	SPLIT %				50.6%		49.4%		62.6%

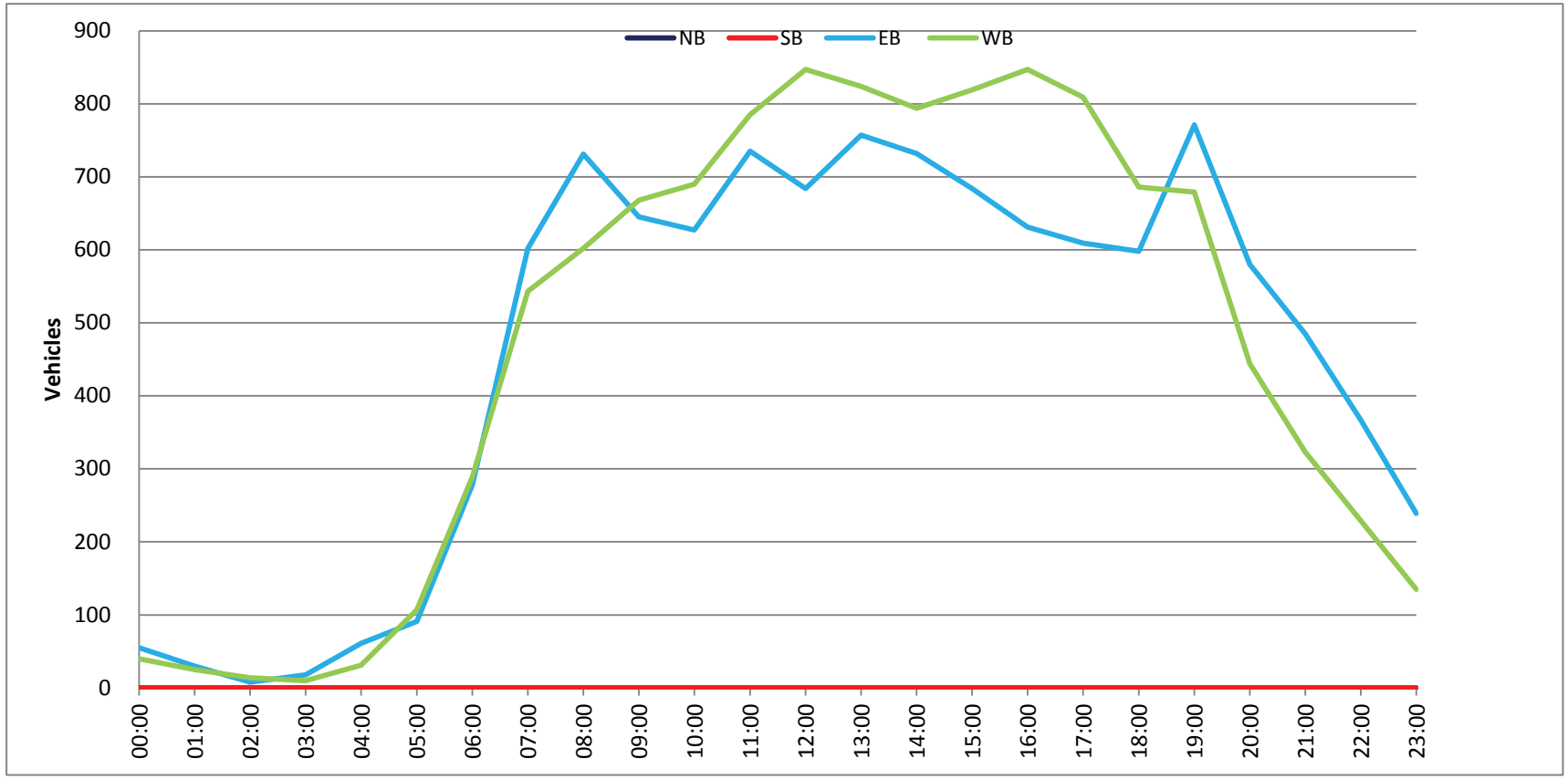
DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	10,358	9,799	20,157

AM Peak Hour			07:30	11:15	11:30	PM Peak Hour			17:15	17:15	17:15
AM Pk Volume			795	798	1463	PM Pk Volume			787	885	1672
Pk Hr Factor			0.956	0.964	0.955	Pk Hr Factor			0.844	0.838	0.841
7 - 9 Volume	0	0	1507	1029	2536	4 - 6 Volume	0	0	1413	1589	3002
7 - 9 Peak Hour			07:30	07:15	07:15	4 - 6 Peak Hour			17:00	17:00	17:00
7 - 9 Pk Volume	0	0	795	550	1341	4 - 6 Pk Volume	0	0	777	858	1635
Pk Hr Factor	0.000	0.000	0.956	0.838	0.911	Pk Hr Factor	0.000	0.000	0.834	0.813	0.822

Prepared by NDS/ATD

Project #: CA14_4218_007 **City:** Solana Beach

Location: Via De La Valle w/o Jimmy Durante Blvd **Date:** 8/22/2014



Prepared by NDS/ATD

Project #: CA14_4218_007 **City:** Solana Beach

Location: Via De La Valle w/o Jimmy Durante Blvd **Date:** 8/23/2014

Prepared by NDS/ATD

Project #: CA14_4218_007 **City:** Solana Beach

Location: Via De La Valle w/o Jimmy Durante Blvd **Date:** 8/24/2014

Prepared by NDS/ATD

Project #: CA14_4218_007 **City:** Solana Beach

Location: Via De La Valle w/o Jimmy Durante Blvd **Date:** 8/25/2014

Prepared by NDS/ATD

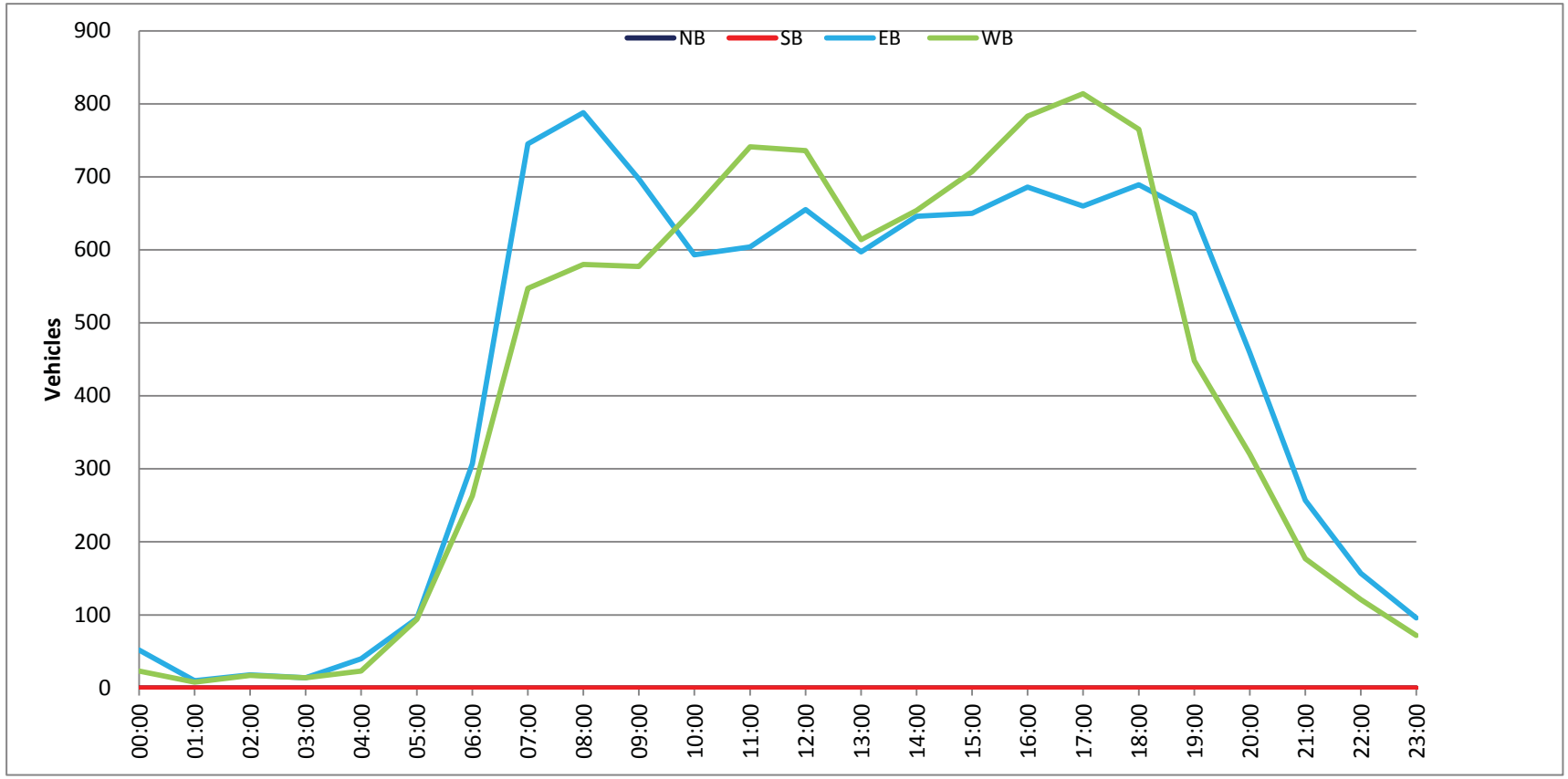
Project #: CA14_4218_007 **City:** Solana Beach

Location: Via De La Valle w/o Jimmy Durante Blvd **Date:** 8/26/2014

Prepared by NDS/ATD

Project #: CA14_4218_007 **City:** Solana Beach

Location: Via De La Valle w/o Jimmy Durante Blvd **Date:** 8/27/2014



Prepared by NDS/ATD

Project #: CA14_4218_007 **City:** Solana Beach

Location: Via De La Valle w/o Jimmy Durante Blvd **Date:** 8/28/2014

Prepared by NDS/ATD

VOLUME

E Solana Circle

Day: Thursday
Date: 7/31/2014

City: Solana Beach
Project #: CA14_4197_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	604	277	881

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			4		0		4		12:00			9		7		16	
00:15			0		0		0		12:15			8		8		16	
00:30			1		0		1		12:30			8		8		16	
00:45			2	7	0		2	7	12:45			10	35	5	28	15	63
01:00			0		0		0		13:00			13		2		15	
01:15			2		1		3		13:15			8		9		17	
01:30			0		0		0		13:30			13		11		24	
01:45			0	2	0	1	0	3	13:45			9	43	6	28	15	71
02:00			0		1		1		14:00			9		6		15	
02:15			1		0		1		14:15			15		6		21	
02:30			0		0		0		14:30			5		4		9	
02:45			0	1	0	1	0	2	14:45			12	41	7	23	19	64
03:00			1		0		1		15:00			14		3		17	
03:15			0		0		0		15:15			10		12		22	
03:30			0		0		0		15:30			11		5		16	
03:45			1	2	0		1	2	15:45			18	53	5	25	23	78
04:00			0		0		0		16:00			13		9		22	
04:15			0		0		0		16:15			7		7		14	
04:30			1		0		1		16:30			13		5		18	
04:45			0	1	0		0	1	16:45			8	41	7	28	15	69
05:00			0		0		0		17:00			13		5		18	
05:15			0		0		0		17:15			17		9		26	
05:30			2		0		2		17:30			13		1		14	
05:45			2	4	0		2	4	17:45			24	67	7	22	31	89
06:00			2		0		2		18:00			18		4		22	
06:15			3		2		5		18:15			11		2		13	
06:30			3		1		4		18:30			2		4		6	
06:45			3	11	4	7	7	18	18:45			8	39	2	12	10	51
07:00			6		1		7		19:00			11		4		15	
07:15			8		2		10		19:15			5		1		6	
07:30			11		4		15		19:30			7		1		8	
07:45			12	37	1	8	13	45	19:45			8	31	2	8	10	39
08:00			4		5		9		20:00			8		0		8	
08:15			4		3		7		20:15			8		0		8	
08:30			8		5		13		20:30			4		1		5	
08:45			7	23	4	17	11	40	20:45			8	28	1	2	9	30
09:00			10		2		12		21:00			6		0		6	
09:15			4		2		6		21:15			2		0		2	
09:30			4		10		14		21:30			5		1		6	
09:45			10	28	4	18	14	46	21:45			2	15	1	2	3	17
10:00			9		5		14		22:00			3		2		5	
10:15			11		8		19		22:15			5		1		6	
10:30			9		5		14		22:30			1		2		3	
10:45			5	34	3	21	8	55	22:45			2	11	0	5	2	16
11:00			9		5		14		23:00			5		0		5	
11:15			7		4		11		23:15			5		1		6	
11:30			8		6		14		23:30			1		1		2	
11:45			15	39	4	19	19	58	23:45			0	11	0	2	0	13
TOTALS				189		92		281	TOTALS				415		185		600
SPLIT %				67.3%		32.7%		31.9%	SPLIT %				69.2%		30.8%		68.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	604	277	881

AM Peak Hour			11:30	09:30	11:45	PM Peak Hour			17:15	13:15	17:15
AM Pk Volume			40	27	67	PM Pk Volume			72	32	93
Pk Hr Factor			0.667	0.675	0.882	Pk Hr Factor			0.750	0.727	0.750
7 - 9 Volume	0	0	60	25	85	4 - 6 Volume	0	0	108	50	158
7 - 9 Peak Hour			07:00	08:00	07:15	4 - 6 Peak Hour			17:00	16:00	17:00
7 - 9 Pk Volume	0	0	37	17	47	4 - 6 Pk Volume	0	0	67	28	89
Pk Hr Factor	0.000	0.000	0.771	0.850	0.783	Pk Hr Factor	0.000	0.000	0.698	0.778	0.718

Prepared by NDS/ATD

VOLUME

Nardo Ave btwn Corto St & Lirio St

Day: Thursday
Date: 7/31/2014

City: Solana Beach
Project #: CA14_4197_002

DAILY TOTALS	NB	SB	EB	WB	Total
	979	1,062	0	0	2,041

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	4		0						4		12:00	23		17						40	
00:15	2		3						5		12:15	17		18						35	
00:30	0		1						1		12:30	11		18						29	
00:45	2	8	1	5					3	13	12:45	15	66	21	74					36	140
01:00	0		1						1		13:00	15		14						29	
01:15	0		0						0		13:15	24		11						35	
01:30	0		0						0		13:30	26		20						46	
01:45	0		1	2					1	2	13:45	18	83	21	66					39	149
02:00	0		2						2		14:00	15		17						32	
02:15	1		0						1		14:15	18		14						32	
02:30	0		0						0		14:30	17		17						34	
02:45	0	1	0	2					0	3	14:45	14	64	14	62					28	126
03:00	1		0						1		15:00	14		20						34	
03:15	0		1						1		15:15	18		29						47	
03:30	0		0						0		15:30	15		17						32	
03:45	0	1	0	1					0	2	15:45	15	62	17	83					32	145
04:00	0		0						0		16:00	16		18						34	
04:15	1		1						2		16:15	12		23						35	
04:30	0		2						2		16:30	17		29						46	
04:45	1	2	1	4					2	6	16:45	20	65	19	89					39	154
05:00	1		0						1		17:00	18		27						45	
05:15	2		1						3		17:15	33		19						52	
05:30	1		1						2		17:30	25		14						39	
05:45	2	6	4	6					6	12	17:45	27	103	19	79					46	182
06:00	7		4						11		18:00	37		13						50	
06:15	7		5						12		18:15	31		15						46	
06:30	6		7						13		18:30	15		16						31	
06:45	7	27	8	24					15	51	18:45	18	101	17	61					35	162
07:00	8		4						12		19:00	12		9						21	
07:15	13		6						19		19:15	15		17						32	
07:30	12		16						28		19:30	5		12						17	
07:45	16	49	29	55					45	104	19:45	7	39	13	51					20	90
08:00	11		11						22		20:00	8		11						19	
08:15	22		18						40		20:15	9		12						21	
08:30	22		20						42		20:30	7		8						15	
08:45	17	72	16	65					33	137	20:45	2	26	10	41					12	67
09:00	12		25						37		21:00	5		8						13	
09:15	9		20						29		21:15	3		6						9	
09:30	14		19						33		21:30	8		5						13	
09:45	12	47	17	81					29	128	21:45	2	18	2	21					4	39
10:00	13		14						27		22:00	7		5						12	
10:15	10		18						28		22:15	2		4						6	
10:30	16		21						37		22:30	2		12						14	
10:45	14	53	12	65					26	118	22:45	3	14	1	22					4	36
11:00	18		19						37		23:00	5		5						10	
11:15	11		14						25		23:15	2		5						7	
11:30	12		25						37		23:30	2		4						6	
11:45	20	61	30	88					50	149	23:45	2	11	1	15					3	26
TOTALS		327		398						725	TOTALS		652		664						1316
SPLIT %		45.1%		54.9%						35.5%	SPLIT %		49.5%		50.5%						64.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	979	1,062	0	0	2,041

AM Peak Hour	08:15	11:30			11:30	PM Peak Hour	17:15	16:15			17:15
AM Pk Volume	73	90			162	PM Pk Volume	122	98			187
Pk Hr Factor	0.830	0.750			0.810	Pk Hr Factor	0.824	0.845			0.899
7 - 9 Volume	121	120	0	0	241	4 - 6 Volume	168	168	0	0	336
7 - 9 Peak Hour	08:00	07:45			07:45	4 - 6 Peak Hour	17:00	16:15			16:30
7 - 9 Pk Volume	72	78	0	0	149	4 - 6 Pk Volume	103	98	0	0	182
Pk Hr Factor	0.818	0.672	0.000	0.000	0.828	Pk Hr Factor	0.780	0.845	0.000	0.000	0.875

Prepared by NDS/ATD

VOLUME

Stevens Ave S/o Nardo Ave

Day: Thursday
Date: 7/31/2014

City: Solana Beach
Project #: CA14_4197_003

DAILY TOTALS	NB	SB	EB	WB	Total
	4,534	4,447	0	0	8,981

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	9		4						13		12:00	77		109						186	
00:15	16		9						25		12:15	89		82						171	
00:30	4		1						5		12:30	66		103						169	
00:45	4	33	5	19					9	52	12:45	70	302	96	390					166	692
01:00	5		3						8		13:00	69		86						155	
01:15	3		4						7		13:15	58		87						145	
01:30	0		1						1		13:30	75		93						168	
01:45	3	11	1	9					4	20	13:45	63	265	99	365					162	630
02:00	1		2						3		14:00	60		82						142	
02:15	2		1						3		14:15	73		85						158	
02:30	2		3						5		14:30	79		77						156	
02:45	2	7	0	6					2	13	14:45	59	271	59	303					118	574
03:00	1		1						2		15:00	74		89						163	
03:15	1		1						2		15:15	72		89						161	
03:30	1		0						1		15:30	72		86						158	
03:45	2	5	1	3					3	8	15:45	75	293	72	336					147	629
04:00	1		4						5		16:00	77		82						159	
04:15	2		3						5		16:15	101		84						185	
04:30	2		8						10		16:30	99		78						177	
04:45	4	9	6	21					10	30	16:45	97	374	94	338					191	712
05:00	3		4						7		17:00	97		90						187	
05:15	8		8						16		17:15	111		81						192	
05:30	9		14						23		17:30	107		53						160	
05:45	6	26	15	41					21	67	17:45	111	426	69	293					180	719
06:00	19		19						38		18:00	153		68						221	
06:15	31		25						56		18:15	98		50						148	
06:30	31		24						55		18:30	77		61						138	
06:45	37	118	28	96					65	214	18:45	72	400	51	230					123	630
07:00	46		37						83		19:00	63		62						125	
07:15	49		46						95		19:15	47		50						97	
07:30	53		61						114		19:30	42		58						100	
07:45	80	228	56	200					136	428	19:45	38	190	39	209					77	399
08:00	60		60						120		20:00	28		37						65	
08:15	73		61						134		20:15	38		43						81	
08:30	87		68						155		20:30	25		33						58	
08:45	96	316	76	265					172	581	20:45	28	119	40	153					68	272
09:00	88		77						165		21:00	22		28						50	
09:15	82		91						173		21:15	22		19						41	
09:30	89		77						166		21:30	17		23						40	
09:45	81	340	63	308					144	648	21:45	28	89	18	88					46	177
10:00	87		65						152		22:00	21		13						34	
10:15	73		71						144		22:15	18		12						30	
10:30	82		80						162		22:30	12		24						36	
10:45	57	299	76	292					133	591	22:45	12	63	9	58					21	121
11:00	81		93						174		23:00	11		7						18	
11:15	68		98						166		23:15	9		8						17	
11:30	80		102						182		23:30	7		9						16	
11:45	82	311	102	395					184	706	23:45	12	39	5	29					17	68
TOTALS		1703		1655						3358	TOTALS		2831		2792						5623
SPLIT %		50.7%		49.3%						37.4%	SPLIT %		50.3%		49.7%						62.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,534	4,447	0	0	8,981

AM Peak Hour	08:45	11:15			11:30	PM Peak Hour	17:15	12:00			17:15
AM Pk Volume	355	411			723	PM Pk Volume	482	390			753
Pk Hr Factor	0.924	0.943			0.972	Pk Hr Factor	0.788	0.894			0.852
7 - 9 Volume	544	465	0	0	1009	4 - 6 Volume	800	631	0	0	1431
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	17:00	16:15			16:30
7 - 9 Pk Volume	316	265	0	0	581	4 - 6 Pk Volume	426	346	0	0	747
Pk Hr Factor	0.823	0.872	0.000	0.000	0.844	Pk Hr Factor	0.959	0.920	0.000	0.000	0.973

Prepared by NDS/ATD

VOLUME

Nardo Ave btwn Fresca St & Stevens Ave

Day: Thursday
Date: 7/31/2014

City: Solana Beach
Project #: CA14_4197_004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,797	1,507	3,304

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			3		6		9		12:00			35		34		69	
00:15			10		16		26		12:15			36		35		71	
00:30			1		4		5		12:30			25		21		46	
00:45			3	17	2	28	5	45	12:45			30	126	22	112	52	238
01:00			1		0		1		13:00			31		34		65	
01:15			1		2		3		13:15			26		31		57	
01:30			0		1		1		13:30			36		26		62	
01:45			1	3	1	4	2	7	13:45			25	118	28	119	53	237
02:00			1		0		1		14:00			33		24		57	
02:15			1		2		3		14:15			27		17		44	
02:30			1		1		2		14:30			25		23		48	
02:45			0	3	1	4	1	7	14:45			33	118	28	92	61	210
03:00			0		1		1		15:00			36		22		58	
03:15			1		1		2		15:15			40		28		68	
03:30			0		1		1		15:30			25		33		58	
03:45			1	2	0	3	1	5	15:45			28	129	25	108	53	237
04:00			3		0		3		16:00			27		23		50	
04:15			3		0		3		16:15			21		28		49	
04:30			8		1		9		16:30			32		26		58	
04:45			1	15	2	3	3	18	16:45			29	109	26	103	55	212
05:00			3		1		4		17:00			31		36		67	
05:15			6		1		7		17:15			24		37		61	
05:30			12		1		13		17:30			19		32		51	
05:45			8	29	2	5	10	34	17:45			27	101	22	127	49	228
06:00			6		5		11		18:00			31		44		75	
06:15			14		6		20		18:15			27		29		56	
06:30			17		6		23		18:30			29		31		60	
06:45			23	60	10	27	33	87	18:45			20	107	30	134	50	241
07:00			17		5		22		19:00			23		22		45	
07:15			24		12		36		19:15			21		26		47	
07:30			32		15		47		19:30			21		23		44	
07:45			35	108	16	48	51	156	19:45			24	89	19	90	43	179
08:00			29		9		38		20:00			16		12		28	
08:15			35		11		46		20:15			16		23		39	
08:30			33		18		51		20:30			14		15		29	
08:45			32	129	21	59	53	188	20:45			15	61	17	67	32	128
09:00			36		19		55		21:00			10		11		21	
09:15			51		15		66		21:15			11		15		26	
09:30			26		18		44		21:30			12		16		28	
09:45			32	145	18	70	50	215	21:45			11	44	17	59	28	103
10:00			24		22		46		22:00			6		15		21	
10:15			27		18		45		22:15			7		11		18	
10:30			28		20		48		22:30			13		10		23	
10:45			22	101	18	78	40	179	22:45			8	34	5	41	13	75
11:00			32		24		56		23:00			8		11		19	
11:15			21		20		41		23:15			7		5		12	
11:30			31		26		57		23:30			5		4		9	
11:45			43	127	29	99	72	226	23:45			2	22	7	27	9	49
TOTALS				739		428		**1167**	**TOTALS**				1058		1079		**2137**
SPLIT %				63.3%		36.7%		**35.3%**	**SPLIT %**				49.5%		50.5%		**64.7%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,797	1,507	3,304

AM Peak Hour			08:30	11:30	**11:30**	**PM Peak Hour**			14:30	17:15	**14:45**
AM Pk Volume			152	124	**269**	**PM Pk Volume**			134	135	**245**
Pk Hr Factor			0.745	0.886	**0.934**	**Pk Hr Factor**			0.838	0.767	**0.901**
7 - 9 Volume	0	0	237	107	**344**	**4 - 6 Volume**	0	0	210	230	**440**
7 - 9 Peak Hour			07:45	08:00	**08:00**	**4 - 6 Peak Hour**			16:30	16:45	**16:30**
7 - 9 Pk Volume	0	0	132	59	**188**	**4 - 6 Pk Volume**	0	0	116	131	**241**
Pk Hr Factor	0.000	0.000	0.943	0.702	**0.887**	**Pk Hr Factor**	0.000	0.000	0.906	0.885	**0.899**

Prepared by NDS/ATD

VOLUME

Stevens Ave S/o Genevieve St

Day: Thursday
Date: 7/31/2014

City: Solana Beach
Project #: CA14_4197_005

DAILY TOTALS	NB	SB	EB	WB	Total
	4,364	3,976	0	0	8,340

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	3		2						5		12:00	81		114						195	
00:15	5		2						7		12:15	86		77						163	
00:30	2		3						5		12:30	66		97						163	
00:45	2	12	3	10					5	22	12:45	74	307	88	376					162	683
01:00	5		2						7		13:00	62		92						154	
01:15	2		4						6		13:15	60		89						149	
01:30	0		2						2		13:30	77		82						159	
01:45	2	9	1	9					3	18	13:45	53	252	93	356					146	608
02:00	1		1						2		14:00	60		73						133	
02:15	1		1						2		14:15	70		70						140	
02:30	2		3						5		14:30	81		72						153	
02:45	1	5	0	5					1	10	14:45	67	278	62	277					129	555
03:00	0		1						1		15:00	76		82						158	
03:15	1		0						1		15:15	77		83						160	
03:30	0		0						0		15:30	64		82						146	
03:45	2	3	0	1					2	4	15:45	79	296	76	323					155	619
04:00	1		0						1		16:00	81		77						158	
04:15	3		1						4		16:15	89		87						176	
04:30	5		6						11		16:30	92		80						172	
04:45	4	13	6	13					10	26	16:45	97	359	89	333					186	692
05:00	2		1						3		17:00	92		80						172	
05:15	10		3						13		17:15	102		92						194	
05:30	13		5						18		17:30	90		61						151	
05:45	9	34	9	18					18	52	17:45	115	399	61	294					176	693
06:00	17		16						33		18:00	134		67						201	
06:15	28		13						41		18:15	94		46						140	
06:30	35		13						48		18:30	62		49						111	
06:45	45	125	17	59					62	184	18:45	60	350	49	211					109	561
07:00	44		31						75		19:00	64		55						119	
07:15	60		31						91		19:15	41		48						89	
07:30	46		43						89		19:30	40		47						87	
07:45	87	237	34	139					121	376	19:45	41	186	37	187					78	373
08:00	62		40						102		20:00	27		36						63	
08:15	84		38						122		20:15	25		39						64	
08:30	80		49						129		20:30	24		35						59	
08:45	98	324	57	184					155	508	20:45	23	99	43	153					66	252
09:00	92		63						155		21:00	17		26						43	
09:15	90		58						148		21:15	14		15						29	
09:30	80		65						145		21:30	13		26						39	
09:45	92	354	63	249					155	603	21:45	19	63	17	84					36	147
10:00	88		53						141		22:00	8		17						25	
10:15	84		60						144		22:15	10		10						20	
10:30	82		82						164		22:30	7		19						26	
10:45	61	315	66	261					127	576	22:45	10	35	6	52					16	87
11:00	71		83						154		23:00	7		8						15	
11:15	62		92						154		23:15	7		6						13	
11:30	80		97						177		23:30	2		6						8	
11:45	75	288	85	357					160	645	23:45	5	21	5	25					10	46
TOTALS		1719		1305						3024	TOTALS		2645		2671						5316
SPLIT %		56.8%		43.2%						36.3%	SPLIT %		49.8%		50.2%						63.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,364	3,976	0	0	8,340

AM Peak Hour	08:30	11:15			11:30	PM Peak Hour	17:15	12:00			16:30
AM Pk Volume	360	388			695	PM Pk Volume	441	376			724
Pk Hr Factor	0.918	0.851			0.891	Pk Hr Factor	0.823	0.825			0.933
7 - 9 Volume	561	323	0	0	884	4 - 6 Volume	758	627	0	0	1385
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	17:00	16:30			16:30
7 - 9 Pk Volume	324	184	0	0	508	4 - 6 Pk Volume	399	341	0	0	724
Pk Hr Factor	0.827	0.807	0.000	0.000	0.819	Pk Hr Factor	0.867	0.927	0.000	0.000	0.933

Prepared by NDS/ATD

VOLUME

Lomas Santa Fe Dr btwn Stevens Ave & Solana Hills Dr

Day: Thursday
Date: 7/31/2014

City: Solana Beach
Project #: CA14_4197_006

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	12,972	13,196	26,168

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			29		10		39		12:00			247		281		528	
00:15			27		10		37		12:15			235		273		508	
00:30			21		15		36		12:30			230		226		456	
00:45			10	87	4	39	14	126	12:45			247	959	272	1052	519	2011
01:00			10		10		20		13:00			201		235		436	
01:15			5		5		10		13:15			249		244		493	
01:30			8		10		18		13:30			266		236		502	
01:45			6	29	4	29	10	58	13:45			237	953	260	975	497	1928
02:00			6		8		14		14:00			226		205		431	
02:15			2		1		3		14:15			223		262		485	
02:30			3		5		8		14:30			258		218		476	
02:45			3	14	1	15	4	29	14:45			267	974	238	923	505	1897
03:00			2		8		10		15:00			251		209		460	
03:15			3		5		8		15:15			240		182		422	
03:30			6		1		7		15:30			241		237		478	
03:45			2	13	3	17	5	30	15:45			227	959	191	819	418	1778
04:00			1		4		5		16:00			277		230		507	
04:15			5		5		10		16:15			209		214		423	
04:30			5		8		13		16:30			270		194		464	
04:45			13	24	12	29	25	53	16:45			267	1023	191	829	458	1852
05:00			12		19		31		17:00			294		222		516	
05:15			14		15		29		17:15			255		230		485	
05:30			24		29		53		17:30			296		222		518	
05:45			31	81	47	110	78	191	17:45			202	1047	193	867	395	1914
06:00			30		84		114		18:00			261		206		467	
06:15			46		141		187		18:15			248		199		447	
06:30			60		102		162		18:30			217		188		405	
06:45			64	200	155	482	219	682	18:45			213	939	211	804	424	1743
07:00			86		141		227		19:00			172		149		321	
07:15			122		169		291		19:15			191		159		350	
07:30			133		207		340		19:30			173		136		309	
07:45			135	476	210	727	345	1203	19:45			177	713	107	551	284	1264
08:00			175		173		348		20:00			152		91		243	
08:15			190		201		391		20:15			147		126		273	
08:30			193		237		430		20:30			137		124		261	
08:45			167	725	250	861	417	1586	20:45			128	564	95	436	223	1000
09:00			170		218		388		21:00			108		89		197	
09:15			202		250		452		21:15			103		82		185	
09:30			175		264		439		21:30			98		92		190	
09:45			170	717	285	1017	455	1734	21:45			80	389	59	322	139	711
10:00			201		226		427		22:00			76		47		123	
10:15			188		224		412		22:15			46		46		92	
10:30			182		244		426		22:30			64		29		93	
10:45			236	807	257	951	493	1758	22:45			40	226	33	155	73	381
11:00			219		244		463		23:00			51		22		73	
11:15			224		253		477		23:15			38		27		65	
11:30			225		280		505		23:30			33		28		61	
11:45			245	913	313	1090	558	2003	23:45			18	140	19	96	37	236
TOTALS				4086		5367		**9453**	**TOTALS**				8886		7829		**16715**
SPLIT %				43.2%		56.8%		**36.1%**	**SPLIT %**				53.2%		46.8%		**63.9%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	12,972	13,196	26,168

AM Peak Hour			11:45	11:30	**11:30**	**PM Peak Hour**			16:45	12:00	**12:00**
AM Pk Volume			957	1147	**2099**	**PM Pk Volume**			1112	1052	**2011**
Pk Hr Factor			0.969	0.916	**0.940**	**Pk Hr Factor**			0.939	0.936	**0.952**
7 - 9 Volume	0	0	1201	1588	**2789**	**4 - 6 Volume**	0	0	2070	1696	**3766**
7 - 9 Peak Hour			08:00	08:00	**08:00**	**4 - 6 Peak Hour**			16:45	17:00	**16:45**
7 - 9 Pk Volume	0	0	725	861	**1586**	**4 - 6 Pk Volume**	0	0	1112	867	**1977**
Pk Hr Factor	0.000	0.000	0.939	0.861	**0.922**	**Pk Hr Factor**	0.000	0.000	0.939	0.942	**0.954**

Prepared by NDS/ATD

VOLUME

Via De La Valle W/o Jimmy Durante Blvd

Day: Thursday
Date: 7/31/2014

City: Solana Beach
Project #: CA14_4197_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	11,080	10,529	21,609

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			12		3		15		12:00			190		185		375	
00:15			11		10		21		12:15			158		209		367	
00:30			11		6		17		12:30			177		182		359	
00:45			5	39	6	25	11	64	12:45			167	692	174	750	341	1442
01:00			6		9		15		13:00			214		156		370	
01:15			4		2		6		13:15			185		182		367	
01:30			5		2		7		13:30			198		180		378	
01:45			4	19	3	16	7	35	13:45			148	745	172	690	320	1435
02:00			5		6		11		14:00			160		151		311	
02:15			2		5		7		14:15			168		148		316	
02:30			3		9		12		14:30			164		153		317	
02:45			4	14	2	22	6	36	14:45			178	670	122	574	300	1244
03:00			5		3		8		15:00			178		140		318	
03:15			3		1		4		15:15			230		158		388	
03:30			3		4		7		15:30			178		188		366	
03:45			6	17	1	9	7	26	15:45			185	771	225	711	410	1482
04:00			6		1		7		16:00			208		185		393	
04:15			12		5		17		16:15			171		192		363	
04:30			20		6		26		16:30			160		203		363	
04:45			19	57	9	21	28	78	16:45			189	728	224	804	413	1532
05:00			20		16		36		17:00			164		213		377	
05:15			24		16		40		17:15			191		191		382	
05:30			28		25		53		17:30			172		238		410	
05:45			36	108	31	88	67	196	17:45			205	732	280	922	485	1654
06:00			52		43		95		18:00			199		275		474	
06:15			53		49		102		18:15			173		229		402	
06:30			68		80		148		18:30			159		190		349	
06:45			86	259	89	261	175	520	18:45			166	697	190	884	356	1581
07:00			140		92		232		19:00			145		162		307	
07:15			138		116		254		19:15			162		120		282	
07:30			181		171		352		19:30			134		108		242	
07:45			191	650	174	553	365	1203	19:45			173	614	97	487	270	1101
08:00			190		105		295		20:00			175		80		255	
08:15			211		150		361		20:15			172		100		272	
08:30			207		134		341		20:30			123		91		214	
08:45			186	794	163	552	349	1346	20:45			125	595	94	365	219	960
09:00			188		169		357		21:00			97		87		184	
09:15			180		127		307		21:15			90		76		166	
09:30			170		208		378		21:30			82		67		149	
09:45			155	693	168	672	323	1365	21:45			67	336	56	286	123	622
10:00			165		161		326		22:00			74		63		137	
10:15			171		194		365		22:15			58		43		101	
10:30			173		182		355		22:30			52		46		98	
10:45			159	668	173	710	332	1378	22:45			51	235	29	181	80	416
11:00			204		191		395		23:00			42		28		70	
11:15			193		193		386		23:15			42		28		70	
11:30			204		231		435		23:30			28		16		44	
11:45			169	770	242	857	411	1627	23:45			65	177	17	89	82	266
TOTALS				4088		3786		7874	TOTALS				6992		6743		13735
SPLIT %				51.9%		48.1%		36.4%	SPLIT %				50.9%		49.1%		63.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	11,080	10,529	21,609

AM Peak Hour			07:45	11:30	11:00	PM Peak Hour			15:15	17:30	17:30
AM Pk Volume			799	867	1627	PM Pk Volume			801	1022	1771
Pk Hr Factor			0.947	0.896	0.935	Pk Hr Factor			0.871	0.913	0.913
7 - 9 Volume	0	0	1444	1105	2549	4 - 6 Volume	0	0	1460	1726	3186
7 - 9 Peak Hour			07:45	07:30	07:30	4 - 6 Peak Hour			17:00	17:00	17:00
7 - 9 Pk Volume	0	0	799	600	1373	4 - 6 Pk Volume	0	0	732	922	1654
Pk Hr Factor	0.000	0.000	0.947	0.862	0.940	Pk Hr Factor	0.000	0.000	0.893	0.823	0.853

Prepared by NDS/ATD

VOLUME

E Solana Circle

Day: Wednesday
Date: 7/2/2014

City: Solana Beach
Project #: CA14_4175_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	669	340	1,009

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			9		7		16	
00:15			0		0		0		12:15			10		5		15	
00:30			0		0		0		12:30			9		4		13	
00:45			0		0		0		12:45			13	41	8	24	21	65
01:00			0		0		0		13:00			10		5		15	
01:15			0		0		0		13:15			11		8		19	
01:30			0		0		0		13:30			7		3		10	
01:45			0		0		0		13:45			16	44	9	25	25	69
02:00			1		0		1		14:00			16		8		24	
02:15			0		0		0		14:15			10		7		17	
02:30			0		0		0		14:30			7		4		11	
02:45			0	1	0		0	1	14:45			11	44	10	29	21	73
03:00			0		0		0		15:00			15		8		23	
03:15			0		0		0		15:15			12		8		20	
03:30			0		0		0		15:30			17		7		24	
03:45			0		0		0		15:45			12	56	6	29	18	85
04:00			0		0		0		16:00			14		7		21	
04:15			0		0		0		16:15			15		6		21	
04:30			0		0		0		16:30			14		7		21	
04:45			1	1	0		1	1	16:45			13	56	7	27	20	83
05:00			1		0		1		17:00			15		14		29	
05:15			0		0		0		17:15			12		7		19	
05:30			4		0		4		17:30			15		7		22	
05:45			1	6	0		1	6	17:45			12	54	7	35	19	89
06:00			4		1		5		18:00			11		8		19	
06:15			3		6		9		18:15			11		7		18	
06:30			3		2		5		18:30			18		2		20	
06:45			5	15	3	12	8	27	18:45			8	48	9	26	17	74
07:00			2		2		4		19:00			8		4		12	
07:15			3		6		9		19:15			7		6		13	
07:30			5		2		7		19:30			8		5		13	
07:45			9	19	5	15	14	34	19:45			5	28	2	17	7	45
08:00			12		4		16		20:00			9		2		11	
08:15			2		2		4		20:15			7		1		8	
08:30			6		5		11		20:30			7		4		11	
08:45			12	32	2	13	14	45	20:45			2	25	2	9	4	34
09:00			5		4		9		21:00			2		1		3	
09:15			9		1		10		21:15			10		2		12	
09:30			16		5		21		21:30			17		4		21	
09:45			14	44	3	13	17	57	21:45			10	39	2	9	12	48
10:00			13		8		21		22:00			14		0		14	
10:15			9		7		16		22:15			4		1		5	
10:30			8		5		13		22:30			9		1		10	
10:45			4	34	6	26	10	60	22:45			6	33	0	2	6	35
11:00			10		5		15		23:00			8		0		8	
11:15			4		8		12		23:15			3		0		3	
11:30			6		7		13		23:30			3		1		4	
11:45			13	33	8	28	21	61	23:45			2	16	0	1	2	17
TOTALS				185		107		**292**	**TOTALS**				484		233		**717**
SPLIT %				63.4%		36.6%		**28.9%**	**SPLIT %**				67.5%		32.5%		**71.1%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	669	340	1,009

AM Peak Hour			09:15	11:15	**09:30**	**PM Peak Hour**			15:30	16:30	**16:15**
AM Pk Volume			52	30	**75**	**PM Pk Volume**			58	35	**91**
Pk Hr Factor			0.813	0.938	**0.893**	**Pk Hr Factor**			0.853	0.625	**0.784**
7 - 9 Volume	0	0	51	28	**79**	**4 - 6 Volume**	0	0	110	62	**172**
7 - 9 Peak Hour			08:00	07:15	**07:15**	**4 - 6 Peak Hour**			16:15	16:30	**16:15**
7 - 9 Pk Volume	0	0	32	17	**46**	**4 - 6 Pk Volume**	0	0	57	35	**91**
Pk Hr Factor	0.000	0.000	0.667	0.708	**0.719**	**Pk Hr Factor**	0.000	0.000	0.950	0.625	**0.784**

Prepared by NDS/ATD

VOLUME

Nardo Ave btwn Corto St & Lirio St

Day: Wednesday
Date: 7/2/2014

City: Solana Beach
Project #: CA14_4175_002

DAILY TOTALS	NB	SB	EB	WB	Total
	952	1,257	0	0	2,209

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	1		1						2		12:00	16		33						49	
00:15	0		0						0		12:15	22		39						61	
00:30	0		0						0		12:30	16		23						39	
00:45	0	1	1	2					1	3	12:45	10	64	22	117					32	181
01:00	0		0						0		13:00	16		20						36	
01:15	0		1						1		13:15	18		27						45	
01:30	0		0						0		13:30	14		18						32	
01:45	0		0	1					0	1	13:45	10	58	24	89					34	147
02:00	0		0						0		14:00	13		18						31	
02:15	0		0						0		14:15	21		22						43	
02:30	0		1						1		14:30	12		30						42	
02:45	0		0	1					0	1	14:45	15	61	28	98					43	159
03:00	0		1						1		15:00	17		23						40	
03:15	0		0						0		15:15	21		37						58	
03:30	0		0						0		15:30	17		34						51	
03:45	0		0	1					0	1	15:45	18	73	30	124					48	197
04:00	0		0						0		16:00	15		32						47	
04:15	0		0						0		16:15	17		24						41	
04:30	1		0						1		16:30	23		23						46	
04:45	0	1	0						0	1	16:45	13	68	24	103					37	171
05:00	0		0						0		17:00	24		45						69	
05:15	0		0						0		17:15	27		28						55	
05:30	2		4						6		17:30	25		22						47	
05:45	1	3	5	9					6	12	17:45	22	98	19	114					41	212
06:00	3		0						3		18:00	19		37						56	
06:15	3		3						6		18:15	18		24						42	
06:30	6		9						15		18:30	18		22						40	
06:45	10	22	14	26					24	48	18:45	8	63	20	103					28	166
07:00	9		6						15		19:00	9		6						15	
07:15	10		10						20		19:15	9		16						25	
07:30	14		14						28		19:30	17		13						30	
07:45	16	49	25	55					41	104	19:45	4	39	12	47					16	86
08:00	23		20						43		20:00	10		8						18	
08:15	17		5						22		20:15	16		12						28	
08:30	21		17						38		20:30	10		5						15	
08:45	20	81	17	59					37	140	20:45	13	49	15	40					28	89
09:00	11		17						28		21:00	9		13						22	
09:15	14		18						32		21:15	14		17						31	
09:30	16		14						30		21:30	14		8						22	
09:45	13	54	9	58					22	112	21:45	6	43	4	42					10	85
10:00	11		14						25		22:00	8		4						12	
10:15	9		13						22		22:15	4		5						9	
10:30	5		18						23		22:30	11		6						17	
10:45	13	38	15	60					28	98	22:45	7	30	3	18					10	48
11:00	7		24						31		23:00	5		3						8	
11:15	12		16						28		23:15	1		2						3	
11:30	13		22						35		23:30	1		2						3	
11:45	17	49	20	82					37	131	23:45	1	8	1	8					2	16
TOTALS		298		354						652	TOTALS		654		903						1557
SPLIT %		45.7%		54.3%						29.5%	SPLIT %		42.0%		58.0%						70.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	952	1,257	0	0	2,209

AM Peak Hour	08:00	11:45			11:45	PM Peak Hour	17:00	15:15			17:00
AM Pk Volume	81	115			186	PM Pk Volume	98	133			212
Pk Hr Factor	0.880	0.737			0.762	Pk Hr Factor	0.907	0.899			0.768
7 - 9 Volume	130	114	0	0	244	4 - 6 Volume	166	217	0	0	383
7 - 9 Peak Hour	08:00	07:15			07:45	4 - 6 Peak Hour	17:00	16:30			17:00
7 - 9 Pk Volume	81	69	0	0	144	4 - 6 Pk Volume	98	120	0	0	212
Pk Hr Factor	0.880	0.690	0.000	0.000	0.837	Pk Hr Factor	0.907	0.667	0.000	0.000	0.768

Prepared by NDS/ATD

VOLUME

Stevens Ave s/o Nardo Ave

Day: Wednesday
Date: 7/2/2014

City: Solana Beach
Project #: CA14_4175_003

DAILY TOTALS	NB	SB	EB	WB	Total
	4,044	4,801	0	0	8,845

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	3		5						8		12:00	79		92						171	
00:15	7		2						9		12:15	65		94						159	
00:30	4		6						10		12:30	71		93						164	
00:45	0	14	0	13					0	27	12:45	72	287	85	364					157	651
01:00	5		1						6		13:00	54		88						142	
01:15	1		2						3		13:15	59		80						139	
01:30	4		1						5		13:30	62		92						154	
01:45	4	14	2	6					6	20	13:45	66	241	70	330					136	571
02:00	1		1						2		14:00	65		91						156	
02:15	3		1						4		14:15	69		92						161	
02:30	2		5						7		14:30	79		84						163	
02:45	0	6	2	9					2	15	14:45	58	271	98	365					156	636
03:00	0		1						1		15:00	59		99						158	
03:15	1		0						1		15:15	75		71						146	
03:30	2		1						3		15:30	65		100						165	
03:45	2	5	0	2					2	7	15:45	64	263	90	360					154	623
04:00	1		1						2		16:00	71		95						166	
04:15	0		1						1		16:15	88		114						202	
04:30	2		3						5		16:30	105		91						196	
04:45	3	6	3	8					6	14	16:45	75	339	102	402					177	741
05:00	5		3						8		17:00	81		134						215	
05:15	7		2						9		17:15	74		99						173	
05:30	8		14						22		17:30	72		77						149	
05:45	11	31	13	32					24	63	17:45	85	312	72	382					157	694
06:00	17		20						37		18:00	66		80						146	
06:15	22		21						43		18:15	60		86						146	
06:30	31		30						61		18:30	60		90						150	
06:45	50	120	31	102					81	222	18:45	39	225	66	322					105	547
07:00	59		33						92		19:00	48		78						126	
07:15	67		64						131		19:15	33		58						91	
07:30	47		54						101		19:30	48		45						93	
07:45	78	251	59	210					137	461	19:45	25	154	48	229					73	383
08:00	77		67						144		20:00	41		36						77	
08:15	87		56						143		20:15	33		42						75	
08:30	108		70						178		20:30	31		36						67	
08:45	87	359	86	279					173	638	20:45	20	125	38	152					58	277
09:00	77		69						146		21:00	27		41						68	
09:15	90		72						162		21:15	27		43						70	
09:30	86		95						181		21:30	25		26						51	
09:45	69	322	93	329					162	651	21:45	34	113	18	128					52	241
10:00	56		70						126		22:00	39		22						61	
10:15	57		66						123		22:15	26		17						43	
10:30	54		95						149		22:30	25		11						36	
10:45	56	223	74	305					130	528	22:45	17	107	15	65					32	172
11:00	50		86						136		23:00	25		14						39	
11:15	42		101						143		23:15	12		8						20	
11:30	51		100						151		23:30	12		3						15	
11:45	51	194	86	373					137	567	23:45	13	62	9	34					22	96
TOTALS		1545		1668						3213	TOTALS		2499		3133						5632
SPLIT %		48.1%		51.9%						36.3%	SPLIT %		44.4%		55.6%						63.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,044	4,801	0	0	8,845

AM Peak Hour	08:30	11:15			08:45	PM Peak Hour	16:15	16:15			16:15
AM Pk Volume	362	379			662	PM Pk Volume	349	441			790
Pk Hr Factor	0.838	0.938			0.914	Pk Hr Factor	0.831	0.823			0.919
7 - 9 Volume	610	489	0	0	1099	4 - 6 Volume	651	784	0	0	1435
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:15	16:15			16:15
7 - 9 Pk Volume	359	279	0	0	638	4 - 6 Pk Volume	349	441	0	0	790
Pk Hr Factor	0.831	0.811	0.000	0.000	0.896	Pk Hr Factor	0.831	0.823	0.000	0.000	0.919

Prepared by NDS/ATD

VOLUME

Stevens Ave S/o Genevieve St

Day: Wednesday
Date: 7/2/2014

City: Solana Beach
Project #: CA14_4175_005

DAILY TOTALS	NB	SB	EB	WB	Total
	2,929	4,477	0	0	7,406

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		4						4		12:00	68		101						169	
00:15	1		2						3		12:15	66		87						153	
00:30	2		3						5		12:30	63		92						155	
00:45	1	4	0	9					1	13	12:45	64	261	86	366					150	627
01:00	2		0						2		13:00	43		85						128	
01:15	2		1						3		13:15	37		80						117	
01:30	1		1						2		13:30	47		94						141	
01:45	1	6	3	5					4	11	13:45	59	186	72	331					131	517
02:00	1		1						2		14:00	62		89						151	
02:15	0		1						1		14:15	55		90						145	
02:30	0		4						4		14:30	62		77						139	
02:45	0	1	1	7					1	8	14:45	33	212	101	357					134	569
03:00	0		1						1		15:00	38		92						130	
03:15	0		0						0		15:15	49		74						123	
03:30	0		1						1		15:30	52		99						151	
03:45	1	1	0	2					1	3	15:45	43	182	96	361					139	543
04:00	0		1						1		16:00	46		100						146	
04:15	0		0						0		16:15	59		116						175	
04:30	1		3						4		16:30	81		100						181	
04:45	3	4	2	6					5	10	16:45	53	239	101	417					154	656
05:00	3		0						3		17:00	82		118						200	
05:15	6		1						7		17:15	54		95						149	
05:30	9		5						14		17:30	48		71						119	
05:45	8	26	6	12					14	38	17:45	53	237	89	373					142	610
06:00	16		10						26		18:00	45		89						134	
06:15	12		18						30		18:15	62		93						155	
06:30	22		15						37		18:30	48		78						126	
06:45	43	93	15	58					58	151	18:45	34	189	75	335					109	524
07:00	50		25						75		19:00	39		79						118	
07:15	39		47						86		19:15	16		58						74	
07:30	31		30						61		19:30	30		46						76	
07:45	62	182	42	144					104	326	19:45	10	95	41	224					51	319
08:00	60		38						98		20:00	18		37						55	
08:15	54		44						98		20:15	16		35						51	
08:30	84		48						132		20:30	13		35						48	
08:45	67	265	74	204					141	469	20:45	13	60	39	146					52	206
09:00	52		59						111		21:00	13		35						48	
09:15	38		58						96		21:15	12		31						43	
09:30	47		82						129		21:30	12		21						33	
09:45	35	172	86	285					121	457	21:45	19	56	16	103					35	159
10:00	30		69						99		22:00	21		22						43	
10:15	39		61						100		22:15	13		15						28	
10:30	36		94						130		22:30	27		4						31	
10:45	37	142	79	303					116	445	22:45	14	75	10	51					24	126
11:00	29		76						105		23:00	16		8						24	
11:15	59		105						164		23:15	4		4						8	
11:30	64		90						154		23:30	2		0						2	
11:45	63	215	88	359					151	574	23:45	4	26	7	19					11	45
TOTALS		1111		1394						2505	TOTALS		1818		3083						4901
SPLIT %		44.4%		55.6%						33.8%	SPLIT %		37.1%		62.9%						66.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	2,929	4,477	0	0	7,406

AM Peak Hour	08:00	11:15			11:15	PM Peak Hour	16:15	16:15			16:15
AM Pk Volume	265	384			638	PM Pk Volume	275	435			710
Pk Hr Factor	0.789	0.914			0.944	Pk Hr Factor	0.838	0.922			0.888
7 - 9 Volume	447	348	0	0	795	4 - 6 Volume	476	790	0	0	1266
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:15	16:15			16:15
7 - 9 Pk Volume	265	204	0	0	469	4 - 6 Pk Volume	275	435	0	0	710
Pk Hr Factor	0.789	0.689	0.000	0.000	0.832	Pk Hr Factor	0.838	0.922	0.000	0.000	0.888

Prepared by NDS/ATD

VOLUME

Lomas Santa Fe Dr btwn Stevens Ave & Solana Hills Dr

Day: Wednesday
Date: 7/2/2014

City: Solana Beach
Project #: CA14_4175_006

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	14,639	14,982	29,621

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			8		9		17		12:00			248		337		585	
00:15			11		14		25		12:15			268		311		579	
00:30			15		9		24		12:30			242		296		538	
00:45			9	43	7	39	16	82	12:45			267	1025	287	1231	554	2256
01:00			5		5		10		13:00			258		260		518	
01:15			10		3		13		13:15			275		263		538	
01:30			5		4		9		13:30			290		296		586	
01:45			1	21	3	15	4	36	13:45			257	1080	238	1057	495	2137
02:00			3		2		5		14:00			273		251		524	
02:15			6		7		13		14:15			244		241		485	
02:30			8		2		10		14:30			253		290		543	
02:45			2	19	1	12	3	31	14:45			263	1033	313	1095	576	2128
03:00			0		2		2		15:00			265		269		534	
03:15			4		1		5		15:15			281		242		523	
03:30			3		3		6		15:30			286		288		574	
03:45			5	12	3	9	8	21	15:45			297	1129	242	1041	539	2170
04:00			5		3		8		16:00			283		240		523	
04:15			9		6		15		16:15			286		270		556	
04:30			3		6		9		16:30			270		236		506	
04:45			12	29	11	26	23	55	16:45			292	1131	259	1005	551	2136
05:00			10		16		26		17:00			255		267		522	
05:15			12		20		32		17:15			263		255		518	
05:30			20		33		53		17:30			291		265		556	
05:45			22	64	50	119	72	183	17:45			251	1060	262	1049	513	2109
06:00			34		61		95		18:00			261		269		530	
06:15			52		138		190		18:15			283		261		544	
06:30			82		128		210		18:30			223		262		485	
06:45			73	241	151	478	224	719	18:45			188	955	232	1024	420	1979
07:00			113		152		265		19:00			206		215		421	
07:15			130		200		330		19:15			204		153		357	
07:30			142		155		297		19:30			183		146		329	
07:45			150	535	256	763	406	1298	19:45			172	765	126	640	298	1405
08:00			188		183		371		20:00			160		129		289	
08:15			196		220		416		20:15			166		99		265	
08:30			192		261		453		20:30			147		79		226	
08:45			215	791	322	986	537	1777	20:45			145	618	60	367	205	985
09:00			222		266		488		21:00			163		76		239	
09:15			174		284		458		21:15			186		107		293	
09:30			223		242		465		21:30			178		78		256	
09:45			220	839	293	1085	513	1924	21:45			133	660	79	340	212	1000
10:00			241		248		489		22:00			95		44		139	
10:15			201		240		441		22:15			82		38		120	
10:30			221		278		499		22:30			104		36		140	
10:45			243	906	289	1055	532	1961	22:45			78	359	32	150	110	509
11:00			235		287		522		23:00			74		27		101	
11:15			269		380		649		23:15			41		20		61	
11:30			258		329		587		23:30			46		17		63	
11:45			279	1041	320	1316	599	2357	23:45			122	283	16	80	138	363
TOTALS				4541		5903		**10444**	**TOTALS**				10098		9079		**19177**
SPLIT %				43.5%		56.5%		**35.3%**	**SPLIT %**				52.7%		47.3%		**64.7%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	14,639	14,982	29,621

AM Peak Hour			11:15	11:15	**11:15**	**PM Peak Hour**			15:30	12:00	**12:00**
AM Pk Volume			1054	1366	**2420**	**PM Pk Volume**			1152	1231	**2256**
Pk Hr Factor			0.944	0.899	**0.932**	**Pk Hr Factor**			0.970	0.913	**0.964**
7 - 9 Volume	0	0	1326	1749	**3075**	**4 - 6 Volume**	0	0	2191	2054	**4245**
7 - 9 Peak Hour			08:00	08:00	**08:00**	**4 - 6 Peak Hour**			16:00	17:00	**16:45**
7 - 9 Pk Volume	0	0	791	986	**1777**	**4 - 6 Pk Volume**	0	0	1131	1049	**2147**
Pk Hr Factor	0.000	0.000	0.920	0.766	**0.827**	**Pk Hr Factor**	0.000	0.000	0.968	0.982	**0.965**

Prepared by NDS/ATD

VOLUME

Via De La Valle W/o Jimmy Durante Blvd

Day: Wednesday
Date: 7/2/2014

City: Solana Beach
Project #: CA14_4175_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	10,050	10,820	20,870

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			28		22		50		12:00			143		171		314	
00:15			11		14		25		12:15			160		177		337	
00:30			8		10		18		12:30			135		177		312	
00:45			6	53	11	57	17	110	12:45			113	551	175	700	288	1251
01:00			8		12		20		13:00			133		189		322	
01:15			4		3		7		13:15			166		161		327	
01:30			5		2		7		13:30			157		149		306	
01:45			1	18	6	23	7	41	13:45			152	608	182	681	334	1289
02:00			4		6		10		14:00			145		162		307	
02:15			3		6		9		14:15			150		157		307	
02:30			7		6		13		14:30			157		182		339	
02:45			4	18	6	24	10	42	14:45			165	617	172	673	337	1290
03:00			2		3		5		15:00			149		195		344	
03:15			3		4		7		15:15			148		181		329	
03:30			3		4		7		15:30			179		167		346	
03:45			2	10	6	17	8	27	15:45			179	655	166	709	345	1364
04:00			7		4		11		16:00			184		161		345	
04:15			4		9		13		16:15			179		188		367	
04:30			12		12		24		16:30			165		164		329	
04:45			10	33	15	40	25	73	16:45			164	692	185	698	349	1390
05:00			15		13		28		17:00			163		193		356	
05:15			21		18		39		17:15			137		187		324	
05:30			22		36		58		17:30			128		191		319	
05:45			33	91	44	111	77	202	17:45			146	574	183	754	329	1328
06:00			30		80		110		18:00			126		179		305	
06:15			48		78		126		18:15			137		178		315	
06:30			73		102		175		18:30			114		193		307	
06:45			84	235	104	364	188	599	18:45			144	521	167	717	311	1238
07:00			93		126		219		19:00			117		160		277	
07:15			123		138		261		19:15			162		141		303	
07:30			164		164		328		19:30			125		126		251	
07:45			160	540	222	650	382	1190	19:45			106	510	123	550	229	1060
08:00			194		163		357		20:00			147		119		266	
08:15			179		186		365		20:15			120		93		213	
08:30			177		184		361		20:30			123		80		203	
08:45			175	725	189	722	364	1447	20:45			128	518	88	380	216	898
09:00			180		174		354		21:00			133		90		223	
09:15			133		201		334		21:15			109		81		190	
09:30			175		244		419		21:30			99		75		174	
09:45			135	623	218	837	353	1460	21:45			122	463	64	310	186	773
10:00			141		226		367		22:00			149		74		223	
10:15			143		234		377		22:15			128		66		194	
10:30			124		169		293		22:30			100		56		156	
10:45			163	571	146	775	309	1346	22:45			69	446	52	248	121	694
11:00			123		166		289		23:00			105		36		141	
11:15			130		147		277		23:15			117		43		160	
11:30			138		141		279		23:30			81		33		114	
11:45			160	551	181	635	341	1186	23:45			124	427	33	145	157	572
TOTALS				3468		4255		7723	TOTALS				6582		6565		13147
SPLIT %				44.9%		55.1%		37.0%	SPLIT %				50.1%		49.9%		63.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	10,050	10,820	20,870

AM Peak Hour			08:00	09:30	09:30	PM Peak Hour			15:30	16:45	15:30
AM Pk Volume			725	922	1516	PM Pk Volume			721	756	1403
Pk Hr Factor			0.934	0.945	0.905	Pk Hr Factor			0.980	0.979	0.956
7 - 9 Volume	0	0	1265	1372	2637	4 - 6 Volume	0	0	1266	1452	2718
7 - 9 Peak Hour			08:00	07:45	07:45	4 - 6 Peak Hour			16:00	16:45	16:15
7 - 9 Pk Volume	0	0	725	755	1465	4 - 6 Pk Volume	0	0	692	756	1401
Pk Hr Factor	0.000	0.000	0.934	0.850	0.959	Pk Hr Factor	0.000	0.000	0.940	0.979	0.954

Prepared by NDS/ATD

VOLUME

E Solana Cir Bet. S Nardo Ave & Solana Cir

Day: Monday
Date: 11/10/2014

City: Solana Beach
Project #: CA14_4223_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	298	331	629

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			3		5		8	
00:15			1		1		2		12:15			2		5		7	
00:30			0		0		0		12:30			5		8		13	
00:45			0	1	0	1	0	2	12:45			2	12	9	27	11	39
01:00			1		0		1		13:00			4		14		18	
01:15			0		1		1		13:15			10		10		20	
01:30			0		0		0		13:30			5		13		18	
01:45			0	1	1	2	1	3	13:45			1	20	6	43	7	63
02:00			0		1		1		14:00			6		1		7	
02:15			0		0		0		14:15			5		4		9	
02:30			0		0		0		14:30			9		6		15	
02:45			0		0	1	0	1	14:45			2	22	8	19	10	41
03:00			0		0		0		15:00			6		8		14	
03:15			0		0		0		15:15			6		4		10	
03:30			0		0		0		15:30			4		1		5	
03:45			0		1	1	1	1	15:45			2	18	4	17	6	35
04:00			0		0		0		16:00			5		7		12	
04:15			0		0		0		16:15			3		10		13	
04:30			0		0		0		16:30			6		8		14	
04:45			0		2	2	2	2	16:45			2	16	5	30	7	46
05:00			0		0		0		17:00			7		6		13	
05:15			0		0		0		17:15			6		7		13	
05:30			0		1		1		17:30			9		10		19	
05:45			0		0	1	0	1	17:45			7	29	9	32	16	61
06:00			0		1		1		18:00			2		6		8	
06:15			0		1		1		18:15			4		14		18	
06:30			0		0		0		18:30			8		6		14	
06:45			0		1	3	1	3	18:45			11	25	0	26	11	51
07:00			0		0		0		19:00			6		4		10	
07:15			0		3		3		19:15			9		3		12	
07:30			0		4		4		19:30			10		1		11	
07:45			0		5	12	5	12	19:45			5	30	4	12	9	42
08:00			0		3		3		20:00			7		0		7	
08:15			1		5		6		20:15			6		1		7	
08:30			3		4		7		20:30			6		2		8	
08:45			2	6	4	16	6	22	20:45			6	25	4	7	10	32
09:00			6		8		14		21:00			5		1		6	
09:15			2		6		8		21:15			2		2		4	
09:30			2		9		11		21:30			5		0		5	
09:45			3	13	2	25	5	38	21:45			5	17	1	4	6	21
10:00			6		4		10		22:00			4		0		4	
10:15			4		4		8		22:15			1		0		1	
10:30			6		7		13		22:30			1		5		6	
10:45			2	18	4	19	6	37	22:45			0	6	2	7	2	13
11:00			6		3		9		23:00			6		0		6	
11:15			3		4		7		23:15			4		1		5	
11:30			8		7		15		23:30			4		0		4	
11:45			4	21	9	23	13	44	23:45			4	18	0	1	4	19
TOTALS				60		106		166	TOTALS				238		225		463
SPLIT %				36.1%		63.9%		26.4%	SPLIT %				51.4%		48.6%		73.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	298	331	629

AM Peak Hour			11:00	08:45	11:00	PM Peak Hour			18:45	12:45	12:45
AM Pk Volume			21	27	44	PM Pk Volume			36	46	67
Pk Hr Factor			0.656	0.750	0.733	Pk Hr Factor			0.818	0.821	0.838
7 - 9 Volume	0	0	6	28	34	4 - 6 Volume	0	0	45	62	107
7 - 9 Peak Hour			08:00	07:30	08:00	4 - 6 Peak Hour			17:00	17:00	17:00
7 - 9 Pk Volume	0	0	6	17	22	4 - 6 Pk Volume	0	0	29	32	61
Pk Hr Factor	0.000	0.000	0.500	0.850	0.786	Pk Hr Factor	0.000	0.000	0.806	0.800	0.803

Prepared by NDS/ATD

VOLUME

E Solana Cir Bet. S Nardo Ave & Solana Cir

Day: Tuesday
Date: 11/11/2014

City: Solana Beach
Project #: CA14_4223_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	271	309	580

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			4		5		9	
00:15			1		0		1		12:15			2		6		8	
00:30			4		0		4		12:30			4		7		11	
00:45			0	5	0		0	5	12:45			4	14	6	24	10	38
01:00			0		0		0		13:00			3		7		10	
01:15			4		0		4		13:15			1		3		4	
01:30			2		0		2		13:30			6		3		9	
01:45			0	6	0		0	6	13:45			4	14	9	22	13	36
02:00			0		0		0		14:00			2		4		6	
02:15			0		0		0		14:15			4		8		12	
02:30			0		0		0		14:30			3		10		13	
02:45			0		1	1	1	1	14:45			11	20	5	27	16	47
03:00			0		0		0		15:00			3		8		11	
03:15			0		0		0		15:15			6		4		10	
03:30			0		0		0		15:30			8		8		16	
03:45			0		0		0		15:45			7	24	8	28	15	52
04:00			1		0		1		16:00			5		4		9	
04:15			0		0		0		16:15			9		4		13	
04:30			0		0		0		16:30			8		8		16	
04:45			1	2	0		1	2	16:45			3	25	5	21	8	46
05:00			0		0		0		17:00			6		9		15	
05:15			0		0		0		17:15			3		5		8	
05:30			0		1		1		17:30			5		11		16	
05:45			0		0	1	0	1	17:45			3	17	5	30	8	47
06:00			0		0		0		18:00			7		10		17	
06:15			0		0		0		18:15			8		7		15	
06:30			0		0		0		18:30			9		7		16	
06:45			1	1	0		1	1	18:45			7	31	5	29	12	60
07:00			3		0		3		19:00			5		4		9	
07:15			1		0		1		19:15			7		4		11	
07:30			1		3		4		19:30			3		6		9	
07:45			4	9	0	3	4	12	19:45			3	18	3	17	6	35
08:00			0		2		2		20:00			3		5		8	
08:15			4		9		13		20:15			3		3		6	
08:30			7		2		9		20:30			3		2		5	
08:45			4	15	0	13	4	28	20:45			2	11	1	11	3	22
09:00			6		3		9		21:00			1		4		5	
09:15			9		2		11		21:15			1		5		6	
09:30			6		4		10		21:30			2		3		5	
09:45			2	23	4	13	6	36	21:45			3	7	4	16	7	23
10:00			3		4		7		22:00			1		1		2	
10:15			7		10		17		22:15			0		2		2	
10:30			1		5		6		22:30			1		0		1	
10:45			2	13	3	22	5	35	22:45			0	2	2	5	2	7
11:00			3		7		10		23:00			0		0		0	
11:15			2		6		8		23:15			2		1		3	
11:30			5		8		13		23:30			0		1		1	
11:45			2	12	3	24	5	36	23:45			0	2	0	2	0	4
TOTALS				86		77		163	TOTALS				185		232		417
SPLIT %				52.8%		47.2%		28.1%	SPLIT %				44.4%		55.6%		71.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	271	309	580

AM Peak Hour			08:30	10:15	09:30	PM Peak Hour			18:00	17:30	18:00
AM Pk Volume			26	25	40	PM Pk Volume			31	33	60
Pk Hr Factor			0.722	0.625	0.588	Pk Hr Factor			0.861	0.750	0.882
7 - 9 Volume	0	0	24	16	40	4 - 6 Volume	0	0	42	51	93
7 - 9 Peak Hour			07:45	07:30	07:45	4 - 6 Peak Hour			16:15	16:45	16:15
7 - 9 Pk Volume	0	0	15	14	28	4 - 6 Pk Volume	0	0	26	30	52
Pk Hr Factor	0.000	0.000	0.536	0.389	0.538	Pk Hr Factor	0.000	0.000	0.722	0.682	0.813

Prepared by NDS/ATD

VOLUME

E Solana Cir Bet. S Nardo Ave & Solana Cir

Day: Wednesday
Date: 11/12/2014

City: Solana Beach
Project #: CA14_4223_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	352	300	652

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		2		2		12:00			7		4		11	
00:15			0		1		1		12:15			4		5		9	
00:30			1		0		1		12:30			3		8		11	
00:45			4	5	1	4	5	9	12:45			5	19	5	22	10	41
01:00			2		0		2		13:00			3		11		14	
01:15			1		1		2		13:15			10		6		16	
01:30			1		1		2		13:30			0		9		9	
01:45			0	4	0	2	0	6	13:45			3	16	4	30	7	46
02:00			0		2		2		14:00			4		6		10	
02:15			0		0		0		14:15			8		12		20	
02:30			0		0		0		14:30			5		15		20	
02:45			0		0	2	0	2	14:45			6	23	4	37	10	60
03:00			1		0		1		15:00			5		7		12	
03:15			0		0		0		15:15			4		7		11	
03:30			0		2		2		15:30			8		5		13	
03:45			0	1	0	2	0	3	15:45			5	22	8	27	13	49
04:00			0		0		0		16:00			4		0		4	
04:15			0		0		0		16:15			5		12		17	
04:30			0		0		0		16:30			3		8		11	
04:45			0		0		0		16:45			2	14	6	26	8	40
05:00			0		0		0		17:00			2		10		12	
05:15			0		0		0		17:15			4		13		17	
05:30			0		0		0		17:30			5		4		9	
05:45			0		0		0		17:45			4	15	7	34	11	49
06:00			1		0		1		18:00			7		10		17	
06:15			1		0		1		18:15			12		9		21	
06:30			0		0		0		18:30			4		8		12	
06:45			0	2	0		0	2	18:45			2	25	7	34	9	59
07:00			0		0		0		19:00			5		8		13	
07:15			4		1		5		19:15			6		8		14	
07:30			1		0		1		19:30			8		0		8	
07:45			2	7	1	2	3	9	19:45			7	26	4	20	11	46
08:00			3		4		7		20:00			3		1		4	
08:15			3		3		6		20:15			7		1		8	
08:30			11		3		14		20:30			3		1		4	
08:45			14	31	2	12	16	43	20:45			3	16	0	3	3	19
09:00			4		2		6		21:00			4		2		6	
09:15			6		3		9		21:15			5		0		5	
09:30			4		1		5		21:30			5		1		6	
09:45			8	22	0	6	8	28	21:45			6	20	0	3	6	23
10:00			12		2		14		22:00			2		1		3	
10:15			12		4		16		22:15			4		0		4	
10:30			6		2		8		22:30			5		1		6	
10:45			7	37	5	13	12	50	22:45			6	17	2	4	8	21
11:00			5		4		9		23:00			1		0		1	
11:15			6		8		14		23:15			3		0		3	
11:30			7		2		9		23:30			1		0		1	
11:45			6	24	3	17	9	41	23:45			1	6	0		1	6
TOTALS				133		60		**193**	**TOTALS**				219		240		**459**
SPLIT %				68.9%		31.1%		**29.6%**	**SPLIT %**				47.7%		52.3%		**70.4%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	352	300	652

AM Peak Hour			09:45	11:45	**10:00**	**PM Peak Hour**			17:30	14:15	**14:15**
AM Pk Volume			38	20	**50**	**PM Pk Volume**			28	38	**62**
Pk Hr Factor			0.792	0.625	**0.781**	**Pk Hr Factor**			0.583	0.633	**0.775**
7 - 9 Volume	0	0	38	14	**52**	**4 - 6 Volume**	0	0	29	60	**89**
7 - 9 Peak Hour			08:00	08:00	**08:00**	**4 - 6 Peak Hour**			17:00	16:30	**17:00**
7 - 9 Pk Volume	0	0	31	12	**43**	**4 - 6 Pk Volume**	0	0	15	37	**49**
Pk Hr Factor	0.000	0.000	0.554	0.750	**0.672**	**Pk Hr Factor**	0.000	0.000	0.750	0.712	**0.721**

Prepared by NDS/ATD

VOLUME

E Solana Cir Bet. S Nardo Ave & Solana Cir

Day: Thursday
Date: 11/13/2014

City: Solana Beach
Project #: CA14_4223_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	403	335	738

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			3		0		3		12:00			3		2		5	
00:15			0		1		1		12:15			5		12		17	
00:30			0		0		0		12:30			4		8		12	
00:45			1	4	0	1	1	5	12:45			6	18	4	26	10	44
01:00			0		1		1		13:00			8		6		14	
01:15			1		0		1		13:15			9		9		18	
01:30			0		0		0		13:30			5		6		11	
01:45			1	2	1	2	2	4	13:45			10	32	8	29	18	61
02:00			1		0		1		14:00			4		13		17	
02:15			0		0		0		14:15			9		5		14	
02:30			0		0		0		14:30			6		9		15	
02:45			0	1	0		0	1	14:45			8	27	2	29	10	56
03:00			0		0		0		15:00			10		4		14	
03:15			0		0		0		15:15			10		7		17	
03:30			0		0		0		15:30			2		5		7	
03:45			0		0		0		15:45			9	31	12	28	21	59
04:00			0		0		0		16:00			5		8		13	
04:15			0		0		0		16:15			6		4		10	
04:30			1		0		1		16:30			4		5		9	
04:45			0	1	0		0	1	16:45			9	24	11	28	20	52
05:00			0		0		0		17:00			8		3		11	
05:15			0		0		0		17:15			5		8		13	
05:30			0		0		0		17:30			8		9		17	
05:45			0		0		0		17:45			11	32	10	30	21	62
06:00			1		0		1		18:00			16		9		25	
06:15			0		0		0		18:15			6		11		17	
06:30			0		0		0		18:30			13		6		19	
06:45			1	2	1	1	2	3	18:45			13	48	8	34	21	82
07:00			2		0		2		19:00			8		4		12	
07:15			2		1		3		19:15			10		6		16	
07:30			2		0		2		19:30			9		1		10	
07:45			3	9	1	2	4	11	19:45			7	34	4	15	11	49
08:00			2		1		3		20:00			8		2		10	
08:15			3		1		4		20:15			0		1		1	
08:30			5		5		10		20:30			8		1		9	
08:45			6	16	2	9	8	25	20:45			7	23	3	7	10	30
09:00			3		1		4		21:00			5		1		6	
09:15			5		9		14		21:15			4		0		4	
09:30			9		9		18		21:30			3		1		4	
09:45			6	23	3	22	9	45	21:45			7	19	1	3	8	22
10:00			8		9		17		22:00			3		2		5	
10:15			5		11		16		22:15			3		1		4	
10:30			3		3		6		22:30			0		0		0	
10:45			4	20	8	31	12	51	22:45			4	10	4	7	8	17
11:00			5		5		10		23:00			1		1		2	
11:15			5		9		14		23:15			2		0		2	
11:30			7		5		12		23:30			1		2		3	
11:45			4	21	8	27	12	48	23:45			2	6	1	4	3	10
TOTALS				99		95		194	TOTALS				304		240		544
SPLIT %				51.0%		49.0%		26.3%	SPLIT %				55.9%		44.1%		73.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	403	335	738

AM Peak Hour			09:15	09:30	09:30	PM Peak Hour			18:00	17:30	17:45
AM Pk Volume			28	32	60	PM Pk Volume			48	39	82
Pk Hr Factor			0.778	0.727	0.833	Pk Hr Factor			0.750	0.886	0.820
7 - 9 Volume	0	0	25	11	36	4 - 6 Volume	0	0	56	58	114
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			17:00	16:45	17:00
7 - 9 Pk Volume	0	0	16	9	25	4 - 6 Pk Volume	0	0	32	31	62
Pk Hr Factor	0.000	0.000	0.667	0.450	0.625	Pk Hr Factor	0.000	0.000	0.727	0.705	0.738

Prepared by NDS/ATD

VOLUME

E Solana Cir Bet. S Nardo Ave & Solana Cir

Day: Friday
Date: 11/14/2014

City: Solana Beach
Project #: CA14_4223_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	383	363	746

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			2		0		2		12:00			5		10		15	
00:15			2		1		3		12:15			0		10		10	
00:30			1		0		1		12:30			1		12		13	
00:45			0	5	0	1	0	6	12:45			4	10	9	41	13	51
01:00			0		0		0		13:00			8		6		14	
01:15			1		0		1		13:15			4		5		9	
01:30			0		0		0		13:30			2		7		9	
01:45			0	1	0		0	1	13:45			2	16	19	37	21	53
02:00			0		0		0		14:00			3		12		15	
02:15			0		0		0		14:15			5		14		19	
02:30			0		0		0		14:30			2		11		13	
02:45			0		0		0		14:45			6	16	9	46	15	62
03:00			0		0		0		15:00			10		12		22	
03:15			0		0		0		15:15			9		5		14	
03:30			0		0		0		15:30			4		4		8	
03:45			0		0		0		15:45			1	24	7	28	8	52
04:00			0		0		0		16:00			4		13		17	
04:15			0		0		0		16:15			7		9		16	
04:30			0		0		0		16:30			7		8		15	
04:45			0		0		0		16:45			3	21	6	36	9	57
05:00			0		0		0		17:00			7		9		16	
05:15			0		0		0		17:15			5		14		19	
05:30			0		0		0		17:30			9		11		20	
05:45			0		0		0		17:45			9	30	21	55	30	85
06:00			0		0		0		18:00			13		11		24	
06:15			0		0		0		18:15			10		11		21	
06:30			0		0		0		18:30			5		4		9	
06:45			0		0		0		18:45			11	39	10	36	21	75
07:00			0		1		1		19:00			11		4		15	
07:15			2		1		3		19:15			11		0		11	
07:30			2		2		4		19:30			10		3		13	
07:45			4	8	0	4	4	12	19:45			7	39	0	7	7	46
08:00			4		3		7		20:00			4		1		5	
08:15			2		2		4		20:15			3		2		5	
08:30			7		0		7		20:30			8		4		12	
08:45			7	20	5	10	12	30	20:45			7	22	2	9	9	31
09:00			5		1		6		21:00			3		0		3	
09:15			13		6		19		21:15			6		1		7	
09:30			10		4		14		21:30			2		1		3	
09:45			11	39	1	12	12	51	21:45			1	12	1	3	2	15
10:00			7		0		7		22:00			3		2		5	
10:15			11		3		14		22:15			3		0		3	
10:30			9		6		15		22:30			0		1		1	
10:45			10	37	2	11	12	48	22:45			2	8	1	4	3	12
11:00			6		4		10		23:00			1		0		1	
11:15			6		3		9		23:15			6		1		7	
11:30			2		7		9		23:30			5		1		6	
11:45			8	22	7	21	15	43	23:45			2	14	0	2	2	16
TOTALS				132		59		191	TOTALS				251		304		555
SPLIT %				69.1%		30.9%		25.6%	SPLIT %				45.2%		54.8%		74.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	383	363	746

AM Peak Hour			09:15	11:45	11:45	PM Peak Hour			18:45	17:15	17:30
AM Pk Volume			41	39	53	PM Pk Volume			43	57	95
Pk Hr Factor			0.788	0.813	0.883	Pk Hr Factor			0.977	0.679	0.792
7 - 9 Volume	0	0	28	14	42	4 - 6 Volume	0	0	51	91	142
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			17:00	17:00	17:00
7 - 9 Pk Volume	0	0	20	10	30	4 - 6 Pk Volume	0	0	30	55	85
Pk Hr Factor	0.000	0.000	0.714	0.500	0.625	Pk Hr Factor	0.000	0.000	0.833	0.655	0.708

Prepared by NDS/ATD

VOLUME

E Solana Cir Bet. S Nardo Ave & Solana Cir

Day: Saturday
Date: 11/15/2014

City: Solana Beach
Project #: CA14_4223_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	372	502	874

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			3		1		4		12:00			2		16		18	
00:15			3		1		4		12:15			4		7		11	
00:30			0		0		0		12:30			4		8		12	
00:45			0	6	0	2	0	8	12:45			6	16	11	42	17	58
01:00			2		1		3		13:00			4		10		14	
01:15			1		0		1		13:15			5		12		17	
01:30			0		1		1		13:30			6		10		16	
01:45			2	5	0	2	2	7	13:45			4	19	10	42	14	61
02:00			1		0		1		14:00			6		10		16	
02:15			2		0		2		14:15			2		9		11	
02:30			0		0		0		14:30			5		5		10	
02:45			0	3	0		0	3	14:45			6	19	7	31	13	50
03:00			0		0		0		15:00			4		10		14	
03:15			0		0		0		15:15			3		10		13	
03:30			0		0		0		15:30			2		8		10	
03:45			0		0		0		15:45			2	11	19	47	21	58
04:00			0		0		0		16:00			3		9		12	
04:15			0		0		0		16:15			3		19		22	
04:30			1		0		1		16:30			6		13		19	
04:45			0	1	0		0	1	16:45			6	18	8	49	14	67
05:00			0		0		0		17:00			5		9		14	
05:15			0		0		0		17:15			2		11		13	
05:30			0		1		1		17:30			4		12		16	
05:45			0		0	1	0	1	17:45			4	15	18	50	22	65
06:00			0		0		0		18:00			4		15		19	
06:15			0		0		0		18:15			9		13		22	
06:30			0		0		0		18:30			21		15		36	
06:45			0		0		0		18:45			18	52	19	62	37	114
07:00			1		0		1		19:00			15		15		30	
07:15			0		0		0		19:15			5		14		19	
07:30			1		1		2		19:30			4		12		16	
07:45			0	2	0	1	0	3	19:45			11	35	7	48	18	83
08:00			3		3		6		20:00			7		4		11	
08:15			3		0		3		20:15			7		9		16	
08:30			3		1		4		20:30			6		0		6	
08:45			2	11	1	5	3	16	20:45			5	25	3	16	8	41
09:00			7		3		10		21:00			9		5		14	
09:15			6		1		7		21:15			15		0		15	
09:30			4		4		8		21:30			13		1		14	
09:45			7	24	2	10	9	34	21:45			5	42	1	7	6	49
10:00			11		3		14		22:00			5		1		6	
10:15			9		12		21		22:15			2		1		3	
10:30			3		14		17		22:30			4		1		5	
10:45			1	24	2	31	3	55	22:45			3	14	4	7	7	21
11:00			0		6		6		23:00			1		1		2	
11:15			4		14		18		23:15			10		2		12	
11:30			4		8		12		23:30			3		3		6	
11:45			6	14	14	42	20	56	23:45			2	16	1	7	3	23
TOTALS				90		94		184	TOTALS				282		408		690
SPLIT %				48.9%		51.1%		21.1%	SPLIT %				40.9%		59.1%		78.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	372	502	874

AM Peak Hour			09:30	11:15	11:15	PM Peak Hour			18:15	18:30	18:15
AM Pk Volume			31	52	68	PM Pk Volume			63	63	125
Pk Hr Factor			0.705	0.813	0.850	Pk Hr Factor			0.750	0.829	0.845
7 - 9 Volume	0	0	13	6	19	4 - 6 Volume	0	0	33	99	132
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:15	17:00	16:15
7 - 9 Pk Volume	0	0	11	5	16	4 - 6 Pk Volume	0	0	20	50	69
Pk Hr Factor	0.000	0.000	0.917	0.417	0.667	Pk Hr Factor	0.000	0.000	0.833	0.694	0.784

Prepared by NDS/ATD

VOLUME

E Solana Cir Bet. S Nardo Ave & Solana Cir

Day: Sunday
Date: 11/16/2014

City: Solana Beach
Project #: CA14_4223_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	307	387	694

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			3		0		3		12:00			3		4		7	
00:15			0		0		0		12:15			3		6		9	
00:30			3		0		3		12:30			3		6		9	
00:45			3	9	0		3	9	12:45			7	16	6	22	13	38
01:00			1		0		1		13:00			6		4		10	
01:15			2		0		2		13:15			2		7		9	
01:30			1		0		1		13:30			11		7		18	
01:45			0	4	0		0	4	13:45			6	25	11	29	17	54
02:00			0		0		0		14:00			9		8		17	
02:15			0		0		0		14:15			7		5		12	
02:30			0		0		0		14:30			9		6		15	
02:45			0		1	1	1	1	14:45			5	30	3	22	8	52
03:00			0		0		0		15:00			9		10		19	
03:15			1		0		1		15:15			1		6		7	
03:30			0		0		0		15:30			2		6		8	
03:45			0	1	0		0	1	15:45			1	13	15	37	16	50
04:00			0		1		1		16:00			0		9		9	
04:15			0		0		0		16:15			5		14		19	
04:30			0		0		0		16:30			6		5		11	
04:45			0		0	1	0	1	16:45			8	19	9	37	17	56
05:00			0		0		0		17:00			2		8		10	
05:15			0		0		0		17:15			5		6		11	
05:30			0		0		0		17:30			4		6		10	
05:45			0		0		0		17:45			3	14	10	30	13	44
06:00			0		0		0		18:00			6		13		19	
06:15			1		0		1		18:15			6		14		20	
06:30			0		0		0		18:30			15		11		26	
06:45			0	1	1	1	1	2	18:45			14	41	15	53	29	94
07:00			2		0		2		19:00			7		9		16	
07:15			0		0		0		19:15			6		12		18	
07:30			0		0		0		19:30			6		10		16	
07:45			1	3	0		1	3	19:45			4	23	5	36	9	59
08:00			4		3		7		20:00			9		2		11	
08:15			3		0		3		20:15			3		3		6	
08:30			3		0		3		20:30			6		6		12	
08:45			4	14	2	5	6	19	20:45			6	24	6	17	12	41
09:00			5		6		11		21:00			9		5		14	
09:15			2		3		5		21:15			5		9		14	
09:30			3		3		6		21:30			3		5		8	
09:45			3	13	3	15	6	28	21:45			5	22	5	24	10	46
10:00			2		7		9		22:00			3		4		7	
10:15			4		7		11		22:15			2		2		4	
10:30			4		4		8		22:30			4		1		5	
10:45			2	12	4	22	6	34	22:45			0	9	1	8	1	17
11:00			0		8		8		23:00			2		0		2	
11:15			1		6		7		23:15			2		1		3	
11:30			3		11		14		23:30			2		0		2	
11:45			4	8	1	26	5	34	23:45			0	6	0	1	0	7
TOTALS				65		71		136	TOTALS				242		316		558
SPLIT %				47.8%		52.2%		19.6%	SPLIT %				43.4%		56.6%		80.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	307	387	694

AM Peak Hour			08:15	10:45	10:45	PM Peak Hour			18:15	18:00	18:00
AM Pk Volume			15	29	35	PM Pk Volume			42	53	94
Pk Hr Factor			0.750	0.659	0.625	Pk Hr Factor			0.700	0.883	0.810
7 - 9 Volume	0	0	17	5	22	4 - 6 Volume	0	0	33	67	100
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:15	16:00	16:15
7 - 9 Pk Volume	0	0	14	5	19	4 - 6 Pk Volume	0	0	21	37	57
Pk Hr Factor	0.000	0.000	0.875	0.417	0.679	Pk Hr Factor	0.000	0.000	0.656	0.661	0.750

Prepared by NDS/ATD

Project #: CA14_4223_001 **City:** Solana Beach

Location: E Solana Cir Bet. S Nardo Ave & Solana Cir **Date:** 11/10/2014

Prepared by NDS/ATD

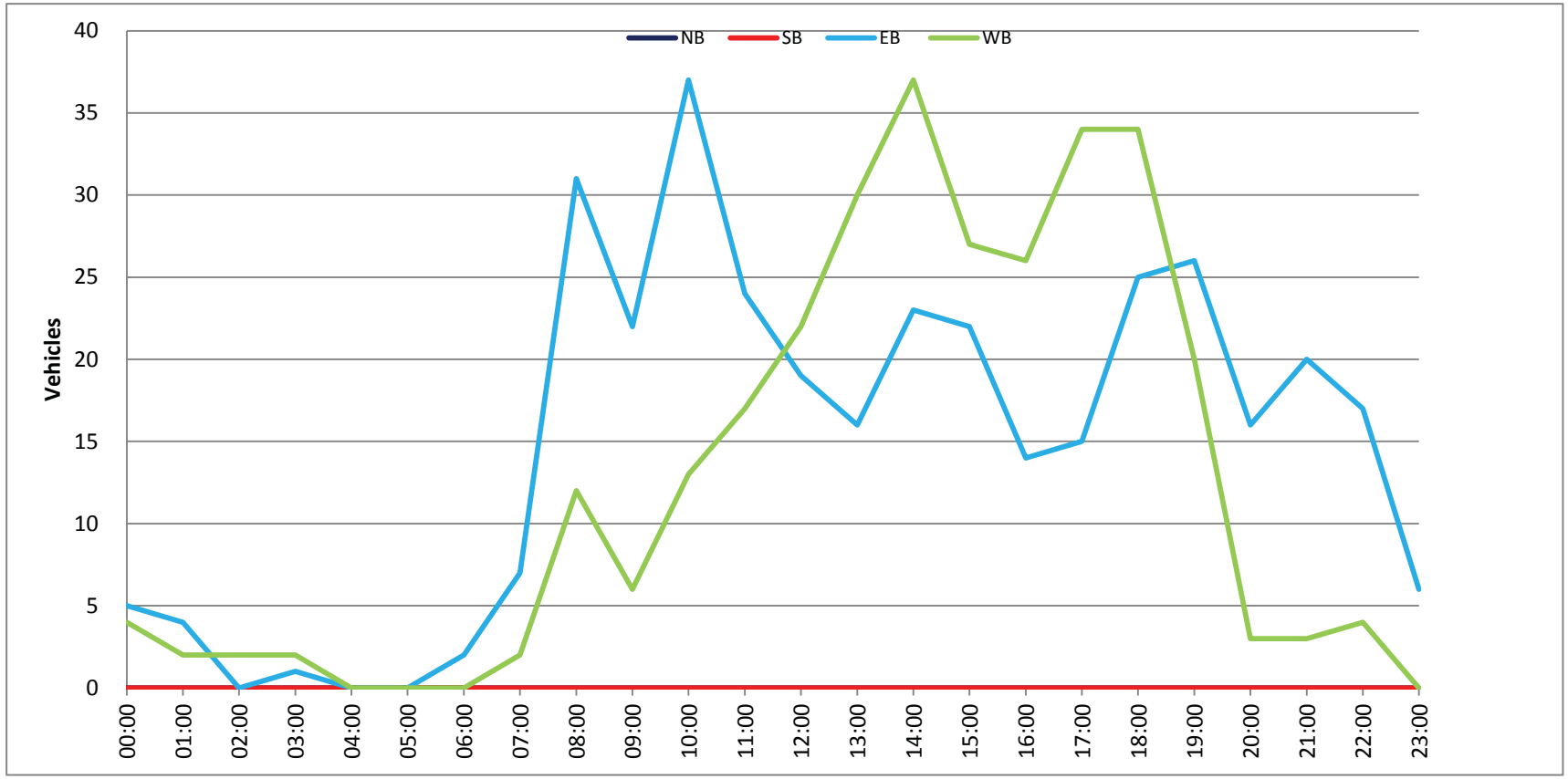
Project #: CA14_4223_001 **City:** Solana Beach

Location: E Solana Cir Bet. S Nardo Ave & Solana Cir **Date:** 11/11/2014

Prepared by NDS/ATD

Project #: CA14_4223_001 **City:** Solana Beach

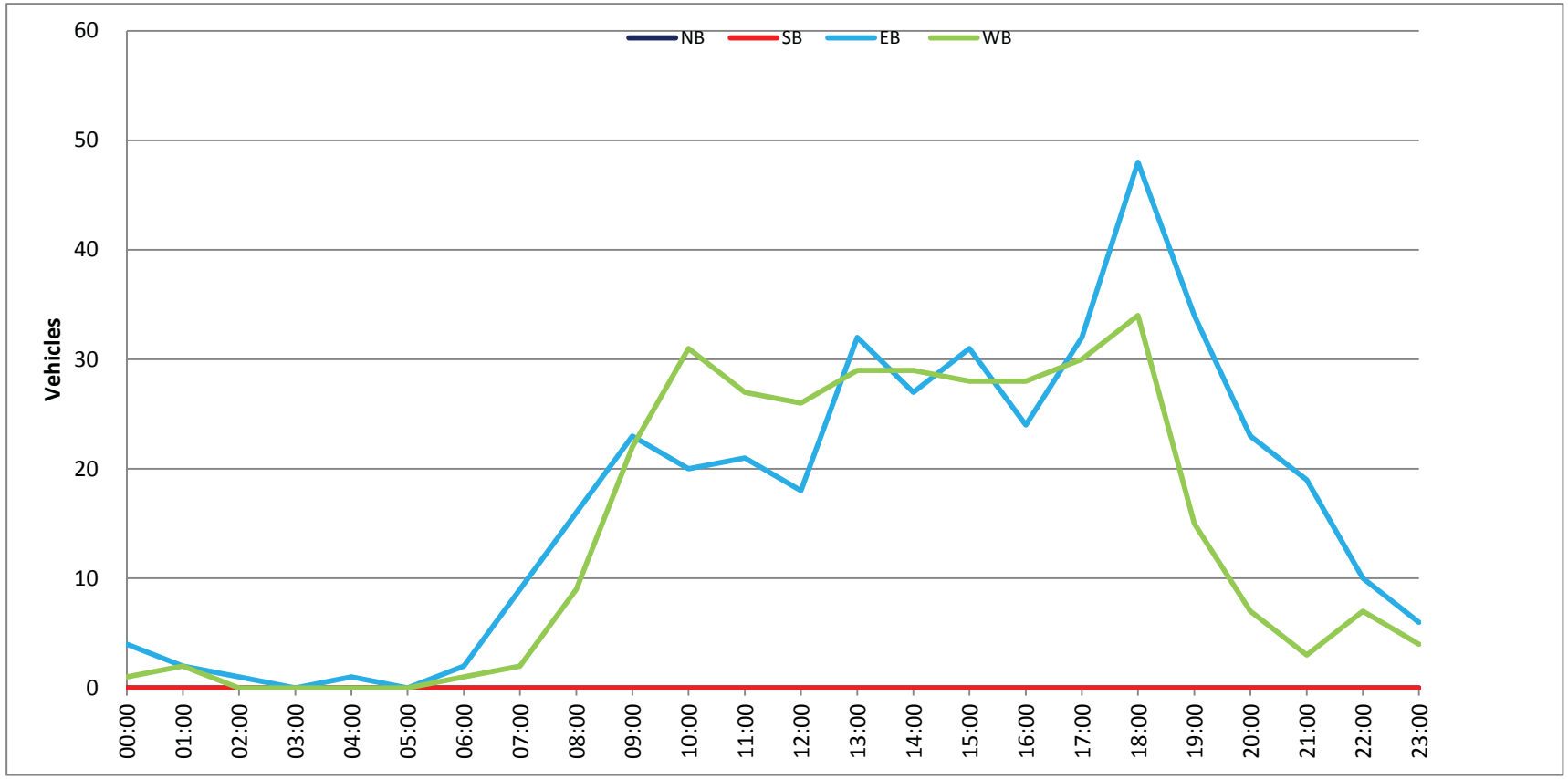
Location: E Solana Cir Bet. S Nardo Ave & Solana Cir **Date:** 11/12/2014



Prepared by NDS/ATD

Project #: CA14_4223_001 **City:** Solana Beach

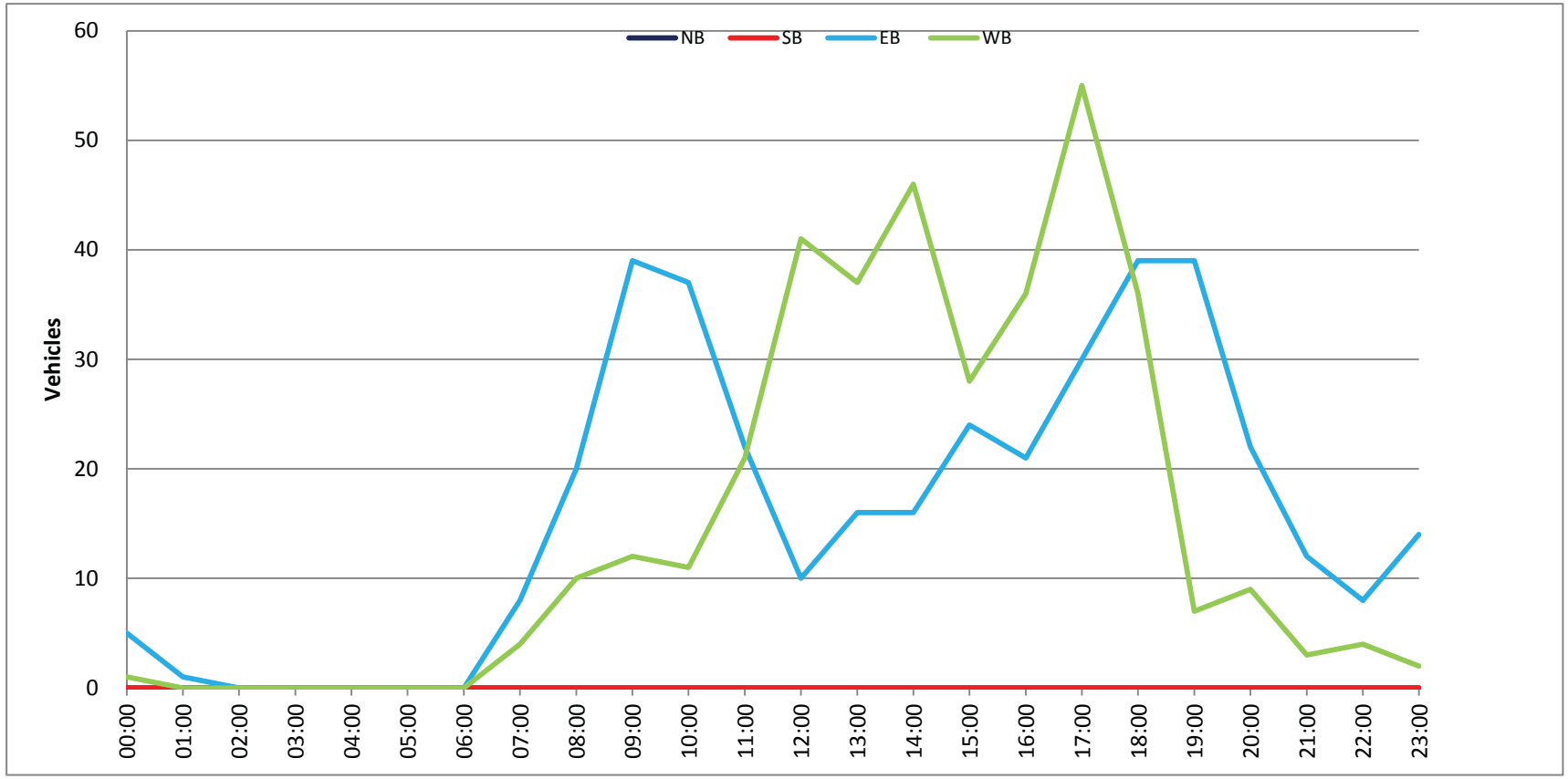
Location: E Solana Cir Bet. S Nardo Ave & Solana Cir **Date:** 11/13/2014



Prepared by NDS/ATD

Project #: CA14_4223_001 **City:** Solana Beach

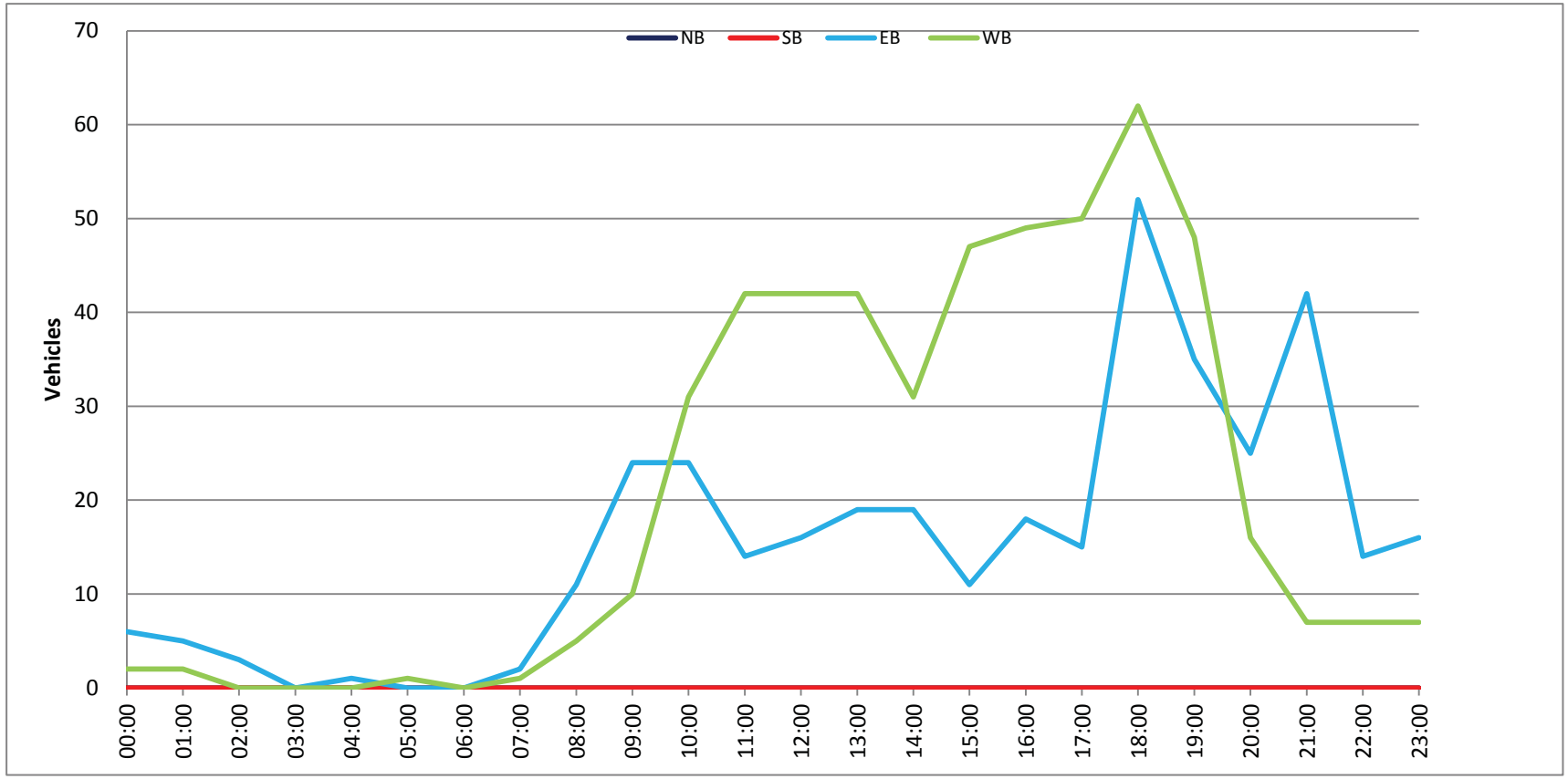
Location: E Solana Cir Bet. S Nardo Ave & Solana Cir **Date:** 11/14/2014



Prepared by NDS/ATD

Project #: CA14_4223_001 **City:** Solana Beach

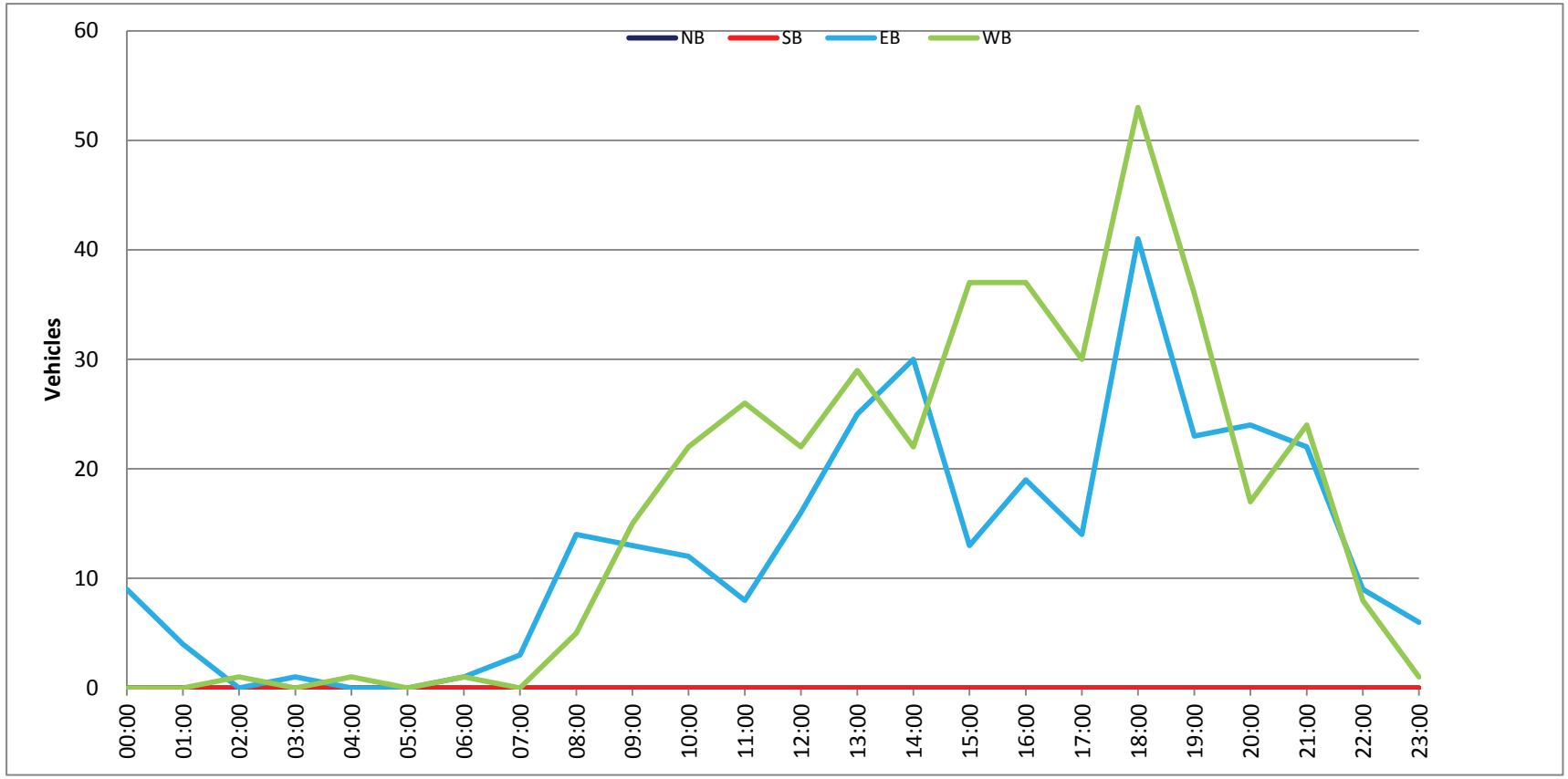
Location: E Solana Cir Bet. S Nardo Ave & Solana Cir **Date:** 11/15/2014



Prepared by NDS/ATD

Project #: CA14_4223_001 **City:** Solana Beach

Location: E Solana Cir Bet. S Nardo Ave & Solana Cir **Date:** 11/16/2014



Prepared by NDS/ATD

VOLUME

Nardo Ave Bet. Corto St & Lirio St

Day: Monday
Date: 11/10/2014

City: Solana Beach
Project #: CA14_4223_002

DAILY TOTALS	NB	SB	EB	WB	Total
	929	1,004	0	0	1,933

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	1		0						1		12:00	17		17						34	
00:15	2		1						3		12:15	21		11						32	
00:30	0		1						1		12:30	20		18						38	
00:45	1	4	0	2					1	6	12:45	11	69	22	68					33	137
01:00	0		0						0		13:00	13		16						29	
01:15	1		1						2		13:15	12		14						26	
01:30	0		0						0		13:30	12		12						24	
01:45	0	1	1	2					1	3	13:45	10	47	17	59					27	106
02:00	0		0						0		14:00	15		17						32	
02:15	1		0						1		14:15	19		16						35	
02:30	0		0						0		14:30	22		34						56	
02:45	0	1	0						0	1	14:45	40	96	27	94					67	190
03:00	0		0						0		15:00	22		18						40	
03:15	0		0						0		15:15	19		13						32	
03:30	0		0						0		15:30	22		17						39	
03:45	0		0						0		15:45	22	85	22	70					44	155
04:00	0		0						0		16:00	12		18						30	
04:15	1		1						2		16:15	20		16						36	
04:30	0		0						0		16:30	24		20						44	
04:45	0	1	2	3					2	4	16:45	22	78	24	78					46	156
05:00	0		1						1		17:00	20		19						39	
05:15	4		3						7		17:15	16		17						33	
05:30	3		2						5		17:30	16		23						39	
05:45	1	8	2	8					3	16	17:45	10	62	24	83					34	145
06:00	5		3						8		18:00	9		13						22	
06:15	9		4						13		18:15	15		16						31	
06:30	6		13						19		18:30	9		11						20	
06:45	8	28	8	28					16	56	18:45	8	41	10	50					18	91
07:00	14		18						32		19:00	10		8						18	
07:15	13		42						55		19:15	9		12						21	
07:30	19		49						68		19:30	6		6						12	
07:45	20	66	22	131					42	197	19:45	8	33	4	30					12	63
08:00	11		18						29		20:00	4		6						10	
08:15	13		18						31		20:15	4		5						9	
08:30	22		16						38		20:30	3		6						9	
08:45	28	74	16	68					44	142	20:45	10	21	5	22					15	43
09:00	21		15						36		21:00	2		4						6	
09:15	16		5						21		21:15	3		4						7	
09:30	7		7						14		21:30	1		9						10	
09:45	12	56	19	46					31	102	21:45	3	9	3	20					6	29
10:00	22		14						36		22:00	3		3						6	
10:15	10		20						30		22:15	3		3						6	
10:30	17		14						31		22:30	1		3						4	
10:45	17	66	8	56					25	122	22:45	2	9	4	13					6	22
11:00	17		13						30		23:00	0		2						2	
11:15	13		12						25		23:15	1		2						3	
11:30	21		20						41		23:30	1		1						2	
11:45	20	71	21	66					41	137	23:45	1	3	2	7					3	10
TOTALS		376		410						786	TOTALS		553		594						1147
SPLIT %		47.8%		52.2%						40.7%	SPLIT %		48.2%		51.8%						59.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	929	1,004	0	0	1,933

AM Peak Hour	08:30	07:00			07:00	PM Peak Hour	14:15	14:15			14:15
AM Pk Volume	87	131			197	PM Pk Volume	103	95			198
Pk Hr Factor	0.777	0.668			0.724	Pk Hr Factor	0.644	0.699			0.739
7 - 9 Volume	140	199	0	0	339	4 - 6 Volume	140	161	0	0	301
7 - 9 Peak Hour	08:00	07:00			07:00	4 - 6 Peak Hour	16:15	16:45			16:15
7 - 9 Pk Volume	74	131	0	0	197	4 - 6 Pk Volume	86	83	0	0	165
Pk Hr Factor	0.661	0.668	0.000	0.000	0.724	Pk Hr Factor	0.896	0.865	0.000	0.000	0.897

Prepared by NDS/ATD

VOLUME

Nardo Ave Bet. Corto St & Lirio St

Day: Tuesday
Date: 11/11/2014

City: Solana Beach
Project #: CA14_4223_002

DAILY TOTALS	NB	SB	EB	WB	Total
	930	1,026	0	0	1,956

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	1		1						2		12:00	16		18						34	
00:15	0		2						2		12:15	15		12						27	
00:30	1		0						1		12:30	9		21						30	
00:45	0	2	0	3					0	5	12:45	21	61	14	65					35	126
01:00	0		1						1		13:00	21		20						41	
01:15	0		0						0		13:15	11		14						25	
01:30	0		1						1		13:30	15		20						35	
01:45	0		0	2					0	2	13:45	20	67	13	67					33	134
02:00	0		0						0		14:00	10		22						32	
02:15	1		0						1		14:15	15		25						40	
02:30	0		1						1		14:30	25		33						58	
02:45	0	1	0	1					0	2	14:45	35	85	22	102					57	187
03:00	0		0						0		15:00	18		12						30	
03:15	1		1						2		15:15	22		22						44	
03:30	0		0						0		15:30	24		26						50	
03:45	0	1	0	1					0	2	15:45	26	90	27	87					53	177
04:00	0		0						0		16:00	17		27						44	
04:15	0		1						1		16:15	22		18						40	
04:30	0		1						1		16:30	15		18						33	
04:45	0		0	2					0	2	16:45	20	74	21	84					41	158
05:00	0		0						0		17:00	14		12						26	
05:15	1		3						4		17:15	16		14						30	
05:30	0		2						2		17:30	15		20						35	
05:45	0	1	2	7					2	8	17:45	16	61	14	60					30	121
06:00	4		5						9		18:00	11		16						27	
06:15	5		4						9		18:15	17		20						37	
06:30	7		8						15		18:30	9		14						23	
06:45	8	24	12	29					20	53	18:45	7	44	12	62					19	106
07:00	9		14						23		19:00	7		11						18	
07:15	17		32						49		19:15	10		10						20	
07:30	23		37						60		19:30	9		7						16	
07:45	19	68	37	120					56	188	19:45	5	31	4	32					9	63
08:00	18		11						29		20:00	5		5						10	
08:15	27		14						41		20:15	5		11						16	
08:30	23		20						43		20:30	2		4						6	
08:45	14	82	19	64					33	146	20:45	8	20	4	24					12	44
09:00	13		17						30		21:00	9		7						16	
09:15	20		11						31		21:15	3		4						7	
09:30	20		13						33		21:30	3		7						10	
09:45	12	65	14	55					26	120	21:45	4	19	2	20					6	39
10:00	15		12						27		22:00	1		7						8	
10:15	21		13						34		22:15	2		2						4	
10:30	17		16						33		22:30	3		3						6	
10:45	16	69	17	58					33	127	22:45	2	8	2	14					4	22
11:00	10		9						19		23:00	1		3						4	
11:15	17		18						35		23:15	0		1						1	
11:30	11		17						28		23:30	2		0						2	
11:45	16	54	19	63					35	117	23:45	0	3	0	4					0	7
TOTALS		367		405						772	TOTALS		563		621						1184
SPLIT %		47.5%		52.5%						39.5%	SPLIT %		47.6%		52.4%						60.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	930	1,026	0	0	1,956

AM Peak Hour	07:30	07:00			07:15	PM Peak Hour	14:30	14:00			15:15
AM Pk Volume	87	120			194	PM Pk Volume	100	102			191
Pk Hr Factor	0.806	0.811			0.808	Pk Hr Factor	0.714	0.773			0.901
7 - 9 Volume	150	184	0	0	334	4 - 6 Volume	135	144	0	0	279
7 - 9 Peak Hour	07:30	07:00			07:15	4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	87	120	0	0	194	4 - 6 Pk Volume	74	84	0	0	158
Pk Hr Factor	0.806	0.811	0.000	0.000	0.808	Pk Hr Factor	0.841	0.778	0.000	0.000	0.898

Prepared by NDS/ATD

VOLUME

Nardo Ave Bet. Corto St & Lirio St

Day: Wednesday
Date: 11/12/2014

City: Solana Beach
Project #: CA14_4223_002

DAILY TOTALS	NB	SB	EB	WB	Total
	974	1,165	0	0	2,139

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		1						1		12:00	34		25						59	
00:15	0		1						1		12:15	23		26						49	
00:30	0		1						1		12:30	12		20						32	
00:45	1	1	0	3					1	4	12:45	17	86	21	92					38	178
01:00	0		0						0		13:00	14		18						32	
01:15	0		1						1		13:15	17		14						31	
01:30	0		0						0		13:30	14		22						36	
01:45	0		0	1					0	1	13:45	22	67	27	81					49	148
02:00	0		0						0		14:00	18		28						46	
02:15	0		0						0		14:15	21		17						38	
02:30	0		1						1		14:30	20		16						36	
02:45	0		0	1					0	1	14:45	15	74	25	86					40	160
03:00	1		0						1		15:00	13		33						46	
03:15	0		0						0		15:15	27		25						52	
03:30	0		0						0		15:30	25		24						49	
03:45	0	1	0						0	1	15:45	15	80	23	105					38	185
04:00	0		2						2		16:00	21		17						38	
04:15	1		1						2		16:15	13		22						35	
04:30	0		0						0		16:30	26		19						45	
04:45	0	1	0	3					0	4	16:45	25	85	23	81					48	166
05:00	2		2						4		17:00	11		30						41	
05:15	0		1						1		17:15	12		22						34	
05:30	0		1						1		17:30	20		18						38	
05:45	0	2	2	6					2	8	17:45	13	56	10	80					23	136
06:00	4		3						7		18:00	12		14						26	
06:15	8		10						18		18:15	18		11						29	
06:30	4		15						19		18:30	12		7						19	
06:45	18	34	17	45					35	79	18:45	14	56	5	37					19	93
07:00	14		15						29		19:00	9		7						16	
07:15	29		38						67		19:15	6		4						10	
07:30	18		41						59		19:30	6		8						14	
07:45	26	87	49	143					75	230	19:45	7	28	10	29					17	57
08:00	22		21						43		20:00	4		8						12	
08:15	32		17						49		20:15	4		5						9	
08:30	23		25						48		20:30	3		9						12	
08:45	19	96	25	88					44	184	20:45	6	17	5	27					11	44
09:00	12		14						26		21:00	5		5						10	
09:15	18		22						40		21:15	5		9						14	
09:30	21		14						35		21:30	1		6						7	
09:45	10	61	17	67					27	128	21:45	2	13	4	24					6	37
10:00	14		14						28		22:00	5		6						11	
10:15	8		12						20		22:15	2		1						3	
10:30	14		11						25		22:30	0		1						1	
10:45	9	45	20	57					29	102	22:45	1	8	1	9					2	17
11:00	16		11						27		23:00	4		3						7	
11:15	17		13						30		23:15	1		1						2	
11:30	14		29						43		23:30	0		3						3	
11:45	24	71	40	93					64	164	23:45	0	5	0	7					0	12
TOTALS		399		507						906	TOTALS		575		658						1233
SPLIT %		44.0%		56.0%						42.4%	SPLIT %		46.6%		53.4%						57.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	974	1,165	0	0	2,139

AM Peak Hour	07:45	07:15			07:15	PM Peak Hour	15:15	14:45			14:45
AM Pk Volume	103	149			244	PM Pk Volume	88	107			187
Pk Hr Factor	0.805	0.760			0.813	Pk Hr Factor	0.815	0.811			0.899
7 - 9 Volume	183	231	0	0	414	4 - 6 Volume	141	161	0	0	302
7 - 9 Peak Hour	07:45	07:15			07:15	4 - 6 Peak Hour	16:00	16:15			16:15
7 - 9 Pk Volume	103	149	0	0	244	4 - 6 Pk Volume	85	94	0	0	169
Pk Hr Factor	0.805	0.760	0.000	0.000	0.813	Pk Hr Factor	0.817	0.783	0.000	0.000	0.880

Prepared by NDS/ATD

VOLUME

Nardo Ave Bet. Corto St & Lirio St

Day: Thursday
Date: 11/13/2014

City: Solana Beach
Project #: CA14_4223_002

DAILY TOTALS	NB	SB	EB	WB	Total
	1,071	1,187	0	0	2,258

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		1						1		12:00	28		26						54	
00:15	0		0						0		12:15	15		23						38	
00:30	0		0						0		12:30	12		27						39	
00:45	0		1	2					1	2	12:45	19	74	17	93					36	167
01:00	0		1						1		13:00	14		19						33	
01:15	0		0						0		13:15	11		16						27	
01:30	0		0						0		13:30	20		17						37	
01:45	0		0	1					0	1	13:45	21	66	15	67					36	133
02:00	0		0						0		14:00	17		17						34	
02:15	0		1						1		14:15	18		23						41	
02:30	0		1						1		14:30	25		17						42	
02:45	0		0	2					0	2	14:45	21	81	18	75					39	156
03:00	0		0						0		15:00	24		37						61	
03:15	0		0						0		15:15	25		26						51	
03:30	0		0						0		15:30	24		24						48	
03:45	0		0						0		15:45	23	96	25	112					48	208
04:00	0		0						0		16:00	22		22						44	
04:15	1		1						2		16:15	28		25						53	
04:30	0		0						0		16:30	35		33						68	
04:45	0	1	0	1					0	2	16:45	26	111	27	107					53	218
05:00	1		0						1		17:00	21		32						53	
05:15	1		0						1		17:15	17		20						37	
05:30	2		1						3		17:30	22		18						40	
05:45	2	6	2	3					4	9	17:45	18	78	16	86					34	164
06:00	5		1						6		18:00	18		11						29	
06:15	6		7						13		18:15	13		16						29	
06:30	5		11						16		18:30	12		21						33	
06:45	15	31	23	42					38	73	18:45	18	61	12	60					30	121
07:00	12		18						30		19:00	12		10						22	
07:15	22		33						55		19:15	10		6						16	
07:30	20		55						75		19:30	5		12						17	
07:45	27	81	40	146					67	227	19:45	9	36	13	41					22	77
08:00	22		22						44		20:00	10		12						22	
08:15	29		10						39		20:15	9		8						17	
08:30	22		29						51		20:30	16		7						23	
08:45	17	90	21	82					38	172	20:45	3	38	5	32					8	70
09:00	20		19						39		21:00	8		6						14	
09:15	14		12						26		21:15	9		11						20	
09:30	11		12						23		21:30	4		6						10	
09:45	10	55	18	61					28	116	21:45	5	26	10	33					15	59
10:00	14		7						21		22:00	4		5						9	
10:15	14		14						28		22:15	7		1						8	
10:30	11		19						30		22:30	1		4						5	
10:45	11	50	12	52					23	102	22:45	3	15	4	14					7	29
11:00	19		9						28		23:00	4		3						7	
11:15	16		13						29		23:15	1		1						2	
11:30	16		27						43		23:30	0		1						1	
11:45	16	67	20	69					36	136	23:45	3	8	1	6					4	14
TOTALS		381		461						842	TOTALS		690		726						1416
SPLIT %		45.2%		54.8%						37.3%	SPLIT %		48.7%		51.3%						62.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	1,071	1,187	0	0	2,258

AM Peak Hour	07:45	07:15			07:15	PM Peak Hour	16:00	16:15			16:15
AM Pk Volume	100	150			241	PM Pk Volume	111	117			227
Pk Hr Factor	0.862	0.682			0.803	Pk Hr Factor	0.793	0.886			0.835
7 - 9 Volume	171	228	0	0	399	4 - 6 Volume	189	193	0	0	382
7 - 9 Peak Hour	07:45	07:15			07:15	4 - 6 Peak Hour	16:00	16:15			16:15
7 - 9 Pk Volume	100	150	0	0	241	4 - 6 Pk Volume	111	117	0	0	227
Pk Hr Factor	0.862	0.682	0.000	0.000	0.803	Pk Hr Factor	0.793	0.886	0.000	0.000	0.835

Prepared by NDS/ATD

VOLUME

Nardo Ave Bet. Corto St & Lirio St

Day: Friday
Date: 11/14/2014

City: Solana Beach
Project #: CA14_4223_002

DAILY TOTALS	NB	SB	EB	WB	Total
	1,085	1,213	0	0	2,298

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	1		1						2		12:00	29		23						52	
00:15	0		1						1		12:15	20		17						37	
00:30	0		0						0		12:30	18		14						32	
00:45	0	1	1	3					1	4	12:45	15	82	23	77					38	159
01:00	0		0						0		13:00	16		23						39	
01:15	0		0						0		13:15	21		17						38	
01:30	0		0						0		13:30	20		14						34	
01:45	0		0						0		13:45	19	76	17	71					36	147
02:00	0		0						0		14:00	29		25						54	
02:15	0		0						0		14:15	12		23						35	
02:30	0		0						0		14:30	19		19						38	
02:45	0		0						0		14:45	35	95	23	90					58	185
03:00	0		0						0		15:00	15		37						52	
03:15	0		0						0		15:15	22		25						47	
03:30	0		0						0		15:30	24		25						49	
03:45	0		0						0		15:45	18	79	19	106					37	185
04:00	1		0						1		16:00	31		25						56	
04:15	0		0						0		16:15	45		19						64	
04:30	0		0						0		16:30	29		17						46	
04:45	0	1	0						0	1	16:45	24	129	26	87					50	216
05:00	0		0						0		17:00	20		28						48	
05:15	0		1						1		17:15	17		24						41	
05:30	1		1						2		17:30	18		23						41	
05:45	0	1	3	5					3	6	17:45	14	69	21	96					35	165
06:00	3		4						7		18:00	18		15						33	
06:15	7		5						12		18:15	10		15						25	
06:30	11		14						25		18:30	9		6						15	
06:45	16	37	19	42					35	79	18:45	10	47	13	49					23	96
07:00	13		27						40		19:00	7		10						17	
07:15	23		41						64		19:15	12		8						20	
07:30	28		47						75		19:30	7		6						13	
07:45	25	89	40	155					65	244	19:45	7	33	4	28					11	61
08:00	20		17						37		20:00	6		5						11	
08:15	20		18						38		20:15	11		8						19	
08:30	28		29						57		20:30	7		7						14	
08:45	18	86	25	89					43	175	20:45	4	28	11	31					15	59
09:00	19		19						38		21:00	1		7						8	
09:15	10		16						26		21:15	7		7						14	
09:30	17		8						25		21:30	5		8						13	
09:45	9	55	12	55					21	110	21:45	5	18	5	27					10	45
10:00	23		22						45		22:00	5		6						11	
10:15	14		16						30		22:15	4		4						8	
10:30	10		20						30		22:30	3		4						7	
10:45	10	57	26	84					36	141	22:45	3	15	3	17					6	32
11:00	14		16						30		23:00	2		6						8	
11:15	21		15						36		23:15	3		1						4	
11:30	21		27						48		23:30	0		4						4	
11:45	23	79	30	88					53	167	23:45	3	8	2	13					5	21
TOTALS		406		521						927	TOTALS		679		692						1371
SPLIT %		43.8%		56.2%						40.3%	SPLIT %		49.5%		50.5%						59.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	1,085	1,213	0	0	2,298

AM Peak Hour	07:15	07:00			07:00	PM Peak Hour	16:00	14:45			16:00
AM Pk Volume	96	155			244	PM Pk Volume	129	110			216
Pk Hr Factor	0.857	0.824			0.813	Pk Hr Factor	0.717	0.743			0.844
7 - 9 Volume	175	244	0	0	419	4 - 6 Volume	198	183	0	0	381
7 - 9 Peak Hour	07:15	07:00			07:00	4 - 6 Peak Hour	16:00	16:45			16:00
7 - 9 Pk Volume	96	155	0	0	244	4 - 6 Pk Volume	129	101	0	0	216
Pk Hr Factor	0.857	0.824	0.000	0.000	0.813	Pk Hr Factor	0.717	0.902	0.000	0.000	0.844

Prepared by NDS/ATD

VOLUME

Nardo Ave Bet. Corto St & Lirio St

Day: Saturday
Date: 11/15/2014

City: Solana Beach
Project #: CA14_4223_002

DAILY TOTALS	NB	SB	EB	WB	Total
	801	956	0	0	1,757

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	2		1						3		12:00	12		25						37	
00:15	1		3						4		12:15	8		13						21	
00:30	1		0						1		12:30	15		11						26	
00:45	1	5	1	5					2	10	12:45	19	54	16	65					35	119
01:00	0		0						0		13:00	11		16						27	
01:15	0		1						1		13:15	15		25						40	
01:30	1		1						2		13:30	16		9						25	
01:45	1	2	2	4					3	6	13:45	15	57	17	67					32	124
02:00	0		0						0		14:00	10		8						18	
02:15	0		0						0		14:15	14		17						31	
02:30	0		1						1		14:30	11		19						30	
02:45	0		0	1					0	1	14:45	12	47	18	62					30	109
03:00	0		0						0		15:00	11		17						28	
03:15	1		0						1		15:15	21		14						35	
03:30	0		0						0		15:30	10		17						27	
03:45	0	1	0						0	1	15:45	16	58	33	81					49	139
04:00	0		0						0		16:00	12		34						46	
04:15	0		0						0		16:15	14		29						43	
04:30	0		0						0		16:30	13		49						62	
04:45	0		0						0		16:45	20	59	33	145					53	204
05:00	0		0						0		17:00	16		29						45	
05:15	0		0						0		17:15	21		25						46	
05:30	1		3						4		17:30	15		16						31	
05:45	3	4	1	4					4	8	17:45	33	85	17	87					50	172
06:00	3		3						6		18:00	11		17						28	
06:15	1		0						1		18:15	10		12						22	
06:30	8		2						10		18:30	8		11						19	
06:45	5	17	2	7					7	24	18:45	8	37	7	47					15	84
07:00	5		3						8		19:00	5		8						13	
07:15	13		9						22		19:15	11		9						20	
07:30	8		13						21		19:30	17		7						24	
07:45	9	35	11	36					20	71	19:45	8	41	2	26					10	67
08:00	8		11						19		20:00	4		4						8	
08:15	20		14						34		20:15	5		5						10	
08:30	25		17						42		20:30	4		5						9	
08:45	10	63	14	56					24	119	20:45	5	18	5	19					10	37
09:00	14		11						25		21:00	5		5						10	
09:15	18		10						28		21:15	5		9						14	
09:30	15		15						30		21:30	7		7						14	
09:45	11	58	10	46					21	104	21:45	0	17	3	24					3	41
10:00	18		18						36		22:00	6		4						10	
10:15	10		10						20		22:15	3		6						9	
10:30	17		12						29		22:30	9		12						21	
10:45	11	56	21	61					32	117	22:45	7	25	4	26					11	51
11:00	6		11						17		23:00	5		6						11	
11:15	18		17						35		23:15	4		0						4	
11:30	15		20						35		23:30	2		3						5	
11:45	11	50	27	75					38	125	23:45	1	12	3	12					4	24
TOTALS		291		295						586	TOTALS		510		661						1171
SPLIT %		49.7%		50.3%						33.4%	SPLIT %		43.6%		56.4%						66.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	801	956	0	0	1,757

AM Peak Hour	08:15	11:15			11:15	PM Peak Hour	17:00	15:45			16:30
AM Pk Volume	69	89			145	PM Pk Volume	85	145			206
Pk Hr Factor	0.690	0.824			0.954	Pk Hr Factor	0.644	0.740			0.831
7 - 9 Volume	98	92	0	0	190	4 - 6 Volume	144	232	0	0	376
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	17:00	16:00			16:30
7 - 9 Pk Volume	63	56	0	0	119	4 - 6 Pk Volume	85	145	0	0	206
Pk Hr Factor	0.630	0.824	0.000	0.000	0.708	Pk Hr Factor	0.644	0.740	0.000	0.000	0.831

Prepared by NDS/ATD

VOLUME

Nardo Ave Bet. Corto St & Lirio St

Day: Sunday
Date: 11/16/2014

City: Solana Beach
Project #: CA14_4223_002

DAILY TOTALS	NB	SB	EB	WB	Total
	879	982	0	0	1,861

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	1		1						2		12:00	12		16						28	
00:15	6		0						6		12:15	39		15						54	
00:30	1		2						3		12:30	25		23						48	
00:45	0	8	0	3					0	11	12:45	18	94	18	72					36	166
01:00	1		2						3		13:00	22		14						36	
01:15	0		1						1		13:15	12		17						29	
01:30	0		2						2		13:30	9		22						31	
01:45	0	1	1	6					1	7	13:45	11	54	12	65					23	119
02:00	1		0						1		14:00	10		12						22	
02:15	0		2						2		14:15	12		10						22	
02:30	0		1						1		14:30	8		20						28	
02:45	0	1	0	3					0	4	14:45	11	41	10	52					21	93
03:00	1		1						2		15:00	12		15						27	
03:15	0		0						0		15:15	17		14						31	
03:30	1		0						1		15:30	13		15						28	
03:45	0	2	2	3					2	5	15:45	16	58	13	57					29	115
04:00	0		0						0		16:00	14		13						27	
04:15	0		0						0		16:15	17		25						42	
04:30	1		0						1		16:30	21		11						32	
04:45	2	3	1	1					3	4	16:45	26	78	16	65					42	143
05:00	1		0						1		17:00	25		19						44	
05:15	2		1						3		17:15	9		8						17	
05:30	0		0						0		17:30	17		32						49	
05:45	0	3	0	1					0	4	17:45	14	65	36	95					50	160
06:00	1		0						1		18:00	14		10						24	
06:15	5		2						7		18:15	11		14						25	
06:30	5		5						10		18:30	4		15						19	
06:45	10	21	12	19					22	40	18:45	17	46	7	46					24	92
07:00	4		20						24		19:00	27		11						38	
07:15	6		27						33		19:15	4		5						9	
07:30	4		8						12		19:30	1		2						3	
07:45	13	27	10	65					23	92	19:45	5	37	3	21					8	58
08:00	13		8						21		20:00	4		4						8	
08:15	33		12						45		20:15	1		10						11	
08:30	9		29						38		20:30	4		2						6	
08:45	16	71	48	97					64	168	20:45	5	14	9	25					14	39
09:00	13		21						34		21:00	9		5						14	
09:15	6		10						16		21:15	3		2						5	
09:30	8		13						21		21:30	3		4						7	
09:45	29	56	24	68					53	124	21:45	2	17	2	13					4	30
10:00	48		23						71		22:00	1		2						3	
10:15	24		12						36		22:15	1		3						4	
10:30	13		15						28		22:30	0		0						0	
10:45	12	97	22	72					34	169	22:45	2	4	1	6					3	10
11:00	25		33						58		23:00	2		3						5	
11:15	21		40						61		23:15	0		1						1	
11:30	16		22						38		23:30	0		1						1	
11:45	16	78	26	121					42	199	23:45	1	3	1	6					2	9
TOTALS		368		459						827	TOTALS		511		523						1034
SPLIT %		44.5%		55.5%						44.4%	SPLIT %		49.4%		50.6%						55.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	879	982	0	0	1,861

AM Peak Hour	09:45	11:00			11:00	PM Peak Hour	12:15	17:00			12:15
AM Pk Volume	114	121			199	PM Pk Volume	104	95			174
Pk Hr Factor	0.594	0.756			0.816	Pk Hr Factor	0.667	0.660			0.806
7 - 9 Volume	98	162	0	0	260	4 - 6 Volume	143	160	0	0	303
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:15	17:00			16:15
7 - 9 Pk Volume	71	97	0	0	168	4 - 6 Pk Volume	89	95	0	0	160
Pk Hr Factor	0.538	0.505	0.000	0.000	0.656	Pk Hr Factor	0.856	0.660	0.000	0.000	0.909

Prepared by NDS/ATD

Project #: CA14_4223_002 **City:** Solana Beach

Location: Nardo Ave Bet. Corto St & Lirio St **Date:** 11/10/2014

Prepared by NDS/ATD

Project #: CA14_4223_002 **City:** Solana Beach

Location: Nardo Ave Bet. Corto St & Lirio St **Date:** 11/11/2014

Prepared by NDS/ATD

Project #: CA14_4223_002 **City:** Solana Beach

Location: Nardo Ave Bet. Corto St & Lirio St **Date:** 11/12/2014

Prepared by NDS/ATD

Project #: CA14_4223_002 **City:** Solana Beach

Location: Nardo Ave Bet. Corto St & Lirio St **Date:** 11/13/2014

Prepared by NDS/ATD

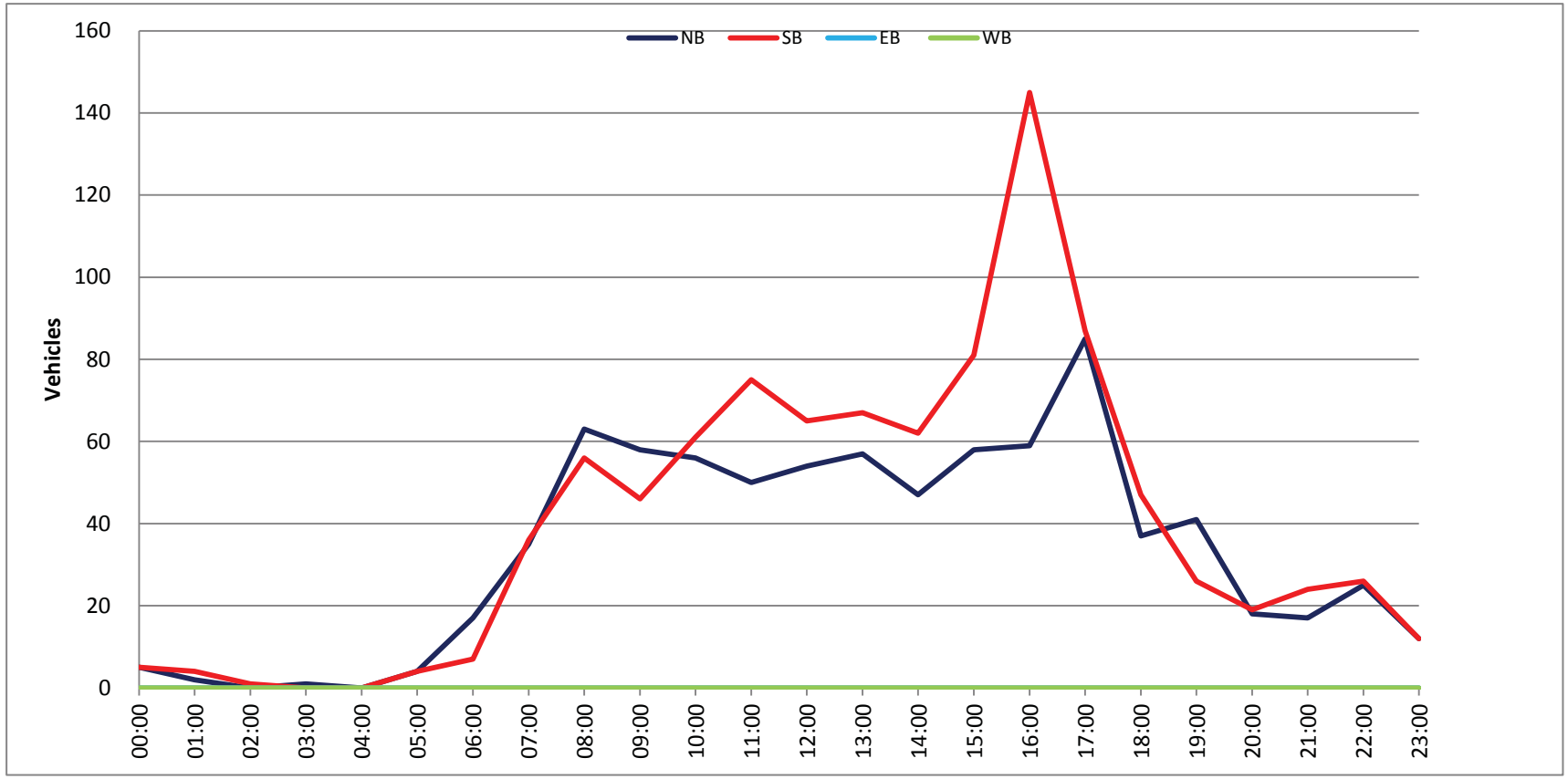
Project #: CA14_4223_002 **City:** Solana Beach

Location: Nardo Ave Bet. Corto St & Lirio St **Date:** 11/14/2014

Prepared by NDS/ATD

Project #: CA14_4223_002 **City:** Solana Beach

Location: Nardo Ave Bet. Corto St & Lirio St **Date:** 11/15/2014



Prepared by NDS/ATD

Project #: CA14_4223_002 **City:** Solana Beach

Location: Nardo Ave Bet. Corto St & Lirio St **Date:** 11/16/2014

Prepared by NDS/ATD

VOLUME

Nardo Ave Bet. Stevens Ave & Fresca St

Day: Monday
Date: 11/10/2014

City: Solana Beach
Project #: CA14_4223_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,630	1,384	3,014

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		3		3		12:00			16		14		30	
00:15			1		3		4		12:15			20		24		44	
00:30			2		2		4		12:30			23		21		44	
00:45			1	4	1	9	2	13	12:45			24	83	32	91	56	174
01:00			1		0		1		13:00			12		13		25	
01:15			1		1		2		13:15			27		21		48	
01:30			0		1		1		13:30			28		14		42	
01:45			0	2	0	2	0	4	13:45			25	92	26	74	51	166
02:00			1		2		3		14:00			17		24		41	
02:15			0		1		1		14:15			21		26		47	
02:30			0		0		0		14:30			46		37		83	
02:45			0	1	0	3	0	4	14:45			61	145	39	126	100	271
03:00			1		0		1		15:00			29		34		63	
03:15			0		0		0		15:15			29		29		58	
03:30			1		1		2		15:30			28		33		61	
03:45			1	3	0	1	1	4	15:45			36	122	27	123	63	245
04:00			0		1		1		16:00			35		17		52	
04:15			1		0		1		16:15			34		44		78	
04:30			3		2		5		16:30			27		28		55	
04:45			6	10	4	7	10	17	16:45			26	122	35	124	61	246
05:00			6		0		6		17:00			37		33		70	
05:15			3		2		5		17:15			23		37		60	
05:30			9		2		11		17:30			27		22		49	
05:45			7	25	1	5	8	30	17:45			31	118	36	128	67	246
06:00			11		4		15		18:00			24		38		62	
06:15			10		7		17		18:15			18		27		45	
06:30			22		6		28		18:30			15		23		38	
06:45			16	59	8	25	24	84	18:45			18	75	23	111	41	186
07:00			36		11		47		19:00			12		18		30	
07:15			36		17		53		19:15			10		21		31	
07:30			49		31		80		19:30			7		14		21	
07:45			43	164	21	80	64	244	19:45			8	37	17	70	25	107
08:00			51		12		63		20:00			6		12		18	
08:15			37		12		49		20:15			8		9		17	
08:30			47		22		69		20:30			5		8		13	
08:45			36	171	22	68	58	239	20:45			11	30	9	38	20	68
09:00			32		21		53		21:00			7		12		19	
09:15			27		18		45		21:15			6		9		15	
09:30			17		10		27		21:30			7		5		12	
09:45			25	101	19	68	44	169	21:45			12	32	8	34	20	66
10:00			30		17		47		22:00			4		10		14	
10:15			37		15		52		22:15			3		6		9	
10:30			27		17		44		22:30			2		10		12	
10:45			17	111	14	63	31	174	22:45			4	13	9	35	13	48
11:00			23		21		44		23:00			5		6		11	
11:15			26		16		42		23:15			2		6		8	
11:30			24		20		44		23:30			3		3		6	
11:45			24	97	20	77	44	174	23:45			3	13	7	22	10	35
TOTALS				748		408		1156	TOTALS				882		976		1858
SPLIT %				64.7%		35.3%		38.4%	SPLIT %				47.5%		52.5%		61.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,630	1,384	3,014

AM Peak Hour			07:30	08:30	07:15	PM Peak Hour			14:30	16:15	14:30
AM Pk Volume			180	83	260	PM Pk Volume			165	140	304
Pk Hr Factor			0.882	0.943	0.813	Pk Hr Factor			0.676	0.795	0.760
7 - 9 Volume	0	0	335	148	483	4 - 6 Volume	0	0	240	252	492
7 - 9 Peak Hour			07:30	07:15	07:15	4 - 6 Peak Hour			16:15	16:15	16:15
7 - 9 Pk Volume	0	0	180	81	260	4 - 6 Pk Volume	0	0	124	140	264
Pk Hr Factor	0.000	0.000	0.882	0.653	0.813	Pk Hr Factor	0.000	0.000	0.838	0.795	0.846

Prepared by NDS/ATD

VOLUME

Nardo Ave Bet. Stevens Ave & Fresca St

Day: Tuesday
Date: 11/11/2014

City: Solana Beach
Project #: CA14_4223_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,665	1,432	3,097

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			1		3		4		12:00			24		27		51	
00:15			2		3		5		12:15			32		22		54	
00:30			0		0		0		12:30			33		19		52	
00:45			0	3	1	7	1	10	12:45			21	110	28	96	49	206
01:00			1		0		1		13:00			20		21		41	
01:15			0		2		2		13:15			30		22		52	
01:30			1		0		1		13:30			29		17		46	
01:45			0	2	2	4	2	6	13:45			23	102	29	89	52	191
02:00			1		1		2		14:00			23		24		47	
02:15			0		0		0		14:15			32		33		65	
02:30			1		0		1		14:30			39		32		71	
02:45			0	2	0	1	0	3	14:45			59	153	28	117	87	270
03:00			0		3		3		15:00			33		33		66	
03:15			1		0		1		15:15			23		27		50	
03:30			1		0		1		15:30			31		31		62	
03:45			0	2	1	4	1	6	15:45			43	130	34	125	77	255
04:00			1		0		1		16:00			33		24		57	
04:15			2		0		2		16:15			27		39		66	
04:30			8		2		10		16:30			27		29		56	
04:45			2	13	2	4	4	17	16:45			31	118	31	123	62	241
05:00			3		0		3		17:00			27		34		61	
05:15			9		0		9		17:15			22		35		57	
05:30			7		1		8		17:30			26		28		54	
05:45			6	25	0	1	6	26	17:45			22	97	37	134	59	231
06:00			9		2		11		18:00			23		25		48	
06:15			7		6		13		18:15			13		35		48	
06:30			23		10		33		18:30			27		26		53	
06:45			19	58	12	30	31	88	18:45			13	76	23	109	36	185
07:00			25		10		35		19:00			17		21		38	
07:15			35		18		53		19:15			11		14		25	
07:30			53		30		83		19:30			16		12		28	
07:45			47	160	14	72	61	232	19:45			8	52	12	59	20	111
08:00			38		13		51		20:00			5		15		20	
08:15			44		15		59		20:15			5		11		16	
08:30			27		19		46		20:30			5		14		19	
08:45			30	139	14	61	44	200	20:45			22	37	12	52	34	89
09:00			32		16		48		21:00			25		14		39	
09:15			27		18		45		21:15			6		12		18	
09:30			24		13		37		21:30			10		15		25	
09:45			28	111	23	70	51	181	21:45			8	49	13	54	21	103
10:00			17		17		34		22:00			9		10		19	
10:15			26		19		45		22:15			3		7		10	
10:30			23		19		42		22:30			4		11		15	
10:45			26	92	16	71	42	163	22:45			3	19	7	35	10	54
11:00			24		25		49		23:00			6		9		15	
11:15			27		26		53		23:15			3		4		7	
11:30			23		13		36		23:30			2		3		5	
11:45			28	102	30	94	58	196	23:45			2	13	4	20	6	33
TOTALS				709		419		1128	TOTALS				956		1013		1969
SPLIT %				62.9%		37.1%		36.4%	SPLIT %				48.6%		51.4%		63.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,665	1,432	3,097

AM Peak Hour			07:30	11:45	07:30	PM Peak Hour			14:15	17:00	14:15
AM Pk Volume			182	98	254	PM Pk Volume			163	134	289
Pk Hr Factor			0.858	0.817	0.765	Pk Hr Factor			0.691	0.905	0.830
7 - 9 Volume	0	0	299	133	432	4 - 6 Volume	0	0	215	257	472
7 - 9 Peak Hour			07:30	07:15	07:30	4 - 6 Peak Hour			16:00	17:00	16:15
7 - 9 Pk Volume	0	0	182	75	254	4 - 6 Pk Volume	0	0	118	134	245
Pk Hr Factor	0.000	0.000	0.858	0.625	0.765	Pk Hr Factor	0.000	0.000	0.894	0.905	0.928

Prepared by NDS/ATD

VOLUME

Nardo Ave Bet. Stevens Ave & Fresca St

Day: Wednesday
Date: 11/12/2014

City: Solana Beach
Project #: CA14_4223_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,811	1,504	3,315

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			1		2		3		12:00			41		23		64	
00:15			2		1		3		12:15			36		26		62	
00:30			1		1		2		12:30			29		32		61	
00:45			0	4	0	4	0	8	12:45			33	139	20	101	53	240
01:00			0		0		0		13:00			21		16		37	
01:15			0		0		0		13:15			26		27		53	
01:30			0		1		1		13:30			33		20		53	
01:45			0		2	3	2	3	13:45			27	107	26	89	53	196
02:00			0		1		1		14:00			34		25		59	
02:15			1		0		1		14:15			33		29		62	
02:30			1		0		1		14:30			25		28		53	
02:45			0	2	0	1	0	3	14:45			24	116	42	124	66	240
03:00			0		0		0		15:00			30		34		64	
03:15			0		0		0		15:15			38		29		67	
03:30			1		0		1		15:30			37		36		73	
03:45			0	1	0		0	1	15:45			36	141	21	120	57	261
04:00			1		0		1		16:00			31		27		58	
04:15			0		1		1		16:15			31		36		67	
04:30			6		1		7		16:30			30		33		63	
04:45			2	9	3	5	5	14	16:45			29	121	31	127	60	248
05:00			9		1		10		17:00			25		30		55	
05:15			5		2		7		17:15			29		26		55	
05:30			10		3		13		17:30			33		31		64	
05:45			8	32	1	7	9	39	17:45			22	109	34	121	56	230
06:00			13		1		14		18:00			23		29		52	
06:15			22		8		30		18:15			12		39		51	
06:30			32		10		42		18:30			13		34		47	
06:45			32	99	20	39	52	138	18:45			14	62	22	124	36	186
07:00			33		10		43		19:00			18		17		35	
07:15			43		26		69		19:15			10		19		29	
07:30			49		26		75		19:30			14		20		34	
07:45			85	210	26	88	111	298	19:45			10	52	27	83	37	135
08:00			44		19		63		20:00			13		14		27	
08:15			49		23		72		20:15			7		13		20	
08:30			47		21		68		20:30			8		11		19	
08:45			39	179	13	76	52	255	20:45			14	42	15	53	29	95
09:00			25		17		42		21:00			9		13		22	
09:15			36		25		61		21:15			6		12		18	
09:30			24		20		44		21:30			13		10		23	
09:45			26	111	17	79	43	190	21:45			6	34	15	50	21	84
10:00			20		20		40		22:00			6		17		23	
10:15			33		17		50		22:15			2		7		9	
10:30			18		13		31		22:30			2		7		9	
10:45			27	98	16	66	43	164	22:45			4	14	4	35	8	49
11:00			21		14		35		23:00			2		4		6	
11:15			22		23		45		23:15			0		4		4	
11:30			34		32		66		23:30			4		6		10	
11:45			42	119	25	94	67	213	23:45			4	10	1	15	5	25
TOTALS				864		462		1326	TOTALS				947		1042		1989
SPLIT %				65.2%		34.8%		40.0%	SPLIT %				47.6%		52.4%		60.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,811	1,504	3,315

AM Peak Hour			07:30	11:30	07:30	PM Peak Hour			15:15	14:45	14:45
AM Pk Volume			227	106	321	PM Pk Volume			142	141	270
Pk Hr Factor			0.668	0.828	0.723	Pk Hr Factor			0.934	0.839	0.925
7 - 9 Volume	0	0	389	164	553	4 - 6 Volume	0	0	230	248	478
7 - 9 Peak Hour			07:30	07:15	07:30	4 - 6 Peak Hour			16:00	16:15	16:00
7 - 9 Pk Volume	0	0	227	97	321	4 - 6 Pk Volume	0	0	121	130	248
Pk Hr Factor	0.000	0.000	0.668	0.933	0.723	Pk Hr Factor	0.000	0.000	0.976	0.903	0.925

Prepared by NDS/ATD

VOLUME

Nardo Ave Bet. Stevens Ave & Fresca St

Day: Thursday
Date: 11/13/2014

City: Solana Beach
Project #: CA14_4223_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,885	1,519	3,404

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		1		1		12:00			54		28		82	
00:15			2		2		4		12:15			25		22		47	
00:30			1		1		2		12:30			23		24		47	
00:45			2	5	0	4	2	9	12:45			26	128	24	98	50	226
01:00			0		2		2		13:00			26		20		46	
01:15			1		1		2		13:15			30		18		48	
01:30			1		1		2		13:30			28		23		51	
01:45			1	3	1	5	2	8	13:45			20	104	27	88	47	192
02:00			0		0		0		14:00			37		27		64	
02:15			1		1		2		14:15			44		41		85	
02:30			1		0		1		14:30			40		29		69	
02:45			0	2	0	1	0	3	14:45			35	156	35	132	70	288
03:00			1		0		1		15:00			35		33		68	
03:15			0		0		0		15:15			31		33		64	
03:30			0		0		0		15:30			27		41		68	
03:45			1	2	0		1	2	15:45			30	123	32	139	62	262
04:00			0		1		1		16:00			30		28		58	
04:15			1		0		1		16:15			34		30		64	
04:30			2		1		3		16:30			57		32		89	
04:45			2	5	1	3	3	8	16:45			27	148	43	133	70	281
05:00			3		0		3		17:00			30		25		55	
05:15			9		2		11		17:15			22		23		45	
05:30			10		1		11		17:30			33		34		67	
05:45			7	29	2	5	9	34	17:45			28	113	34	116	62	229
06:00			8		1		9		18:00			29		42		71	
06:15			20		10		30		18:15			31		26		57	
06:30			31		11		42		18:30			29		26		55	
06:45			32	91	13	35	45	126	18:45			14	103	21	115	35	218
07:00			41		15		56		19:00			17		25		42	
07:15			48		22		70		19:15			15		15		30	
07:30			59		23		82		19:30			10		16		26	
07:45			75	223	19	79	94	302	19:45			12	54	18	74	30	128
08:00			48		23		71		20:00			9		18		27	
08:15			37		27		64		20:15			18		12		30	
08:30			44		15		59		20:30			22		16		38	
08:45			43	172	21	86	64	258	20:45			9	58	14	60	23	118
09:00			27		16		43		21:00			12		14		26	
09:15			28		14		42		21:15			11		9		20	
09:30			27		13		40		21:30			14		17		31	
09:45			30	112	16	59	46	171	21:45			8	45	19	59	27	104
10:00			16		13		29		22:00			4		11		15	
10:15			28		13		41		22:15			1		13		14	
10:30			23		15		38		22:30			4		12		16	
10:45			22	89	9	50	31	139	22:45			3	12	11	47	14	59
11:00			17		23		40		23:00			3		8		11	
11:15			22		23		45		23:15			1		4		5	
11:30			25		31		56		23:30			3		5		8	
11:45			34	98	28	105	62	203	23:45			3	10	9	26	12	36
TOTALS				831		432		1263	TOTALS				1054		1087		2141
SPLIT %				65.8%		34.2%		37.1%	SPLIT %				49.2%		50.8%		62.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,885	1,519	3,404

AM Peak Hour			07:15	11:15	07:15	PM Peak Hour			14:00	14:45	14:15
AM Pk Volume			230	110	317	PM Pk Volume			156	142	292
Pk Hr Factor			0.767	0.887	0.843	Pk Hr Factor			0.886	0.866	0.859
7 - 9 Volume	0	0	395	165	560	4 - 6 Volume	0	0	261	249	510
7 - 9 Peak Hour			07:15	07:30	07:15	4 - 6 Peak Hour			16:00	16:00	16:00
7 - 9 Pk Volume	0	0	230	92	317	4 - 6 Pk Volume	0	0	148	133	281
Pk Hr Factor	0.000	0.000	0.767	0.852	0.843	Pk Hr Factor	0.000	0.000	0.649	0.773	0.789

Prepared by NDS/ATD

VOLUME

Nardo Ave Bet. Stevens Ave & Fresca St

Day: Friday
Date: 11/14/2014

City: Solana Beach
Project #: CA14_4223_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,937	1,589	3,526

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			2		4		6		12:00			33		28		61	
00:15			3		2		5		12:15			34		25		59	
00:30			4		1		5		12:30			32		25		57	
00:45			3	12	1	8	4	20	12:45			33	132	28	106	61	238
01:00			0		2		2		13:00			28		21		49	
01:15			0		0		0		13:15			35		27		62	
01:30			0		1		1		13:30			28		24		52	
01:45			0		0	3	0	3	13:45			31	122	30	102	61	224
02:00			0		0		0		14:00			38		33		71	
02:15			0		1		1		14:15			46		22		68	
02:30			1		0		1		14:30			26		23		49	
02:45			0	1	0	1	0	2	14:45			24	134	57	135	81	269
03:00			0		0		0		15:00			40		23		63	
03:15			0		0		0		15:15			30		36		66	
03:30			1		1		2		15:30			37		34		71	
03:45			0	1	1	2	1	3	15:45			35	142	26	119	61	261
04:00			0		0		0		16:00			27		39		66	
04:15			1		1		2		16:15			29		40		69	
04:30			3		2		5		16:30			38		24		62	
04:45			1	5	0	3	1	8	16:45			31	125	38	141	69	266
05:00			5		0		5		17:00			25		33		58	
05:15			3		1		4		17:15			26		29		55	
05:30			8		2		10		17:30			22		44		66	
05:45			10	26	0	3	10	29	17:45			27	100	42	148	69	248
06:00			11		2		13		18:00			30		34		64	
06:15			17		7		24		18:15			19		24		43	
06:30			33		19		52		18:30			22		24		46	
06:45			30	91	12	40	42	131	18:45			23	94	25	107	48	201
07:00			41		19		60		19:00			18		17		35	
07:15			52		26		78		19:15			16		13		29	
07:30			57		26		83		19:30			17		13		30	
07:45			68	218	28	99	96	317	19:45			8	59	10	53	18	112
08:00			41		18		59		20:00			14		11		25	
08:15			34		26		60		20:15			11		14		25	
08:30			56		16		72		20:30			6		19		25	
08:45			44	175	12	72	56	247	20:45			13	44	18	62	31	106
09:00			44		20		64		21:00			13		18		31	
09:15			32		10		42		21:15			27		10		37	
09:30			20		20		40		21:30			9		16		25	
09:45			28	124	30	80	58	204	21:45			6	55	15	59	21	114
10:00			39		19		58		22:00			9		13		22	
10:15			27		21		48		22:15			7		20		27	
10:30			24		16		40		22:30			8		11		19	
10:45			29	119	12	68	41	187	22:45			8	32	8	52	16	84
11:00			21		16		37		23:00			11		16		27	
11:15			23		22		45		23:15			2		6		8	
11:30			21		29		50		23:30			4		7		11	
11:45			39	104	27	94	66	198	23:45			5	22	3	32	8	54
TOTALS				876		473		1349	TOTALS				1061		1116		2177
SPLIT %				64.9%		35.1%		38.3%	SPLIT %				48.7%		51.3%		61.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,937	1,589	3,526

AM Peak Hour			07:00	11:30	07:00	PM Peak Hour			13:30	14:45	14:45
AM Pk Volume			218	109	317	PM Pk Volume			143	150	281
Pk Hr Factor			0.801	0.940	0.826	Pk Hr Factor			0.777	0.658	0.867
7 - 9 Volume	0	0	393	171	564	4 - 6 Volume	0	0	225	289	514
7 - 9 Peak Hour			07:00	07:00	07:00	4 - 6 Peak Hour			16:00	17:00	16:00
7 - 9 Pk Volume	0	0	218	99	317	4 - 6 Pk Volume	0	0	125	148	266
Pk Hr Factor	0.000	0.000	0.801	0.884	0.826	Pk Hr Factor	0.000	0.000	0.822	0.841	0.964

Prepared by NDS/ATD

VOLUME

Nardo Ave Bet. Stevens Ave & Fresca St

Day: Saturday
Date: 11/15/2014

City: Solana Beach
Project #: CA14_4223_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,618	1,352	2,970

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		4		4		12:00			24		20		44	
00:15			6		3		9		12:15			20		21		41	
00:30			4		1		5		12:30			23		23		46	
00:45			1	11	5	13	6	24	12:45			20	87	32	96	52	183
01:00			2		5		7		13:00			30		14		44	
01:15			2		2		4		13:15			28		24		52	
01:30			0		1		1		13:30			19		36		55	
01:45			2	6	0	8	2	14	13:45			27	104	35	109	62	213
02:00			1		0		1		14:00			21		24		45	
02:15			0		2		2		14:15			24		25		49	
02:30			0		0		0		14:30			29		26		55	
02:45			1	2	1	3	2	5	14:45			29	103	23	98	52	201
03:00			1		2		3		15:00			28		24		52	
03:15			0		0		0		15:15			25		20		45	
03:30			0		2		2		15:30			32		29		61	
03:45			0	1	1	5	1	6	15:45			21	106	28	101	49	207
04:00			0		2		2		16:00			24		20		44	
04:15			1		0		1		16:15			23		25		48	
04:30			2		1		3		16:30			33		45		78	
04:45			2	5	0	3	2	8	16:45			35	115	33	123	68	238
05:00			3		1		4		17:00			52		30		82	
05:15			2		0		2		17:15			45		31		76	
05:30			5		3		8		17:30			34		25		59	
05:45			5	15	5	9	10	24	17:45			50	181	19	105	69	286
06:00			6		4		10		18:00			38		23		61	
06:15			6		4		10		18:15			23		23		46	
06:30			14		5		19		18:30			16		10		26	
06:45			7	33	5	18	12	51	18:45			17	94	13	69	30	163
07:00			14		5		19		19:00			10		13		23	
07:15			24		8		32		19:15			19		26		45	
07:30			27		13		40		19:30			21		17		38	
07:45			14	79	5	31	19	110	19:45			22	72	14	70	36	142
08:00			23		10		33		20:00			18		13		31	
08:15			36		7		43		20:15			11		10		21	
08:30			30		8		38		20:30			7		16		23	
08:45			26	115	12	37	38	152	20:45			13	49	13	52	26	101
09:00			22		18		40		21:00			15		9		24	
09:15			28		26		54		21:15			7		12		19	
09:30			33		21		54		21:30			12		15		27	
09:45			26	109	22	87	48	196	21:45			10	44	8	44	18	88
10:00			24		21		45		22:00			14		12		26	
10:15			27		29		56		22:15			9		18		27	
10:30			28		16		44		22:30			13		16		29	
10:45			27	106	15	81	42	187	22:45			10	46	12	58	22	104
11:00			22		27		49		23:00			4		9		13	
11:15			20		24		44		23:15			10		13		23	
11:30			35		22		57		23:30			5		10		15	
11:45			35	112	23	96	58	208	23:45			4	23	4	36	8	59
TOTALS				594		391		985	TOTALS				1024		961		1985
SPLIT %				60.3%		39.7%		33.2%	SPLIT %				51.6%		48.4%		66.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,618	1,352	2,970

AM Peak Hour			08:00	11:00	11:00	PM Peak Hour			17:00	16:30	16:30
AM Pk Volume			115	96	208	PM Pk Volume			181	139	304
Pk Hr Factor			0.799	0.889	0.897	Pk Hr Factor			0.870	0.772	0.927
7 - 9 Volume	0	0	194	68	262	4 - 6 Volume	0	0	296	228	524
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			17:00	16:30	16:30
7 - 9 Pk Volume	0	0	115	37	152	4 - 6 Pk Volume	0	0	181	139	304
Pk Hr Factor	0.000	0.000	0.799	0.771	0.884	Pk Hr Factor	0.000	0.000	0.870	0.772	0.927

Prepared by NDS/ATD

VOLUME

Nardo Ave Bet. Stevens Ave & Fresca St

Day: Sunday
Date: 11/16/2014

City: Solana Beach
Project #: CA14_4223_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,540	1,335	2,875

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			3		7		10		12:00			32		23		55	
00:15			1		7		8		12:15			67		31		98	
00:30			3		3		6		12:30			34		21		55	
00:45			1	8	2	19	3	27	12:45			25	158	27	102	52	260
01:00			2		2		4		13:00			18		32		50	
01:15			3		3		6		13:15			33		27		60	
01:30			4		4		8		13:30			29		14		43	
01:45			4	13	4	13	8	26	13:45			25	105	32	105	57	210
02:00			0		1		1		14:00			23		19		42	
02:15			0		1		1		14:15			16		16		32	
02:30			3		3		6		14:30			29		18		47	
02:45			1	4	1	6	2	10	14:45			24	92	21	74	45	166
03:00			1		2		3		15:00			34		25		59	
03:15			0		2		2		15:15			23		21		44	
03:30			1		2		3		15:30			32		27		59	
03:45			2	4	0	6	2	10	15:45			26	115	31	104	57	219
04:00			1		0		1		16:00			32		18		50	
04:15			0		0		0		16:15			37		31		68	
04:30			4		1		5		16:30			29		24		53	
04:45			1	6	3	4	4	10	16:45			32	130	34	107	66	237
05:00			2		1		3		17:00			28		37		65	
05:15			1		4		5		17:15			12		19		31	
05:30			1		1		2		17:30			20		32		52	
05:45			6	10	1	7	7	17	17:45			20	80	25	113	45	193
06:00			4		0		4		18:00			10		28		38	
06:15			4		3		7		18:15			15		15		30	
06:30			12		6		18		18:30			16		18		34	
06:45			10	30	7	16	17	46	18:45			18	59	4	65	22	124
07:00			14		13		27		19:00			29		19		48	
07:15			12		13		25		19:15			18		10		28	
07:30			18		14		32		19:30			8		13		21	
07:45			14	58	14	54	28	112	19:45			9	64	20	62	29	126
08:00			32		8		40		20:00			8		8		16	
08:15			32		15		47		20:15			6		8		14	
08:30			12		32		44		20:30			11		18		29	
08:45			33	109	29	84	62	193	20:45			13	38	11	45	24	83
09:00			26		15		41		21:00			7		13		20	
09:15			21		26		47		21:15			5		8		13	
09:30			23		11		34		21:30			10		10		20	
09:45			35	105	25	77	60	182	21:45			3	25	7	38	10	63
10:00			57		19		76		22:00			6		11		17	
10:15			38		16		54		22:15			3		10		13	
10:30			24		14		38		22:30			2		6		8	
10:45			21	140	20	69	41	209	22:45			5	16	4	31	9	47
11:00			39		31		70		23:00			8		10		18	
11:15			42		36		78		23:15			2		10		12	
11:30			40		17		57		23:30			2		3		5	
11:45			37	158	24	108	61	266	23:45			1	13	3	26	4	39
TOTALS				645		463		1108	TOTALS				895		872		1767
SPLIT %				58.2%		41.8%		38.5%	SPLIT %				50.7%		49.3%		61.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,540	1,335	2,875

AM Peak Hour			11:30	11:00	11:30	PM Peak Hour			12:00	16:15	12:00
AM Pk Volume			176	108	271	PM Pk Volume			158	126	260
Pk Hr Factor			0.657	0.750	0.691	Pk Hr Factor			0.590	0.851	0.663
7 - 9 Volume	0	0	167	138	305	4 - 6 Volume	0	0	210	220	430
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:00	16:15	16:15
7 - 9 Pk Volume	0	0	109	84	193	4 - 6 Pk Volume	0	0	130	126	252
Pk Hr Factor	0.000	0.000	0.826	0.656	0.778	Pk Hr Factor	0.000	0.000	0.878	0.851	0.926

Prepared by NDS/ATD

Project #: CA14_4223_003 **City:** Solana Beach

Location: Nardo Ave Bet. Stevens Ave & Fresca St **Date:** 11/10/2014

Prepared by NDS/ATD

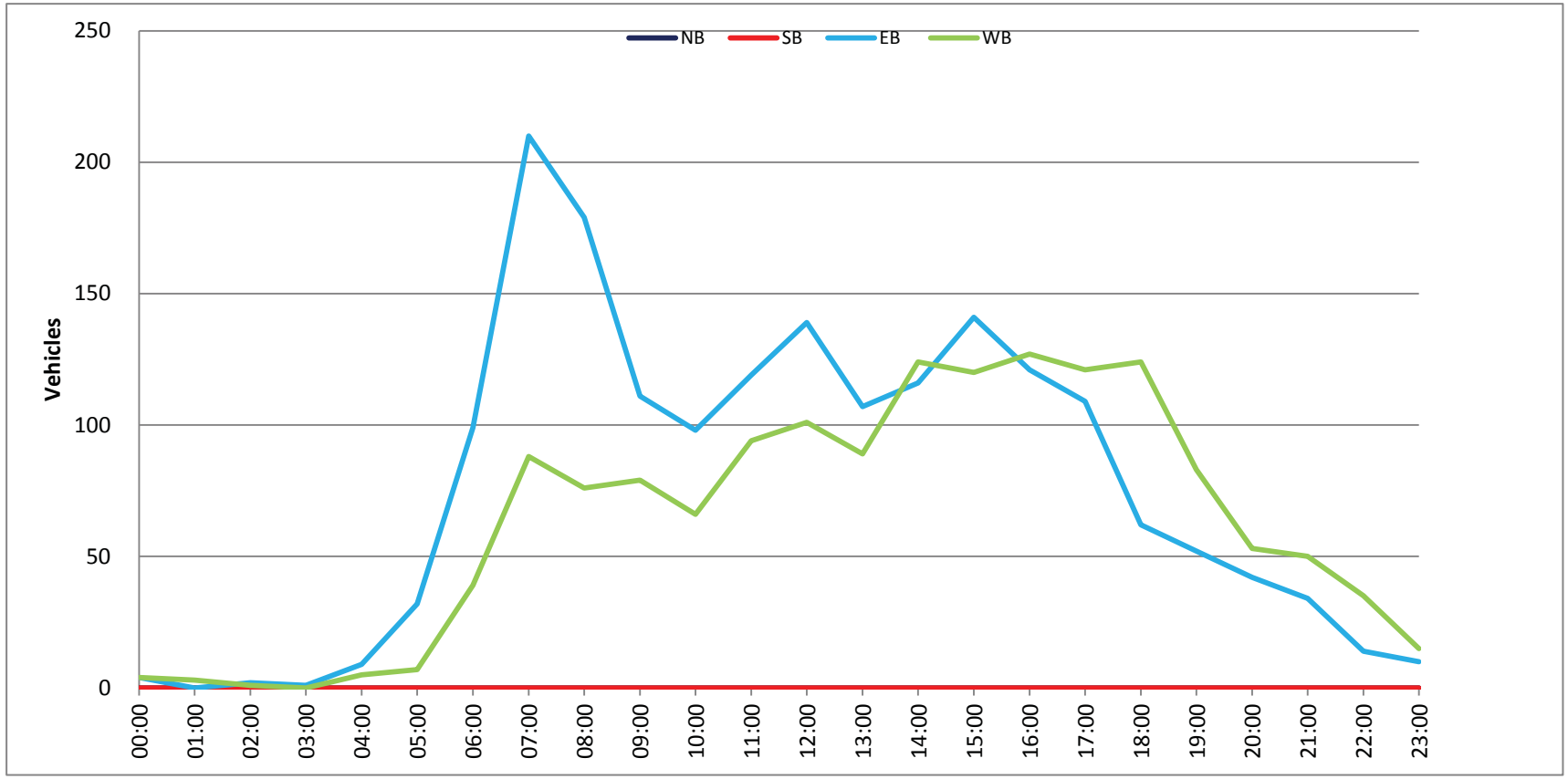
Project #: CA14_4223_003 **City:** Solana Beach

Location: Nardo Ave Bet. Stevens Ave & Fresca St **Date:** 11/11/2014

Prepared by NDS/ATD

Project #: CA14_4223_003 **City:** Solana Beach

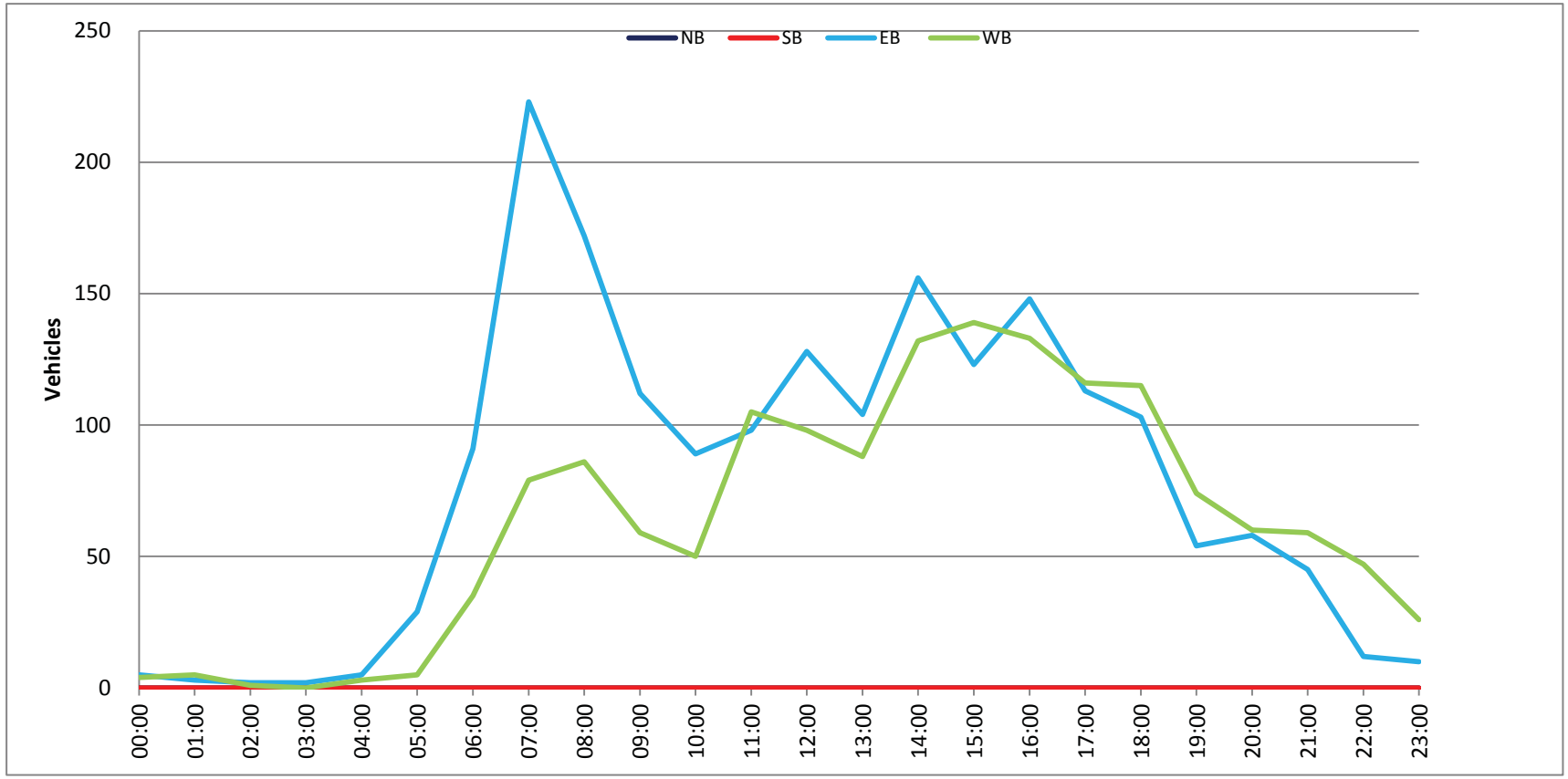
Location: Nardo Ave Bet. Stevens Ave & Fresca St **Date:** 11/12/2014



Prepared by NDS/ATD

Project #: CA14_4223_003 **City:** Solana Beach

Location: Nardo Ave Bet. Stevens Ave & Fresca St **Date:** 11/13/2014



Prepared by NDS/ATD

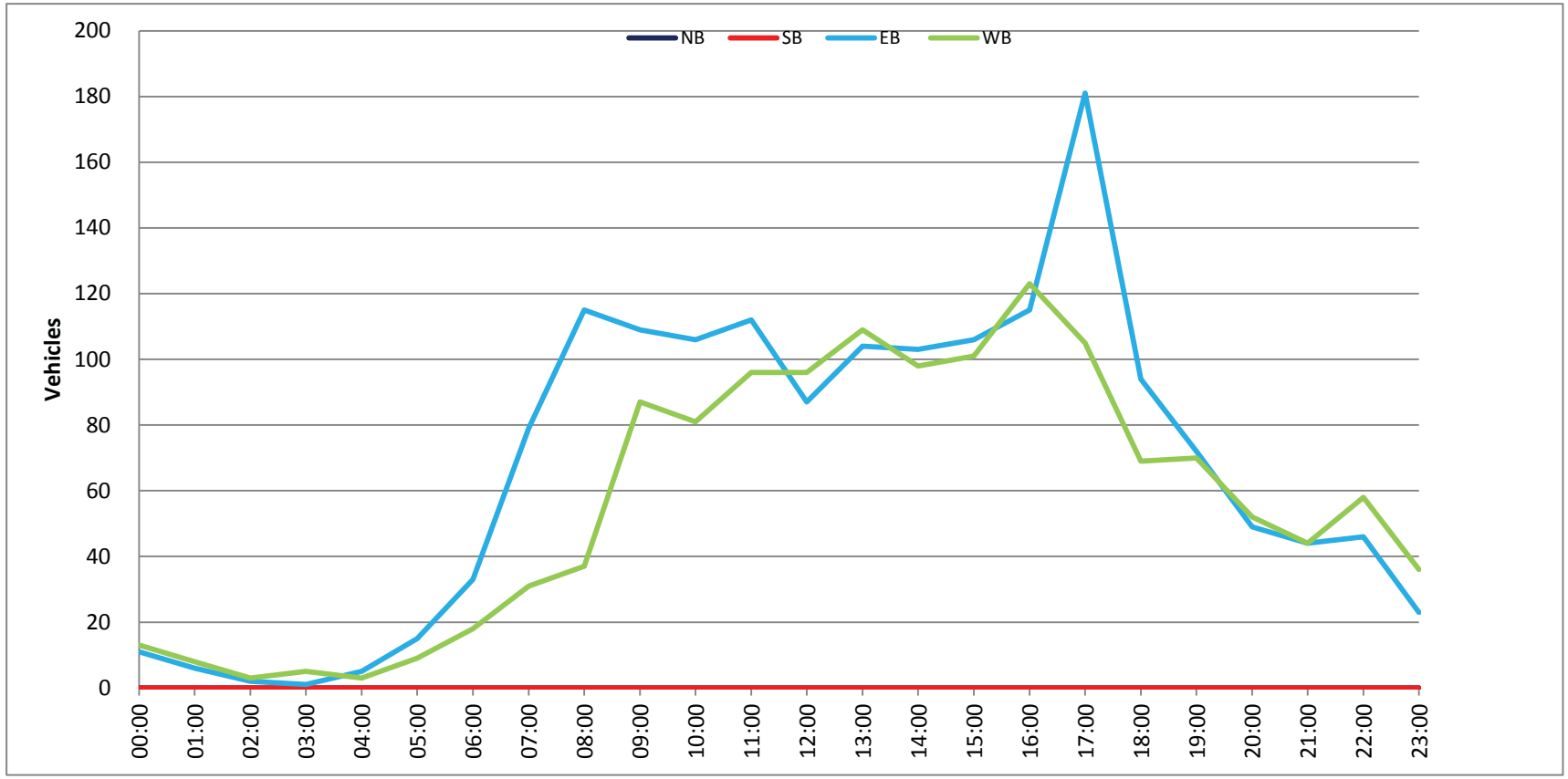
Project #: CA14_4223_003 **City:** Solana Beach

Location: Nardo Ave Bet. Stevens Ave & Fresca St **Date:** 11/14/2014

Prepared by NDS/ATD

Project #: CA14_4223_003 **City:** Solana Beach

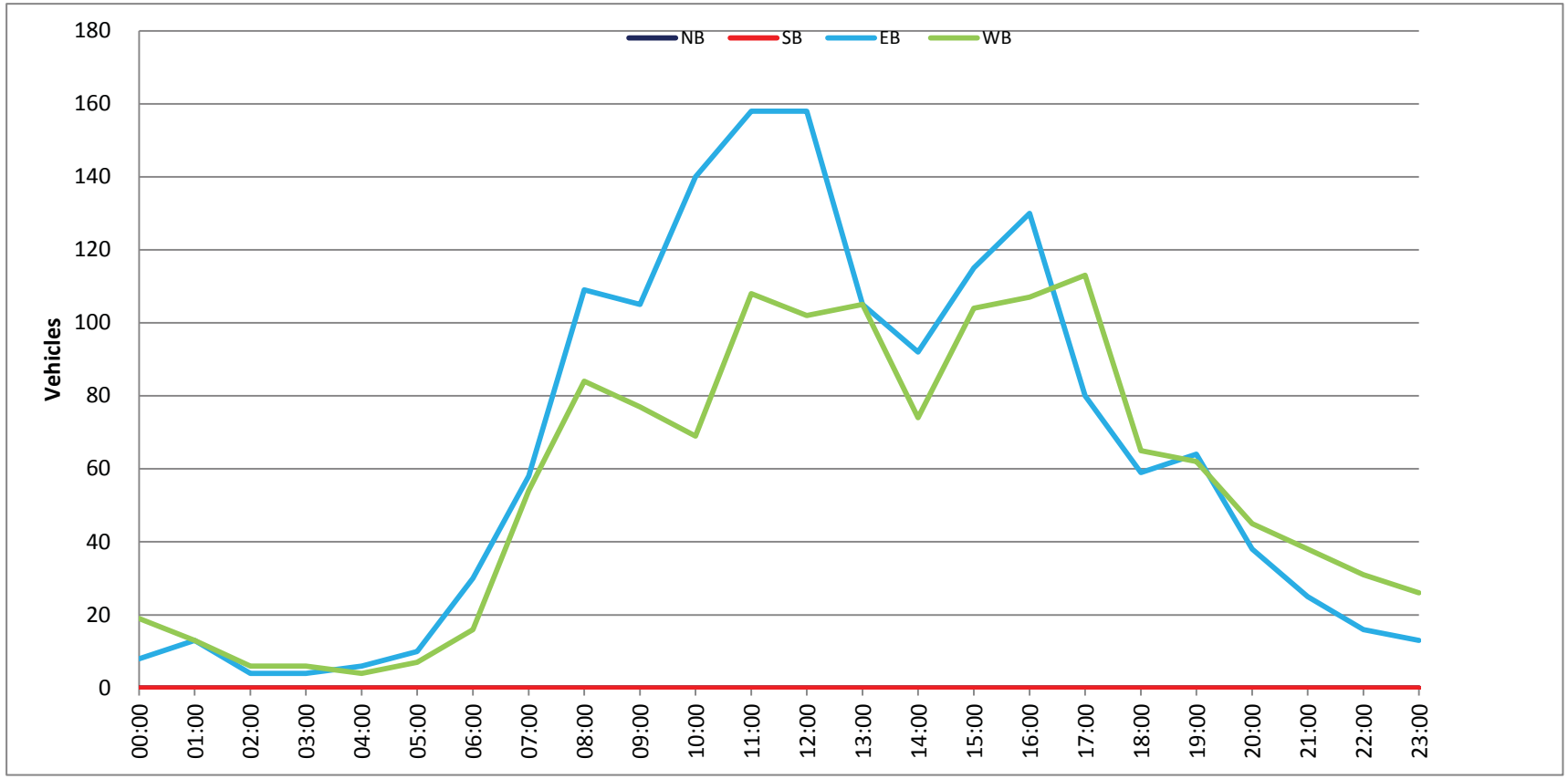
Location: Nardo Ave Bet. Stevens Ave & Fresca St **Date:** 11/15/2014



Prepared by NDS/ATD

Project #: CA14_4223_003 **City:** Solana Beach

Location: Nardo Ave Bet. Stevens Ave & Fresca St **Date:** 11/16/2014



Prepared by NDS/ATD

VOLUME

Stevens Ave Bet. Nardo Ave & Genevieve St

Day: Friday
Date: 11/14/2014

City: Solana Beach
Project #: CA14_4223_004

DAILY TOTALS	NB	SB	EB	WB	Total
	5,233	4,699	0	0	9,932

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	3		6						9		12:00	89		162						251	
00:15	3		4						7		12:15	98		86						184	
00:30	2		0						2		12:30	100		78						178	
00:45	0	8	2	12					2	20	12:45	80	367	74	400					154	767
01:00	2		0						2		13:00	88		70						158	
01:15	0		0						0		13:15	85		73						158	
01:30	1		1						2		13:30	96		103						199	
01:45	1	4	1	2					2	6	13:45	98	367	143	389					241	756
02:00	0		2						2		14:00	104		126						230	
02:15	0		2						2		14:15	106		95						201	
02:30	0		1						1		14:30	90		86						176	
02:45	2	2	0	5					2	7	14:45	95	395	114	421					209	816
03:00	2		1						3		15:00	90		115						205	
03:15	0		0						0		15:15	98		95						193	
03:30	1		1						2		15:30	115		80						195	
03:45	0	3	1	3					1	6	15:45	110	413	113	403					223	816
04:00	0		1						1		16:00	126		102						228	
04:15	1		1						2		16:15	170		95						265	
04:30	3		2						5		16:30	131		74						205	
04:45	2	6	1	5					3	11	16:45	116	543	95	366					211	909
05:00	2		0						2		17:00	81		87						168	
05:15	3		4						7		17:15	87		92						179	
05:30	13		2						15		17:30	79		69						148	
05:45	9	27	4	10					13	37	17:45	87	334	74	322					161	656
06:00	22		11						33		18:00	88		54						142	
06:15	29		14						43		18:15	73		60						133	
06:30	44		16						60		18:30	51		53						104	
06:45	74	169	44	85					118	254	18:45	38	250	53	220					91	470
07:00	122		101						223		19:00	25		41						66	
07:15	169		143						312		19:15	35		45						80	
07:30	127		115						242		19:30	29		32						61	
07:45	106	524	68	427					174	951	19:45	25	114	34	152					59	266
08:00	102		56						158		20:00	31		24						55	
08:15	105		67						172		20:15	29		44						73	
08:30	118		71						189		20:30	22		28						50	
08:45	108	433	70	264					178	697	20:45	19	101	31	127					50	228
09:00	86		56						142		21:00	12		30						42	
09:15	83		47						130		21:15	25		14						39	
09:30	69		50						119		21:30	20		12						32	
09:45	79	317	59	212					138	529	21:45	25	82	23	79					48	161
10:00	75		61						136		22:00	18		26						44	
10:15	81		57						138		22:15	10		26						36	
10:30	71		84						155		22:30	9		10						19	
10:45	74	301	78	280					152	581	22:45	10	47	7	69					17	116
11:00	97		79						176		23:00	9		9						18	
11:15	91		108						199		23:15	4		5						9	
11:30	88		114						202		23:30	4		3						7	
11:45	122	398	124	425					246	823	23:45	11	28	4	21					15	49
TOTALS		2192		1730						3922	TOTALS		3041		2969						6010
SPLIT %		55.9%		44.1%						39.5%	SPLIT %		50.6%		49.4%						60.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	5,233	4,699	0	0	9,932

AM Peak Hour	07:00	11:15			07:00	PM Peak Hour	16:00	13:30			15:45
AM Pk Volume	524	508			951	PM Pk Volume	543	467			921
Pk Hr Factor	0.775	0.784			0.762	Pk Hr Factor	0.799	0.816			0.869
7 - 9 Volume	957	691	0	0	1648	4 - 6 Volume	877	688	0	0	1565
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	524	427	0	0	951	4 - 6 Pk Volume	543	366	0	0	909
Pk Hr Factor	0.775	0.747	0.000	0.000	0.762	Pk Hr Factor	0.799	0.897	0.000	0.000	0.858

Prepared by NDS/ATD

VOLUME

Stevens Ave Bet. Nardo Ave & Genevieve St

Day: Monday
Date: 11/10/2014

City: Solana Beach
Project #: CA14_4223_004

DAILY TOTALS	NB	SB	EB	WB	Total
	4,297	3,817	0	0	8,114

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	2		1						3		12:00	73		64						137	
00:15	2		0						2		12:15	82		84						166	
00:30	2		0						2		12:30	96		78						174	
00:45	0	6	1	2					1	8	12:45	67	318	82	308					149	626
01:00	1		0						1		13:00	67		83						150	
01:15	0		1						1		13:15	76		68						144	
01:30	2		0						2		13:30	91		66						157	
01:45	0	3	1	2					1	5	13:45	71	305	70	287					141	592
02:00	1		0						1		14:00	63		53						116	
02:15	1		0						1		14:15	102		78						180	
02:30	0		0						0		14:30	85		96						181	
02:45	1	3	0						1	3	14:45	110	360	144	371					254	731
03:00	2		2						4		15:00	78		78						156	
03:15	1		0						1		15:15	78		80						158	
03:30	2		0						2		15:30	88		94						182	
03:45	1	6	0	2					1	8	15:45	91	335	88	340					179	675
04:00	1		2						3		16:00	89		87						176	
04:15	3		2						5		16:15	119		113						232	
04:30	8		2						10		16:30	93		74						167	
04:45	7	19	2	8					9	27	16:45	89	390	106	380					195	770
05:00	5		1						6		17:00	70		97						167	
05:15	3		3						6		17:15	79		85						164	
05:30	17		2						19		17:30	67		79						146	
05:45	18	43	5	11					23	54	17:45	81	297	87	348					168	645
06:00	29		19						48		18:00	53		86						139	
06:15	25		12						37		18:15	41		55						96	
06:30	37		25						62		18:30	43		43						86	
06:45	47	138	28	84					75	222	18:45	36	173	49	233					85	406
07:00	81		19						100		19:00	32		49						81	
07:15	117		62						179		19:15	44		42						86	
07:30	108		85						193		19:30	34		43						77	
07:45	79	385	59	225					138	610	19:45	31	141	40	174					71	315
08:00	78		43						121		20:00	21		24						45	
08:15	80		29						109		20:15	36		23						59	
08:30	80		37						117		20:30	18		15						33	
08:45	77	315	46	155					123	470	20:45	23	98	17	79					40	177
09:00	62		49						111		21:00	15		19						34	
09:15	86		54						140		21:15	10		8						18	
09:30	73		52						125		21:30	9		12						21	
09:45	61	282	48	203					109	485	21:45	4	38	14	53					18	91
10:00	69		56						125		22:00	12		8						20	
10:15	68		49						117		22:15	4		11						15	
10:30	73		56						129		22:30	4		8						12	
10:45	60	270	57	218					117	488	22:45	3	23	3	30					6	53
11:00	90		57						147		23:00	1		5						6	
11:15	75		70						145		23:15	2		4						6	
11:30	76		82						158		23:30	2		2						4	
11:45	98	339	79	288					177	627	23:45	5	10	5	16					10	26
TOTALS		1809		1198						**3007**	**TOTALS**		2488		2619						**5107**
SPLIT %		60.2%		39.8%						**37.1%**	**SPLIT %**		48.7%		51.3%						**62.9%**

DAILY TOTALS	NB	SB	EB	WB	Total
	4,297	3,817	0	0	8,114

AM Peak Hour	07:00	11:30			**11:45**	**PM Peak Hour**	15:45	14:30			**14:15**
AM Pk Volume	385	309			**654**	**PM Pk Volume**	392	398			**771**
Pk Hr Factor	0.823	0.920			**0.924**	**Pk Hr Factor**	0.824	0.691			**0.759**
7 - 9 Volume	700	380	0	0	**1080**	**4 - 6 Volume**	687	728	0	0	**1415**
7 - 9 Peak Hour	07:00	07:15			**07:15**	**4 - 6 Peak Hour**	16:00	16:15			**16:00**
7 - 9 Pk Volume	385	249	0	0	**631**	**4 - 6 Pk Volume**	390	390	0	0	**770**
Pk Hr Factor	0.823	0.732	0.000	0.000	**0.817**	**Pk Hr Factor**	0.819	0.863	0.000	0.000	**0.830**

Prepared by NDS/ATD

VOLUME

Stevens Ave Bet. Nardo Ave & Genevieve St

Day: Tuesday
Date: 11/11/2014

City: Solana Beach
Project #: CA14_4223_004

DAILY TOTALS	NB	SB	EB	WB	Total
	4,383	3,967	0	0	8,350

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	1		1						2		12:00	82		78						160	
00:15	1		0						1		12:15	90		81						171	
00:30	0		1						1		12:30	96		81						177	
00:45	0	2	0	2					0	4	12:45	70	338	81	321					151	659
01:00	1		0						1		13:00	78		75						153	
01:15	1		1						2		13:15	81		60						141	
01:30	0		0						0		13:30	84		74						158	
01:45	0	2	1	2					1	4	13:45	71	314	66	275					137	589
02:00	0		1						1		14:00	73		79						152	
02:15	3		3						6		14:15	93		60						153	
02:30	0		1						1		14:30	115		103						218	
02:45	1	4	1	6					2	10	14:45	86	367	153	395					239	762
03:00	0		1						1		15:00	85		105						190	
03:15	0		0						0		15:15	86		75						161	
03:30	4		2						6		15:30	102		89						191	
03:45	1	5	3	6					4	11	15:45	93	366	99	368					192	734
04:00	1		0						1		16:00	84		78						162	
04:15	0		1						1		16:15	108		92						200	
04:30	7		3						10		16:30	84		89						173	
04:45	7	15	4	8					11	23	16:45	104	380	116	375					220	755
05:00	5		2						7		17:00	72		99						171	
05:15	11		4						15		17:15	79		84						163	
05:30	14		3						17		17:30	94		71						165	
05:45	11	41	5	14					16	55	17:45	73	318	74	328					147	646
06:00	28		10						38		18:00	80		77						157	
06:15	25		17						42		18:15	49		61						110	
06:30	46		18						64		18:30	38		66						104	
06:45	57	156	30	75					87	231	18:45	33	200	47	251					80	451
07:00	79		32						111		19:00	33		43						76	
07:15	124		75						199		19:15	25		66						91	
07:30	95		77						172		19:30	24		38						62	
07:45	79	377	47	231					126	608	19:45	16	98	38	185					54	283
08:00	65		32						97		20:00	17		27						44	
08:15	81		42						123		20:15	14		27						41	
08:30	90		34						124		20:30	11		31						42	
08:45	88	324	50	158					138	482	20:45	19	61	23	108					42	169
09:00	79		40						119		21:00	19		17						36	
09:15	74		53						127		21:15	5		15						20	
09:30	80		58						138		21:30	9		12						21	
09:45	67	300	57	208					124	508	21:45	7	40	8	52					15	92
10:00	59		54						113		22:00	3		11						14	
10:15	73		54						127		22:15	6		5						11	
10:30	75		85						160		22:30	1		3						4	
10:45	75	282	74	267					149	549	22:45	4	14	6	25					10	39
11:00	82		62						144		23:00	6		6						12	
11:15	68		63						131		23:15	3		3						6	
11:30	100		74						174		23:30	2		2						4	
11:45	118	368	94	293					212	661	23:45	0	11	3	14					3	25
TOTALS		1876		1270						3146	TOTALS		2507		2697						5204
SPLIT %		59.6%		40.4%						37.7%	SPLIT %		48.2%		51.8%						62.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,383	3,967	0	0	8,350

AM Peak Hour	11:30	11:45			11:45	PM Peak Hour	15:30	14:30			14:30
AM Pk Volume	390	334			720	PM Pk Volume	387	436			808
Pk Hr Factor	0.826	0.888			0.849	Pk Hr Factor	0.896	0.712			0.845
7 - 9 Volume	701	389	0	0	1090	4 - 6 Volume	698	703	0	0	1401
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	16:00	16:15			16:15
7 - 9 Pk Volume	377	231	0	0	608	4 - 6 Pk Volume	380	396	0	0	764
Pk Hr Factor	0.760	0.750	0.000	0.000	0.764	Pk Hr Factor	0.880	0.853	0.000	0.000	0.868

Prepared by NDS/ATD

VOLUME

Stevens Ave Bet. Nardo Ave & Genevieve St

Day: Wednesday
Date: 11/12/2014

City: Solana Beach
Project #: CA14_4223_004

DAILY TOTALS	NB	SB	EB	WB	Total
	5,008	4,673	0	0	9,681

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		2						2		12:00	99		98						197	
00:15	1		5						6		12:15	73		84						157	
00:30	1		3						4		12:30	75		91						166	
00:45	0	2	2	12					2	14	12:45	87	334	68	341					155	675
01:00	0		0						0		13:00	101		79						180	
01:15	0		2						2		13:15	84		104						188	
01:30	0		0						0		13:30	96		63						159	
01:45	1	1	0	2					1	3	13:45	83	364	90	336					173	700
02:00	0		0						0		14:00	84		129						213	
02:15	1		4						5		14:15	128		92						220	
02:30	1		0						1		14:30	126		117						243	
02:45	2	4	1	5					3	9	14:45	97	435	151	489					248	924
03:00	1		0						1		15:00	94		134						228	
03:15	0		0						0		15:15	108		80						188	
03:30	1		1						2		15:30	99		84						183	
03:45	2	4	1	2					3	6	15:45	103	404	102	400					205	804
04:00	1		0						1		16:00	112		102						214	
04:15	0		2						2		16:15	99		93						192	
04:30	7		2						9		16:30	102		94						196	
04:45	7	15	3	7					10	22	16:45	99	412	126	415					225	827
05:00	6		2						8		17:00	91		130						221	
05:15	3		4						7		17:15	96		96						192	
05:30	18		2						20		17:30	96		78						174	
05:45	14	41	7	15					21	56	17:45	87	370	89	393					176	763
06:00	25		10						35		18:00	83		72						155	
06:15	38		13						51		18:15	66		57						123	
06:30	42		20						62		18:30	49		66						115	
06:45	75	180	40	83					115	263	18:45	39	237	53	248					92	485
07:00	121		88						209		19:00	40		53						93	
07:15	157		149						306		19:15	21		47						68	
07:30	101		107						208		19:30	28		26						54	
07:45	119	498	60	404					179	902	19:45	27	116	43	169					70	285
08:00	101		53						154		20:00	20		39						59	
08:15	135		82						217		20:15	22		49						71	
08:30	112		84						196		20:30	14		22						36	
08:45	117	465	60	279					177	744	20:45	13	69	28	138					41	207
09:00	81		60						141		21:00	9		28						37	
09:15	93		55						148		21:15	5		23						28	
09:30	97		41						138		21:30	14		9						23	
09:45	90	361	67	223					157	584	21:45	4	32	16	76					20	108
10:00	60		67						127		22:00	9		11						20	
10:15	76		58						134		22:15	7		6						13	
10:30	71		51						122		22:30	2		10						12	
10:45	57	264	55	231					112	495	22:45	2	20	3	30					5	50
11:00	78		84						162		23:00	4		5						9	
11:15	101		95						196		23:15	2		4						6	
11:30	94		74						168		23:30	1		3						4	
11:45	97	370	109	362					206	732	23:45	3	10	1	13					4	23
TOTALS		2205		1625						3830	TOTALS		2803		3048						5851
SPLIT %		57.6%		42.4%						39.6%	SPLIT %		47.9%		52.1%						60.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	5,008	4,673	0	0	9,681

AM Peak Hour	07:00	07:00			07:00	PM Peak Hour	14:15	14:15			14:15
AM Pk Volume	498	404			902	PM Pk Volume	445	494			939
Pk Hr Factor	0.793	0.678			0.737	Pk Hr Factor	0.869	0.818			0.947
7 - 9 Volume	963	683	0	0	1646	4 - 6 Volume	782	808	0	0	1590
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	16:00	16:30			16:15
7 - 9 Pk Volume	498	404	0	0	902	4 - 6 Pk Volume	412	446	0	0	834
Pk Hr Factor	0.793	0.678	0.000	0.000	0.737	Pk Hr Factor	0.920	0.858	0.000	0.000	0.927

Prepared by NDS/ATD

VOLUME

Stevens Ave Bet. Nardo Ave & Genevieve St

Day: Thursday
Date: 11/13/2014

City: Solana Beach
Project #: CA14_4223_004

DAILY TOTALS	NB	SB	EB	WB	Total
	5,241	4,805	0	0	10,046

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	3		2						5		12:00	94		149						243	
00:15	0		2						2		12:15	79		101						180	
00:30	4		1						5		12:30	68		77						145	
00:45	1	8	3	8					4	16	12:45	81	322	90	417					171	739
01:00	1		3						4		13:00	96		86						182	
01:15	0		0						0		13:15	102		78						180	
01:30	1		2						3		13:30	90		75						165	
01:45	1	3	1	6					2	9	13:45	87	375	73	312					160	687
02:00	1		1						2		14:00	96		141						237	
02:15	0		3						3		14:15	105		110						215	
02:30	1		0						1		14:30	116		90						206	
02:45	3	5	1	5					4	10	14:45	122	439	173	514					295	953
03:00	1		0						1		15:00	101		122						223	
03:15	0		0						0		15:15	105		131						236	
03:30	0		1						1		15:30	119		95						214	
03:45	1	2	0	1					1	3	15:45	111	436	95	443					206	879
04:00	0		1						1		16:00	132		87						219	
04:15	0		1						1		16:15	138		95						233	
04:30	3		3						6		16:30	131		106						237	
04:45	9	12	3	8					12	20	16:45	113	514	118	406					231	920
05:00	5		0						5		17:00	102		99						201	
05:15	5		4						9		17:15	112		102						214	
05:30	24		8						32		17:30	103		94						197	
05:45	12	46	7	19					19	65	17:45	100	417	94	389					194	806
06:00	17		11						28		18:00	76		72						148	
06:15	31		11						42		18:15	64		66						130	
06:30	48		14						62		18:30	66		54						120	
06:45	82	178	47	83					129	261	18:45	44	250	62	254					106	504
07:00	128		83						211		19:00	35		41						76	
07:15	160		168						328		19:15	39		42						81	
07:30	122		108						230		19:30	37		46						83	
07:45	103	513	71	430					174	943	19:45	34	145	50	179					84	324
08:00	97		42						139		20:00	19		44						63	
08:15	112		71						183		20:15	23		31						54	
08:30	112		81						193		20:30	31		21						52	
08:45	111	432	83	277					194	709	20:45	18	91	40	136					58	227
09:00	51		44						95		21:00	11		21						32	
09:15	83		56						139		21:15	14		14						28	
09:30	92		57						149		21:30	8		15						23	
09:45	88	314	49	206					137	520	21:45	10	43	17	67					27	110
10:00	71		65						136		22:00	8		10						18	
10:15	67		57						124		22:15	5		5						10	
10:30	63		66						129		22:30	4		11						15	
10:45	84	285	62	250					146	535	22:45	2	19	7	33					9	52
11:00	91		57						148		23:00	4		8						12	
11:15	102		85						187		23:15	3		1						4	
11:30	83		94						177		23:30	3		3						6	
11:45	105	381	111	347					216	728	23:45	1	11	3	15					4	26
TOTALS		2179		1640						**3819**	**TOTALS**		3062		3165						**6227**
SPLIT %		57.1%		42.9%						**38.0%**	**SPLIT %**		49.2%		50.8%						**62.0%**

DAILY TOTALS	NB	SB	EB	WB	Total
	5,241	4,805	0	0	10,046

AM Peak Hour	07:00	11:30			**07:00**	**PM Peak Hour**	16:00	14:45			**14:45**
AM Pk Volume	513	455			**943**	**PM Pk Volume**	514	521			**968**
Pk Hr Factor	0.802	0.763			**0.719**	**Pk Hr Factor**	0.931	0.753			**0.820**
7 - 9 Volume	945	707	0	0	**1652**	**4 - 6 Volume**	931	795	0	0	**1726**
7 - 9 Peak Hour	07:00	07:00			**07:00**	**4 - 6 Peak Hour**	16:00	16:30			**16:00**
7 - 9 Pk Volume	513	430	0	0	**943**	**4 - 6 Pk Volume**	514	425	0	0	**920**
Pk Hr Factor	0.802	0.640	0.000	0.000	**0.719**	**Pk Hr Factor**	0.931	0.900	0.000	0.000	**0.970**

Prepared by NDS/ATD

VOLUME

Stevens Ave Bet. Nardo Ave & Genevieve St

Day: Saturday
Date: 11/15/2014

City: Solana Beach
Project #: CA14_4223_004

DAILY TOTALS	NB	SB	EB	WB	Total
	3,323	3,637	0	0	6,960

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	1		4						5		12:00	78		104						182	
00:15	2		3						5		12:15	73		89						162	
00:30	2		1						3		12:30	66		85						151	
00:45	1	6	2	10					3	16	12:45	64	281	81	359					145	640
01:00	2		5						7		13:00	78		58						136	
01:15	2		1						3		13:15	77		66						143	
01:30	1		1						2		13:30	67		78						145	
01:45	2	7	3	10					5	17	13:45	64	286	66	268					130	554
02:00	1		3						4		14:00	53		70						123	
02:15	1		1						2		14:15	60		77						137	
02:30	0		2						2		14:30	50		75						125	
02:45	2	4	0	6					2	10	14:45	48	211	64	286					112	497
03:00	1		0						1		15:00	71		62						133	
03:15	1		0						1		15:15	58		55						113	
03:30	0		0						0		15:30	47		80						127	
03:45	1	3	0						1	3	15:45	36	212	113	310					149	522
04:00	0		0						0		16:00	43		124						167	
04:15	2		1						3		16:15	68		99						167	
04:30	4		2						6		16:30	53		110						163	
04:45	2	8	0	3					2	11	16:45	68	232	90	423					158	655
05:00	2		0						2		17:00	77		93						170	
05:15	1		0						1		17:15	68		78						146	
05:30	3		0						3		17:30	63		58						121	
05:45	8	14	7	7					15	21	17:45	63	271	44	273					107	544
06:00	8		3						11		18:00	55		39						94	
06:15	11		4						15		18:15	42		39						81	
06:30	24		8						32		18:30	29		37						66	
06:45	21	64	11	26					32	90	18:45	33	159	35	150					68	309
07:00	28		17						45		19:00	29		42						71	
07:15	23		25						48		19:15	45		34						79	
07:30	36		25						61		19:30	55		30						85	
07:45	46	133	18	85					64	218	19:45	55	184	26	132					81	316
08:00	45		39						84		20:00	38		33						71	
08:15	64		31						95		20:15	18		20						38	
08:30	75		32						107		20:30	17		20						37	
08:45	75	259	54	156					129	415	20:45	9	82	27	100					36	182
09:00	49		36						85		21:00	13		13						26	
09:15	54		62						116		21:15	13		21						34	
09:30	65		54						119		21:30	16		20						36	
09:45	73	241	63	215					136	456	21:45	13	55	20	74					33	129
10:00	76		78						154		22:00	13		10						23	
10:15	84		90						174		22:15	8		17						25	
10:30	70		77						147		22:30	10		8						18	
10:45	70	300	73	318					143	618	22:45	8	39	9	44					17	83
11:00	68		69						137		23:00	5		5						10	
11:15	70		102						172		23:15	5		7						12	
11:30	44		84						128		23:30	3		6						9	
11:45	74	256	106	361					180	617	23:45	3	16	3	21					6	37
TOTALS		1295		1197						**2492**	**TOTALS**		2028		2440						**4468**
SPLIT %		52.0%		48.0%						**35.8%**	**SPLIT %**		45.4%		54.6%						**64.2%**

DAILY TOTALS	NB	SB	EB	WB	Total
	3,323	3,637	0	0	6,960

AM Peak Hour	09:45	11:15			**11:45**	**PM Peak Hour**	12:45	15:45			**16:15**
AM Pk Volume	303	396			**675**	**PM Pk Volume**	286	446			**658**
Pk Hr Factor	0.902	0.934			**0.927**	**Pk Hr Factor**	0.917	0.899			**0.968**
7 - 9 Volume	392	241	0	0	**633**	**4 - 6 Volume**	503	696	0	0	**1199**
7 - 9 Peak Hour	08:00	08:00			**08:00**	**4 - 6 Peak Hour**	16:45	16:00			**16:15**
7 - 9 Pk Volume	259	156	0	0	**415**	**4 - 6 Pk Volume**	276	423	0	0	**658**
Pk Hr Factor	0.863	0.722	0.000	0.000	**0.804**	**Pk Hr Factor**	0.896	0.853	0.000	0.000	**0.968**

Prepared by NDS/ATD

VOLUME

Stevens Ave Bet. Nardo Ave & Genevieve St

Day: Sunday
Date: 11/16/2014

City: Solana Beach
Project #: CA14_4223_004

DAILY TOTALS	NB	SB	EB	WB	Total
	2,669	2,521	0	0	5,190

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	3		3						6		12:00	67		77						144	
00:15	3		2						5		12:15	81		60						141	
00:30	3		3						6		12:30	43		66						109	
00:45	4	13	3	11					7	24	12:45	54	245	65	268					119	513
01:00	1		1						2		13:00	45		72						117	
01:15	2		1						3		13:15	39		48						87	
01:30	0		1						1		13:30	48		39						87	
01:45	2	5	1	4					3	9	13:45	46	178	56	215					102	393
02:00	1		2						3		14:00	54		47						101	
02:15	3		2						5		14:15	43		38						81	
02:30	2		0						2		14:30	40		39						79	
02:45	0	6	1	5					1	11	14:45	48	185	50	174					98	359
03:00	1		0						1		15:00	61		49						110	
03:15	0		1						1		15:15	49		61						110	
03:30	1		1						2		15:30	52		41						93	
03:45	0	2	0	2					0	4	15:45	44	206	53	204					97	410
04:00	1		0						1		16:00	48		32						80	
04:15	0		2						2		16:15	46		42						88	
04:30	6		1						7		16:30	76		37						113	
04:45	2	9	1	4					3	13	16:45	83	253	62	173					145	426
05:00	2		0						2		17:00	72		54						126	
05:15	1		2						3		17:15	58		38						96	
05:30	1		3						4		17:30	62		47						109	
05:45	6	10	2	7					8	17	17:45	56	248	54	193					110	441
06:00	6		5						11		18:00	43		31						74	
06:15	6		7						13		18:15	28		20						48	
06:30	10		7						17		18:30	24		35						59	
06:45	14	36	7	26					21	62	18:45	22	117	32	118					54	235
07:00	12		10						22		19:00	39		35						74	
07:15	15		14						29		19:15	23		23						46	
07:30	23		21						44		19:30	17		26						43	
07:45	28	78	14	59					42	137	19:45	12	91	22	106					34	197
08:00	35		18						53		20:00	9		16						25	
08:15	55		31						86		20:15	10		17						27	
08:30	76		41						117		20:30	12		20						32	
08:45	50	216	28	118					78	334	20:45	11	42	15	68					26	110
09:00	43		29						72		21:00	8		13						21	
09:15	54		49						103		21:15	5		4						9	
09:30	49		36						85		21:30	6		15						21	
09:45	62	208	65	179					127	387	21:45	3	22	10	42					13	64
10:00	99		48						147		22:00	4		12						16	
10:15	65		62						127		22:15	6		5						11	
10:30	50		54						104		22:30	3		1						4	
10:45	50	264	61	225					111	489	22:45	2	15	2	20					4	35
11:00	54		47						101		23:00	3		3						6	
11:15	53		94						147		23:15	3		3						6	
11:30	55		62						117		23:30	2		2						4	
11:45	48	210	86	289					134	499	23:45	2	10	3	11					5	21
TOTALS		1057		929						1986	TOTALS		1612		1592						3204
SPLIT %		53.2%		46.8%						38.3%	SPLIT %		50.3%		49.7%						61.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	2,669	2,521	0	0	5,190

AM Peak Hour	09:45	11:15			11:15	PM Peak Hour	16:30	12:00			12:00
AM Pk Volume	276	319			542	PM Pk Volume	289	268			513
Pk Hr Factor	0.697	0.848			0.922	Pk Hr Factor	0.870	0.870			0.891
7 - 9 Volume	294	177	0	0	471	4 - 6 Volume	501	366	0	0	867
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:30	16:45			16:30
7 - 9 Pk Volume	216	118	0	0	334	4 - 6 Pk Volume	289	201	0	0	480
Pk Hr Factor	0.711	0.720	0.000	0.000	0.714	Pk Hr Factor	0.870	0.810	0.000	0.000	0.828

Prepared by NDS/ATD

Project #: CA14_4223_004 **City:** Solana Beach

Location: Stevens Ave Bet. Nardo Ave & Genevieve St **Date:** 11/10/2014

Prepared by NDS/ATD

Project #: CA14_4223_004 **City:** Solana Beach

Location: Stevens Ave Bet. Nardo Ave & Genevieve St **Date:** 11/11/2014

Prepared by NDS/ATD

Project #: CA14_4223_004 **City:** Solana Beach

Location: Stevens Ave Bet. Nardo Ave & Genevieve St **Date:** 11/12/2014

Prepared by NDS/ATD

Project #: CA14_4223_004 **City:** Solana Beach

Location: Stevens Ave Bet. Nardo Ave & Genevieve St **Date:** 11/13/2014

Prepared by NDS/ATD

Project #: CA14_4223_004 **City:** Solana Beach

Location: Stevens Ave Bet. Nardo Ave & Genevieve St **Date:** 11/14/2014

Prepared by NDS/ATD

Project #: CA14_4223_004 **City:** Solana Beach

Location: Stevens Ave Bet. Nardo Ave & Genevieve St **Date:** 11/15/2014

Prepared by NDS/ATD

Project #: CA14_4223_004 **City:** Solana Beach

Location: Stevens Ave Bet. Nardo Ave & Genevieve St **Date:** 11/16/2014

Prepared by NDS/ATD

VOLUME

Lomas Santa Fe Dr Bet. Stevens Ave & Solana Hills Dr

Day: Monday
Date: 11/10/2014

City: Solana Beach
Project #: CA14_4223_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	11,424	11,369	22,793

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			11		13		24		12:00			212		212		424	
00:15			18		11		29		12:15			204		206		410	
00:30			10		5		15		12:30			194		203		397	
00:45			7	46	6	35	13	81	12:45			212	822	218	839	430	1661
01:00			7		5		12		13:00			234		200		434	
01:15			7		3		10		13:15			216		178		394	
01:30			3		3		6		13:30			195		193		388	
01:45			2	19	4	15	6	34	13:45			198	843	215	786	413	1629
02:00			3		2		5		14:00			206		181		387	
02:15			3		3		6		14:15			225		197		422	
02:30			2		2		4		14:30			237		225		462	
02:45			0	8	1	8	1	16	14:45			300	968	184	787	484	1755
03:00			4		1		5		15:00			239		212		451	
03:15			3		3		6		15:15			230		188		418	
03:30			4		0		4		15:30			226		234		460	
03:45			3	14	3	7	6	21	15:45			231	926	194	828	425	1754
04:00			2		7		9		16:00			236		196		432	
04:15			3		5		8		16:15			229		200		429	
04:30			8		10		18		16:30			246		191		437	
04:45			13	26	17	39	30	65	16:45			275	986	195	782	470	1768
05:00			11		24		35		17:00			287		172		459	
05:15			23		25		48		17:15			244		211		455	
05:30			21		46		67		17:30			208		214		422	
05:45			23	78	52	147	75	225	17:45			261	1000	192	789	453	1789
06:00			37		116		153		18:00			230		169		399	
06:15			76		154		230		18:15			163		145		308	
06:30			71		162		233		18:30			138		141		279	
06:45			89	273	166	598	255	871	18:45			153	684	121	576	274	1260
07:00			113		200		313		19:00			144		116		260	
07:15			137		261		398		19:15			152		91		243	
07:30			192		230		422		19:30			109		81		190	
07:45			184	626	197	888	381	1514	19:45			98	503	74	362	172	865
08:00			148		177		325		20:00			90		65		155	
08:15			167		183		350		20:15			110		63		173	
08:30			177		256		433		20:30			88		59		147	
08:45			154	646	185	801	339	1447	20:45			68	356	67	254	135	610
09:00			153		198		351		21:00			85		61		146	
09:15			163		213		376		21:15			58		57		115	
09:30			171		228		399		21:30			59		53		112	
09:45			159	646	213	852	372	1498	21:45			48	250	50	221	98	471
10:00			202		185		387		22:00			25		26		51	
10:15			199		204		403		22:15			28		24		52	
10:30			175		199		374		22:30			24		26		50	
10:45			179	755	199	787	378	1542	22:45			17	94	16	92	33	186
11:00			180		198		378		23:00			16		11		27	
11:15			208		169		377		23:15			9		10		19	
11:30			210		245		455		23:30			10		22		32	
11:45			213	811	213	825	426	1636	23:45			9	44	8	51	17	95
TOTALS				3948		5002		8950	TOTALS				7476		6367		13843
SPLIT %				44.1%		55.9%		39.3%	SPLIT %				54.0%		46.0%		60.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	11,424	11,369	22,793

AM Peak Hour			11:15	07:00	11:30	PM Peak Hour			16:30	12:00	16:30
AM Pk Volume			843	888	1715	PM Pk Volume			1052	839	1821
Pk Hr Factor			0.989	0.851	0.942	Pk Hr Factor			0.916	0.962	0.969
7 - 9 Volume	0	0	1272	1689	2961	4 - 6 Volume	0	0	1986	1571	3557
7 - 9 Peak Hour			07:30	07:00	07:15	4 - 6 Peak Hour			16:30	16:45	16:30
7 - 9 Pk Volume	0	0	691	888	1526	4 - 6 Pk Volume	0	0	1052	792	1821
Pk Hr Factor	0.000	0.000	0.900	0.851	0.904	Pk Hr Factor	0.000	0.000	0.916	0.925	0.969

Prepared by NDS/ATD

VOLUME

Lomas Santa Fe Dr Bet. Stevens Ave & Solana Hills Dr

Day: Tuesday
Date: 11/11/2014

City: Solana Beach
Project #: CA14_4223_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	11,967	12,215	24,182

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			17		8		25		12:00			227		217		444	
00:15			6		11		17		12:15			211		173		384	
00:30			4		4		8		12:30			212		206		418	
00:45			2	29	3	26	5	55	12:45			210	860	250	846	460	1706
01:00			2		5		7		13:00			246		201		447	
01:15			3		2		5		13:15			205		219		424	
01:30			2		0		2		13:30			230		222		452	
01:45			1	8	3	10	4	18	13:45			264	945	225	867	489	1812
02:00			0		2		2		14:00			233		216		449	
02:15			4		1		5		14:15			216		227		443	
02:30			2		5		7		14:30			269		269		538	
02:45			1	7	2	10	3	17	14:45			319	1037	202	914	521	1951
03:00			3		2		5		15:00			229		202		431	
03:15			0		5		5		15:15			219		185		404	
03:30			2		3		5		15:30			226		255		481	
03:45			1	6	5	15	6	21	15:45			284	958	229	871	513	1829
04:00			1		4		5		16:00			247		223		470	
04:15			3		6		9		16:15			241		214		455	
04:30			12		5		17		16:30			258		202		460	
04:45			9	25	8	23	17	48	16:45			279	1025	233	872	512	1897
05:00			15		17		32		17:00			281		194		475	
05:15			20		26		46		17:15			223		165		388	
05:30			17		38		55		17:30			201		207		408	
05:45			30	82	44	125	74	207	17:45			217	922	211	777	428	1699
06:00			48		127		175		18:00			198		176		374	
06:15			49		145		194		18:15			178		197		375	
06:30			67		169		236		18:30			146		171		317	
06:45			82	246	183	624	265	870	18:45			123	645	147	691	270	1336
07:00			95		251		346		19:00			144		131		275	
07:15			142		280		422		19:15			192		96		288	
07:30			174		258		432		19:30			129		94		223	
07:45			163	574	226	1015	389	1589	19:45			104	569	91	412	195	981
08:00			159		214		373		20:00			90		84		174	
08:15			183		228		411		20:15			89		67		156	
08:30			178		230		408		20:30			101		60		161	
08:45			154	674	213	885	367	1559	20:45			74	354	50	261	124	615
09:00			173		196		369		21:00			84		69		153	
09:15			171		205		376		21:15			89		53		142	
09:30			170		249		419		21:30			87		33		120	
09:45			168	682	219	869	387	1551	21:45			43	303	29	184	72	487
10:00			220		197		417		22:00			33		24		57	
10:15			193		187		380		22:15			38		22		60	
10:30			194		224		418		22:30			25		24		49	
10:45			212	819	248	856	460	1675	22:45			22	118	21	91	43	209
11:00			180		206		386		23:00			110		16		126	
11:15			217		215		432		23:15			67		25		92	
11:30			206		253		459		23:30			39		13		52	
11:45			251	854	237	911	488	1765	23:45			9	225	6	60	15	285
TOTALS				4006		5369		9375	TOTALS				7961		6846		14807
SPLIT %				42.7%		57.3%		38.8%	SPLIT %				53.8%		46.2%		61.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	11,967	12,215	24,182

AM Peak Hour			11:15	07:00	11:15	PM Peak Hour			16:15	13:45	14:00
AM Pk Volume			901	1015	1823	PM Pk Volume			1059	937	1951
Pk Hr Factor			0.897	0.906	0.934	Pk Hr Factor			0.942	0.871	0.907
7 - 9 Volume	0	0	1248	1900	3148	4 - 6 Volume	0	0	1947	1649	3596
7 - 9 Peak Hour			07:45	07:00	07:15	4 - 6 Peak Hour			16:15	16:00	16:15
7 - 9 Pk Volume	0	0	683	1015	1616	4 - 6 Pk Volume	0	0	1059	872	1902
Pk Hr Factor	0.000	0.000	0.933	0.906	0.935	Pk Hr Factor	0.000	0.000	0.942	0.936	0.929

Prepared by NDS/ATD

VOLUME

Lomas Santa Fe Dr Bet. Stevens Ave & Solana Hills Dr

Day: Wednesday
Date: 11/12/2014

City: Solana Beach
Project #: CA14_4223_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	12,535	12,916	25,451

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			20		15		35		12:00			235		220		455	
00:15			16		12		28		12:15			194		218		412	
00:30			4		6		10		12:30			206		235		441	
00:45			1	41	8	41	9	82	12:45			229	864	213	886	442	1750
01:00			5		3		8		13:00			207		224		431	
01:15			3		5		8		13:15			210		216		426	
01:30			4		1		5		13:30			229		239		468	
01:45			4	16	3	12	7	28	13:45			228	874	222	901	450	1775
02:00			1		3		4		14:00			242		238		480	
02:15			5		3		8		14:15			265		226		491	
02:30			4		2		6		14:30			271		265		536	
02:45			1	11	3	11	4	22	14:45			281	1059	297	1026	578	2085
03:00			5		2		7		15:00			289		249		538	
03:15			1		5		6		15:15			249		210		459	
03:30			6		6		12		15:30			258		221		479	
03:45			1	13	3	16	4	29	15:45			239	1035	224	904	463	1939
04:00			3		2		5		16:00			243		218		461	
04:15			7		6		13		16:15			286		203		489	
04:30			7		13		20		16:30			228		237		465	
04:45			19	36	15	36	34	72	16:45			300	1057	197	855	497	1912
05:00			9		24		33		17:00			265		201		466	
05:15			19		38		57		17:15			227		191		418	
05:30			14		33		47		17:30			191		234		425	
05:45			35	77	58	153	93	230	17:45			235	918	201	827	436	1745
06:00			43		84		127		18:00			206		196		402	
06:15			61		131		192		18:15			203		182		385	
06:30			77		131		208		18:30			236		164		400	
06:45			123	304	188	534	311	838	18:45			167	812	132	674	299	1486
07:00			123		284		407		19:00			114		117		231	
07:15			182		329		511		19:15			134		89		223	
07:30			222		237		459		19:30			102		105		207	
07:45			222	749	232	1082	454	1831	19:45			145	495	101	412	246	907
08:00			230		228		458		20:00			116		90		206	
08:15			224		332		556		20:15			86		78		164	
08:30			227		310		537		20:30			121		61		182	
08:45			236	917	251	1121	487	2038	20:45			84	407	66	295	150	702
09:00			176		258		434		21:00			59		65		124	
09:15			197		235		432		21:15			56		49		105	
09:30			198		250		448		21:30			44		37		81	
09:45			179	750	240	983	419	1733	21:45			48	207	38	189	86	396
10:00			165		191		356		22:00			37		36		73	
10:15			172		231		403		22:15			47		25		72	
10:30			189		221		410		22:30			33		34		67	
10:45			190	716	223	866	413	1582	22:45			26	143	23	118	49	261
11:00			225		206		431		23:00			25		12		37	
11:15			246		212		458		23:15			19		16		35	
11:30			210		257		467		23:30			33		10		43	
11:45			255	936	254	929	509	1865	23:45			21	98	7	45	28	143
TOTALS				4566		5784		10350	TOTALS				7969		7132		15101
SPLIT %				44.1%		55.9%		40.7%	SPLIT %				52.8%		47.2%		59.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	12,535	12,916	25,451

AM Peak Hour			11:15	08:15	08:00	PM Peak Hour			14:15	14:15	14:15
AM Pk Volume			946	1151	2038	PM Pk Volume			1106	1037	2143
Pk Hr Factor			0.927	0.867	0.916	Pk Hr Factor			0.957	0.873	0.927
7 - 9 Volume	0	0	1666	2203	3869	4 - 6 Volume	0	0	1975	1682	3657
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:15	16:00	16:15
7 - 9 Pk Volume	0	0	917	1121	2038	4 - 6 Pk Volume	0	0	1079	855	1917
Pk Hr Factor	0.000	0.000	0.971	0.844	0.916	Pk Hr Factor	0.000	0.000	0.899	0.902	0.964

Prepared by NDS/ATD

VOLUME

Lomas Santa Fe Dr Bet. Stevens Ave & Solana Hills Dr

Day: Thursday
Date: 11/13/2014

City: Solana Beach
Project #: CA14_4223_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	13,207	13,329	26,536

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			55		9		64		12:00			277		260		537	
00:15			37		6		43		12:15			210		214		424	
00:30			18		7		25		12:30			211		212		423	
00:45			13	123	9	31	22	154	12:45			242	940	212	898	454	1838
01:00			4		5		9		13:00			219		190		409	
01:15			3		2		5		13:15			231		201		432	
01:30			7		3		10		13:30			225		241		466	
01:45			6	20	5	15	11	35	13:45			251	926	218	850	469	1776
02:00			2		3		5		14:00			244		221		465	
02:15			4		4		8		14:15			260		239		499	
02:30			1		4		5		14:30			316		270		586	
02:45			5	12	2	13	7	25	14:45			279	1099	305	1035	584	2134
03:00			2		4		6		15:00			271		281		552	
03:15			4		6		10		15:15			268		255		523	
03:30			2		3		5		15:30			253		228		481	
03:45			5	13	2	15	7	28	15:45			235	1027	236	1000	471	2027
04:00			0		2		2		16:00			265		240		505	
04:15			5		2		7		16:15			275		218		493	
04:30			13		8		21		16:30			279		222		501	
04:45			10	28	19	31	29	59	16:45			277	1096	209	889	486	1985
05:00			22		24		46		17:00			281		200		481	
05:15			12		19		31		17:15			256		213		469	
05:30			30		43		73		17:30			283		249		532	
05:45			37	101	55	141	92	242	17:45			250	1070	238	900	488	1970
06:00			38		113		151		18:00			241		221		462	
06:15			76		153		229		18:15			199		198		397	
06:30			70		139		209		18:30			174		208		382	
06:45			112	296	191	596	303	892	18:45			166	780	192	819	358	1599
07:00			158		288		446		19:00			159		148		307	
07:15			185		325		510		19:15			139		124		263	
07:30			209		232		441		19:30			183		100		283	
07:45			202	754	250	1095	452	1849	19:45			160	641	100	472	260	1113
08:00			236		199		435		20:00			155		97		252	
08:15			203		325		528		20:15			136		76		212	
08:30			187		330		517		20:30			133		68		201	
08:45			177	803	244	1098	421	1901	20:45			144	568	69	310	213	878
09:00			176		239		415		21:00			82		65		147	
09:15			167		194		361		21:15			82		69		151	
09:30			200		192		392		21:30			78		44		122	
09:45			155	698	258	883	413	1581	21:45			67	309	36	214	103	523
10:00			164		184		348		22:00			49		27		76	
10:15			179		201		380		22:15			34		31		65	
10:30			194		219		413		22:30			42		25		67	
10:45			207	744	224	828	431	1572	22:45			70	195	22	105	92	300
11:00			190		221		411		23:00			66		18		84	
11:15			214		249		463		23:15			39		17		56	
11:30			182		297		479		23:30			25		14		39	
11:45			239	825	261	1028	500	1853	23:45			9	139	14	63	23	202
TOTALS				4417		5774		10191	TOTALS				8790		7555		16345
SPLIT %				43.3%		56.7%		38.4%	SPLIT %				53.8%		46.2%		61.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	13,207	13,329	26,536

AM Peak Hour			11:45	08:15	11:15	PM Peak Hour			14:30	14:30	14:30
AM Pk Volume			937	1138	1979	PM Pk Volume			1134	1111	2245
Pk Hr Factor			0.846	0.862	0.921	Pk Hr Factor			0.897	0.911	0.958
7 - 9 Volume	0	0	1557	2193	3750	4 - 6 Volume	0	0	2166	1789	3955
7 - 9 Peak Hour			07:30	07:45	07:45	4 - 6 Peak Hour			16:15	17:00	16:00
7 - 9 Pk Volume	0	0	850	1104	1932	4 - 6 Pk Volume	0	0	1112	900	1985
Pk Hr Factor	0.000	0.000	0.900	0.836	0.915	Pk Hr Factor	0.000	0.000	0.989	0.904	0.983

Prepared by NDS/ATD

VOLUME

Lomas Santa Fe Dr Bet. Stevens Ave & Solana Hills Dr

Day: Friday
Date: 11/14/2014

City: Solana Beach
Project #: CA14_4223_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	13,014	13,848	26,862

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			20		10		30		12:00			279		274		553	
00:15			4		9		13		12:15			234		234		468	
00:30			6		9		15		12:30			210		271		481	
00:45			6	36	6	34	12	70	12:45			224	947	234	1013	458	1960
01:00			4		7		11		13:00			269		244		513	
01:15			8		4		12		13:15			236		236		472	
01:30			3		7		10		13:30			262		250		512	
01:45			3	18	0	18	3	36	13:45			290	1057	227	957	517	2014
02:00			7		1		8		14:00			311		232		543	
02:15			3		3		6		14:15			271		249		520	
02:30			5		5		10		14:30			258		247		505	
02:45			1	16	4	13	5	29	14:45			253	1093	310	1038	563	2131
03:00			6		2		8		15:00			244		252		496	
03:15			3		2		5		15:15			252		256		508	
03:30			3		9		12		15:30			235		239		474	
03:45			6	18	5	18	11	36	15:45			248	979	232	979	480	1958
04:00			4		4		8		16:00			250		227		477	
04:15			5		4		9		16:15			306		200		506	
04:30			9		10		19		16:30			264		225		489	
04:45			17	35	26	44	43	79	16:45			299	1119	185	837	484	1956
05:00			10		19		29		17:00			277		181		458	
05:15			15		23		38		17:15			279		199		478	
05:30			18		49		67		17:30			217		245		462	
05:45			27	70	54	145	81	215	17:45			178	951	187	812	365	1763
06:00			44		85		129		18:00			196		173		369	
06:15			73		147		220		18:15			233		176		409	
06:30			74		181		255		18:30			134		166		300	
06:45			101	292	200	613	301	905	18:45			161	724	143	658	304	1382
07:00			133		310		443		19:00			151		148		299	
07:15			184		316		500		19:15			197		124		321	
07:30			220		263		483		19:30			126		90		216	
07:45			177	714	253	1142	430	1856	19:45			92	566	61	423	153	989
08:00			243		266		509		20:00			91		85		176	
08:15			216		302		518		20:15			109		89		198	
08:30			184		350		534		20:30			95		81		176	
08:45			204	847	264	1182	468	2029	20:45			93	388	87	342	180	730
09:00			182		219		401		21:00			81		86		167	
09:15			159		237		396		21:15			81		88		169	
09:30			192		231		423		21:30			81		83		164	
09:45			180	713	209	896	389	1609	21:45			111	354	72	329	183	683
10:00			169		210		379		22:00			91		53		144	
10:15			189		233		422		22:15			57		40		97	
10:30			170		250		420		22:30			43		23		66	
10:45			191	719	258	951	449	1670	22:45			39	230	31	147	70	377
11:00			206		244		450		23:00			43		40		83	
11:15			230		291		521		23:15			31		26		57	
11:30			253		292		545		23:30			26		23		49	
11:45			294	983	320	1147	614	2130	23:45			45	145	21	110	66	255
TOTALS				4461		6203		10664	TOTALS				8553		7645		16198
SPLIT %				41.8%		58.2%		39.7%	SPLIT %				52.8%		47.2%		60.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	13,014	13,848	26,862

AM Peak Hour			11:30	08:00	11:15	PM Peak Hour			16:15	14:30	14:00
AM Pk Volume			1060	1182	2233	PM Pk Volume			1146	1065	2131
Pk Hr Factor			0.901	0.844	0.909	Pk Hr Factor			0.936	0.859	0.946
7 - 9 Volume	0	0	1561	2324	3885	4 - 6 Volume	0	0	2070	1649	3719
7 - 9 Peak Hour			07:30	08:00	08:00	4 - 6 Peak Hour			16:15	16:00	16:00
7 - 9 Pk Volume	0	0	856	1182	2029	4 - 6 Pk Volume	0	0	1146	837	1956
Pk Hr Factor	0.000	0.000	0.881	0.844	0.950	Pk Hr Factor	0.000	0.000	0.936	0.922	0.966

Prepared by NDS/ATD

VOLUME

Lomas Santa Fe Dr Bet. Stevens Ave & Solana Hills Dr

Day: Saturday
Date: 11/15/2014

City: Solana Beach
Project #: CA14_4223_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	11,243	12,030	23,273

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			22		21		43		12:00			280		265		545	
00:15			24		16		40		12:15			224		248		472	
00:30			23		13		36		12:30			220		233		453	
00:45			37	106	16	66	53	172	12:45			212	936	271	1017	483	1953
01:00			32		12		44		13:00			229		225		454	
01:15			14		12		26		13:15			217		215		432	
01:30			15		9		24		13:30			197		185		382	
01:45			4	65	5	38	9	103	13:45			244	887	186	811	430	1698
02:00			9		4		13		14:00			210		178		388	
02:15			5		8		13		14:15			194		229		423	
02:30			3		6		9		14:30			204		195		399	
02:45			4	21	2	20	6	41	14:45			204	812	191	793	395	1605
03:00			1		1		2		15:00			212		192		404	
03:15			3		3		6		15:15			213		215		428	
03:30			4		2		6		15:30			207		244		451	
03:45			1	9	2	8	3	17	15:45			194	826	283	934	477	1760
04:00			5		3		8		16:00			215		280		495	
04:15			0		3		3		16:15			223		314		537	
04:30			5		4		9		16:30			210		336		546	
04:45			9	19	5	15	14	34	16:45			238	886	288	1218	526	2104
05:00			0		5		5		17:00			284		234		518	
05:15			13		15		28		17:15			242		232		474	
05:30			21		20		41		17:30			207		252		459	
05:45			17	51	27	67	44	118	17:45			184	917	157	875	341	1792
06:00			27		39		66		18:00			174		144		318	
06:15			30		52		82		18:15			143		138		281	
06:30			33		71		104		18:30			143		111		254	
06:45			45	135	88	250	133	385	18:45			162	622	107	500	269	1122
07:00			48		100		148		19:00			145		91		236	
07:15			71		129		200		19:15			120		100		220	
07:30			91		155		246		19:30			190		95		285	
07:45			86	296	167	551	253	847	19:45			184	639	77	363	261	1002
08:00			103		145		248		20:00			121		78		199	
08:15			122		167		289		20:15			90		69		159	
08:30			167		245		412		20:30			90		66		156	
08:45			150	542	258	815	408	1357	20:45			72	373	70	283	142	656
09:00			165		176		341		21:00			94		69		163	
09:15			161		201		362		21:15			85		86		171	
09:30			157		255		412		21:30			88		73		161	
09:45			183	666	254	886	437	1552	21:45			65	332	51	279	116	611
10:00			222		236		458		22:00			81		71		152	
10:15			191		187		378		22:15			68		49		117	
10:30			198		247		445		22:30			59		48		107	
10:45			183	794	246	916	429	1710	22:45			47	255	40	208	87	463
11:00			218		243		461		23:00			41		39		80	
11:15			208		227		435		23:15			32		31		63	
11:30			237		250		487		23:30			40		38		78	
11:45			241	904	267	987	508	1891	23:45			37	150	22	130	59	280
TOTALS				3608		4619		8227	TOTALS				7635		7411		15046
SPLIT %				43.9%		56.1%		35.3%	SPLIT %				50.7%		49.3%		64.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	11,243	12,030	23,273

AM Peak Hour			11:30	11:30	11:30	PM Peak Hour			16:30	16:00	16:15
AM Pk Volume			982	1030	2012	PM Pk Volume			974	1218	2127
Pk Hr Factor			0.877	0.964	0.923	Pk Hr Factor			0.857	0.906	0.974
7 - 9 Volume	0	0	838	1366	2204	4 - 6 Volume	0	0	1803	2093	3896
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:30	16:00	16:15
7 - 9 Pk Volume	0	0	542	815	1357	4 - 6 Pk Volume	0	0	974	1218	2127
Pk Hr Factor	0.000	0.000	0.811	0.790	0.823	Pk Hr Factor	0.000	0.000	0.857	0.906	0.974

Prepared by NDS/ATD

VOLUME

Lomas Santa Fe Dr Bet. Stevens Ave & Solana Hills Dr

Day: Sunday
Date: 11/16/2014

City: Solana Beach
Project #: CA14_4223_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	8,991	9,141	18,132

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			31		23		54		12:00			243		215		458	
00:15			19		21		40		12:15			209		194		403	
00:30			25		16		41		12:30			200		194		394	
00:45			32	107	16	76	48	183	12:45			205	857	199	802	404	1659
01:00			19		14		33		13:00			178		177		355	
01:15			23		15		38		13:15			180		155		335	
01:30			33		5		38		13:30			193		185		378	
01:45			19	94	6	40	25	134	13:45			205	756	165	682	370	1438
02:00			13		4		17		14:00			205		162		367	
02:15			10		3		13		14:15			182		146		328	
02:30			4		5		9		14:30			145		149		294	
02:45			5	32	3	15	8	47	14:45			224	756	177	634	401	1390
03:00			7		2		9		15:00			173		178		351	
03:15			1		8		9		15:15			168		169		337	
03:30			5		2		7		15:30			154		116		270	
03:45			2	15	0	12	2	27	15:45			154	649	157	620	311	1269
04:00			5		2		7		16:00			203		174		377	
04:15			1		2		3		16:15			210		187		397	
04:30			5		0		5		16:30			173		153		326	
04:45			8	19	0	4	8	23	16:45			224	810	160	674	384	1484
05:00			8		6		14		17:00			191		152		343	
05:15			8		3		11		17:15			169		137		306	
05:30			11		11		22		17:30			126		161		287	
05:45			12	39	16	36	28	75	17:45			113	599	159	609	272	1208
06:00			14		27		41		18:00			110		112		222	
06:15			23		22		45		18:15			123		108		231	
06:30			22		42		64		18:30			90		141		231	
06:45			40	99	69	160	109	259	18:45			85	408	106	467	191	875
07:00			36		83		119		19:00			116		106		222	
07:15			52		89		141		19:15			125		78		203	
07:30			58		111		169		19:30			65		70		135	
07:45			59	205	127	410	186	615	19:45			85	391	68	322	153	713
08:00			69		110		179		20:00			66		45		111	
08:15			91		181		272		20:15			49		45		94	
08:30			101		239		340		20:30			53		50		103	
08:45			95	356	160	690	255	1046	20:45			47	215	50	190	97	405
09:00			94		148		242		21:00			54		53		107	
09:15			151		150		301		21:15			46		31		77	
09:30			163		178		341		21:30			97		31		128	
09:45			162	570	207	683	369	1253	21:45			104	301	34	149	138	450
10:00			236		240		476		22:00			48		33		81	
10:15			177		201		378		22:15			35		15		50	
10:30			186		198		384		22:30			28		19		47	
10:45			148	747	214	853	362	1600	22:45			12	123	6	73	18	196
11:00			162		239		401		23:00			11		12		23	
11:15			201		213		414		23:15			8		15		23	
11:30			208		213		421		23:30			9		7		16	
11:45			237	808	229	894	466	1702	23:45			7	35	12	46	19	81
TOTALS				3091		3873		**6964**	**TOTALS**				5900		5268		**11168**
SPLIT %				44.4%		55.6%		**38.4%**	**SPLIT %**				52.8%		47.2%		**61.6%**

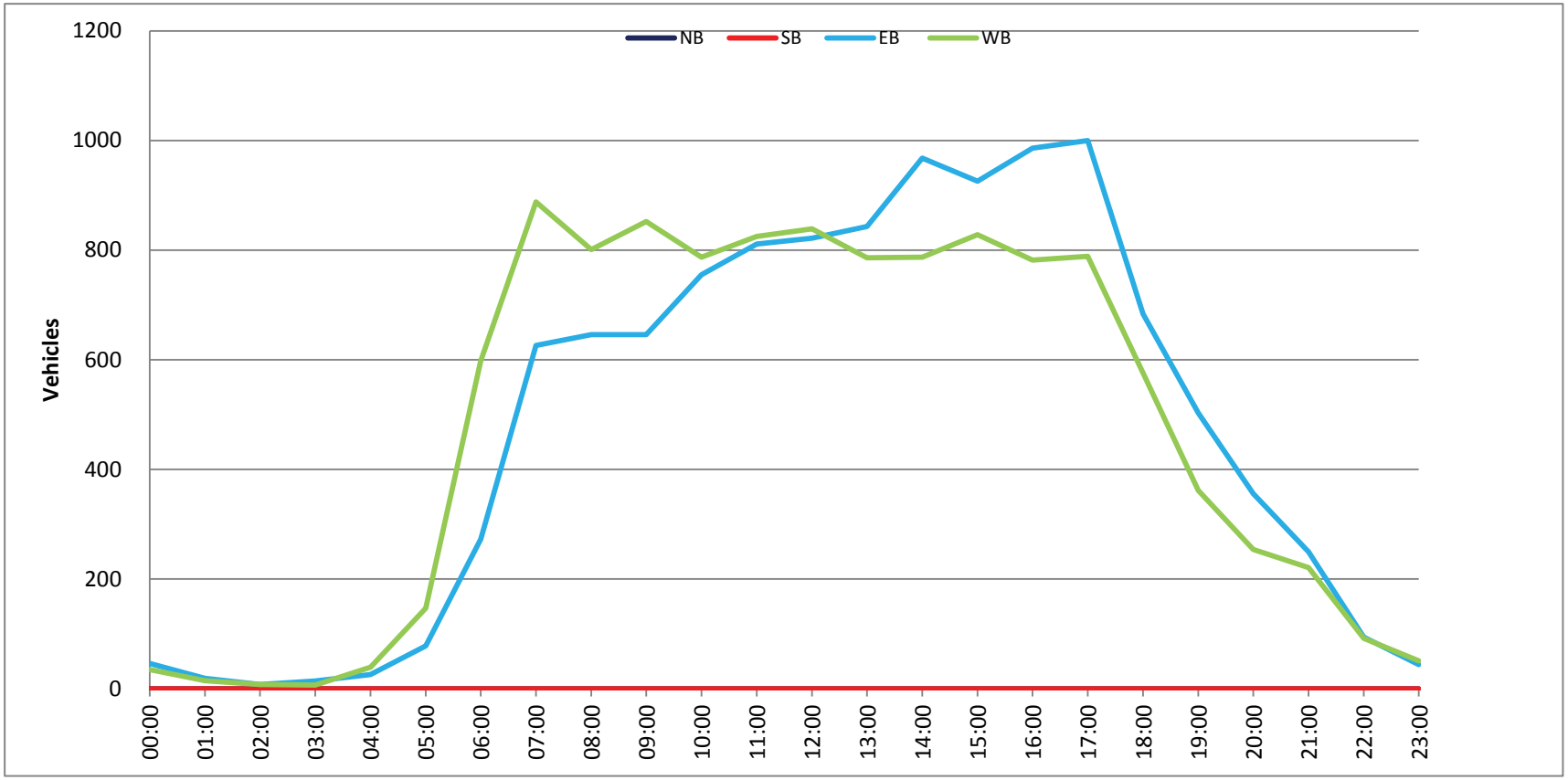
DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	8,991	9,141	18,132

AM Peak Hour			11:30	11:00	**11:15**	**PM Peak Hour**			12:00	12:00	**12:00**
AM Pk Volume			897	894	**1759**	**PM Pk Volume**			857	802	**1659**
Pk Hr Factor			0.923	0.935	**0.944**	**Pk Hr Factor**			0.882	0.933	**0.906**
7 - 9 Volume	0	0	561	1100	**1661**	**4 - 6 Volume**	0	0	1409	1283	**2692**
7 - 9 Peak Hour			08:00	08:00	**08:00**	**4 - 6 Peak Hour**			16:00	16:00	**16:00**
7 - 9 Pk Volume	0	0	356	690	**1046**	**4 - 6 Pk Volume**	0	0	810	674	**1484**
Pk Hr Factor	0.000	0.000	0.881	0.722	**0.769**	**Pk Hr Factor**	0.000	0.000	0.904	0.901	**0.935**

Prepared by NDS/ATD

Project #: CA14_4223_005 **City:** Solana Beach

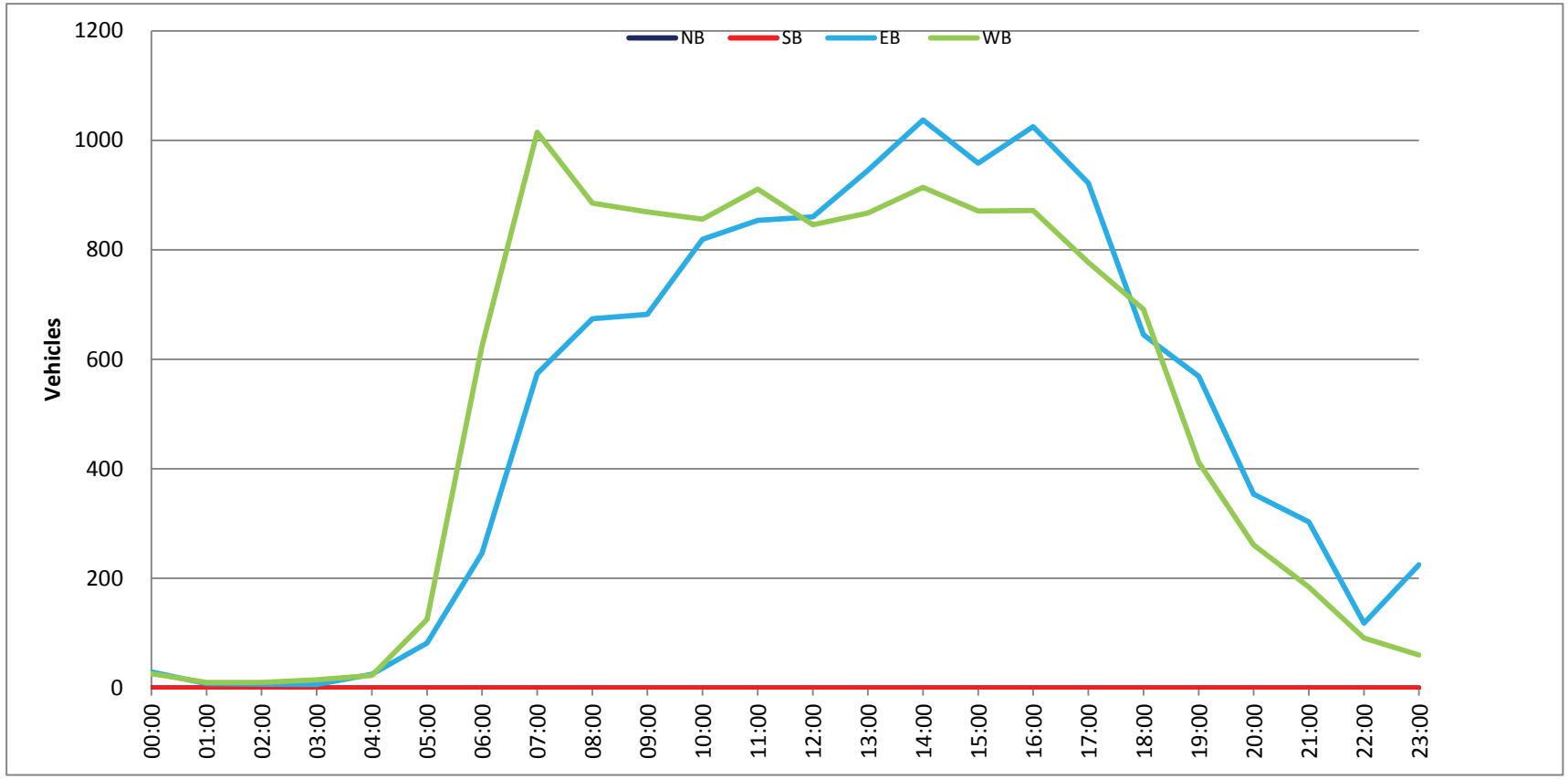
Location: Lomas Santa Fe Dr Bet. Stevens Ave & **Date:** 11/10/2014



Prepared by NDS/ATD

Project #: CA14_4223_005 **City:** Solana Beach

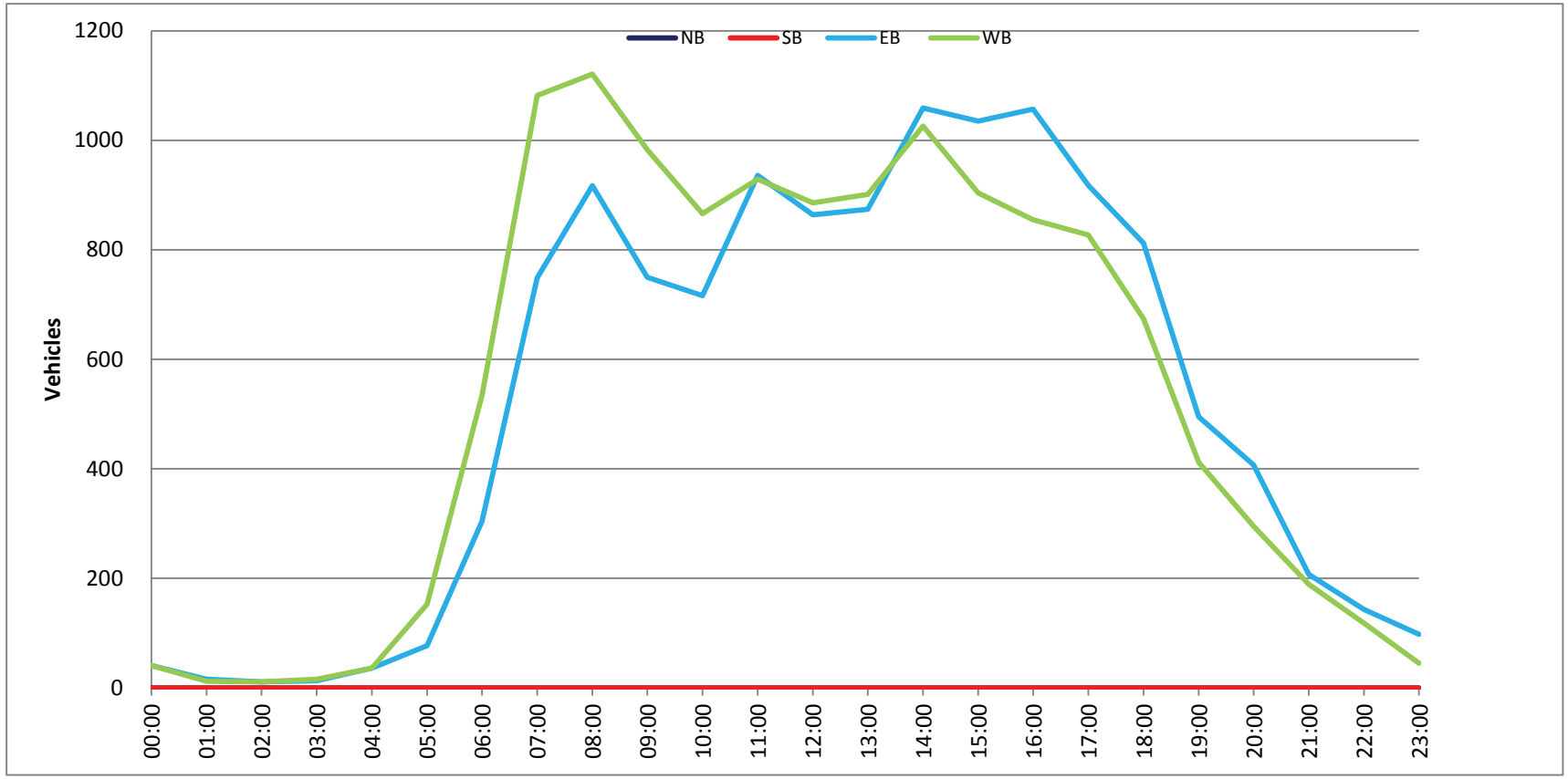
Location: Lomas Santa Fe Dr Bet. Stevens Ave & **Date:** 11/11/2014



Prepared by NDS/ATD

Project #: CA14_4223_005 **City:** Solana Beach

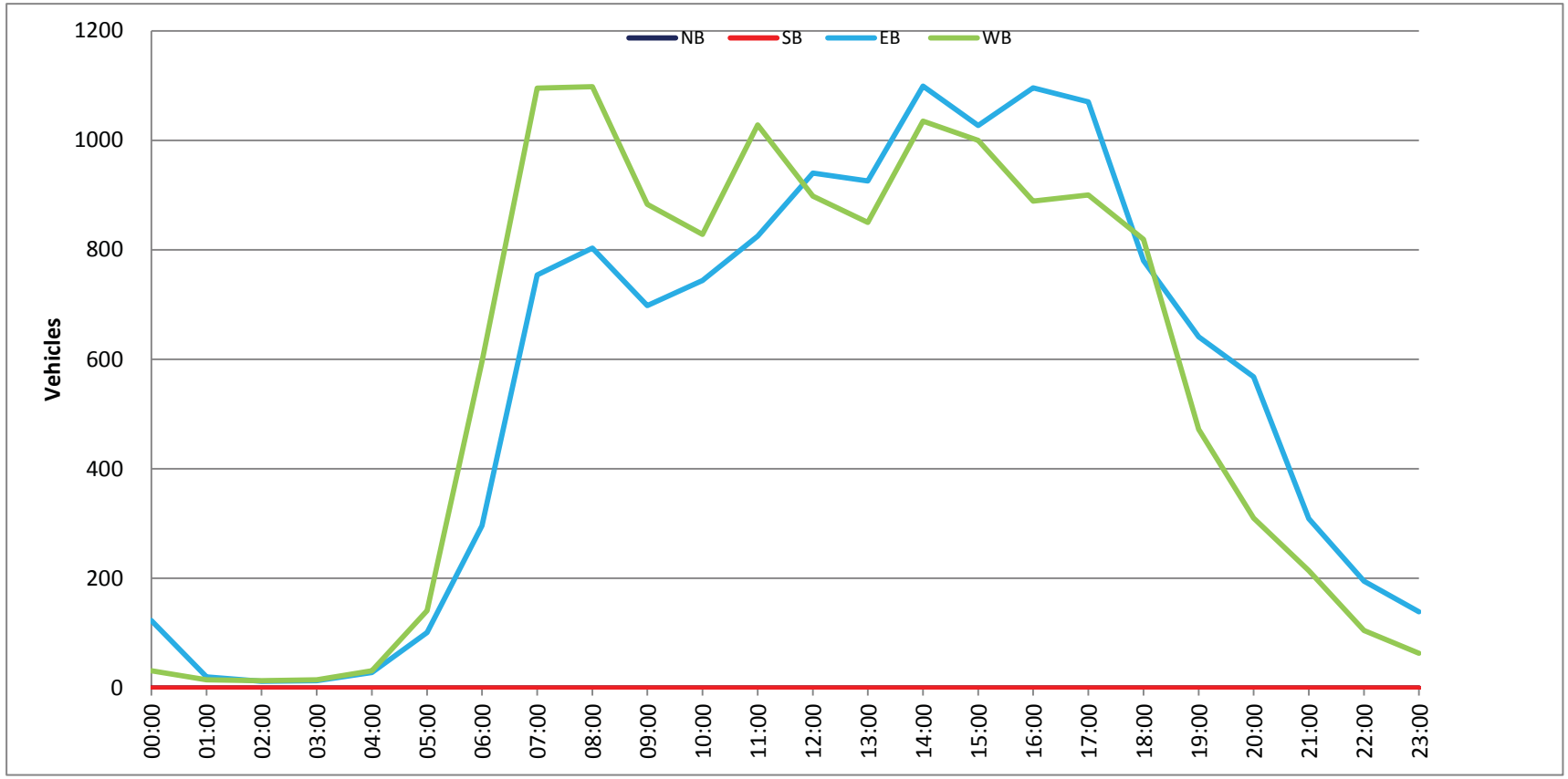
Location: Lomas Santa Fe Dr Bet. Stevens Ave & **Date:** 11/12/2014



Prepared by NDS/ATD

Project #: CA14_4223_005 **City:** Solana Beach

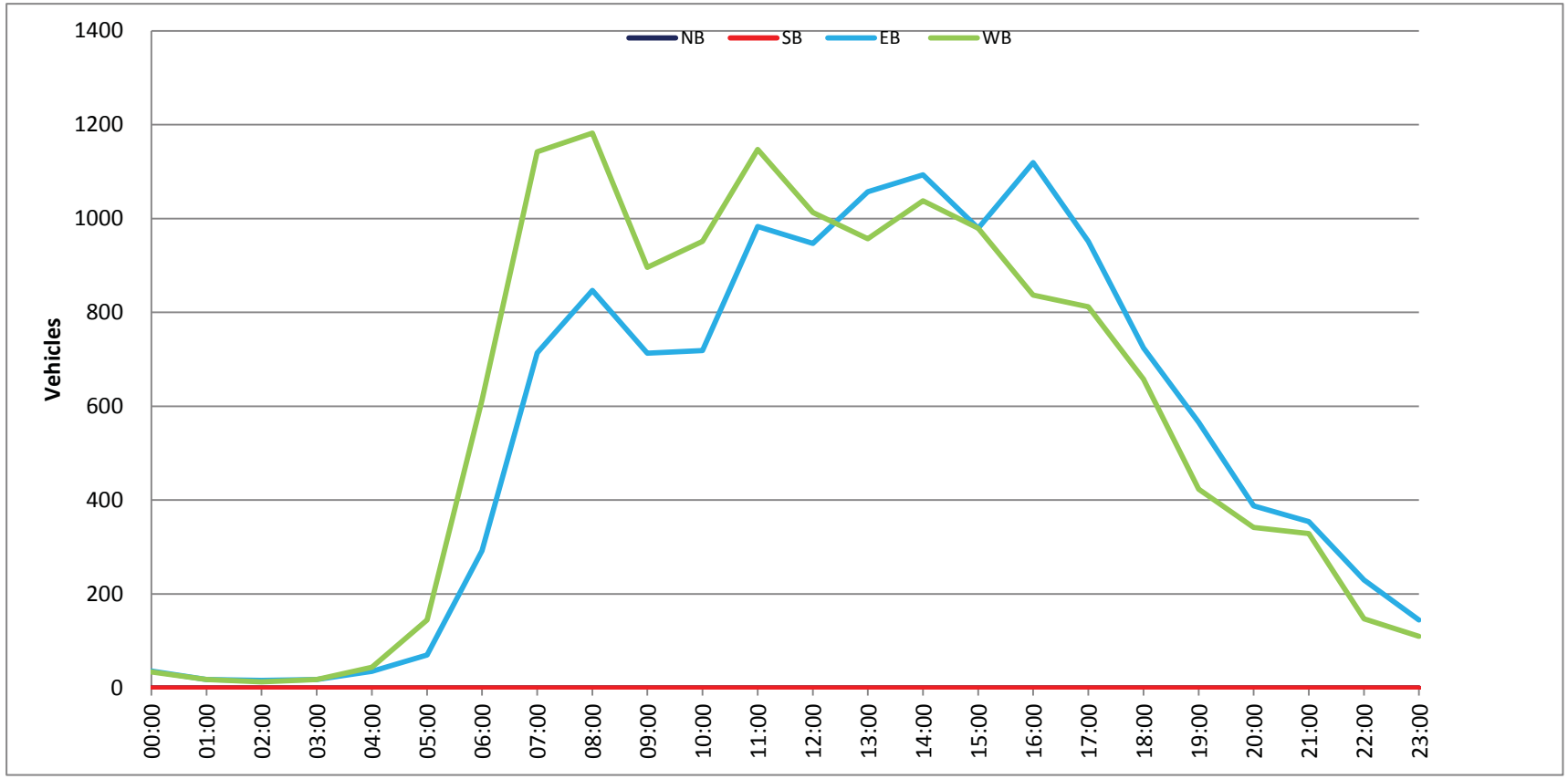
Location: Lomas Santa Fe Dr Bet. Stevens Ave & **Date:** 11/13/2014



Prepared by NDS/ATD

Project #: CA14_4223_005 **City:** Solana Beach

Location: Lomas Santa Fe Dr Bet. Stevens Ave & **Date:** 11/14/2014



Prepared by NDS/ATD

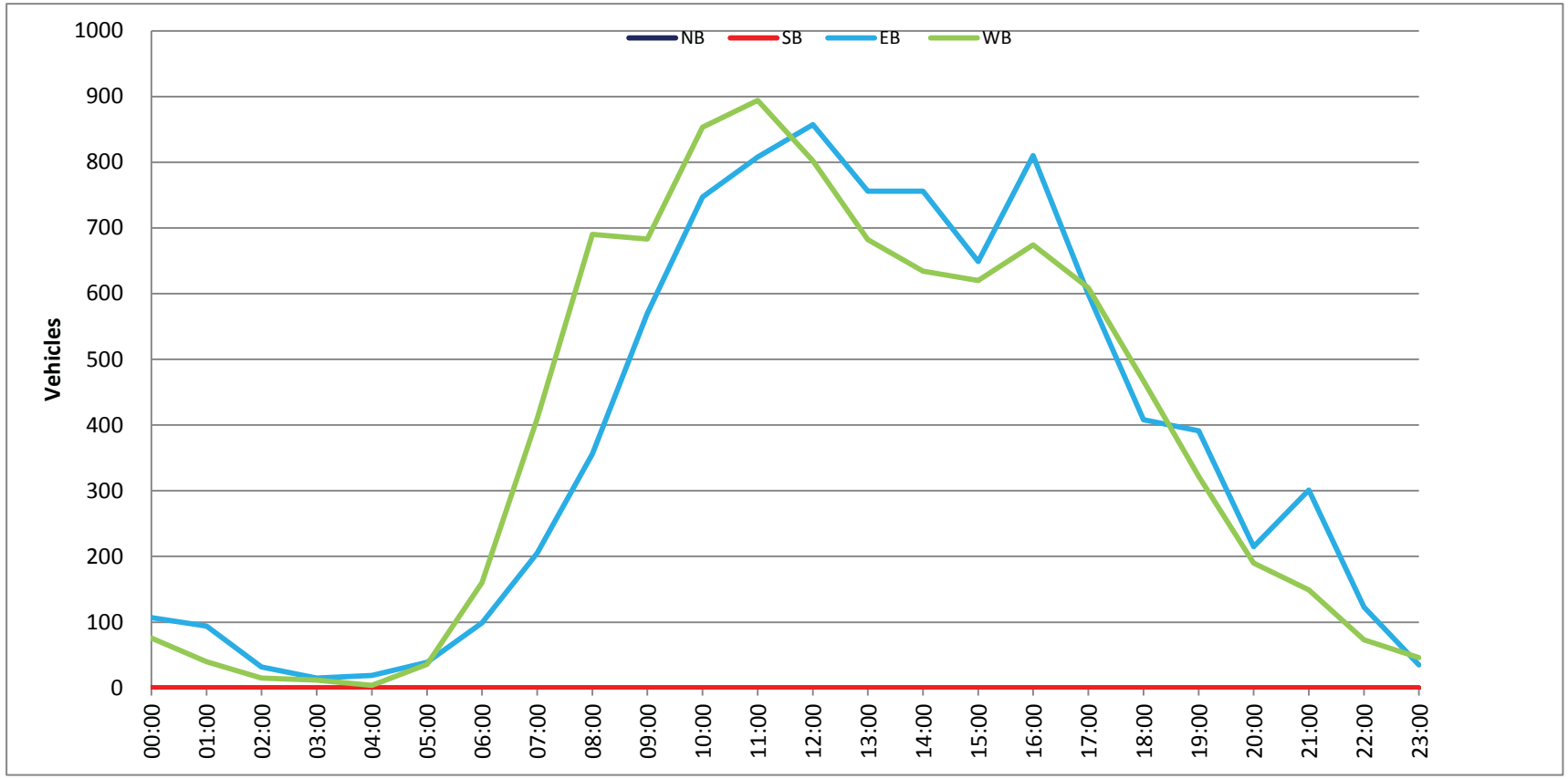
Project #: CA14_4223_005 **City:** Solana Beach

Location: Lomas Santa Fe Dr Bet. Stevens Ave & **Date:** 11/15/2014

Prepared by NDS/ATD

Project #: CA14_4223_005 **City:** Solana Beach

Location: Lomas Santa Fe Dr Bet. Stevens Ave & **Date:** 11/16/2014



Prepared by NDS/ATD

VOLUME

Stevens Ave Bet. Nardo Ave & Valley Ave

Day: Sunday
Date: 11/16/2014

City: Solana Beach
Project #: CA14_4223_006

DAILY TOTALS	NB	SB	EB	WB	Total
	2,685	2,752	0	0	5,437

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	7		2						9		12:00	58		76						134	
00:15	8		2						10		12:15	64		79						143	
00:30	6		5						11		12:30	38		72						110	
00:45	4	25	1	10					5	35	12:45	52	212	60	287					112	499
01:00	2		2						4		13:00	52		64						116	
01:15	3		2						5		13:15	38		53						91	
01:30	4		4						8		13:30	46		54						100	
01:45	5	14	3	11					8	25	13:45	46	182	53	224					99	406
02:00	1		3						4		14:00	53		60						113	
02:15	3		2						5		14:15	44		40						84	
02:30	6		2						8		14:30	38		44						82	
02:45	1	11	3	10					4	21	14:45	51	186	51	195					102	381
03:00	4		2						6		15:00	54		55						109	
03:15	4		2						6		15:15	44		54						98	
03:30	0		0						0		15:30	58		50						108	
03:45	0	8	2	6					2	14	15:45	46	202	52	211					98	413
04:00	0		0						0		16:00	55		44						99	
04:15	0		1						1		16:15	47		62						109	
04:30	2		1						3		16:30	78		42						120	
04:45	4	6	1	3					5	9	16:45	79	259	68	216					147	475
05:00	3		3						6		17:00	76		48						124	
05:15	4		2						6		17:15	65		34						99	
05:30	1		3						4		17:30	78		45						123	
05:45	5	13	6	14					11	27	17:45	54	273	45	172					99	445
06:00	2		5						7		18:00	57		31						88	
06:15	7		11						18		18:15	35		30						65	
06:30	11		16						27		18:30	23		28						51	
06:45	12	32	12	44					24	76	18:45	22	137	41	130					63	267
07:00	13		14						27		19:00	25		34						59	
07:15	16		15						31		19:15	19		24						43	
07:30	22		30						52		19:30	18		23						41	
07:45	35	86	20	79					55	165	19:45	19	81	20	101					39	182
08:00	25		30						55		20:00	10		17						27	
08:15	41		35						76		20:15	7		13						20	
08:30	89		36						125		20:30	13		13						26	
08:45	42	197	28	129					70	326	20:45	10	40	12	55					22	95
09:00	48		41						89		21:00	12		9						21	
09:15	49		41						90		21:15	14		5						19	
09:30	42		43						85		21:30	8		12						20	
09:45	56	195	62	187					118	382	21:45	8	42	10	36					18	78
10:00	74		78						152		22:00	7		11						18	
10:15	55		72						127		22:15	12		4						16	
10:30	48		56						104		22:30	4		3						7	
10:45	51	228	66	272					117	500	22:45	4	27	4	22					8	49
11:00	53		58						111		23:00	5		6						11	
11:15	56		100						156		23:15	11		2						13	
11:30	41		74						115		23:30	5		3						8	
11:45	55	205	94	326					149	531	23:45	3	24	1	12					4	36
TOTALS		1020		1091						2111	TOTALS		1665		1661						3326
SPLIT %		48.3%		51.7%						38.8%	SPLIT %		50.1%		49.9%						61.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	2,685	2,752	0	0	5,437

AM Peak Hour	09:45	11:15			11:15	PM Peak Hour	16:30	12:00			16:15
AM Pk Volume	233	344			554	PM Pk Volume	298	287			500
Pk Hr Factor	0.787	0.860			0.888	Pk Hr Factor	0.943	0.908			0.850
7 - 9 Volume	283	208	0	0	491	4 - 6 Volume	532	388	0	0	920
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:30	16:15			16:15
7 - 9 Pk Volume	197	129	0	0	326	4 - 6 Pk Volume	298	220	0	0	500
Pk Hr Factor	0.553	0.896	0.000	0.000	0.652	Pk Hr Factor	0.943	0.809	0.000	0.000	0.850

Prepared by NDS/ATD

VOLUME

Stevens Ave Bet. Nardo Ave & Valley Ave

Day: Monday
Date: 11/10/2014

City: Solana Beach
Project #: CA14_4223_006

DAILY TOTALS	NB	SB	EB	WB	Total
	4,384	4,196	0	0	8,580

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	5		1						6		12:00	71		67						138	
00:15	5		1						6		12:15	87		78						165	
00:30	3		2						5		12:30	102		87						189	
00:45	3	16	2	6					5	22	12:45	65	325	77	309					142	634
01:00	1		1						2		13:00	55		76						131	
01:15	1		2						3		13:15	76		69						145	
01:30	3		0						3		13:30	74		68						142	
01:45	0	5	1	4					1	9	13:45	69	274	69	282					138	556
02:00	3		1						4		14:00	77		58						135	
02:15	2		0						2		14:15	104		76						180	
02:30	0		0						0		14:30	81		96						177	
02:45	1	6	0	1					1	7	14:45	98	360	167	397					265	757
03:00	1		2						3		15:00	84		73						157	
03:15	1		0						1		15:15	85		88						173	
03:30	2		0						2		15:30	91		95						186	
03:45	1	5	1	3					2	8	15:45	97	357	98	354					195	711
04:00	1		1						2		16:00	92		104						196	
04:15	3		3						6		16:15	120		107						227	
04:30	9		3						12		16:30	100		79						179	
04:45	3	16	2	9					5	25	16:45	94	406	98	388					192	794
05:00	3		8						11		17:00	71		97						168	
05:15	5		5						10		17:15	83		88						171	
05:30	16		10						26		17:30	75		87						162	
05:45	16	40	9	32					25	72	17:45	86	315	87	359					173	674
06:00	29		26						55		18:00	67		84						151	
06:15	26		18						44		18:15	49		52						101	
06:30	34		43						77		18:30	45		44						89	
06:45	50	139	38	125					88	264	18:45	37	198	44	224					81	422
07:00	80		49						129		19:00	38		50						88	
07:15	121		80						201		19:15	55		42						97	
07:30	98		105						203		19:30	41		34						75	
07:45	71	370	84	318					155	688	19:45	35	169	35	161					70	330
08:00	74		81						155		20:00	24		23						47	
08:15	76		48						124		20:15	35		22						57	
08:30	80		66						146		20:30	28		22						50	
08:45	69	299	65	260					134	559	20:45	29	116	24	91					53	207
09:00	64		58						122		21:00	9		14						23	
09:15	81		66						147		21:15	18		8						26	
09:30	74		55						129		21:30	7		11						18	
09:45	61	280	63	242					124	522	21:45	10	44	18	51					28	95
10:00	67		65						132		22:00	18		7						25	
10:15	57		61						118		22:15	9		9						18	
10:30	72		68						140		22:30	9		7						16	
10:45	60	256	58	252					118	508	22:45	8	44	2	25					10	69
11:00	86		49						135		23:00	6		7						13	
11:15	70		86						156		23:15	5		3						8	
11:30	77		76						153		23:30	7		4						11	
11:45	86	319	74	285					160	604	23:45	7	25	4	18					11	43
TOTALS		1751		1537						3288	TOTALS		2633		2659						5292
SPLIT %		53.3%		46.7%						38.3%	SPLIT %		49.8%		50.2%						61.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,384	4,196	0	0	8,580

AM Peak Hour	07:00	07:15			07:15	PM Peak Hour	15:45	14:30			15:30
AM Pk Volume	370	350			714	PM Pk Volume	409	424			804
Pk Hr Factor	0.764	0.833			0.879	Pk Hr Factor	0.852	0.635			0.885
7 - 9 Volume	669	578	0	0	1247	4 - 6 Volume	721	747	0	0	1468
7 - 9 Peak Hour	07:00	07:15			07:15	4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	370	350	0	0	714	4 - 6 Pk Volume	406	388	0	0	794
Pk Hr Factor	0.764	0.833	0.000	0.000	0.879	Pk Hr Factor	0.846	0.907	0.000	0.000	0.874

Prepared by NDS/ATD

VOLUME

Stevens Ave Bet. Nardo Ave & Valley Ave

Day: Tuesday
Date: 11/11/2014

City: Solana Beach
Project #: CA14_4223_006

DAILY TOTALS	NB	SB	EB	WB	Total
	4,405	4,245	0	0	8,650

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	5		1						6		12:00	80		81						161	
00:15	2		3						5		12:15	89		85						174	
00:30	0		1						1		12:30	84		76						160	
00:45	1	8	0	5					1	13	12:45	74	327	83	325					157	652
01:00	1		0						1		13:00	80		77						157	
01:15	1		0						1		13:15	82		73						155	
01:30	0		0						0		13:30	82		80						162	
01:45	2	4	0						2	4	13:45	78	322	63	293					141	615
02:00	1		3						4		14:00	72		69						141	
02:15	3		3						6		14:15	94		70						164	
02:30	0		2						2		14:30	117		102						219	
02:45	1	5	1	9					2	14	14:45	80	363	171	412					251	775
03:00	2		0						2		15:00	87		112						199	
03:15	0		1						1		15:15	97		82						179	
03:30	3		2						5		15:30	105		92						197	
03:45	1	6	2	5					3	11	15:45	92	381	103	389					195	770
04:00	1		1						2		16:00	83		86						169	
04:15	0		3						3		16:15	108		83						191	
04:30	2		4						6		16:30	93		91						184	
04:45	7	10	5	13					12	23	16:45	107	391	101	361					208	752
05:00	3		5						8		17:00	75		101						176	
05:15	8		12						20		17:15	89		83						172	
05:30	10		6						16		17:30	95		76						171	
05:45	9	30	11	34					20	64	17:45	83	342	67	327					150	669
06:00	26		14						40		18:00	69		70						139	
06:15	25		24						49		18:15	58		51						109	
06:30	42		32						74		18:30	36		62						98	
06:45	50	143	34	104					84	247	18:45	39	202	41	224					80	426
07:00	80		48						128		19:00	35		45						80	
07:15	114		87						201		19:15	27		64						91	
07:30	89		102						191		19:30	29		39						68	
07:45	73	356	78	315					151	671	19:45	17	108	35	183					52	291
08:00	63		59						122		20:00	20		18						38	
08:15	80		69						149		20:15	16		21						37	
08:30	83		56						139		20:30	20		28						48	
08:45	88	314	69	253					157	567	20:45	16	72	24	91					40	163
09:00	76		49						125		21:00	21		29						50	
09:15	75		64						139		21:15	8		13						21	
09:30	74		66						140		21:30	18		17						35	
09:45	67	292	59	238					126	530	21:45	15	62	11	70					26	132
10:00	61		57						118		22:00	10		12						22	
10:15	75		52						127		22:15	8		4						12	
10:30	73		73						146		22:30	10		5						15	
10:45	70	279	72	254					142	533	22:45	6	34	6	27					12	61
11:00	84		66						150		23:00	6		5						11	
11:15	64		60						124		23:15	5		3						8	
11:30	78		72						150		23:30	7		2						9	
11:45	107	333	102	300					209	633	23:45	3	21	3	13					6	34
TOTALS		1780		1530						3310	TOTALS		2625		2715						5340
SPLIT %		53.8%		46.2%						38.3%	SPLIT %		49.2%		50.8%						61.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,405	4,245	0	0	8,650

AM Peak Hour	11:45	11:45			11:45	PM Peak Hour	16:00	14:30			14:30
AM Pk Volume	360	344			704	PM Pk Volume	391	467			848
Pk Hr Factor	0.841	0.843			0.842	Pk Hr Factor	0.905	0.683			0.845
7 - 9 Volume	670	568	0	0	1238	4 - 6 Volume	733	688	0	0	1421
7 - 9 Peak Hour	07:00	07:15			07:00	4 - 6 Peak Hour	16:00	16:15			16:15
7 - 9 Pk Volume	356	326	0	0	671	4 - 6 Pk Volume	391	376	0	0	759
Pk Hr Factor	0.781	0.799	0.000	0.000	0.835	Pk Hr Factor	0.905	0.931	0.000	0.000	0.912

Prepared by NDS/ATD

VOLUME

Stevens Ave Bet. Nardo Ave & Valley Ave

Day: Wednesday
Date: 11/12/2014

City: Solana Beach
Project #: CA14_4223_006

DAILY TOTALS	NB	SB	EB	WB	Total
	5,039	5,084	0	0	10,123

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	1		2						3		12:00	91		121						212	
00:15	1		4						5		12:15	69		78						147	
00:30	3		5						8		12:30	78		93						171	
00:45	0	5	3	14					3	19	12:45	73	311	72	364					145	675
01:00	0		0						0		13:00	96		77						173	
01:15	0		2						2		13:15	84		106						190	
01:30	1		0						1		13:30	88		75						163	
01:45	3	4	0	2					3	6	13:45	79	347	92	350					171	697
02:00	2		0						2		14:00	102		134						236	
02:15	1		5						6		14:15	111		100						211	
02:30	1		1						2		14:30	129		113						242	
02:45	2	6	1	7					3	13	14:45	117	459	157	504					274	963
03:00	1		0						1		15:00	105		136						241	
03:15	0		0						0		15:15	106		89						195	
03:30	0		1						1		15:30	105		93						198	
03:45	2	3	1	2					3	5	15:45	98	414	117	435					215	849
04:00	1		1						2		16:00	104		102						206	
04:15	0		1						1		16:15	107		100						207	
04:30	2		2						4		16:30	113		101						214	
04:45	8	11	4	8					12	19	16:45	109	433	124	427					233	860
05:00	5		7						12		17:00	93		121						214	
05:15	4		9						13		17:15	100		107						207	
05:30	18		12						30		17:30	102		86						188	
05:45	10	37	13	41					23	78	17:45	91	386	93	407					184	793
06:00	24		21						45		18:00	93		75						168	
06:15	30		20						50		18:15	83		52						135	
06:30	39		47						86		18:30	52		59						111	
06:45	76	169	62	150					138	319	18:45	49	277	55	241					104	518
07:00	120		104						224		19:00	42		52						94	
07:15	136		160						296		19:15	27		46						73	
07:30	102		138						240		19:30	33		28						61	
07:45	102	460	103	505					205	965	19:45	39	141	37	163					76	304
08:00	93		75						168		20:00	22		34						56	
08:15	107		93						200		20:15	29		42						71	
08:30	109		104						213		20:30	21		29						50	
08:45	104	413	76	348					180	761	20:45	17	89	25	130					42	219
09:00	79		74						153		21:00	19		25						44	
09:15	89		65						154		21:15	18		24						42	
09:30	104		40						144		21:30	15		13						28	
09:45	81	353	79	258					160	611	21:45	13	65	15	77					28	142
10:00	60		59						119		22:00	20		10						30	
10:15	66		73						139		22:15	10		4						14	
10:30	69		53						122		22:30	6		9						15	
10:45	59	254	62	247					121	501	22:45	4	40	6	29					10	69
11:00	75		94						169		23:00	9		4						13	
11:15	90		88						178		23:15	4		2						6	
11:30	88		70						158		23:30	4		3						7	
11:45	89	342	113	365					202	707	23:45	3	20	1	10					4	30
TOTALS		2057		1947						4004	TOTALS		2982		3137						6119
SPLIT %		51.4%		48.6%						39.6%	SPLIT %		48.7%		51.3%						60.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	5,039	5,084	0	0	10,123

AM Peak Hour	07:00	07:00			07:00	PM Peak Hour	14:15	14:15			14:15
AM Pk Volume	460	505			965	PM Pk Volume	462	506			968
Pk Hr Factor	0.846	0.789			0.815	Pk Hr Factor	0.895	0.806			0.883
7 - 9 Volume	873	853	0	0	1726	4 - 6 Volume	819	834	0	0	1653
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	16:00	16:30			16:15
7 - 9 Pk Volume	460	505	0	0	965	4 - 6 Pk Volume	433	453	0	0	868
Pk Hr Factor	0.846	0.789	0.000	0.000	0.815	Pk Hr Factor	0.958	0.913	0.000	0.000	0.931

Prepared by NDS/ATD

VOLUME

Stevens Ave Bet. Nardo Ave & Valley Ave

Day: Thursday
Date: 11/13/2014

City: Solana Beach
Project #: CA14_4223_006

DAILY TOTALS	NB	SB	EB	WB	Total
	5,207	5,189	0	0	10,396

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	5		3						8		12:00	96		162						258	
00:15	3		4						7		12:15	73		98						171	
00:30	3		3						6		12:30	63		83						146	
00:45	2	13	5	15					7	28	12:45	83	315	86	429					169	744
01:00	2		2						4		13:00	86		85						171	
01:15	1		1						2		13:15	80		82						162	
01:30	1		2						3		13:30	86		82						168	
01:45	2	6	2	7					4	13	13:45	98	350	72	321					170	671
02:00	1		1						2		14:00	91		139						230	
02:15	1		4						5		14:15	108		124						232	
02:30	1		1						2		14:30	122		97						219	
02:45	3	6	1	7					4	13	14:45	111	432	169	529					280	961
03:00	1		1						2		15:00	129		123						252	
03:15	0		0						0		15:15	103		138						241	
03:30	0		1						1		15:30	121		90						211	
03:45	1	2	1	3					2	5	15:45	120	473	97	448					217	921
04:00	0		0						0		16:00	123		90						213	
04:15	0		2						2		16:15	141		99						240	
04:30	1		2						3		16:30	125		132						257	
04:45	7	8	2	6					9	14	16:45	123	512	107	428					230	940
05:00	3		3						6		17:00	103		108						211	
05:15	5		10						15		17:15	113		104						217	
05:30	15		18						33		17:30	103		98						201	
05:45	10	33	10	41					20	74	17:45	104	423	86	396					190	819
06:00	15		19						34		18:00	80		63						143	
06:15	26		18						44		18:15	76		80						156	
06:30	52		45						97		18:30	73		62						135	
06:45	74	167	65	147					139	314	18:45	48	277	57	262					105	539
07:00	121		103						224		19:00	42		41						83	
07:15	147		191						338		19:15	36		36						72	
07:30	115		138						253		19:30	46		49						95	
07:45	87	470	112	544					199	1014	19:45	40	164	46	172					86	336
08:00	84		65						149		20:00	27		42						69	
08:15	97		68						165		20:15	25		39						64	
08:30	98		103						201		20:30	32		23						55	
08:45	101	380	102	338					203	718	20:45	24	108	40	144					64	252
09:00	49		53						102		21:00	21		28						49	
09:15	77		66						143		21:15	10		13						23	
09:30	85		65						150		21:30	16		20						36	
09:45	85	296	59	243					144	539	21:45	19	66	16	77					35	143
10:00	68		67						135		22:00	20		13						33	
10:15	62		65						127		22:15	10		2						12	
10:30	68		65						133		22:30	12		6						18	
10:45	69	267	66	263					135	530	22:45	7	49	5	26					12	75
11:00	75		56						131		23:00	11		10						21	
11:15	81		76						157		23:15	6		3						9	
11:30	109		88						197		23:30	6		3						9	
11:45	95	360	105	325					200	685	23:45	7	30	2	18					9	48
TOTALS		2008		1939						3947	TOTALS		3199		3250						6449
SPLIT %		50.9%		49.1%						38.0%	SPLIT %		49.6%		50.4%						62.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	5,207	5,189	0	0	10,396

AM Peak Hour	07:00	07:00			07:00	PM Peak Hour	16:00	14:00			14:30
AM Pk Volume	470	544			1014	PM Pk Volume	512	529			992
Pk Hr Factor	0.799	0.712			0.750	Pk Hr Factor	0.908	0.783			0.886
7 - 9 Volume	850	882	0	0	1732	4 - 6 Volume	935	824	0	0	1759
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	16:00	16:30			16:00
7 - 9 Pk Volume	470	544	0	0	1014	4 - 6 Pk Volume	512	451	0	0	940
Pk Hr Factor	0.799	0.712	0.000	0.000	0.750	Pk Hr Factor	0.908	0.854	0.000	0.000	0.914

Prepared by NDS/ATD

VOLUME

Stevens Ave Bet. Nardo Ave & Valley Ave

Day: Friday
Date: 11/14/2014

City: Solana Beach
Project #: CA14_4223_006

DAILY TOTALS	NB	SB	EB	WB	Total
	5,273	5,179	0	0	10,452

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	6		6						12		12:00	85		170						255	
00:15	3		5						8		12:15	94		87						181	
00:30	2		4						6		12:30	93		80						173	
00:45	1	12	5	20					6	32	12:45	73	345	80	417					153	762
01:00	4		0						4		13:00	89		74						163	
01:15	1		0						1		13:15	82		79						161	
01:30	1		0						1		13:30	89		110						199	
01:45	2	8	2	2					4	10	13:45	105	365	147	410					252	775
02:00	0		2						2		14:00	102		124						226	
02:15	1		2						3		14:15	104		120						224	
02:30	0		2						2		14:30	87		92						179	
02:45	2	3	0	6					2	9	14:45	118	411	104	440					222	851
03:00	2		1						3		15:00	90		124						214	
03:15	1		0						1		15:15	107		98						205	
03:30	1		2						3		15:30	117		95						212	
03:45	0	4	0	3					0	7	15:45	99	413	110	427					209	840
04:00	0		2						2		16:00	138		99						237	
04:15	1		1						2		16:15	177		91						268	
04:30	2		2						4		16:30	134		91						225	
04:45	2	5	4	9					6	14	16:45	116	565	93	374					209	939
05:00	1		5						6		17:00	88		93						181	
05:15	5		7						12		17:15	92		90						182	
05:30	13		10						23		17:30	91		57						148	
05:45	7	26	14	36					21	62	17:45	94	365	64	304					158	669
06:00	19		19						38		18:00	93		58						151	
06:15	24		24						48		18:15	82		61						143	
06:30	45		38						83		18:30	55		54						109	
06:45	75	163	67	148					142	311	18:45	46	276	59	232					105	508
07:00	130		125						255		19:00	30		50						80	
07:15	153		166						319		19:15	38		45						83	
07:30	111		137						248		19:30	23		36						59	
07:45	94	488	104	532					198	1020	19:45	21	112	32	163					53	275
08:00	91		73						164		20:00	31		28						59	
08:15	107		80						187		20:15	31		41						72	
08:30	103		99						202		20:30	27		23						50	
08:45	91	392	88	340					179	732	20:45	35	124	36	128					71	252
09:00	74		77						151		21:00	18		26						44	
09:15	75		57						132		21:15	22		28						50	
09:30	63		52						115		21:30	32		15						47	
09:45	81	293	56	242					137	535	21:45	34	106	20	89					54	195
10:00	77		77						154		22:00	23		29						52	
10:15	70		67						137		22:15	19		20						39	
10:30	72		91						163		22:30	17		11						28	
10:45	71	290	93	328					164	618	22:45	11	70	9	69					20	139
11:00	95		83						178		23:00	18		15						33	
11:15	90		108						198		23:15	13		6						19	
11:30	89		113						202		23:30	8		4						12	
11:45	112	386	123	427					235	813	23:45	12	51	8	33					20	84
TOTALS		2070		2093						4163	TOTALS		3203		3086						6289
SPLIT %		49.7%		50.3%						39.8%	SPLIT %		50.9%		49.1%						60.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	5,273	5,179	0	0	10,452

AM Peak Hour	07:00	07:00			07:00	PM Peak Hour	16:00	13:30			15:45
AM Pk Volume	488	532			1020	PM Pk Volume	565	501			939
Pk Hr Factor	0.797	0.801			0.799	Pk Hr Factor	0.798	0.852			0.876
7 - 9 Volume	880	872	0	0	1752	4 - 6 Volume	930	678	0	0	1608
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	488	532	0	0	1020	4 - 6 Pk Volume	565	374	0	0	939
Pk Hr Factor	0.797	0.801	0.000	0.000	0.799	Pk Hr Factor	0.798	0.944	0.000	0.000	0.876

Prepared by NDS/ATD

VOLUME

Stevens Ave Bet. Nardo Ave & Valley Ave

Day: Saturday
Date: 11/15/2014

City: Solana Beach
Project #: CA14_4223_006

DAILY TOTALS	NB	SB	EB	WB	Total
	3,413	3,737	0	0	7,150

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	5		1						6		12:00	77		109						186	
00:15	5		9						14		12:15	70		73						143	
00:30	2		3						5		12:30	71		86						157	
00:45	5	17	2	15					7	32	12:45	80	298	71	339					151	637
01:00	7		5						12		13:00	72		63						135	
01:15	4		3						7		13:15	77		68						145	
01:30	2		1						3		13:30	78		59						137	
01:45	2	15	3	12					5	27	13:45	79	306	59	249					138	555
02:00	2		5						7		14:00	65		63						128	
02:15	4		2						6		14:15	59		70						129	
02:30	0		2						2		14:30	58		76						134	
02:45	3	9	1	10					4	19	14:45	56	238	65	274					121	512
03:00	2		1						3		15:00	72		58						130	
03:15	1		0						1		15:15	60		60						120	
03:30	2		0						2		15:30	55		85						140	
03:45	2	7	1	2					3	9	15:45	49	236	97	300					146	536
04:00	2		0						2		16:00	43		121						164	
04:15	2		1						3		16:15	60		87						147	
04:30	2		3						5		16:30	45		90						135	
04:45	1	7	1	5					2	12	16:45	72	220	78	376					150	596
05:00	2		3						5		17:00	62		95						157	
05:15	1		2						3		17:15	63		72						135	
05:30	4		6						10		17:30	56		56						112	
05:45	11	18	11	22					22	40	17:45	62	243	54	277					116	520
06:00	8		6						14		18:00	46		50						96	
06:15	11		8						19		18:15	41		47						88	
06:30	18		18						36		18:30	33		44						77	
06:45	19	56	15	47					34	103	18:45	38	158	41	182					79	340
07:00	25		23						48		19:00	36		39						75	
07:15	17		38						55		19:15	44		31						75	
07:30	28		32						60		19:30	58		31						89	
07:45	40	110	28	121					68	231	19:45	47	185	34	135					81	320
08:00	37		42						79		20:00	36		40						76	
08:15	56		57						113		20:15	26		26						52	
08:30	70		50						120		20:30	21		21						42	
08:45	62	225	56	205					118	430	20:45	14	97	25	112					39	209
09:00	55		43						98		21:00	13		22						35	
09:15	56		61						117		21:15	18		18						36	
09:30	61		63						124		21:30	20		19						39	
09:45	66	238	58	225					124	463	21:45	12	63	21	80					33	143
10:00	78		80						158		22:00	17		14						31	
10:15	90		87						177		22:15	17		13						30	
10:30	61		77						138		22:30	19		15						34	
10:45	70	299	82	326					152	625	22:45	14	67	12	54					26	121
11:00	64		70						134		23:00	13		5						18	
11:15	69		87						156		23:15	14		10						24	
11:30	57		97						154		23:30	7		3						10	
11:45	72	262	92	346					164	608	23:45	5	39	5	23					10	62
TOTALS		1263		1336						2599	TOTALS		2150		2401						4551
SPLIT %		48.6%		51.4%						36.3%	SPLIT %		47.2%		52.8%						63.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	3,413	3,737	0	0	7,150

AM Peak Hour	10:00	11:15			11:15	PM Peak Hour	12:45	15:45			12:00
AM Pk Volume	299	385			660	PM Pk Volume	307	395			637
Pk Hr Factor	0.831	0.883			0.887	Pk Hr Factor	0.959	0.816			0.856
7 - 9 Volume	335	326	0	0	661	4 - 6 Volume	463	653	0	0	1116
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:45	16:00			16:00
7 - 9 Pk Volume	225	205	0	0	430	4 - 6 Pk Volume	253	376	0	0	596
Pk Hr Factor	0.804	0.899	0.000	0.000	0.896	Pk Hr Factor	0.878	0.777	0.000	0.000	0.909

Prepared by NDS/ATD

Project #: CA14_4223_006 **City:** Solana Beach

Location: Stevens Ave Bet. Nardo Ave & Valley Ave **Date:** 11/10/2014

Prepared by NDS/ATD

Project #: CA14_4223_006 **City:** Solana Beach

Location: Stevens Ave Bet. Nardo Ave & Valley Ave **Date:** 11/11/2014

Prepared by NDS/ATD

Project #: CA14_4223_006 **City:** Solana Beach

Location: Stevens Ave Bet. Nardo Ave & Valley Ave **Date:** 11/12/2014

Prepared by NDS/ATD

Project #: CA14_4223_006 **City:** Solana Beach

Location: Stevens Ave Bet. Nardo Ave & Valley Ave **Date:** 11/13/2014

Prepared by NDS/ATD

Project #: CA14_4223_006 **City:** Solana Beach

Location: Stevens Ave Bet. Nardo Ave & Valley Ave **Date:** 11/14/2014

Prepared by NDS/ATD

Project #: CA14_4223_006 **City:** Solana Beach

Location: Stevens Ave Bet. Nardo Ave & Valley Ave **Date:** 11/15/2014

Prepared by NDS/ATD

Project #: CA14_4223_006 **City:** Solana Beach

Location: Stevens Ave Bet. Nardo Ave & Valley Ave **Date:** 11/16/2014

Prepared by NDS/ATD

VOLUME

Via De La Valle Bet. Pimlico Dr & Jimmy Durante Blvd

Day: Sunday
Date: 11/16/2014

City: Solana Beach
Project #: CA14_4223_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	7,827	8,160	15,987

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			14		23		37		12:00			148		156		304	
00:15			9		12		21		12:15			164		155		319	
00:30			15		9		24		12:30			180		144		324	
00:45			12	50	9	53	21	103	12:45			135	627	142	597	277	1224
01:00			13		10		23		13:00			140		153		293	
01:15			12		9		21		13:15			155		162		317	
01:30			14		9		23		13:30			174		137		311	
01:45			11	50	4	32	15	82	13:45			125	594	136	588	261	1182
02:00			10		1		11		14:00			138		134		272	
02:15			9		9		18		14:15			162		119		281	
02:30			3		7		10		14:30			155		112		267	
02:45			6	28	6	23	12	51	14:45			132	587	136	501	268	1088
03:00			3		4		7		15:00			158		119		277	
03:15			8		3		11		15:15			145		124		269	
03:30			6		6		12		15:30			151		146		297	
03:45			3	20	9	22	12	42	15:45			141	595	120	509	261	1104
04:00			4		3		7		16:00			178		154		332	
04:15			6		6		12		16:15			155		137		292	
04:30			7		7		14		16:30			250		199		449	
04:45			6	23	4	20	10	43	16:45			235	818	186	676	421	1494
05:00			5		13		18		17:00			190		163		353	
05:15			11		18		29		17:15			163		166		329	
05:30			15		17		32		17:30			114		171		285	
05:45			20	51	20	68	40	119	17:45			126	593	204	704	330	1297
06:00			22		30		52		18:00			104		170		274	
06:15			24		42		66		18:15			103		130		233	
06:30			27		53		80		18:30			97		89		186	
06:45			29	102	62	187	91	289	18:45			85	389	82	471	167	860
07:00			42		78		120		19:00			110		52		162	
07:15			38		101		139		19:15			74		78		152	
07:30			48		107		155		19:30			51		51		102	
07:45			79	207	84	370	163	577	19:45			78	313	44	225	122	538
08:00			75		102		177		20:00			65		57		122	
08:15			125		123		248		20:15			61		36		97	
08:30			109		162		271		20:30			51		36		87	
08:45			98	407	168	555	266	962	20:45			48	225	33	162	81	387
09:00			125		139		264		21:00			44		41		85	
09:15			112		156		268		21:15			38		26		64	
09:30			135		154		289		21:30			43		28		71	
09:45			127	499	168	617	295	1116	21:45			65	190	22	117	87	307
10:00			146		209		355		22:00			41		19		60	
10:15			163		194		357		22:15			22		21		43	
10:30			165		193		358		22:30			12		22		34	
10:45			177	651	208	804	385	1455	22:45			23	98	10	72	33	170
11:00			142		195		337		23:00			18		10		28	
11:15			154		201		355		23:15			11		15		26	
11:30			167		181		348		23:30			10		7		17	
11:45			193	656	169	746	362	1402	23:45			15	54	9	41	24	95
TOTALS				2744		3497		6241	TOTALS				5083		4663		9746
SPLIT %				44.0%		56.0%		39.0%	SPLIT %				52.2%		47.8%		61.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	7,827	8,160	15,987

AM Peak Hour			11:45	10:00	10:00	PM Peak Hour			16:30	16:30	16:30
AM Pk Volume			685	804	1455	PM Pk Volume			838	714	1552
Pk Hr Factor			0.887	0.962	0.945	Pk Hr Factor			0.838	0.897	0.864
7 - 9 Volume	0	0	614	925	1539	4 - 6 Volume	0	0	1411	1380	2791
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:30	16:30	16:30
7 - 9 Pk Volume	0	0	407	555	962	4 - 6 Pk Volume	0	0	838	714	1552
Pk Hr Factor	0.000	0.000	0.814	0.826	0.887	Pk Hr Factor	0.000	0.000	0.838	0.897	0.864

Prepared by NDS/ATD

VOLUME

Via De La Valle Bet. Pimlico Dr & Jimmy Durante Blvd

Day: Monday
Date: 11/10/2014

City: Solana Beach
Project #: CA14_4223_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	8,199	8,231	16,430

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			3		4		7		12:00			140		178		318	
00:15			6		6		12		12:15			168		145		313	
00:30			1		5		6		12:30			169		156		325	
00:45			9	19	2	17	11	36	12:45			156	633	157	636	313	1269
01:00			6		1		7		13:00			154		141		295	
01:15			5		5		10		13:15			144		142		286	
01:30			1		3		4		13:30			137		150		287	
01:45			2	14	2	11	4	25	13:45			148	583	143	576	291	1159
02:00			3		3		6		14:00			181		129		310	
02:15			1		1		2		14:15			157		132		289	
02:30			3		5		8		14:30			124		176		300	
02:45			4	11	0	9	4	20	14:45			157	619	145	582	302	1201
03:00			5		4		9		15:00			149		146		295	
03:15			3		4		7		15:15			182		206		388	
03:30			6		3		9		15:30			141		158		299	
03:45			5	19	5	16	10	35	15:45			147	619	149	659	296	1278
04:00			7		5		12		16:00			122		179		301	
04:15			6		8		14		16:15			149		168		317	
04:30			9		6		15		16:30			147		180		327	
04:45			10	32	10	29	20	61	16:45			170	588	154	681	324	1269
05:00			15		13		28		17:00			148		169		317	
05:15			22		23		45		17:15			145		149		294	
05:30			27		31		58		17:30			155		147		302	
05:45			33	97	29	96	62	193	17:45			134	582	161	626	295	1208
06:00			42		62		104		18:00			121		165		286	
06:15			63		67		130		18:15			87		130		217	
06:30			72		90		162		18:30			93		92		185	
06:45			106	283	87	306	193	589	18:45			101	402	85	472	186	874
07:00			124		100		224		19:00			99		91		190	
07:15			169		122		291		19:15			73		90		163	
07:30			167		132		299		19:30			54		82		136	
07:45			183	643	133	487	316	1130	19:45			64	290	78	341	142	631
08:00			159		109		268		20:00			59		62		121	
08:15			178		131		309		20:15			67		52		119	
08:30			159		146		305		20:30			51		55		106	
08:45			135	631	162	548	297	1179	20:45			45	222	56	225	101	447
09:00			140		143		283		21:00			41		45		86	
09:15			122		149		271		21:15			47		45		92	
09:30			121		134		255		21:30			35		34		69	
09:45			146	529	136	562	282	1091	21:45			43	166	17	141	60	307
10:00			130		136		266		22:00			28		21		49	
10:15			114		141		255		22:15			41		21		62	
10:30			122		131		253		22:30			13		16		29	
10:45			135	501	139	547	274	1048	22:45			22	104	7	65	29	169
11:00			142		130		272		23:00			17		18		35	
11:15			140		127		267		23:15			7		6		13	
11:30			139		129		268		23:30			8		10		18	
11:45			154	575	173	559	327	1134	23:45			5	37	6	40	11	77
TOTALS				3354		3187		6541	TOTALS				4845		5044		9889
SPLIT %				51.3%		48.7%		39.8%	SPLIT %				49.0%		51.0%		60.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	8,199	8,231	16,430

AM Peak Hour			07:30	11:45	11:45	PM Peak Hour			12:15	15:15	14:30
AM Pk Volume			687	652	1283	PM Pk Volume			647	692	1285
Pk Hr Factor			0.939	0.916	0.981	Pk Hr Factor			0.957	0.840	0.828
7 - 9 Volume	0	0	1274	1035	2309	4 - 6 Volume	0	0	1170	1307	2477
7 - 9 Peak Hour			07:30	08:00	07:45	4 - 6 Peak Hour			16:45	16:00	16:15
7 - 9 Pk Volume	0	0	687	548	1198	4 - 6 Pk Volume	0	0	618	681	1285
Pk Hr Factor	0.000	0.000	0.939	0.846	0.948	Pk Hr Factor	0.000	0.000	0.909	0.946	0.982

Prepared by NDS/ATD

VOLUME

Via De La Valle Bet. Pimlico Dr & Jimmy Durante Blvd

Day: Tuesday
Date: 11/11/2014

City: Solana Beach
Project #: CA14_4223_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	8,531	8,625	17,156

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			3		14		17		12:00			158		166		324	
00:15			1		0		1		12:15			169		166		335	
00:30			7		5		12		12:30			140		147		287	
00:45			3	14	2	21	5	35	12:45			165	632	168	647	333	1279
01:00			1		2		3		13:00			206		161		367	
01:15			4		1		5		13:15			174		122		296	
01:30			2		2		4		13:30			157		142		299	
01:45			2	9	3	8	5	17	13:45			175	712	136	561	311	1273
02:00			4		3		7		14:00			150		173		323	
02:15			4		1		5		14:15			171		148		319	
02:30			0		3		3		14:30			156		164		320	
02:45			2	10	2	9	4	19	14:45			162	639	150	635	312	1274
03:00			1		2		3		15:00			154		132		286	
03:15			5		3		8		15:15			166		143		309	
03:30			5		2		7		15:30			137		157		294	
03:45			1	12	3	10	4	22	15:45			149	606	191	623	340	1229
04:00			2		5		7		16:00			154		174		328	
04:15			4		6		10		16:15			133		165		298	
04:30			13		7		20		16:30			144		165		309	
04:45			14	33	8	26	22	59	16:45			166	597	189	693	355	1290
05:00			10		15		25		17:00			175		193		368	
05:15			29		11		40		17:15			185		149		334	
05:30			28		31		59		17:30			139		182		321	
05:45			32	99	29	86	61	185	17:45			132	631	150	674	282	1305
06:00			44		33		77		18:00			124		176		300	
06:15			59		68		127		18:15			111		171		282	
06:30			59		90		149		18:30			95		128		223	
06:45			103	265	90	281	193	546	18:45			74	404	109	584	183	988
07:00			117		98		215		19:00			86		86		172	
07:15			142		162		304		19:15			79		100		179	
07:30			160		142		302		19:30			76		75		151	
07:45			145	564	138	540	283	1104	19:45			72	313	88	349	160	662
08:00			149		127		276		20:00			71		53		124	
08:15			154		153		307		20:15			80		46		126	
08:30			151		162		313		20:30			72		48		120	
08:45			141	595	159	601	300	1196	20:45			76	299	42	189	118	488
09:00			128		134		262		21:00			53		46		99	
09:15			141		145		286		21:15			48		47		95	
09:30			125		156		281		21:30			57		43		100	
09:45			132	526	143	578	275	1104	21:45			41	199	27	163	68	362
10:00			157		147		304		22:00			35		20		55	
10:15			137		155		292		22:15			30		27		57	
10:30			138		141		279		22:30			25		16		41	
10:45			129	561	142	585	271	1146	22:45			34	124	14	77	48	201
11:00			140		137		277		23:00			63		12		75	
11:15			125		161		286		23:15			37		12		49	
11:30			149		167		316		23:30			12		11		23	
11:45			150	564	173	638	323	1202	23:45			11	123	12	47	23	170
TOTALS				3252		3383		6635	TOTALS				5279		5242		10521
SPLIT %				49.0%		51.0%		38.7%	SPLIT %				50.2%		49.8%		61.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	8,531	8,625	17,156

AM Peak Hour			11:30	11:30	11:30	PM Peak Hour			13:00	16:45	16:45
AM Pk Volume			626	672	1298	PM Pk Volume			712	713	1378
Pk Hr Factor			0.926	0.971	0.969	Pk Hr Factor			0.864	0.924	0.936
7 - 9 Volume	0	0	1159	1141	2300	4 - 6 Volume	0	0	1228	1367	2595
7 - 9 Peak Hour			07:30	08:00	08:00	4 - 6 Peak Hour			16:30	16:45	16:45
7 - 9 Pk Volume	0	0	608	601	1196	4 - 6 Pk Volume	0	0	670	713	1378
Pk Hr Factor	0.000	0.000	0.950	0.927	0.955	Pk Hr Factor	0.000	0.000	0.905	0.924	0.936

Prepared by NDS/ATD

VOLUME

Via De La Valle Bet. Pimlico Dr & Jimmy Durante Blvd

Day: Wednesday
Date: 11/12/2014

City: Solana Beach
Project #: CA14_4223_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9,160	8,865	18,025

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			6		12		18		12:00			141		144		285	
00:15			8		10		18		12:15			140		143		283	
00:30			12		3		15		12:30			172		158		330	
00:45			5	31	5	30	10	61	12:45			167	620	173	618	340	1238
01:00			5		6		11		13:00			168		139		307	
01:15			3		4		7		13:15			149		139		288	
01:30			4		5		9		13:30			161		152		313	
01:45			4	16	5	20	9	36	13:45			174	652	154	584	328	1236
02:00			2		3		5		14:00			154		134		288	
02:15			1		5		6		14:15			172		152		324	
02:30			2		2		4		14:30			172		131		303	
02:45			3	8	0	10	3	18	14:45			161	659	192	609	353	1268
03:00			2		0		2		15:00			140		148		288	
03:15			5		4		9		15:15			172		193		365	
03:30			2		4		6		15:30			156		147		303	
03:45			1	10	2	10	3	20	15:45			141	609	179	667	320	1276
04:00			3		5		8		16:00			146		171		317	
04:15			4		11		15		16:15			140		167		307	
04:30			9		5		14		16:30			165		189		354	
04:45			16	32	12	33	28	65	16:45			188	639	159	686	347	1325
05:00			10		10		20		17:00			194		186		380	
05:15			23		19		42		17:15			132		172		304	
05:30			22		34		56		17:30			133		164		297	
05:45			25	80	42	105	67	185	17:45			110	569	179	701	289	1270
06:00			49		53		102		18:00			125		142		267	
06:15			80		79		159		18:15			135		140		275	
06:30			81		103		184		18:30			122		125		247	
06:45			118	328	95	330	213	658	18:45			85	467	93	500	178	967
07:00			165		92		257		19:00			102		79		181	
07:15			209		146		355		19:15			75		85		160	
07:30			217		169		386		19:30			62		87		149	
07:45			229	820	158	565	387	1385	19:45			92	331	81	332	173	663
08:00			202		133		335		20:00			90		81		171	
08:15			228		148		376		20:15			95		62		157	
08:30			205		162		367		20:30			60		69		129	
08:45			224	859	159	602	383	1461	20:45			51	296	60	272	111	568
09:00			191		181		372		21:00			44		49		93	
09:15			168		154		322		21:15			37		38		75	
09:30			150		163		313		21:30			31		40		71	
09:45			146	655	159	657	305	1312	21:45			42	154	25	152	67	306
10:00			123		147		270		22:00			48		22		70	
10:15			129		116		245		22:15			28		33		61	
10:30			135		146		281		22:30			19		27		46	
10:45			165	552	148	557	313	1109	22:45			21	116	13	95	34	211
11:00			159		147		306		23:00			16		14		30	
11:15			146		165		311		23:15			18		7		25	
11:30			147		192		339		23:30			8		11		19	
11:45			155	607	185	689	340	1296	23:45			8	50	9	41	17	91
TOTALS				3998		3608		**7606**	**TOTALS**				5162		5257		**10419**
SPLIT %				52.6%		47.4%		**42.2%**	**SPLIT %**				49.5%		50.5%		**57.8%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9,160	8,865	18,025

AM Peak Hour			07:30	11:00	**08:15**	**PM Peak Hour**			16:15	15:45	**16:15**
AM Pk Volume			876	689	**1498**	**PM Pk Volume**			687	706	**1388**
Pk Hr Factor			0.956	0.897	**0.978**	**Pk Hr Factor**			0.885	0.934	**0.913**
7 - 9 Volume	0	0	1679	1167	**2846**	**4 - 6 Volume**	0	0	1208	1387	**2595**
7 - 9 Peak Hour			07:30	07:30	**07:30**	**4 - 6 Peak Hour**			16:15	16:30	**16:15**
7 - 9 Pk Volume	0	0	876	608	**1484**	**4 - 6 Pk Volume**	0	0	687	706	**1388**
Pk Hr Factor	0.000	0.000	0.956	0.899	**0.959**	**Pk Hr Factor**	0.000	0.000	0.885	0.934	**0.913**

Prepared by NDS/ATD

VOLUME

Via De La Valle Bet. Pimlico Dr & Jimmy Durante Blvd

Day: Thursday
Date: 11/13/2014

City: Solana Beach
Project #: CA14_4223_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9,814	9,507	19,321

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			18		9		27		12:00			190		195		385	
00:15			18		11		29		12:15			159		179		338	
00:30			11		5		16		12:30			165		186		351	
00:45			6	53	2	27	8	80	12:45			160	674	171	731	331	1405
01:00			2		1		3		13:00			192		167		359	
01:15			0		5		5		13:15			173		158		331	
01:30			1		0		1		13:30			174		161		335	
01:45			3	6	3	9	6	15	13:45			163	702	148	634	311	1336
02:00			2		4		6		14:00			174		131		305	
02:15			3		0		3		14:15			176		149		325	
02:30			6		3		9		14:30			170		165		335	
02:45			1	12	7	14	8	26	14:45			200	720	167	612	367	1332
03:00			2		1		3		15:00			184		171		355	
03:15			1		5		6		15:15			177		183		360	
03:30			4		4		8		15:30			166		176		342	
03:45			4	11	4	14	8	25	15:45			147	674	211	741	358	1415
04:00			3		7		10		16:00			182		204		386	
04:15			2		9		11		16:15			204		229		433	
04:30			13		9		22		16:30			211		188		399	
04:45			15	33	5	30	20	63	16:45			204	801	193	814	397	1615
05:00			18		18		36		17:00			182		179		361	
05:15			23		25		48		17:15			194		174		368	
05:30			25		37		62		17:30			141		185		326	
05:45			35	101	35	115	70	216	17:45			128	645	156	694	284	1339
06:00			34		57		91		18:00			114		135		249	
06:15			61		82		143		18:15			126		123		249	
06:30			83		106		189		18:30			104		111		215	
06:45			132	310	111	356	243	666	18:45			117	461	98	467	215	928
07:00			164		94		258		19:00			106		90		196	
07:15			221		144		365		19:15			92		72		164	
07:30			211		161		372		19:30			96		76		172	
07:45			210	806	159	558	369	1364	19:45			92	386	68	306	160	692
08:00			208		135		343		20:00			108		75		183	
08:15			189		171		360		20:15			131		69		200	
08:30			191		179		370		20:30			92		57		149	
08:45			146	734	192	677	338	1411	20:45			101	432	61	262	162	694
09:00			144		184		328		21:00			86		42		128	
09:15			134		176		310		21:15			64		44		108	
09:30			130		176		306		21:30			63		33		96	
09:45			161	569	188	724	349	1293	21:45			59	272	29	148	88	420
10:00			122		153		275		22:00			41		24		65	
10:15			140		171		311		22:15			42		30		72	
10:30			138		162		300		22:30			31		22		53	
10:45			141	541	175	661	316	1202	22:45			48	162	18	94	66	256
11:00			148		168		316		23:00			34		12		46	
11:15			158		204		362		23:15			18		9		27	
11:30			150		192		342		23:30			15		15		30	
11:45			175	631	205	769	380	1400	23:45			11	78	14	50	25	128
TOTALS				3807		3954		7761	TOTALS				6007		5553		11560
SPLIT %				49.1%		50.9%		40.2%	SPLIT %				52.0%		48.0%		59.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9,814	9,507	19,321

AM Peak Hour			07:15	11:15	11:15	PM Peak Hour			16:00	15:45	16:00
AM Pk Volume			850	796	1469	PM Pk Volume			801	832	1615
Pk Hr Factor			0.962	0.971	0.954	Pk Hr Factor			0.949	0.908	0.932
7 - 9 Volume	0	0	1540	1235	2775	4 - 6 Volume	0	0	1446	1508	2954
7 - 9 Peak Hour			07:15	08:00	07:15	4 - 6 Peak Hour			16:00	16:00	16:00
7 - 9 Pk Volume	0	0	850	677	1449	4 - 6 Pk Volume	0	0	801	814	1615
Pk Hr Factor	0.000	0.000	0.962	0.882	0.974	Pk Hr Factor	0.000	0.000	0.949	0.889	0.932

Prepared by NDS/ATD

VOLUME

Via De La Valle Bet. Pimlico Dr & Jimmy Durante Blvd

Day: Friday
Date: 11/14/2014

City: Solana Beach
Project #: CA14_4223_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9,897	10,273	20,170

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			20		9		29		12:00			190		213		403	
00:15			6		13		19		12:15			183		145		328	
00:30			3		5		8		12:30			182		180		362	
00:45			3	32	5	32	8	64	12:45			184	739	150	688	334	1427
01:00			4		4		8		13:00			188		177		365	
01:15			3		7		10		13:15			171		158		329	
01:30			5		3		8		13:30			161		151		312	
01:45			3	15	6	20	9	35	13:45			181	701	183	669	364	1370
02:00			1		5		6		14:00			181		184		365	
02:15			4		9		13		14:15			184		181		365	
02:30			4		3		7		14:30			183		201		384	
02:45			1	10	2	19	3	29	14:45			149	697	208	774	357	1471
03:00			1		1		2		15:00			148		199		347	
03:15			2		2		4		15:15			177		209		386	
03:30			2		3		5		15:30			201		237		438	
03:45			4	9	4	10	8	19	15:45			173	699	226	871	399	1570
04:00			6		7		13		16:00			209		261		470	
04:15			2		7		9		16:15			167		245		412	
04:30			11		9		20		16:30			208		226		434	
04:45			10	29	13	36	23	65	16:45			201	785	166	898	367	1683
05:00			11		14		25		17:00			195		187		382	
05:15			18		22		40		17:15			202		151		353	
05:30			30		31		61		17:30			139		190		329	
05:45			30	89	48	115	78	204	17:45			133	669	174	702	307	1371
06:00			54		58		112		18:00			146		180		326	
06:15			53		87		140		18:15			137		179		316	
06:30			82		108		190		18:30			91		142		233	
06:45			98	287	99	352	197	639	18:45			99	473	163	664	262	1137
07:00			164		101		265		19:00			109		95		204	
07:15			179		135		314		19:15			112		88		200	
07:30			185		177		362		19:30			84		81		165	
07:45			182	710	143	556	325	1266	19:45			102	407	94	358	196	765
08:00			192		121		313		20:00			70		66		136	
08:15			151		129		280		20:15			77		74		151	
08:30			150		140		290		20:30			59		78		137	
08:45			163	656	146	536	309	1192	20:45			97	303	60	278	157	581
09:00			158		196		354		21:00			71		62		133	
09:15			170		167		337		21:15			74		72		146	
09:30			148		177		325		21:30			60		59		119	
09:45			152	628	166	706	318	1334	21:45			81	286	54	247	135	533
10:00			127		173		300		22:00			88		56		144	
10:15			148		168		316		22:15			62		45		107	
10:30			129		206		335		22:30			63		36		99	
10:45			168	572	158	705	326	1277	22:45			51	264	40	177	91	441
11:00			177		163		340		23:00			54		23		77	
11:15			159		165		324		23:15			39		23		62	
11:30			186		215		401		23:30			29		28		57	
11:45			166	688	229	772	395	1460	23:45			27	149	14	88	41	237
TOTALS				3725		3859		**7584**	**TOTALS**				6172		6414		**12586**
SPLIT %				49.1%		50.9%		**37.6%**	**SPLIT %**				49.0%		51.0%		**62.4%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9,897	10,273	20,170

AM Peak Hour			07:15	11:15	**11:30**	**PM Peak Hour**			16:30	15:30	**15:30**
AM Pk Volume			738	822	**1527**	**PM Pk Volume**			806	969	**1719**
Pk Hr Factor			0.961	0.897	**0.947**	**Pk Hr Factor**			0.969	0.928	**0.914**
7 - 9 Volume	0	0	1366	1092	**2458**	**4 - 6 Volume**	0	0	1454	1600	**3054**
7 - 9 Peak Hour			07:15	07:15	**07:15**	**4 - 6 Peak Hour**			16:30	16:00	**16:00**
7 - 9 Pk Volume	0	0	738	576	**1314**	**4 - 6 Pk Volume**	0	0	806	898	**1683**
Pk Hr Factor	0.000	0.000	0.961	0.814	**0.907**	**Pk Hr Factor**	0.000	0.000	0.969	0.860	**0.895**

Prepared by NDS/ATD

VOLUME

Via De La Valle Bet. Pimlico Dr & Jimmy Durante Blvd

Day: Saturday
Date: 11/15/2014

City: Solana Beach
Project #: CA14_4223_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9,672	9,554	19,226

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			21		16		37		12:00			126		197		323	
00:15			15		17		32		12:15			147		184		331	
00:30			16		9		25		12:30			171		178		349	
00:45			26	78	10	52	36	130	12:45			155	599	165	724	320	1323
01:00			12		12		24		13:00			191		152		343	
01:15			19		9		28		13:15			178		188		366	
01:30			5		5		10		13:30			176		145		321	
01:45			13	49	6	32	19	81	13:45			169	714	159	644	328	1358
02:00			3		3		6		14:00			192		174		366	
02:15			3		3		6		14:15			187		213		400	
02:30			3		3		6		14:30			175		143		318	
02:45			8	17	6	15	14	32	14:45			184	738	192	722	376	1460
03:00			2		2		4		15:00			166		155		321	
03:15			4		3		7		15:15			173		185		358	
03:30			4		6		10		15:30			174		154		328	
03:45			3	13	4	15	7	28	15:45			219	732	148	642	367	1374
04:00			5		8		13		16:00			192		127		319	
04:15			5		9		14		16:15			222		142		364	
04:30			4		9		13		16:30			192		149		341	
04:45			8	22	10	36	18	58	16:45			192	798	140	558	332	1356
05:00			10		8		18		17:00			192		134		326	
05:15			15		14		29		17:15			179		140		319	
05:30			13		25		38		17:30			185		125		310	
05:45			16	54	32	79	48	133	17:45			156	712	176	575	332	1287
06:00			29		35		64		18:00			180		160		340	
06:15			48		45		93		18:15			192		148		340	
06:30			39		64		103		18:30			141		155		296	
06:45			46	162	79	223	125	385	18:45			157	670	139	602	296	1272
07:00			33		79		112		19:00			159		122		281	
07:15			57		104		161		19:15			148		104		252	
07:30			65		130		195		19:30			164		127		291	
07:45			62	217	119	432	181	649	19:45			123	594	130	483	253	1077
08:00			84		93		177		20:00			160		97		257	
08:15			100		135		235		20:15			139		77		216	
08:30			142		174		316		20:30			111		73		184	
08:45			112	438	178	580	290	1018	20:45			109	519	67	314	176	833
09:00			135		171		306		21:00			73		54		127	
09:15			135		186		321		21:15			61		50		111	
09:30			133		174		307		21:30			60		53		113	
09:45			124	527	219	750	343	1277	21:45			64	258	51	208	115	466
10:00			168		207		375		22:00			85		51		136	
10:15			173		203		376		22:15			56		51		107	
10:30			159		190		349		22:30			40		42		82	
10:45			183	683	205	805	388	1488	22:45			68	249	31	175	99	424
11:00			169		221		390		23:00			68		35		103	
11:15			178		192		370		23:15			36		33		69	
11:30			147		193		340		23:30			33		26		59	
11:45			159	653	160	766	319	1419	23:45			39	176	28	122	67	298
TOTALS				2913		3785		6698	TOTALS				6759		5769		12528
SPLIT %				43.5%		56.5%		34.8%	SPLIT %				54.0%		46.0%		65.2%

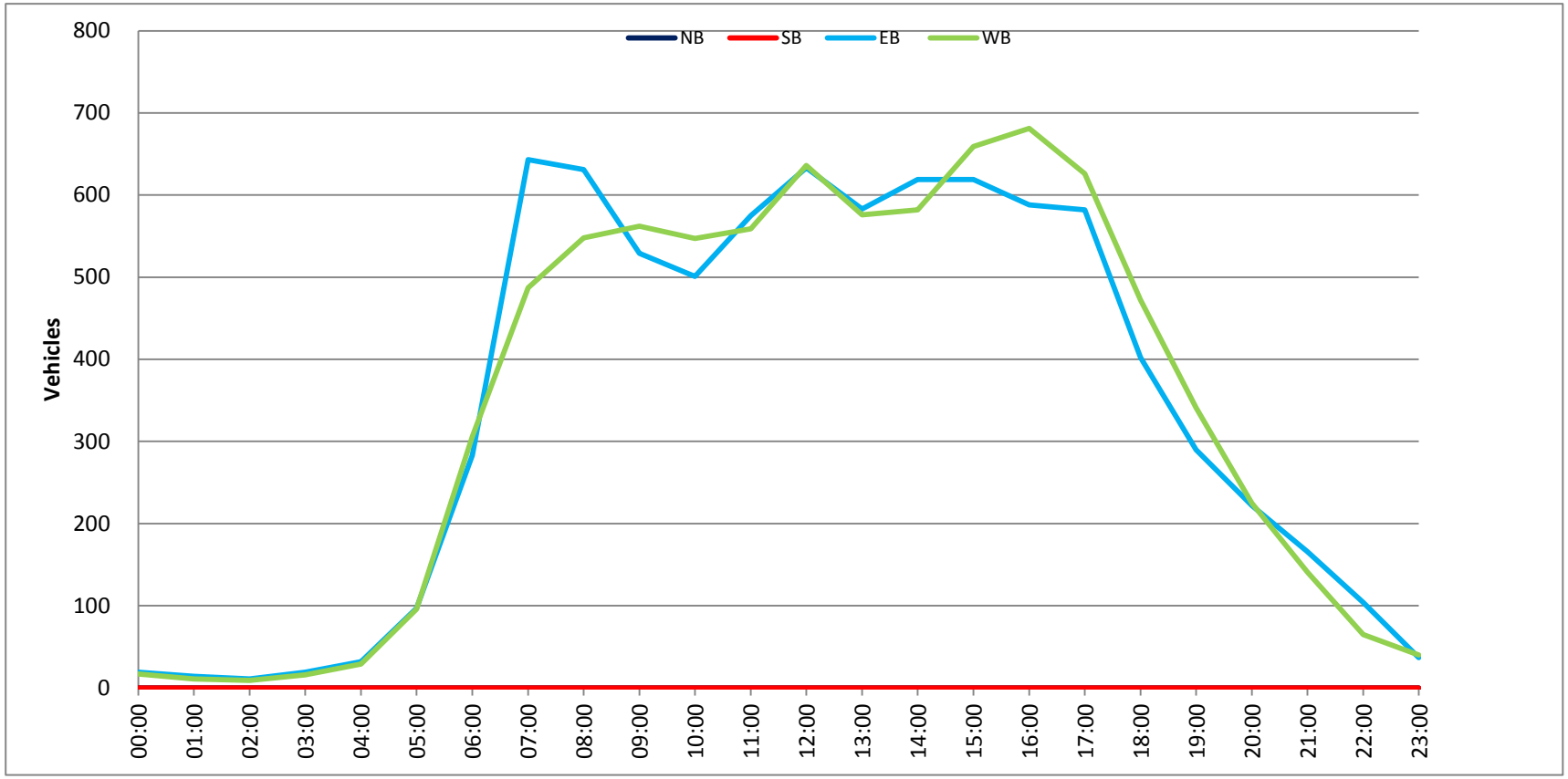
DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9,672	9,554	19,226

AM Peak Hour			10:30	09:45	10:15	PM Peak Hour			15:45	12:00	14:00
AM Pk Volume			689	819	1503	PM Pk Volume			825	724	1460
Pk Hr Factor			0.941	0.935	0.963	Pk Hr Factor			0.929	0.919	0.913
7 - 9 Volume	0	0	655	1012	1667	4 - 6 Volume	0	0	1510	1133	2643
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:00	17:00	16:15
7 - 9 Pk Volume	0	0	438	580	1018	4 - 6 Pk Volume	0	0	798	575	1363
Pk Hr Factor	0.000	0.000	0.771	0.815	0.805	Pk Hr Factor	0.000	0.000	0.899	0.817	0.936

Prepared by NDS/ATD

Project #: CA14_4223_007 **City:** Solana Beach

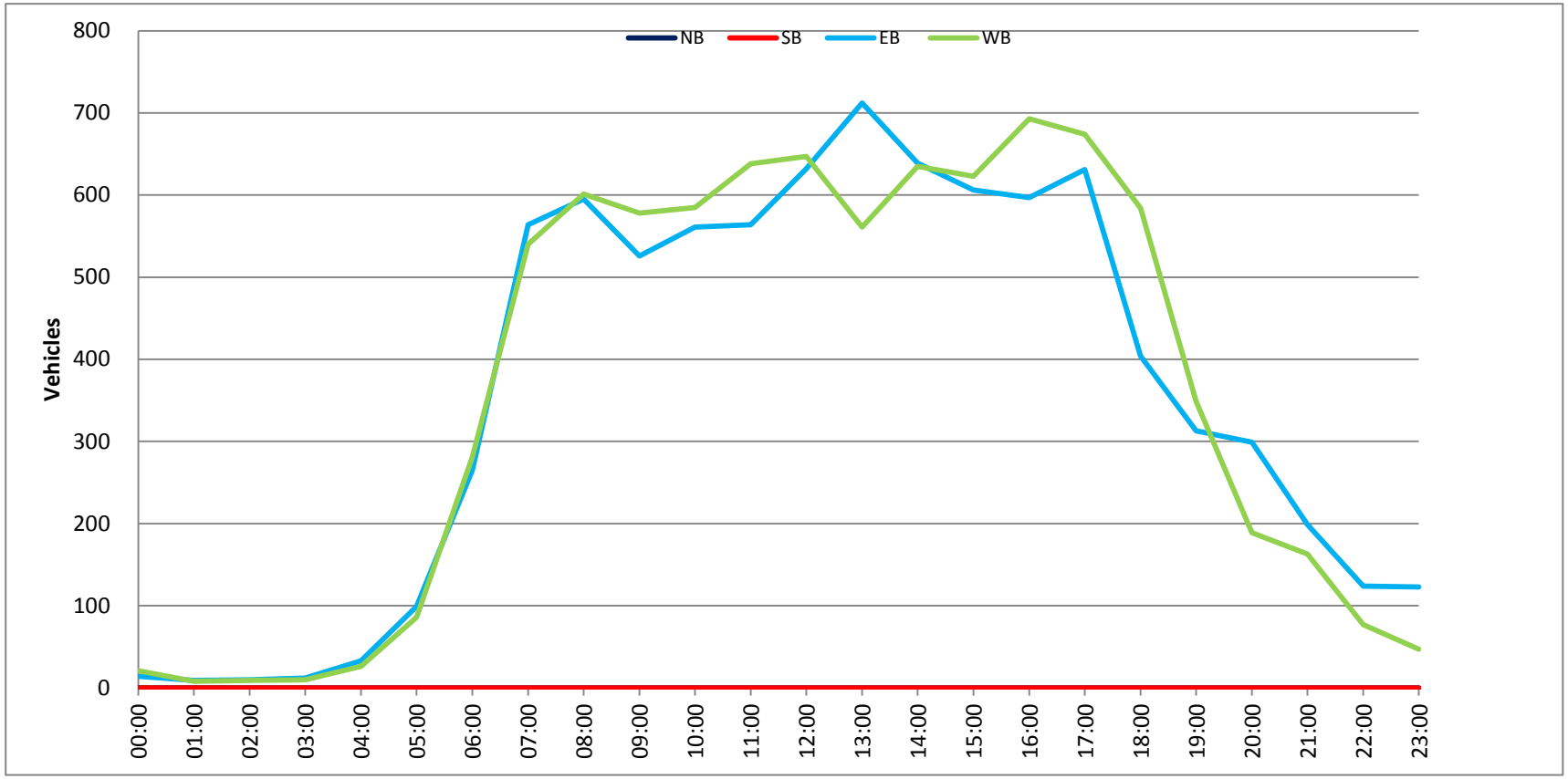
Location: Via De La Valle Bet. Pimlico Dr & Jimmy **Date:** 11/10/2014



Prepared by NDS/ATD

Project #: CA14_4223_007 **City:** Solana Beach

Location: Via De La Valle Bet. Pimlico Dr & Jimmy **Date:** 11/11/2014



Prepared by NDS/ATD

Project #: CA14_4223_007 **City:** Solana Beach

Location: Via De La Valle Bet. Pimlico Dr & Jimmy **Date:** 11/12/2014

Prepared by NDS/ATD

Project #: CA14_4223_007 **City:** Solana Beach

Location: Via De La Valle Bet. Pimlico Dr & Jimmy **Date:** 11/13/2014

Prepared by NDS/ATD

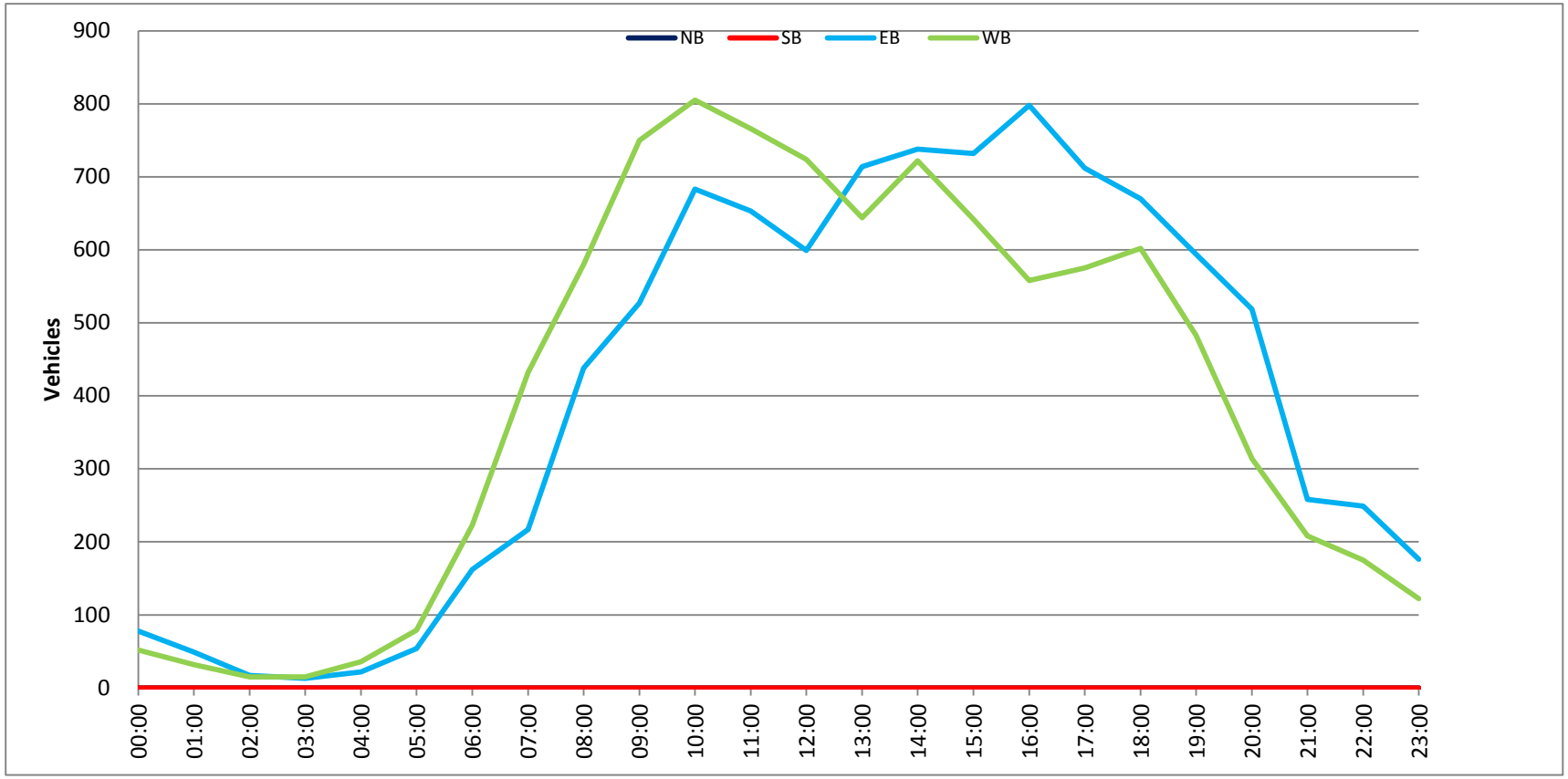
Project #: CA14_4223_007 **City:** Solana Beach

Location: Via De La Valle Bet. Pimlico Dr & Jimmy **Date:** 11/14/2014

Prepared by NDS/ATD

Project #: CA14_4223_007 **City:** Solana Beach

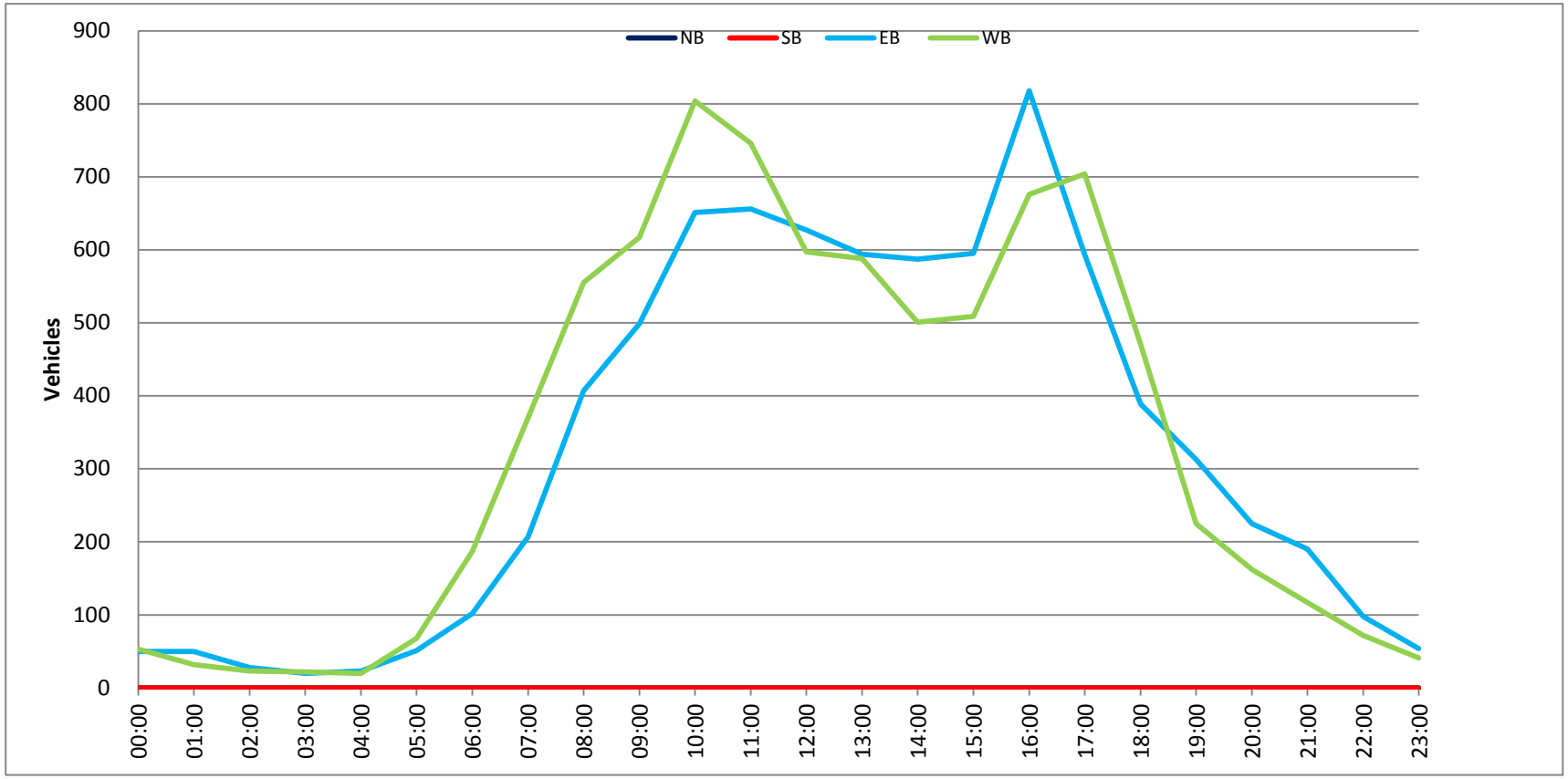
Location: Via De La Valle Bet. Pimlico Dr & Jimmy **Date:** 11/15/2014



Prepared by NDS/ATD

Project #: CA14_4223_007 **City:** Solana Beach

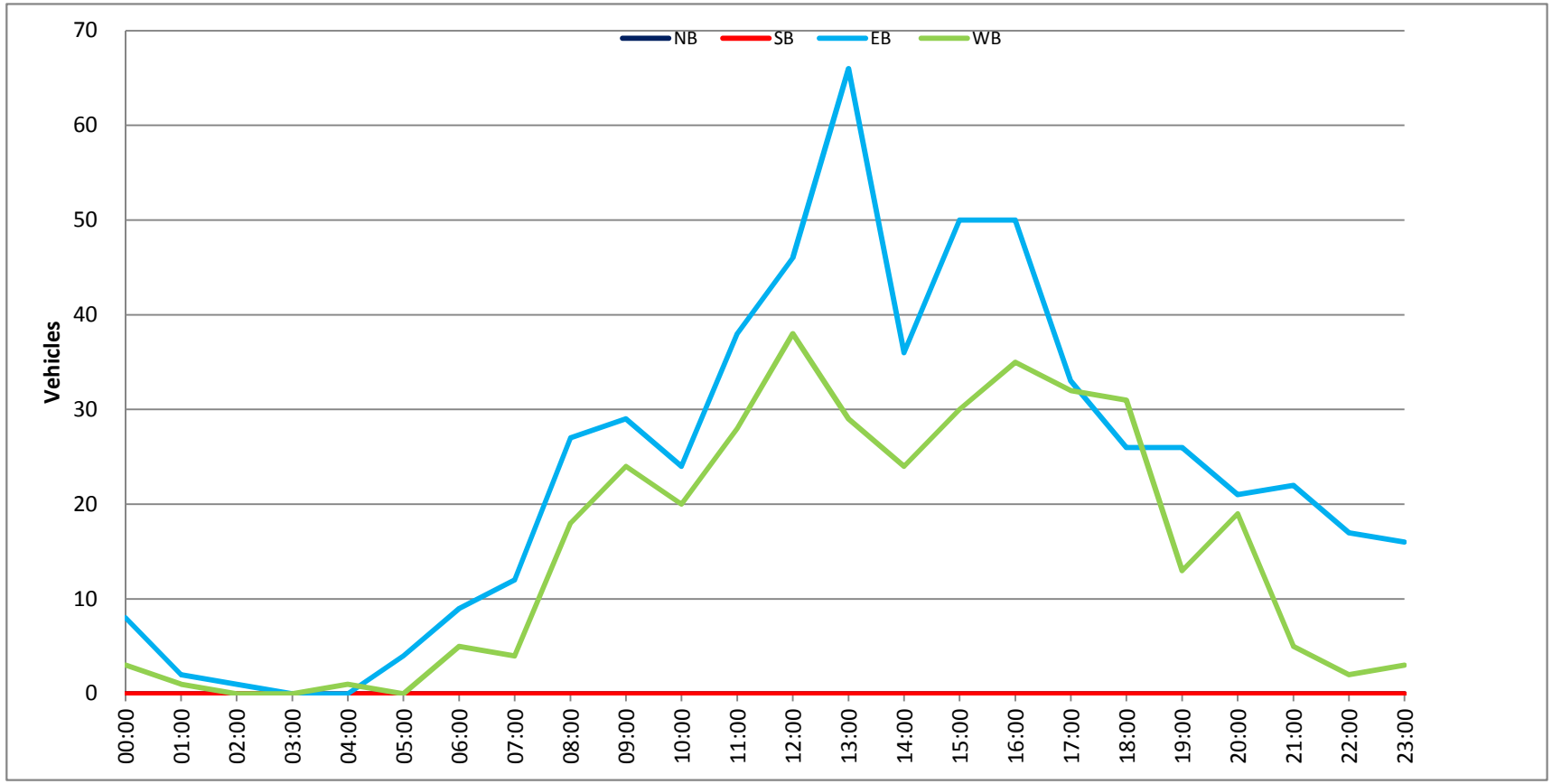
Location: Via De La Valle Bet. Pimlico Dr & Jimmy **Date:** 11/16/2014



Prepared by NDS/ATD

Project #: CA15_4191_001 **City:** Solana Beach

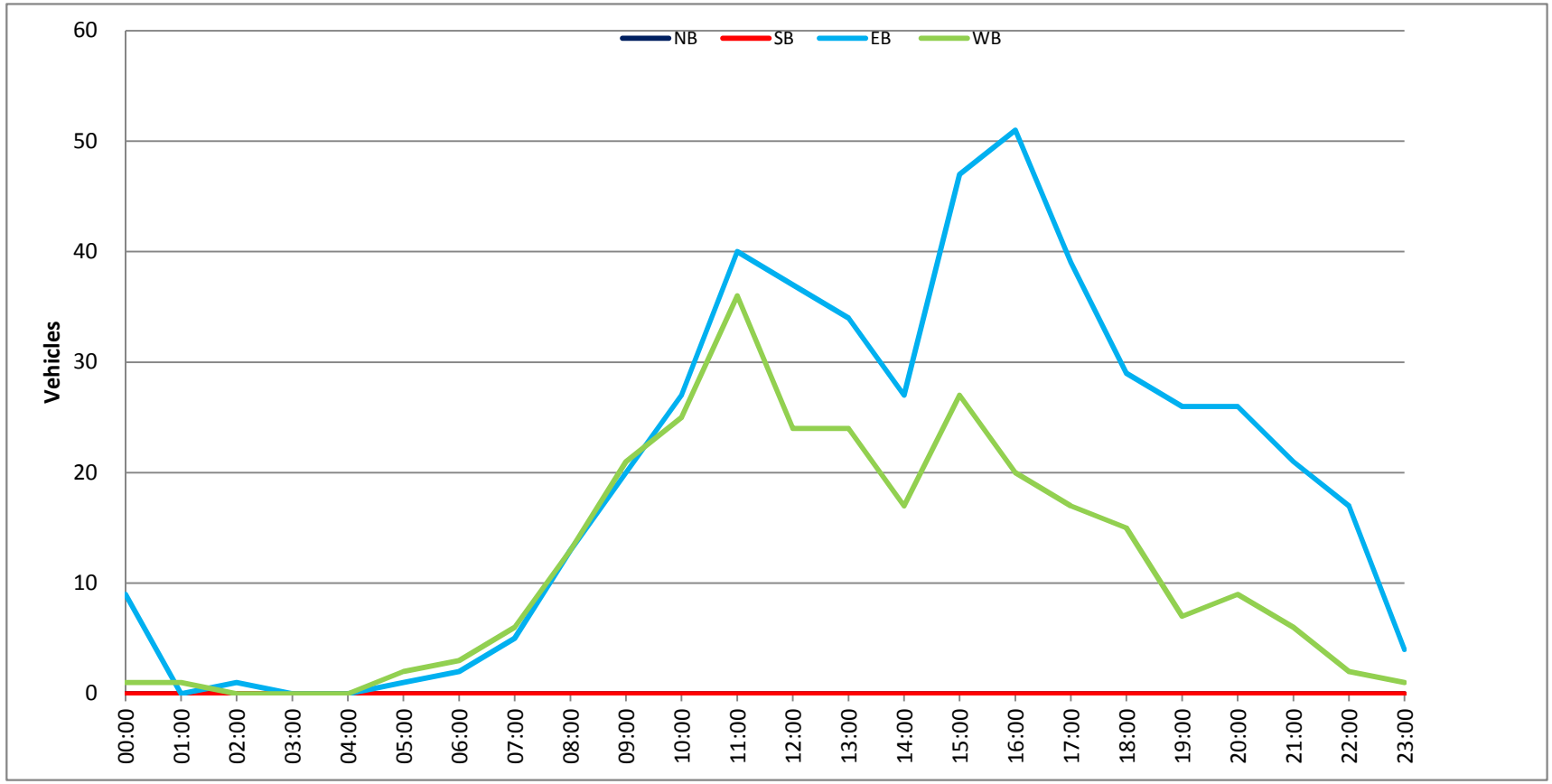
Location: E Solana Cir Bet. S Nardo Ave & Solana Cir **Date:** 6/20/2015



Prepared by NDS/ATD

Project #: CA15_4191_001 **City:** Solana Beach

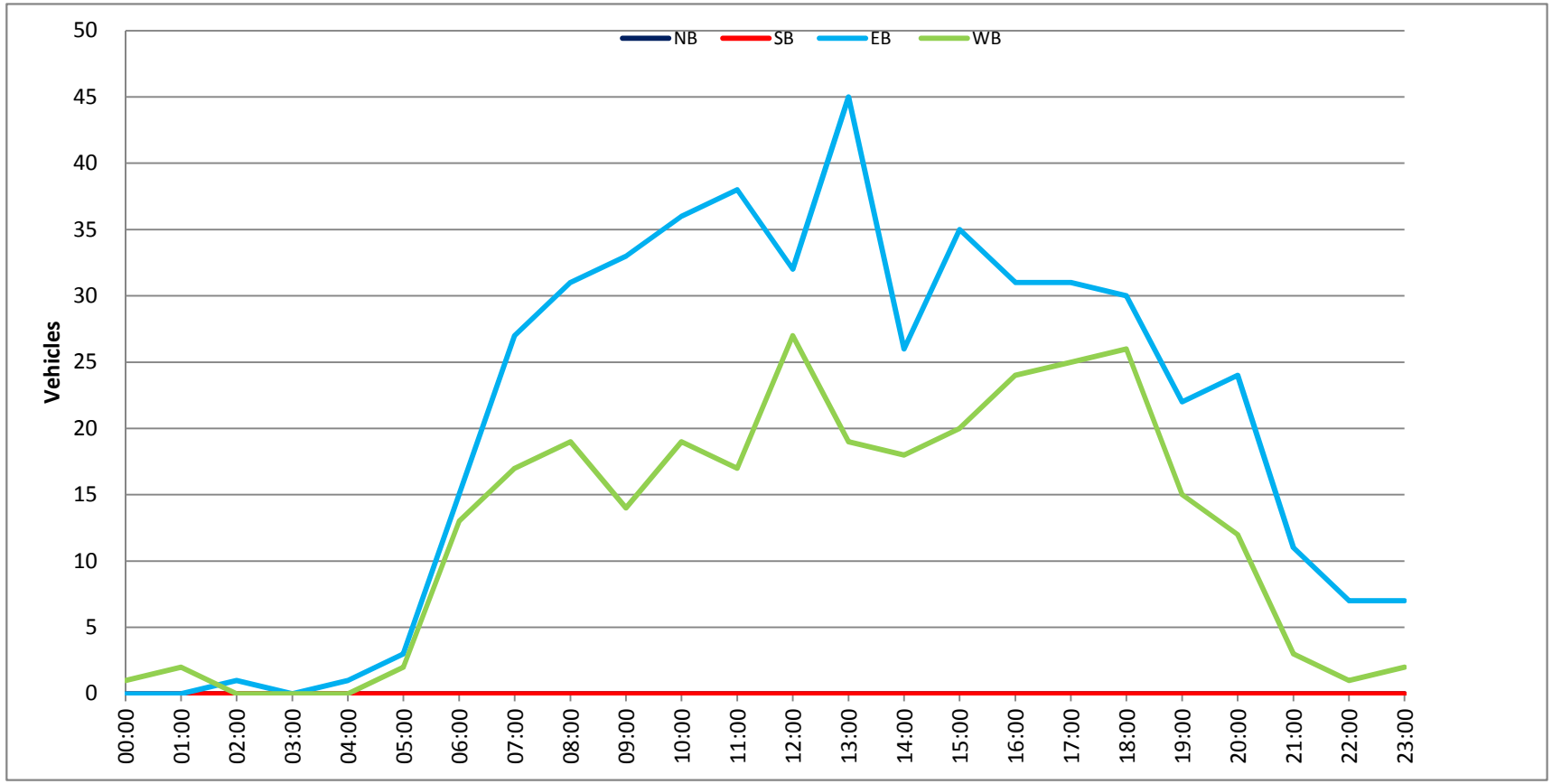
Location: E Solana Cir Bet. S Nardo Ave & Solana Cir **Date:** 6/21/2015



Prepared by NDS/ATD

Project #: CA15_4191_001 **City:** Solana Beach

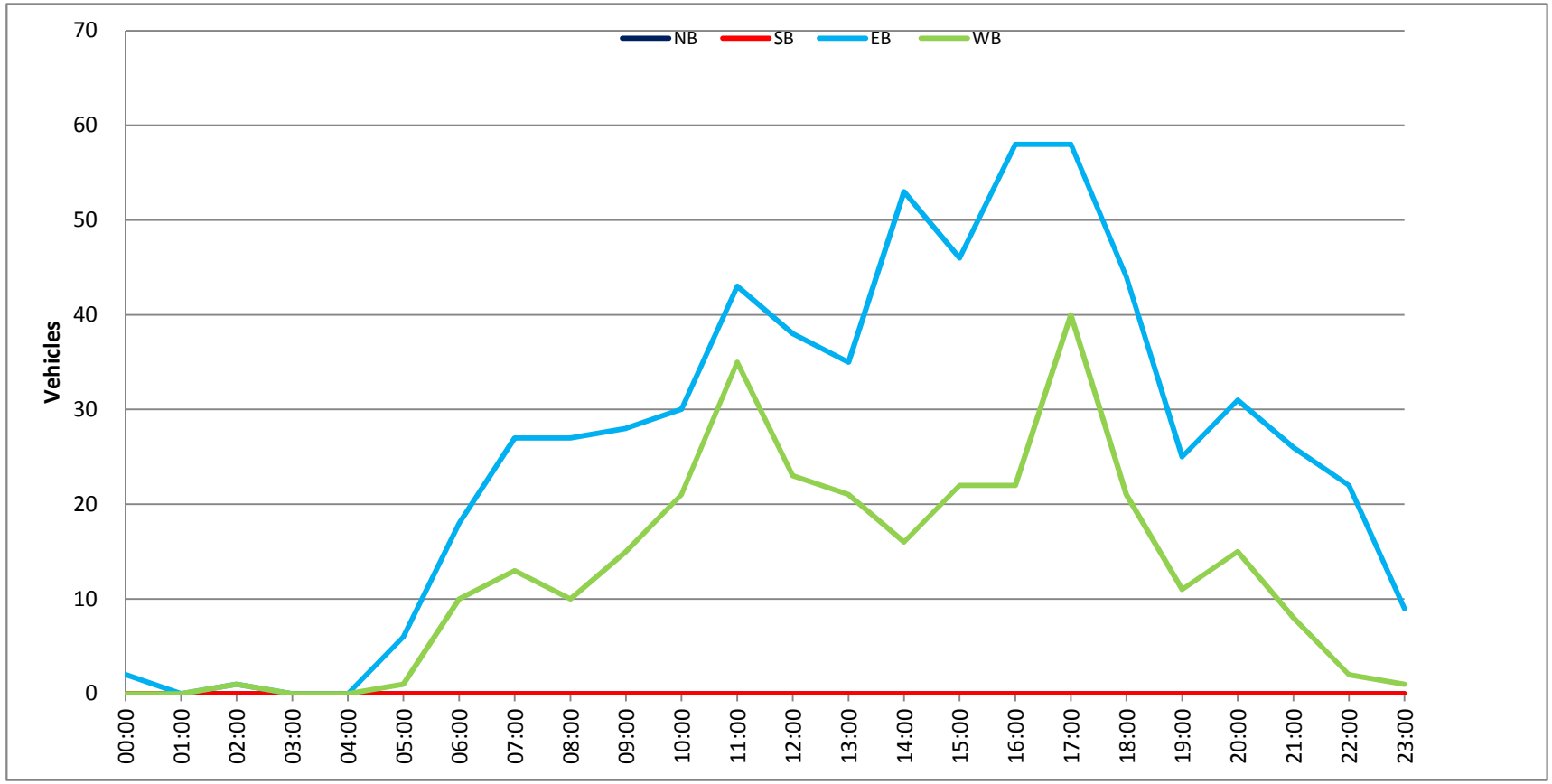
Location: E Solana Cir Bet. S Nardo Ave & Solana Cir **Date:** 6/22/2015



Prepared by NDS/ATD

Project #: CA15_4191_001 **City:** Solana Beach

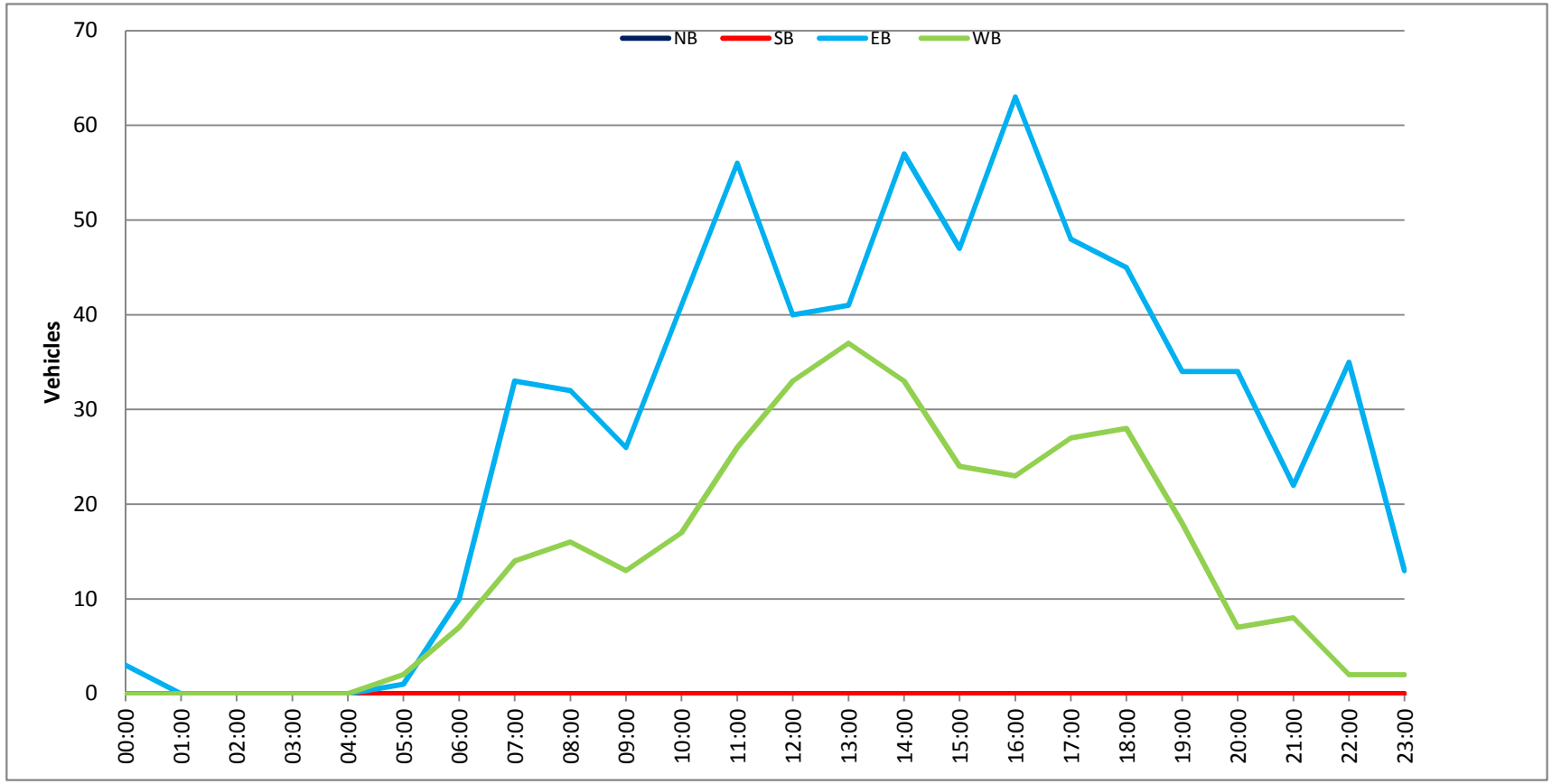
Location: E Solana Cir Bet. S Nardo Ave & Solana Cir **Date:** 6/23/2015



Prepared by NDS/ATD

Project #: CA15_4191_001 **City:** Solana Beach

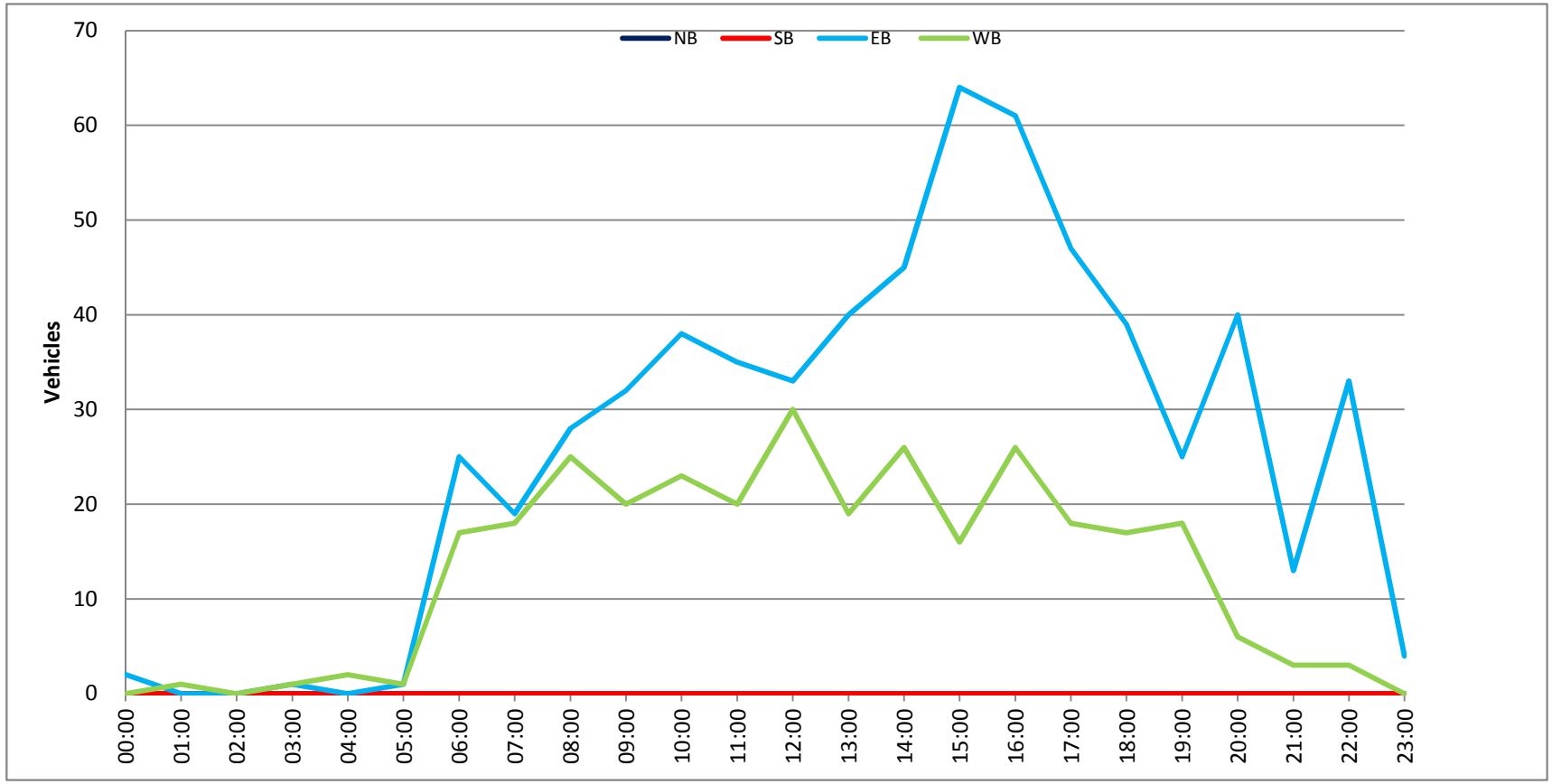
Location: E Solana Cir Bet. S Nardo Ave & Solana Cir **Date:** 6/24/2015



Prepared by NDS/ATD

Project #: CA15_4191_001 **City:** Solana Beach

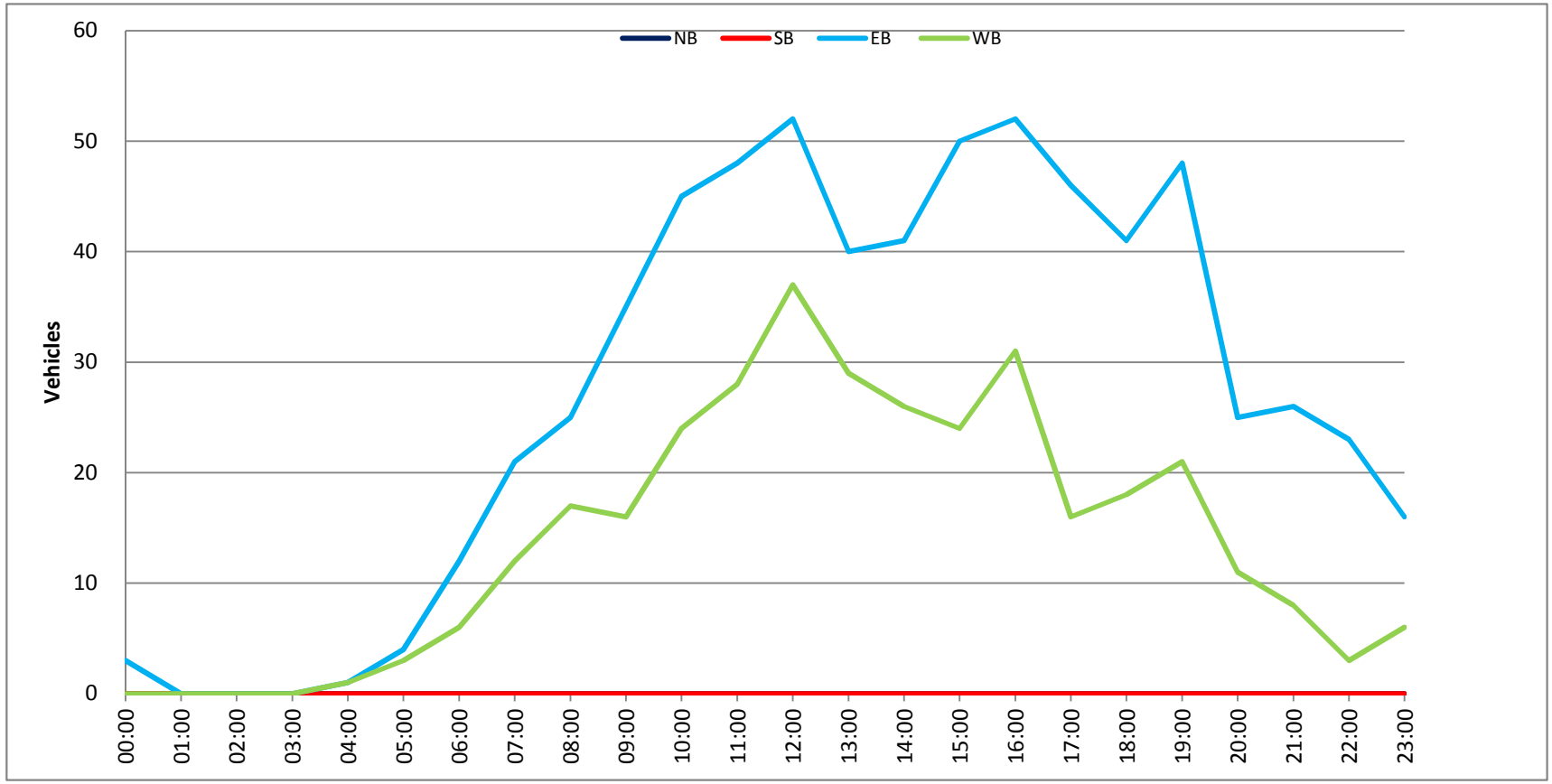
Location: E Solana Cir Bet. S Nardo Ave & Solana Cir **Date:** 6/25/2015



Prepared by NDS/ATD

Project #: CA15_4191_001 **City:** Solana Beach

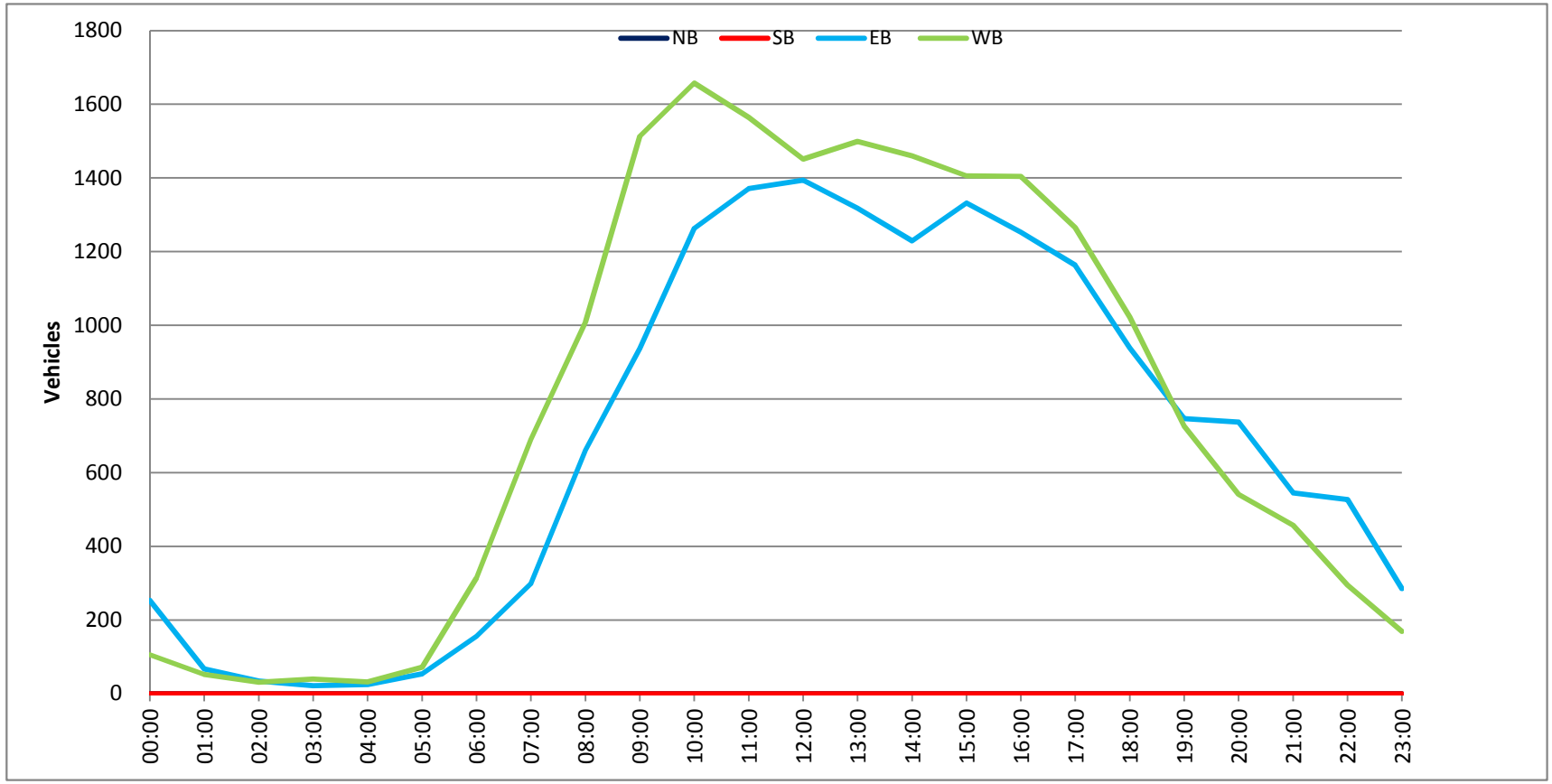
Location: E Solana Cir Bet. S Nardo Ave & Solana Cir **Date:** 6/26/2015



Prepared by NDS/ATD

Project #: CA15_4197_003 **City:** Solana Beach

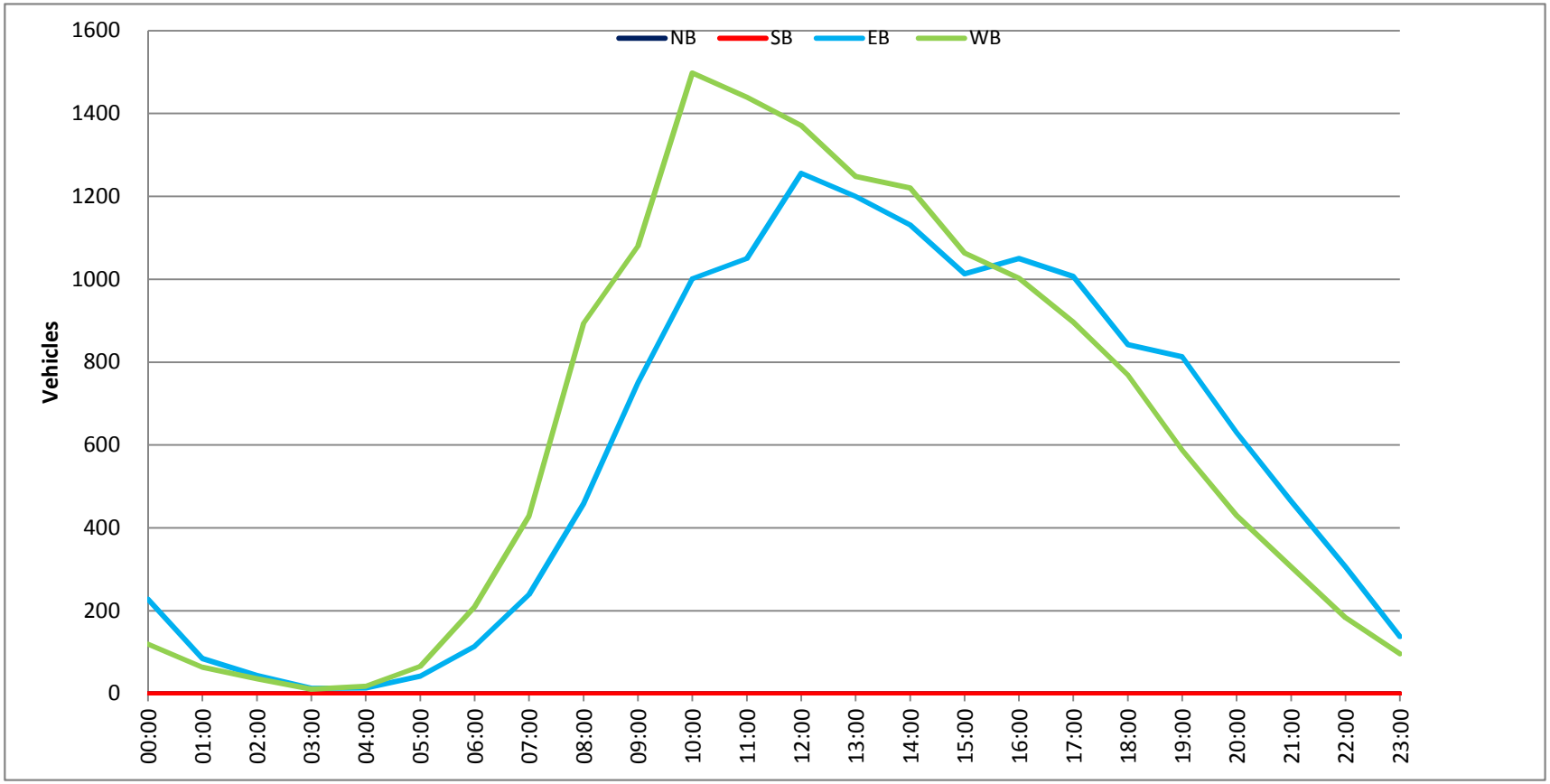
Location: Lomas Santa Fe Dr Bet. Solana Hill Dr & I-5 **Date:** 6/20/2015



Prepared by NDS/ATD

Project #: CA15_4197_003 **City:** Solana Beach

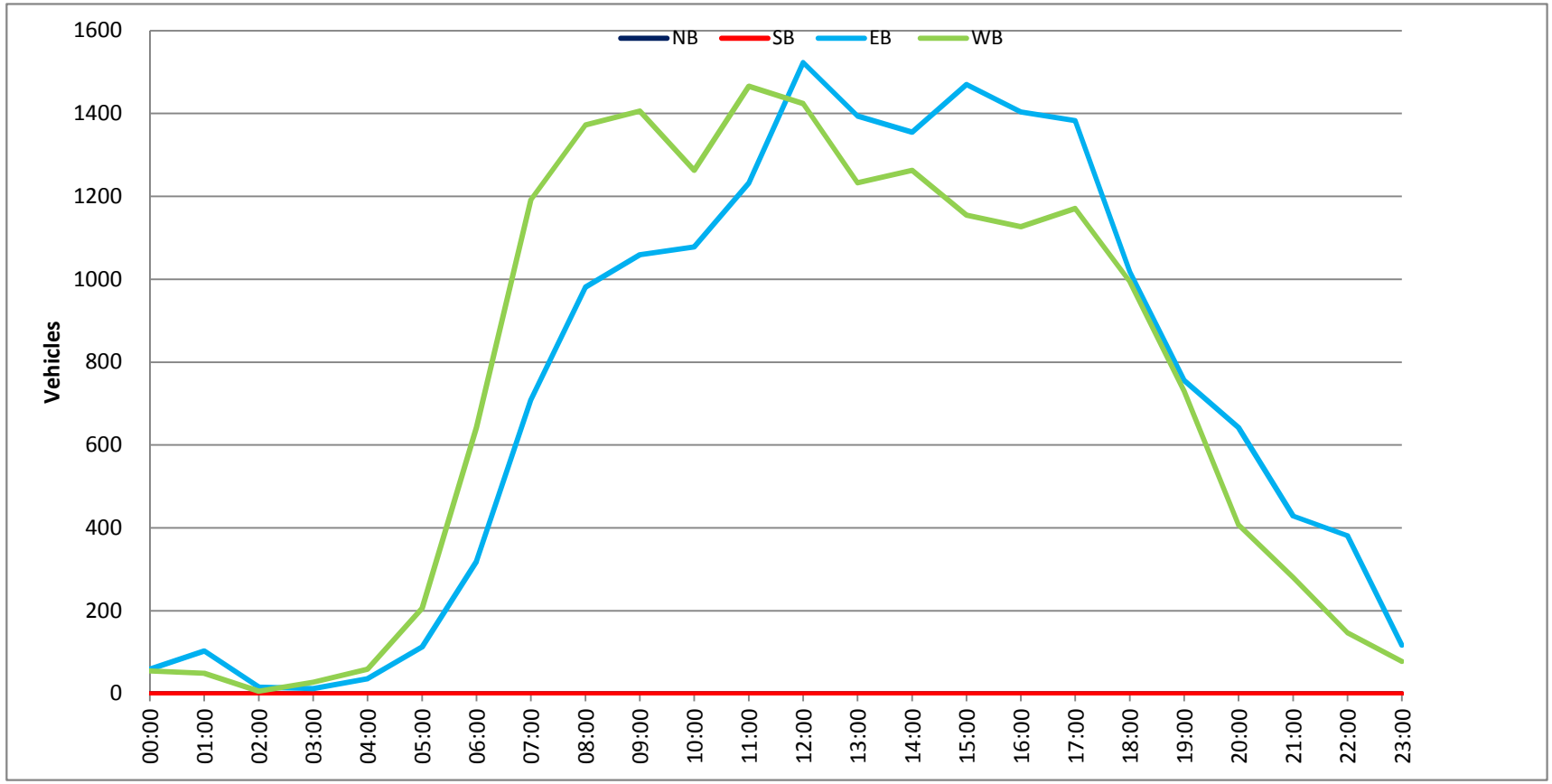
Location: Lomas Santa Fe Dr Bet. Solana Hill Dr & I-5 **Date:** 6/21/2015



Prepared by NDS/ATD

Project #: CA15_4197_003 **City:** Solana Beach

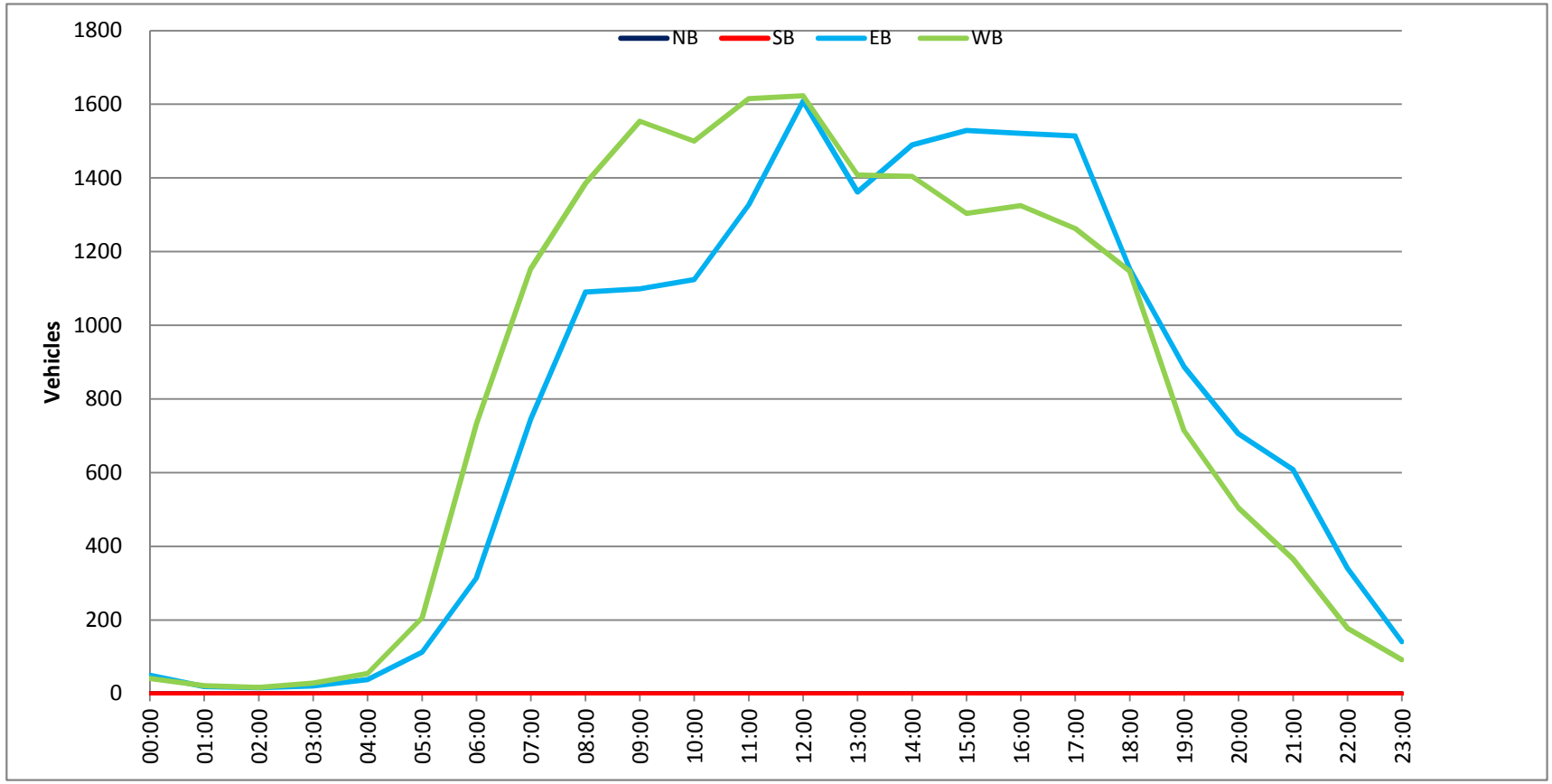
Location: Lomas Santa Fe Dr Bet. Solana Hill Dr & I-5 **Date:** 6/22/2015



Prepared by NDS/ATD

Project #: CA15_4197_003 **City:** Solana Beach

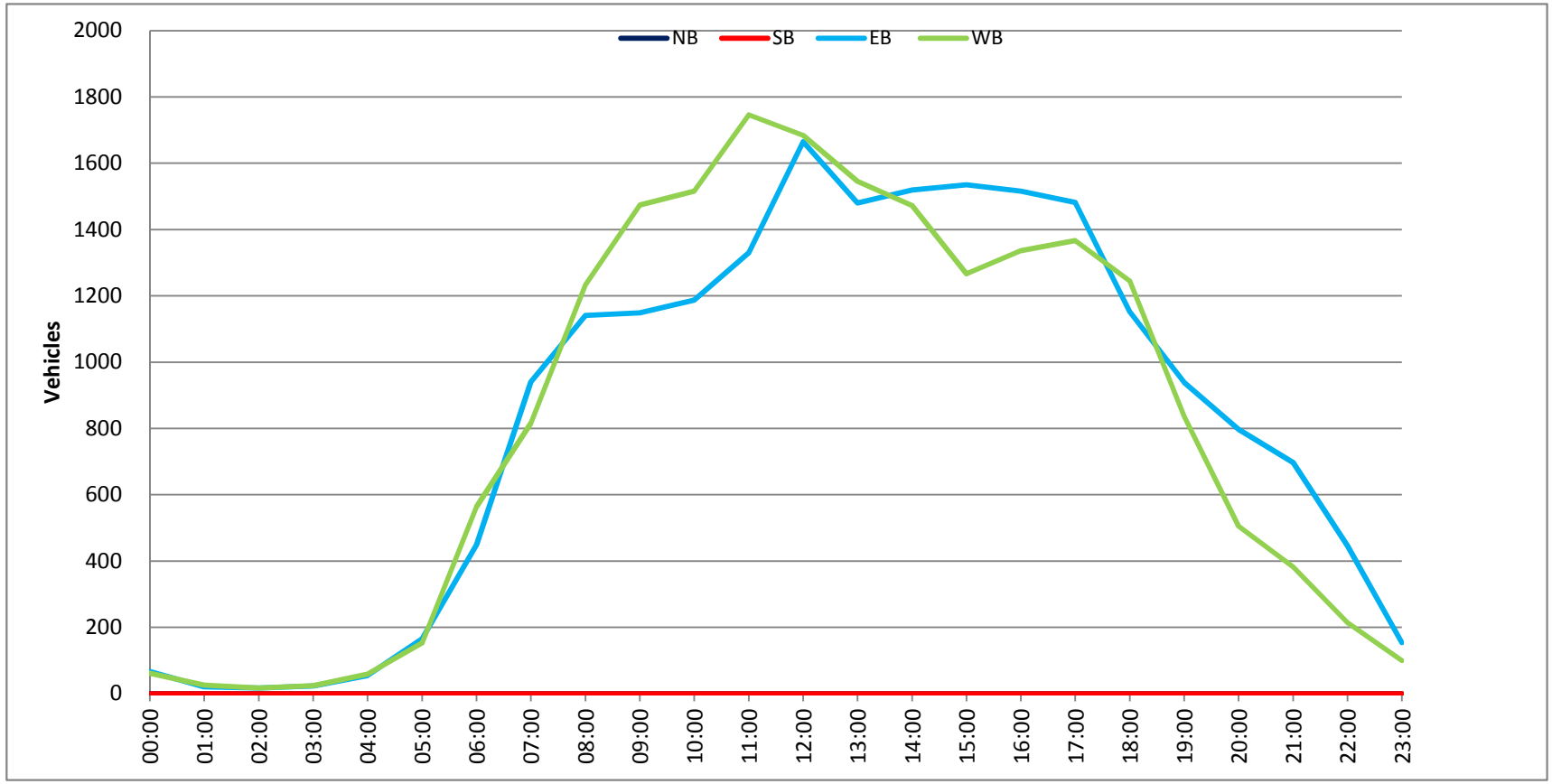
Location: Lomas Santa Fe Dr Bet. Solana Hill Dr & I-5 **Date:** 6/23/2015



Prepared by NDS/ATD

Project #: CA15_4197_003 **City:** Solana Beach

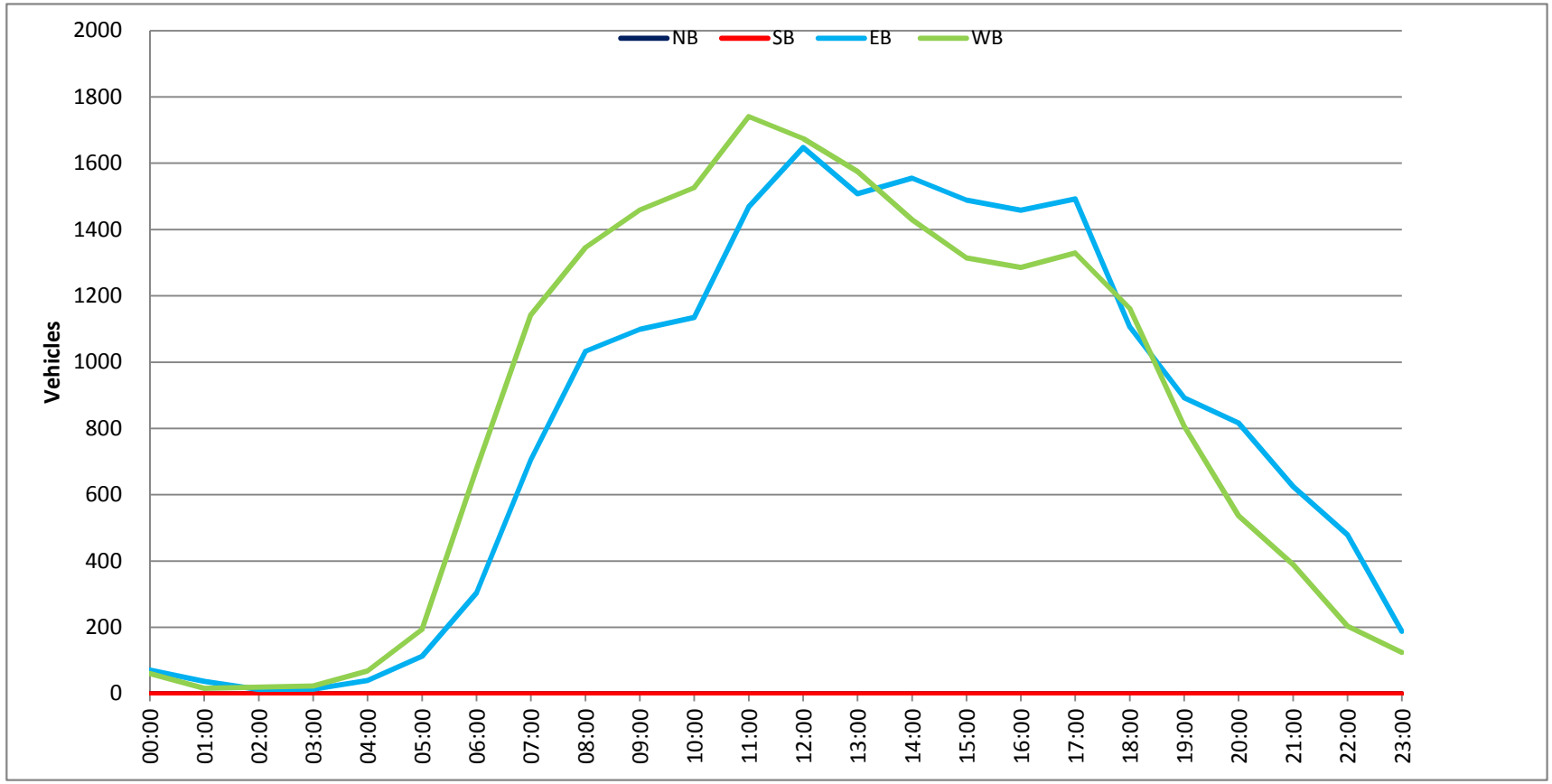
Location: Lomas Santa Fe Dr Bet. Solana Hill Dr & I-5 **Date:** 6/24/2015



Prepared by NDS/ATD

Project #: CA15_4197_003 **City:** Solana Beach

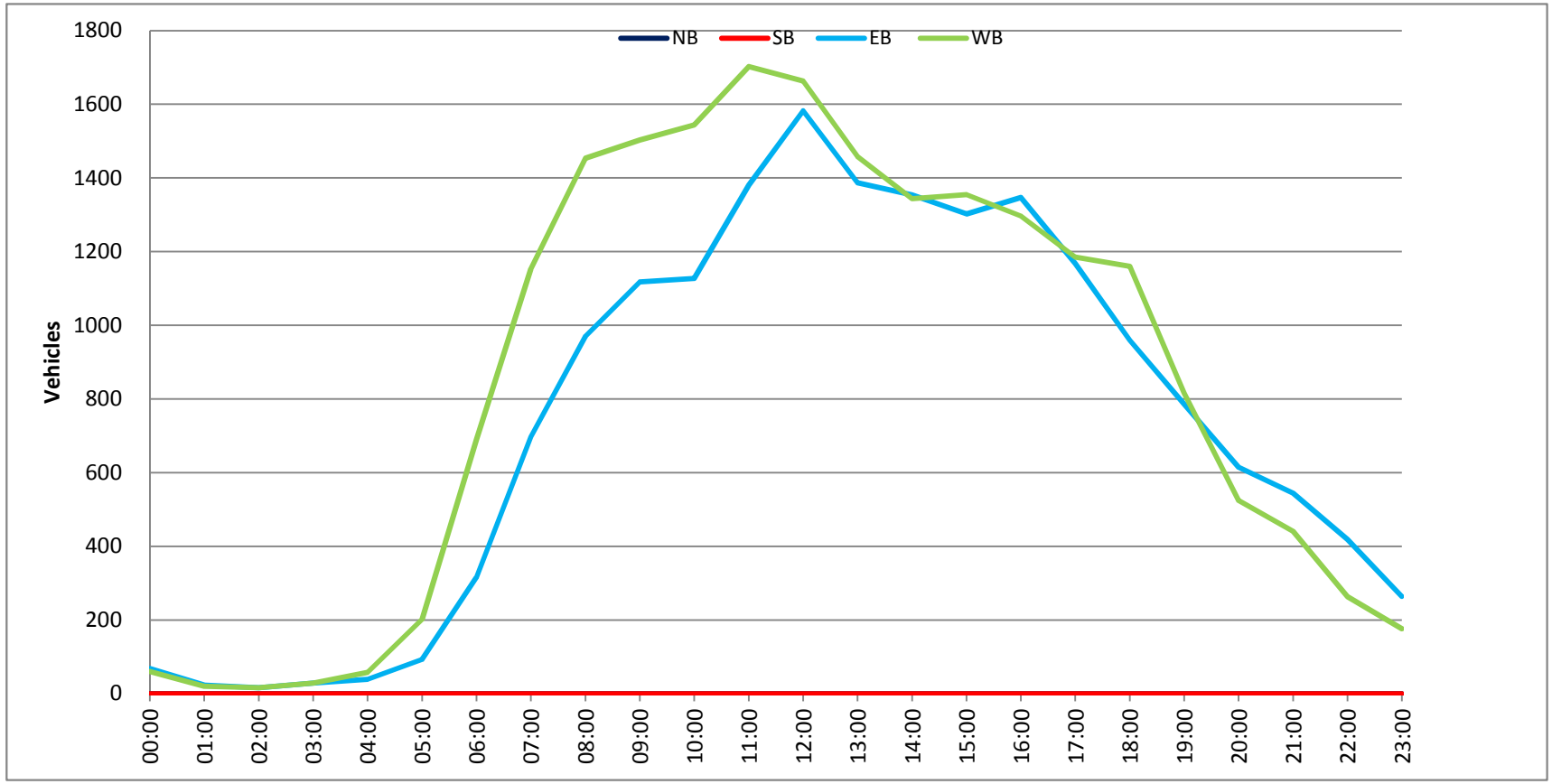
Location: Lomas Santa Fe Dr Bet. Solana Hill Dr & I-5 **Date:** 6/25/2015



Prepared by NDS/ATD

Project #: CA15_4197_003 **City:** Solana Beach

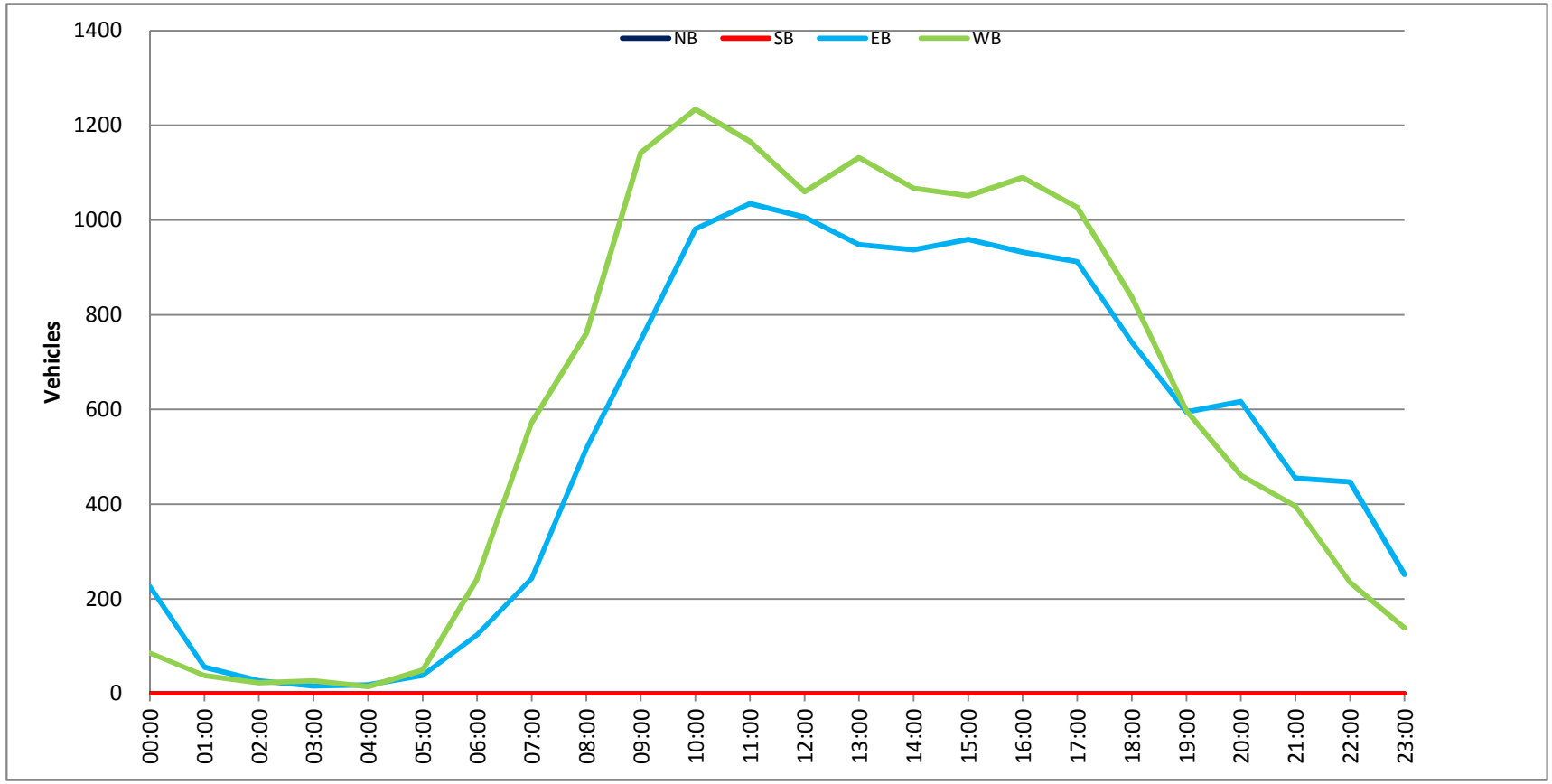
Location: Lomas Santa Fe Dr Bet. Solana Hill Dr & I-5 **Date:** 6/26/2015



Prepared by NDS/ATD

Project #: CA15_4191_005 **City:** Solana Beach

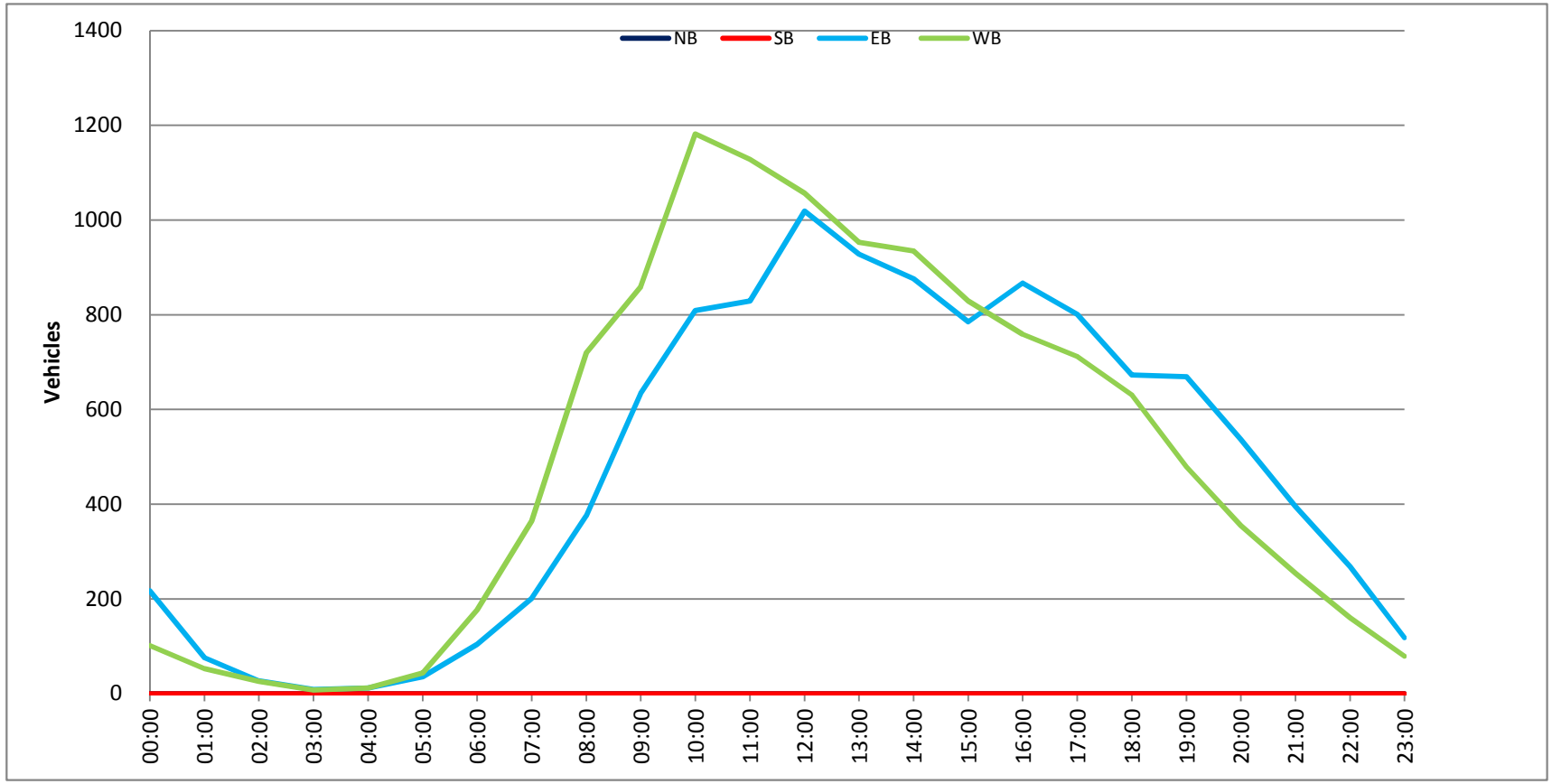
Location: Lomas Santa Fe Dr Bet. Stevens Ave & **Date:** 6/20/2015



Prepared by NDS/ATD

Project #: CA15_4191_005 **City:** Solana Beach

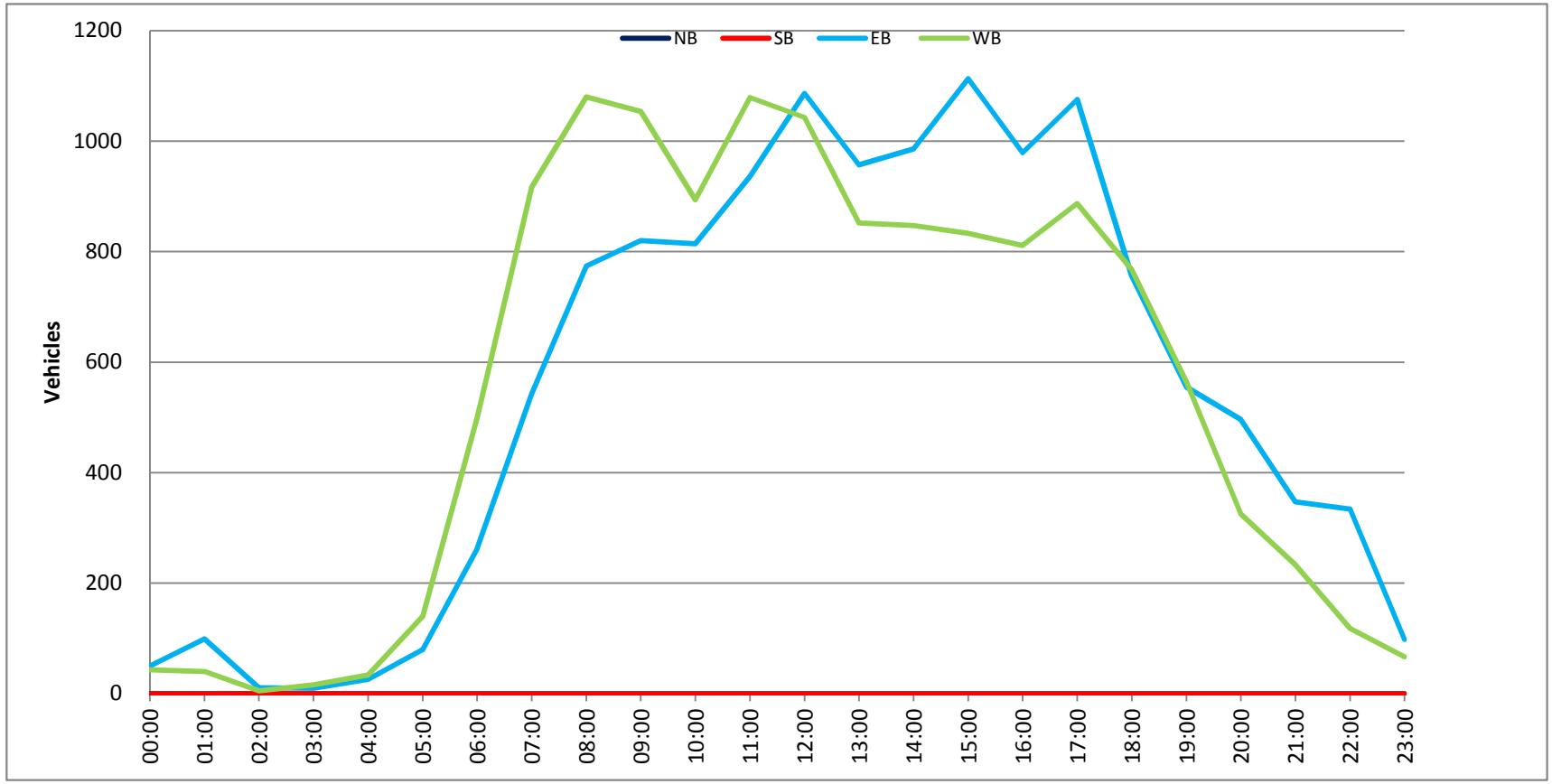
Location: Lomas Santa Fe Dr Bet. Stevens Ave & **Date:** 6/21/2015



Prepared by NDS/ATD

Project #: CA15_4191_005 **City:** Solana Beach

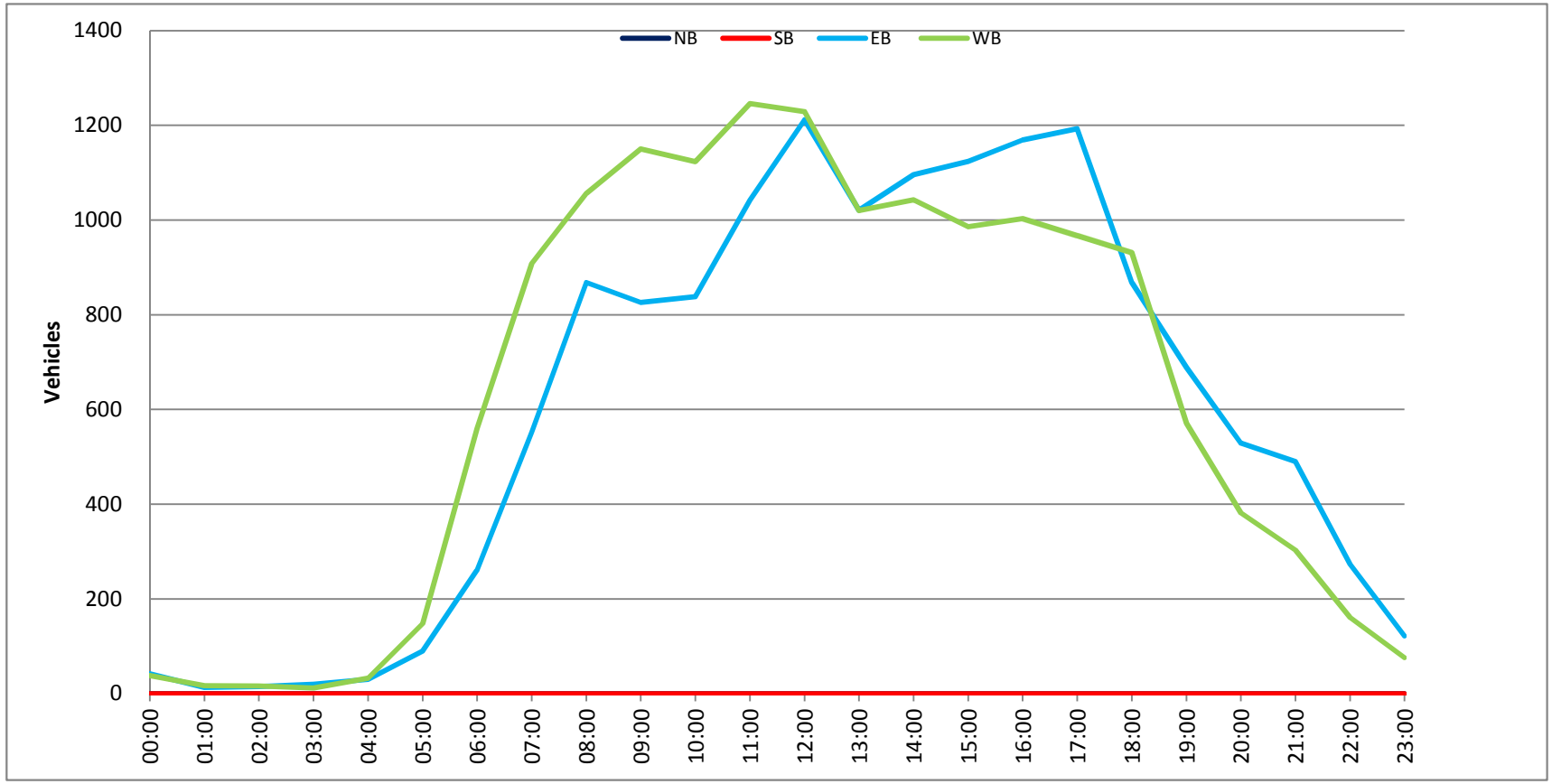
Location: Lomas Santa Fe Dr Bet. Stevens Ave & **Date:** 6/22/2015



Prepared by NDS/ATD

Project #: CA15_4191_005 **City:** Solana Beach

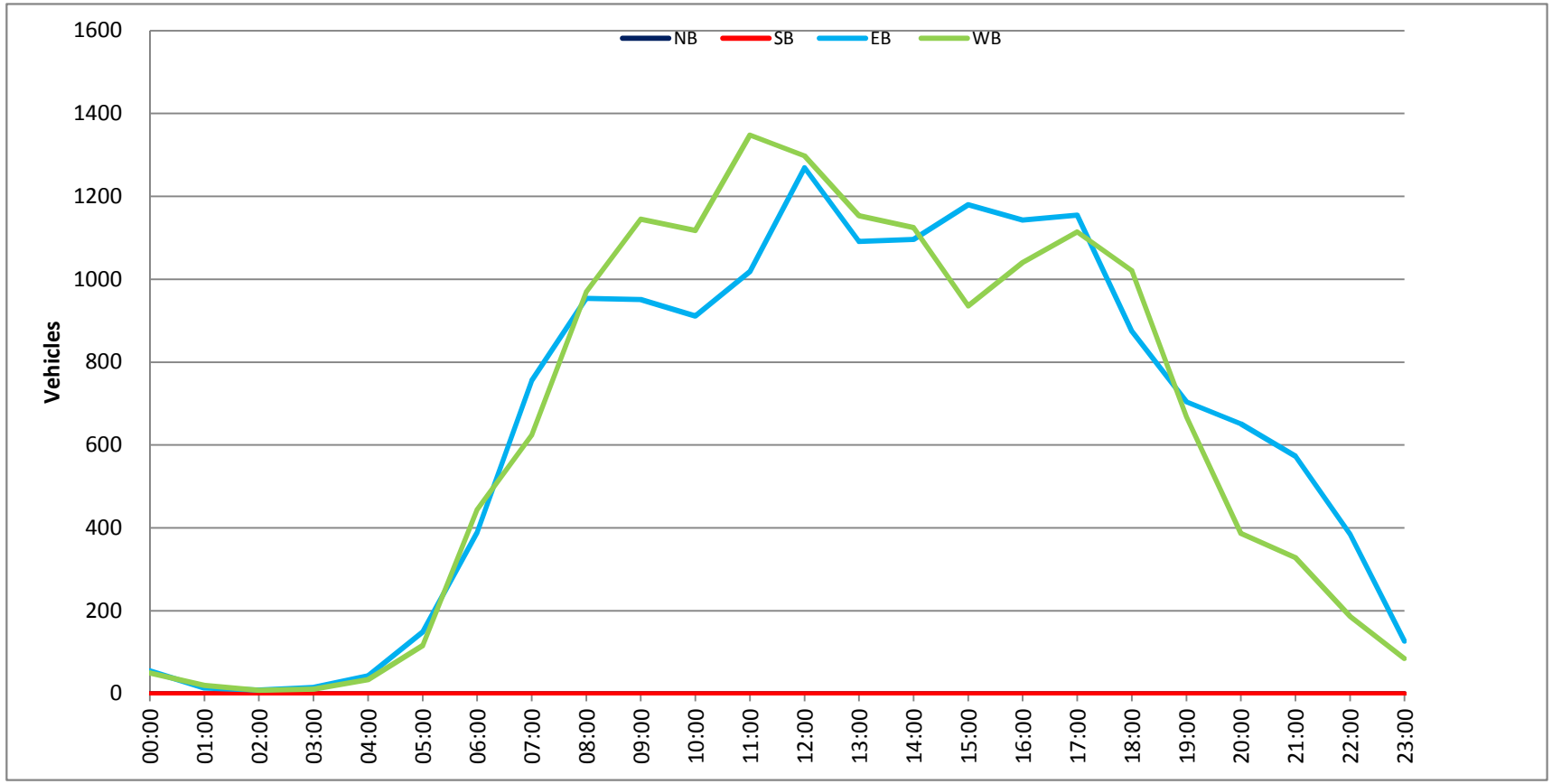
Location: Lomas Santa Fe Dr Bet. Stevens Ave & **Date:** 6/23/2015



Prepared by NDS/ATD

Project #: CA15_4191_005 **City:** Solana Beach

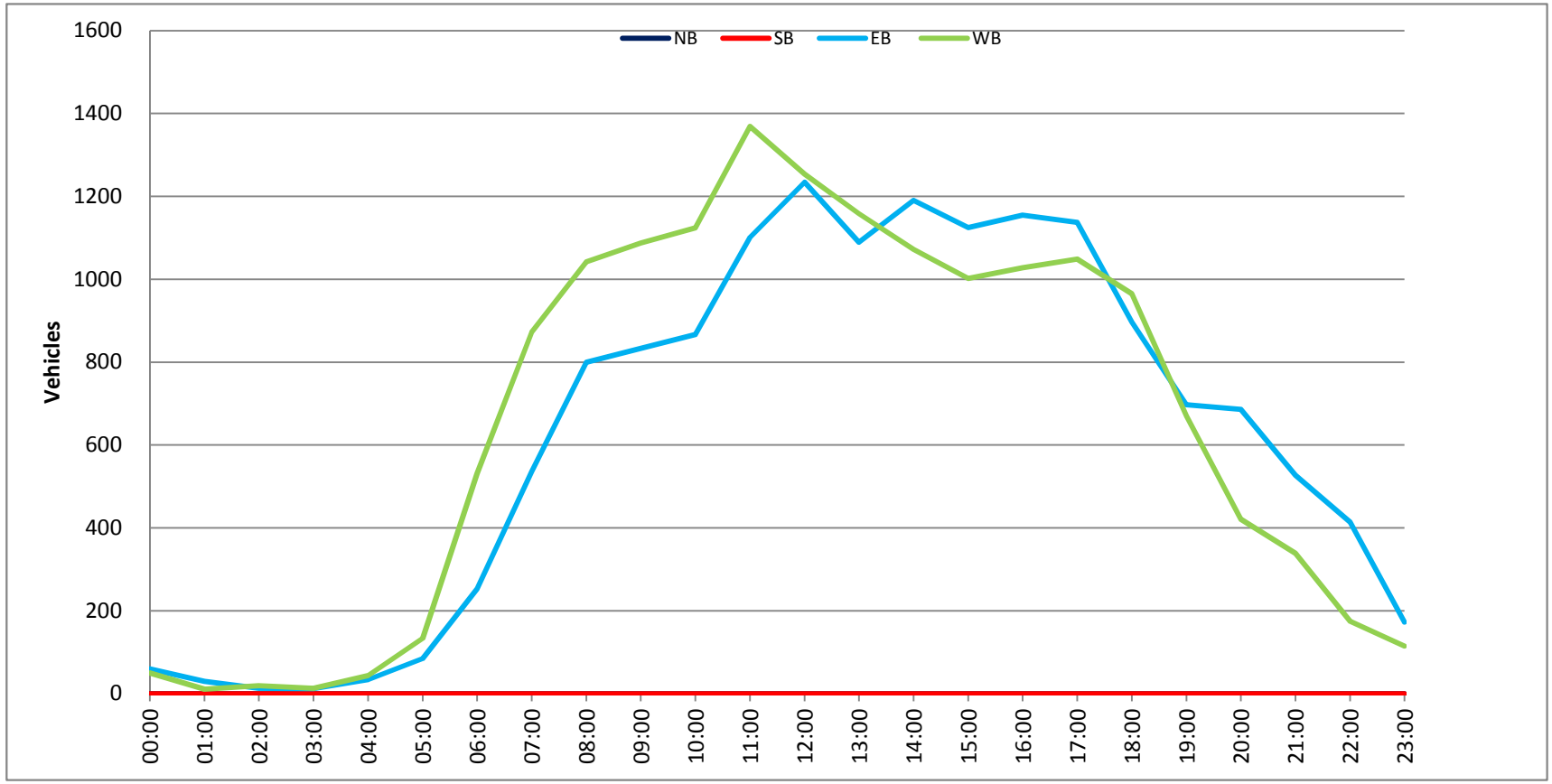
Location: Lomas Santa Fe Dr Bet. Stevens Ave & **Date:** 6/24/2015



Prepared by NDS/ATD

Project #: CA15_4191_005 **City:** Solana Beach

Location: Lomas Santa Fe Dr Bet. Stevens Ave & **Date:** 6/25/2015



Prepared by NDS/ATD

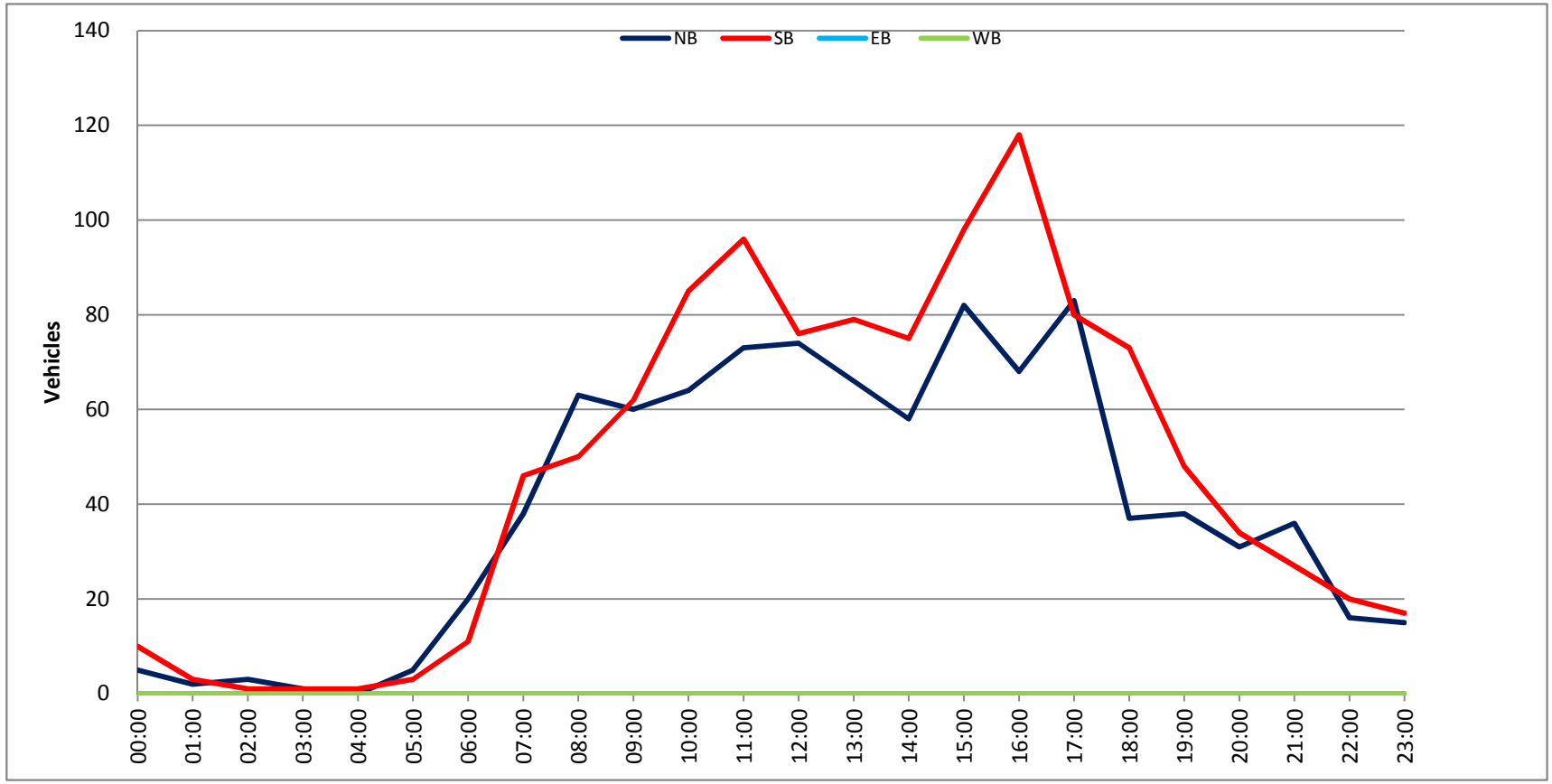
Project #: CA15_4191_005 **City:** Solana Beach

Location: Lomas Santa Fe Dr Bet. Stevens Ave & **Date:** 6/26/2015

Prepared by NDS/ATD

Project #: CA15_4191_002 **City:** Solana Beach

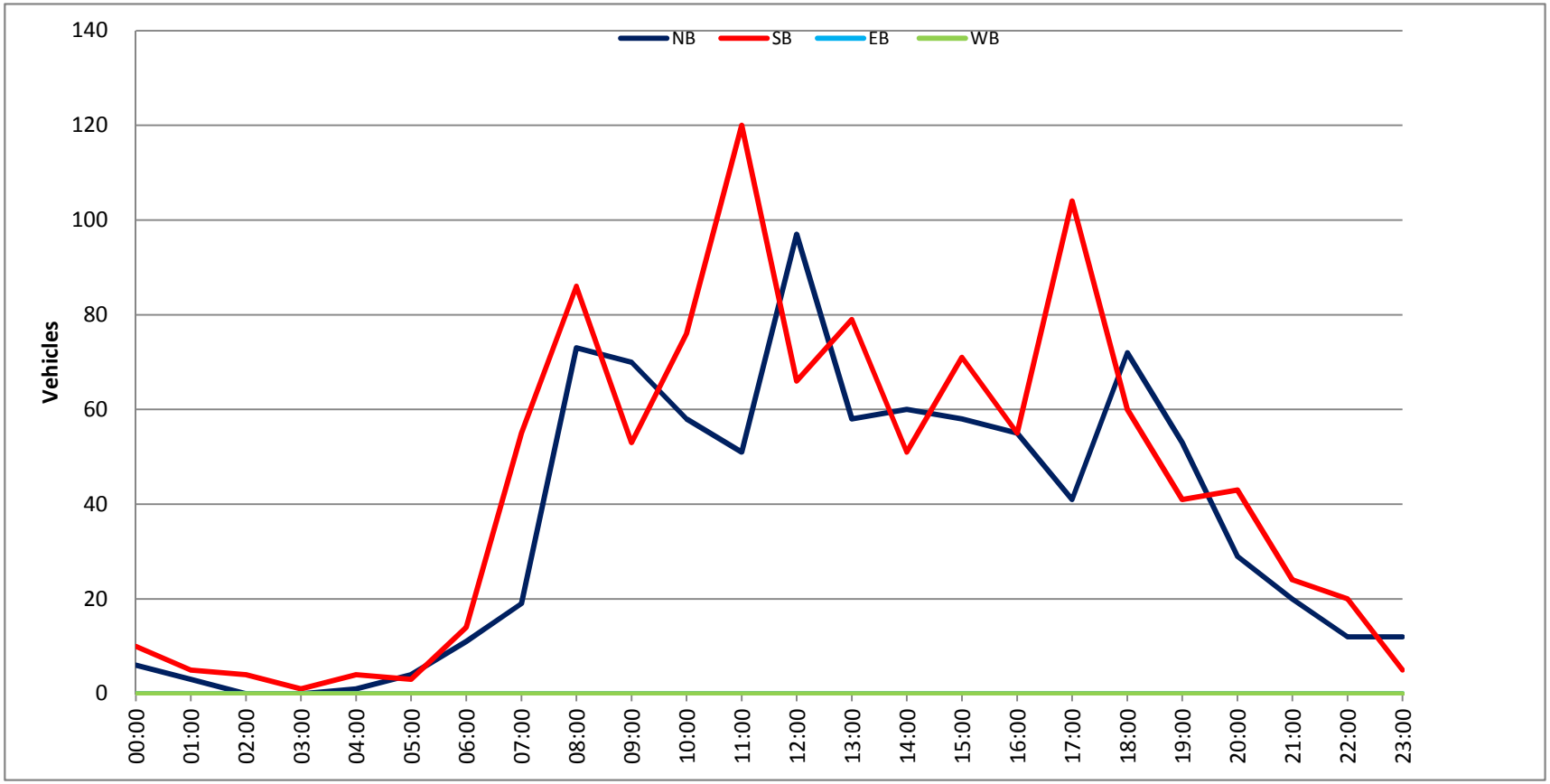
Location: Nardo Ave Bet. Corto St & Lirio St **Date:** 6/20/2015



Prepared by NDS/ATD

Project #: CA15_4191_002 **City:** Solana Beach

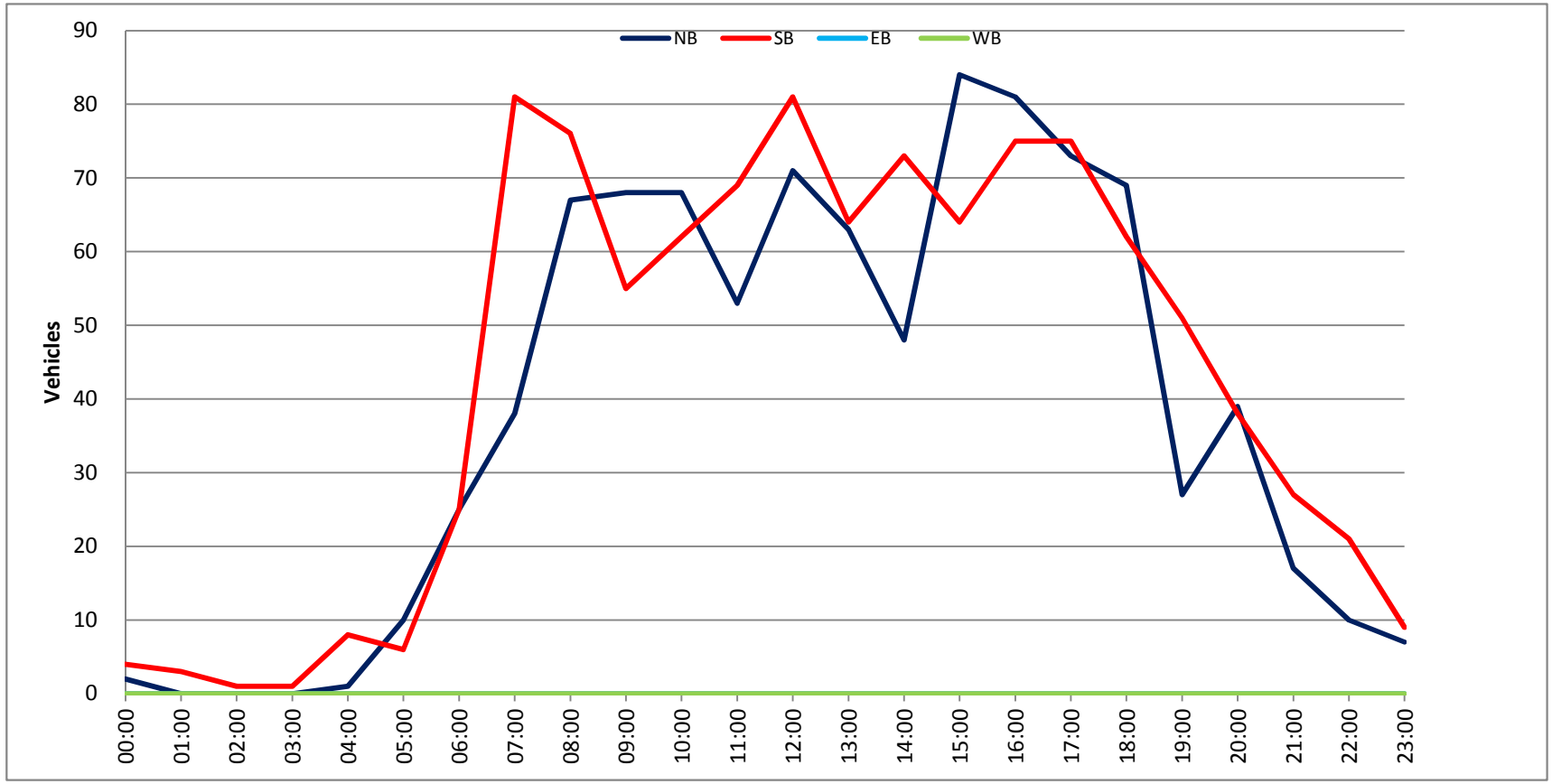
Location: Nardo Ave Bet. Corto St & Lirio St **Date:** 6/21/2015



Prepared by NDS/ATD

Project #: CA15_4191_002 **City:** Solana Beach

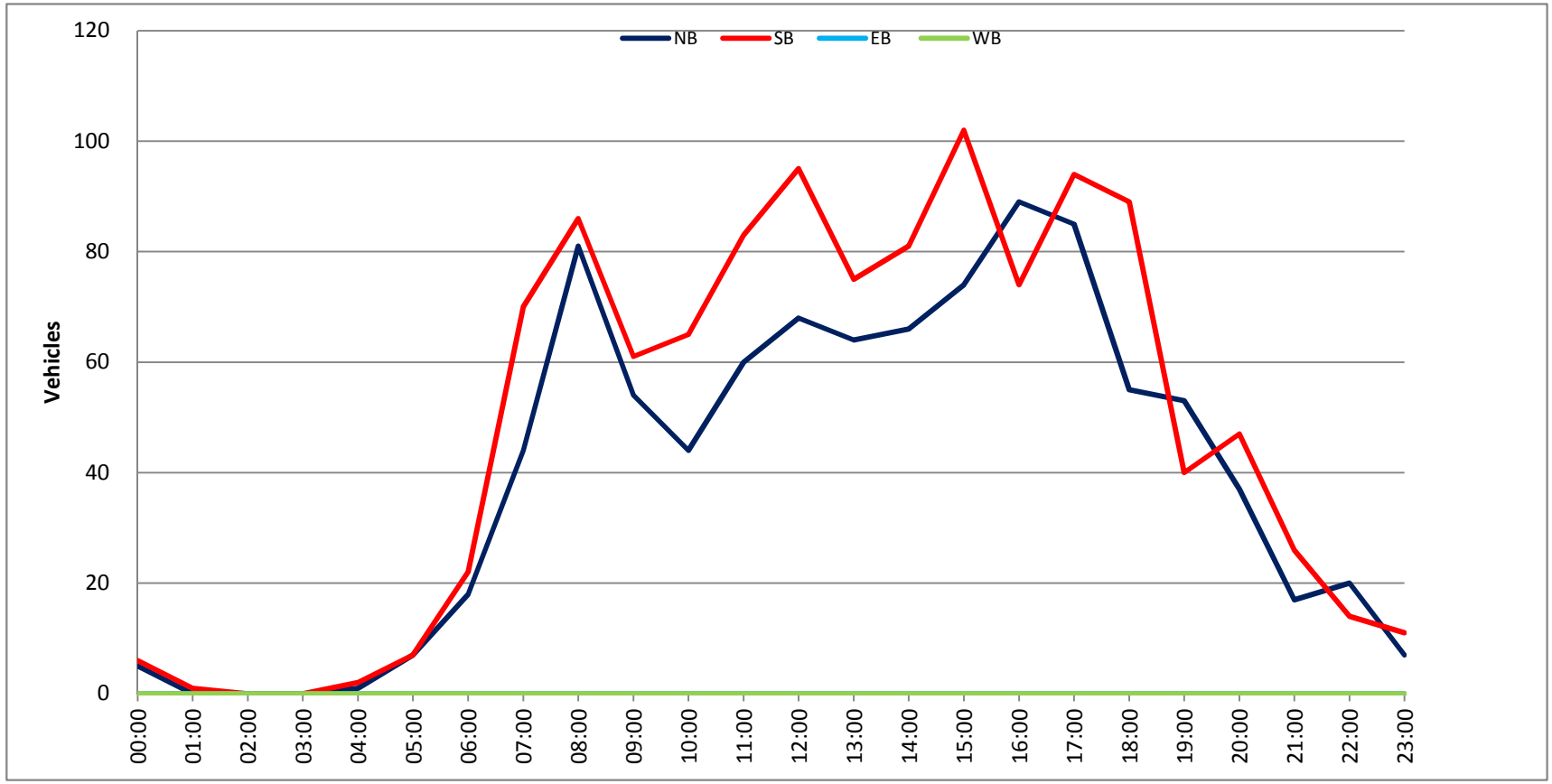
Location: Nardo Ave Bet. Corto St & Lirio St **Date:** 6/22/2015



Prepared by NDS/ATD

Project #: CA15_4191_002 **City:** Solana Beach

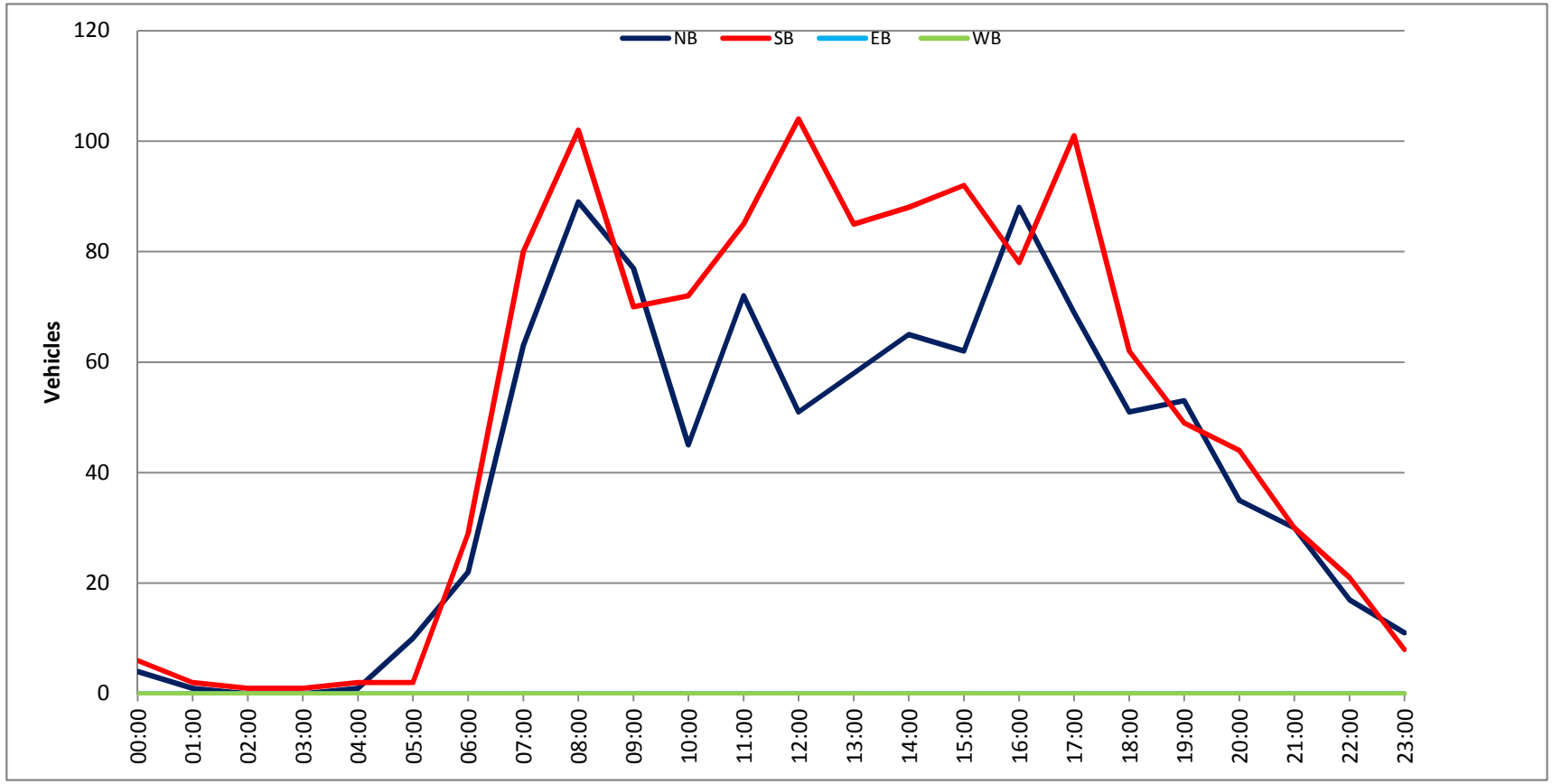
Location: Nardo Ave Bet. Corto St & Lirio St **Date:** 6/23/2015



Prepared by NDS/ATD

Project #: CA15_4191_002 **City:** Solana Beach

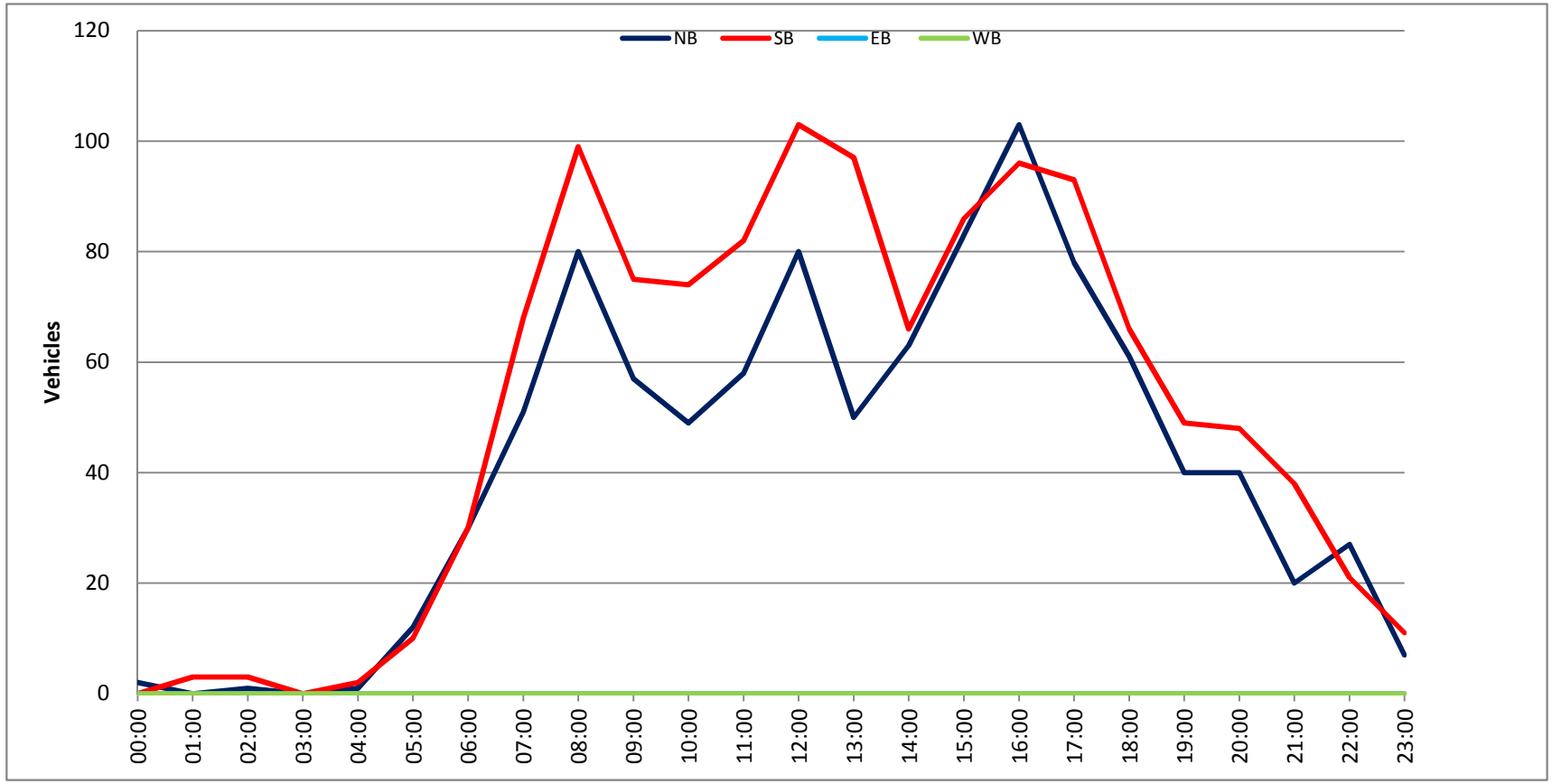
Location: Nardo Ave Bet. Corto St & Lirio St **Date:** 6/24/2015



Prepared by NDS/ATD

Project #: CA15_4191_002 **City:** Solana Beach

Location: Nardo Ave Bet. Corto St & Lirio St **Date:** 6/25/2015



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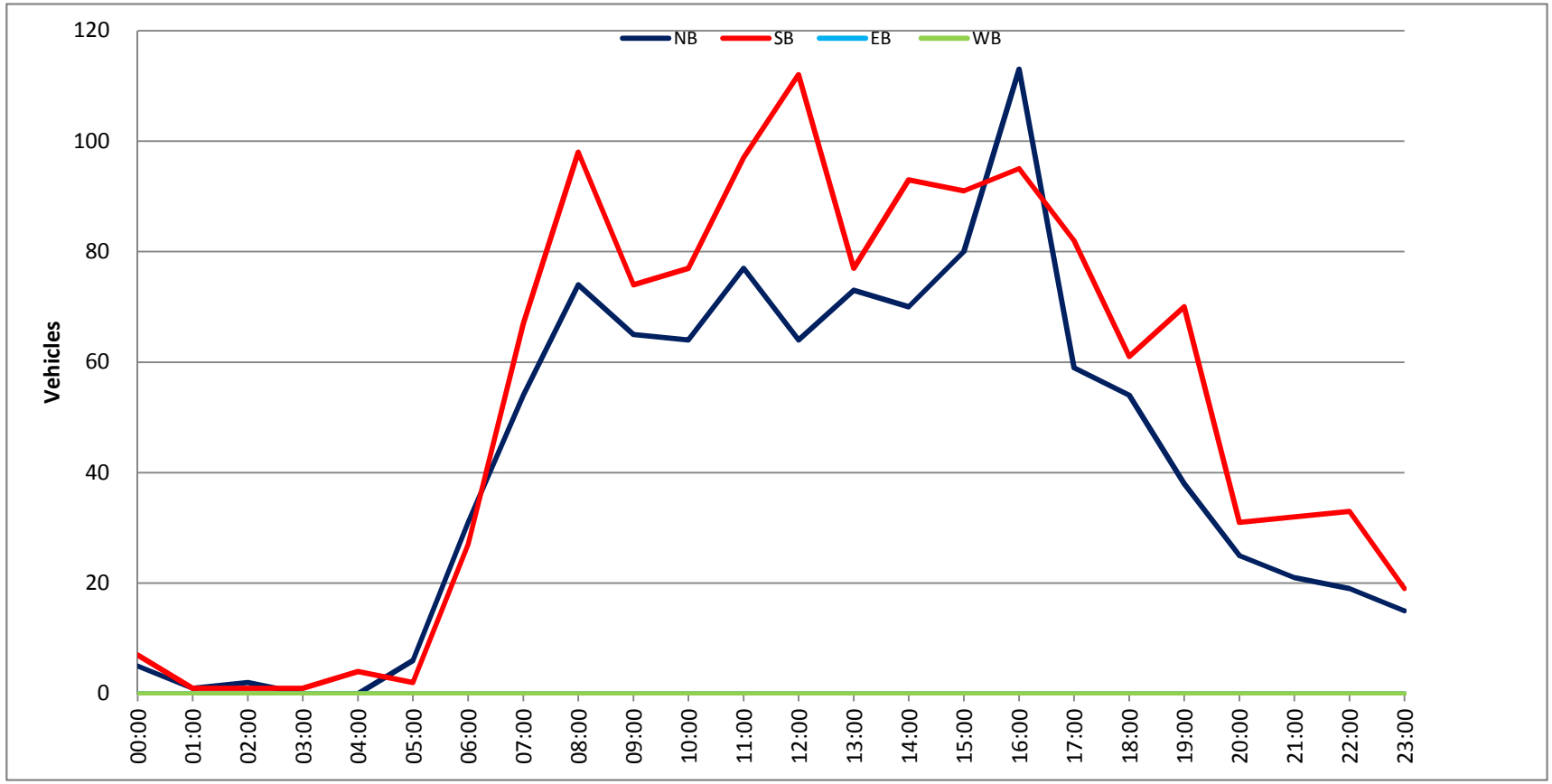
Project #: CA15_4191_002 **City:** Solana Beach

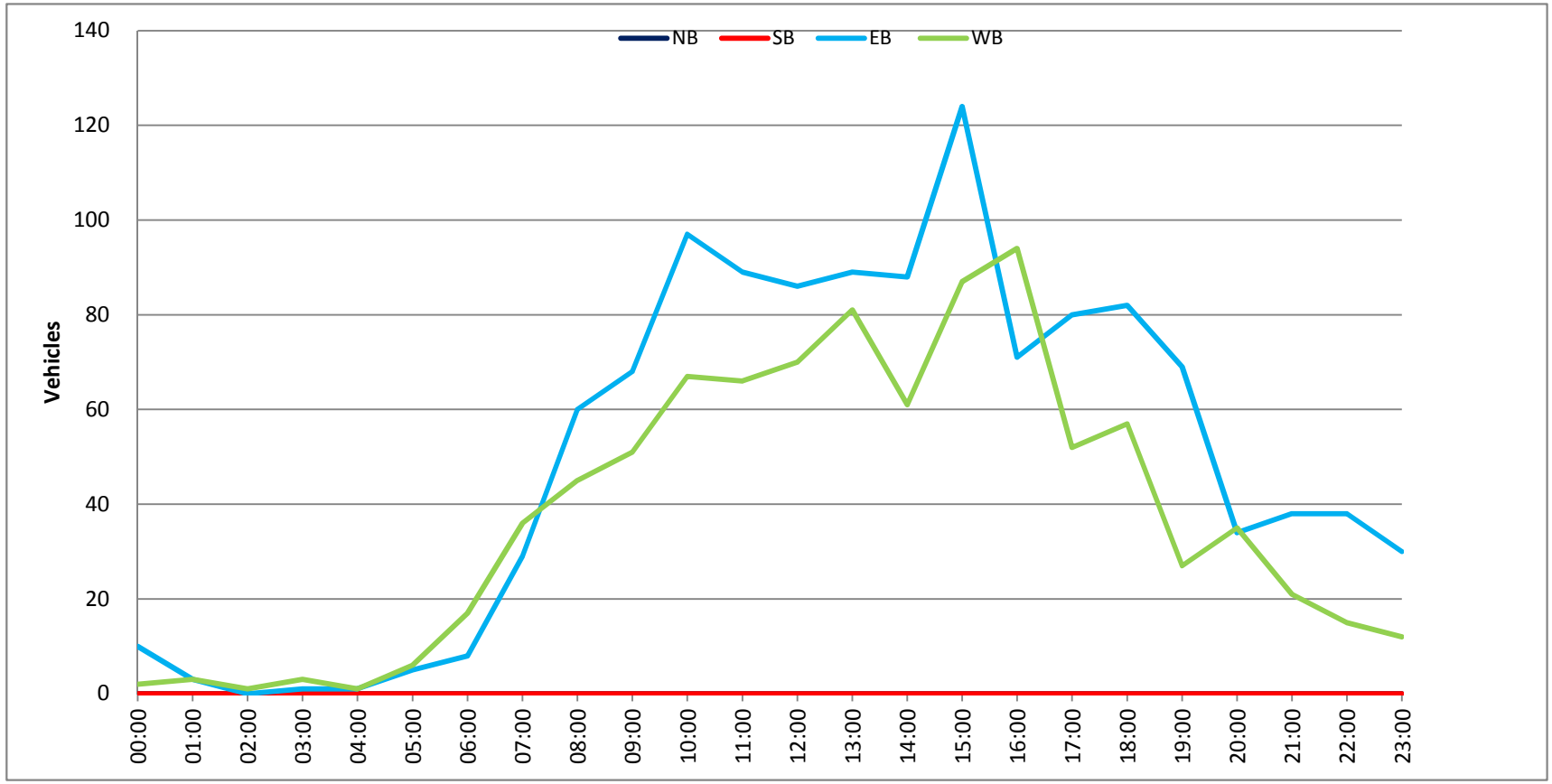
Location: Nardo Ave Bet. Corto St & Lirio St **Date:** 6/26/2015



Prepared by NDS/ATD

Project #: CA15_4197_002 **City:** Solana Beach

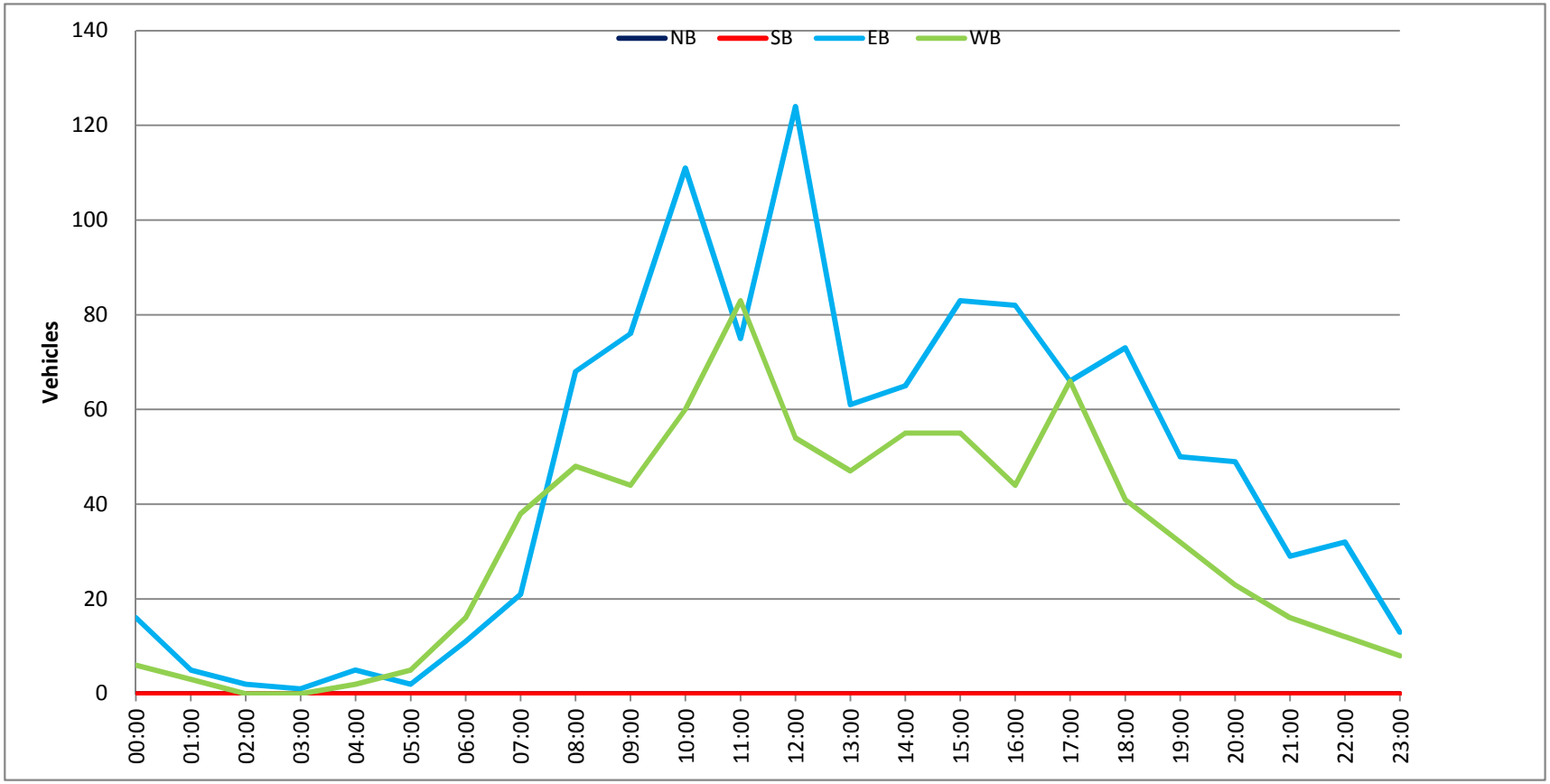
Location: Nardo Ave Bet. E Solana Cir & Fresca St **Date:** 6/20/2015



Prepared by NDS/ATD

Project #: CA15_4197_002 **City:** Solana Beach

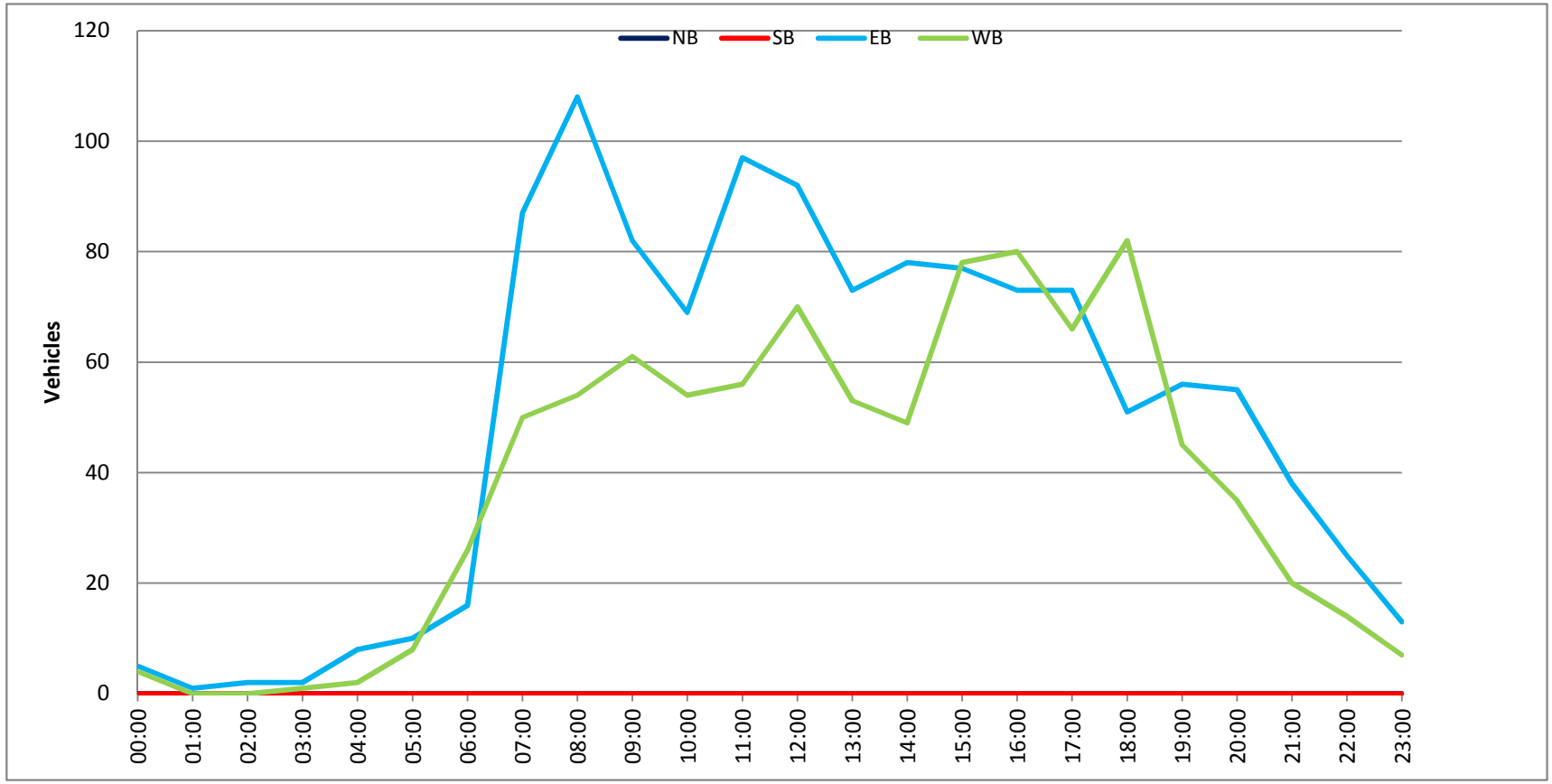
Location: Nardo Ave Bet. E Solana Cir & Fresca St **Date:** 6/21/2015



Prepared by NDS/ATD

Project #: CA15_4197_002 **City:** Solana Beach

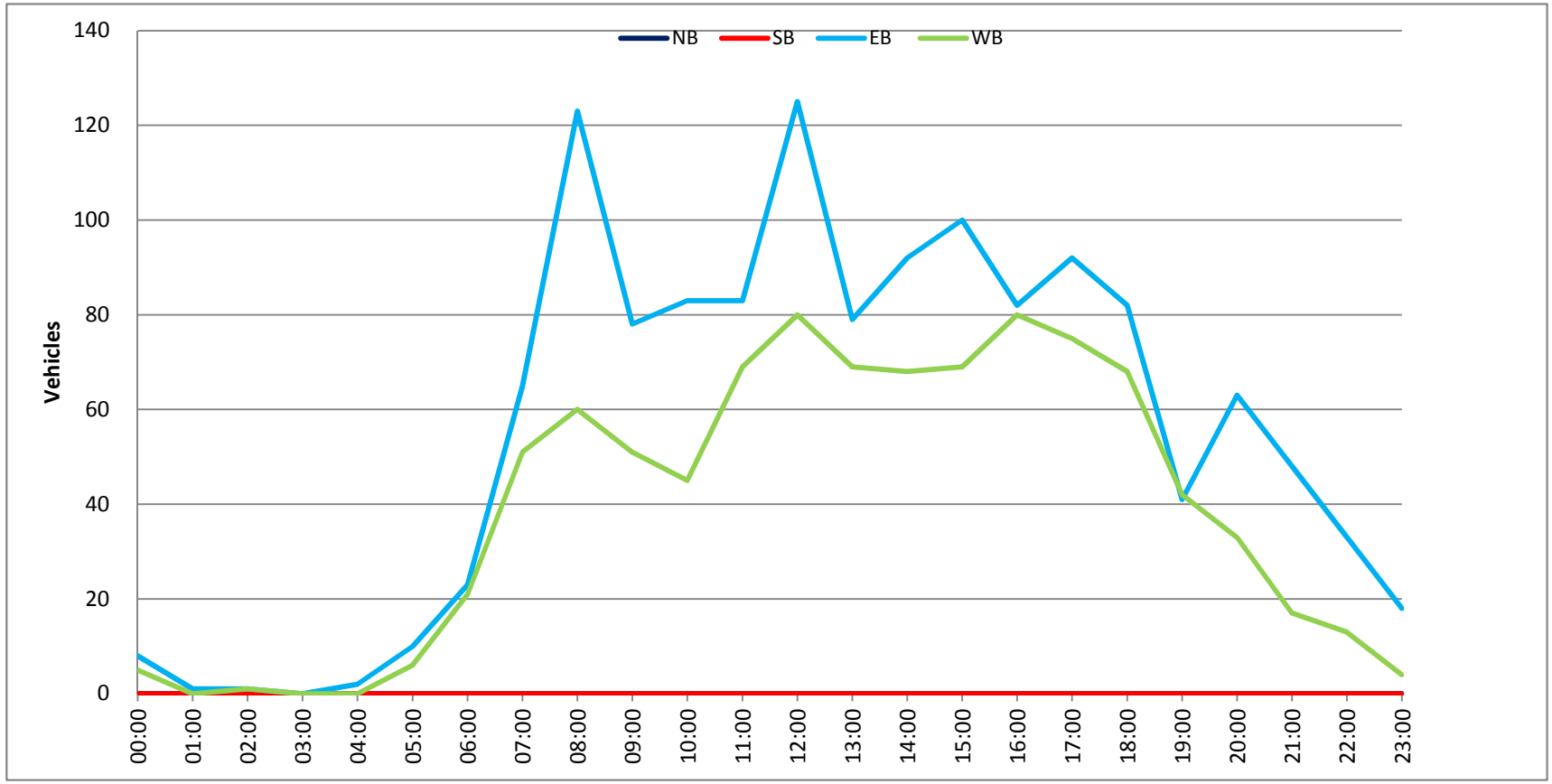
Location: Nardo Ave Bet. E Solana Cir & Fresca St **Date:** 6/22/2015



Prepared by NDS/ATD

Project #: CA15_4197_002 **City:** Solana Beach

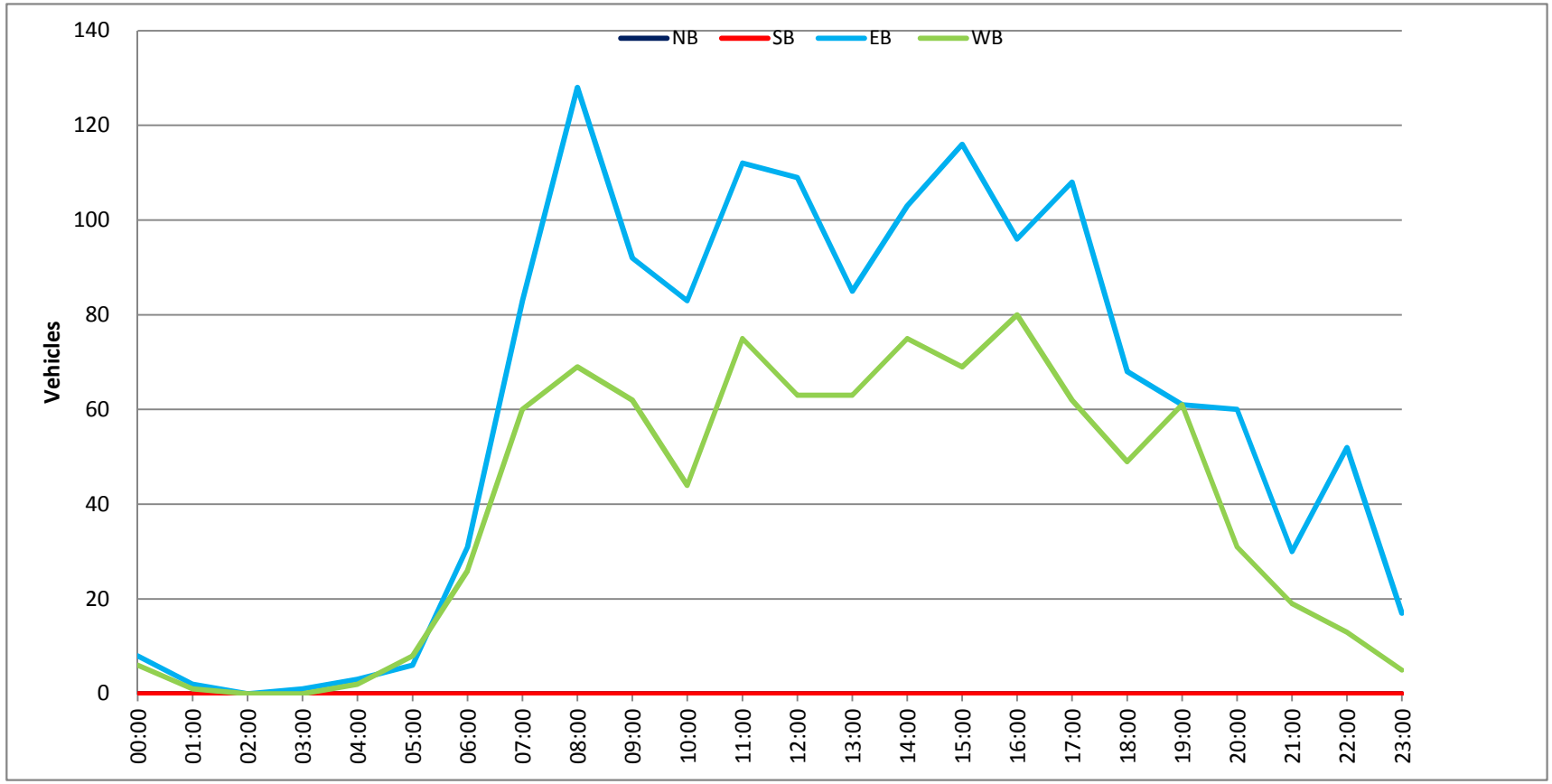
Location: Nardo Ave Bet. E Solana Cir & Fresca St **Date:** 6/23/2015



Prepared by NDS/ATD

Project #: CA15_4197_002 **City:** Solana Beach

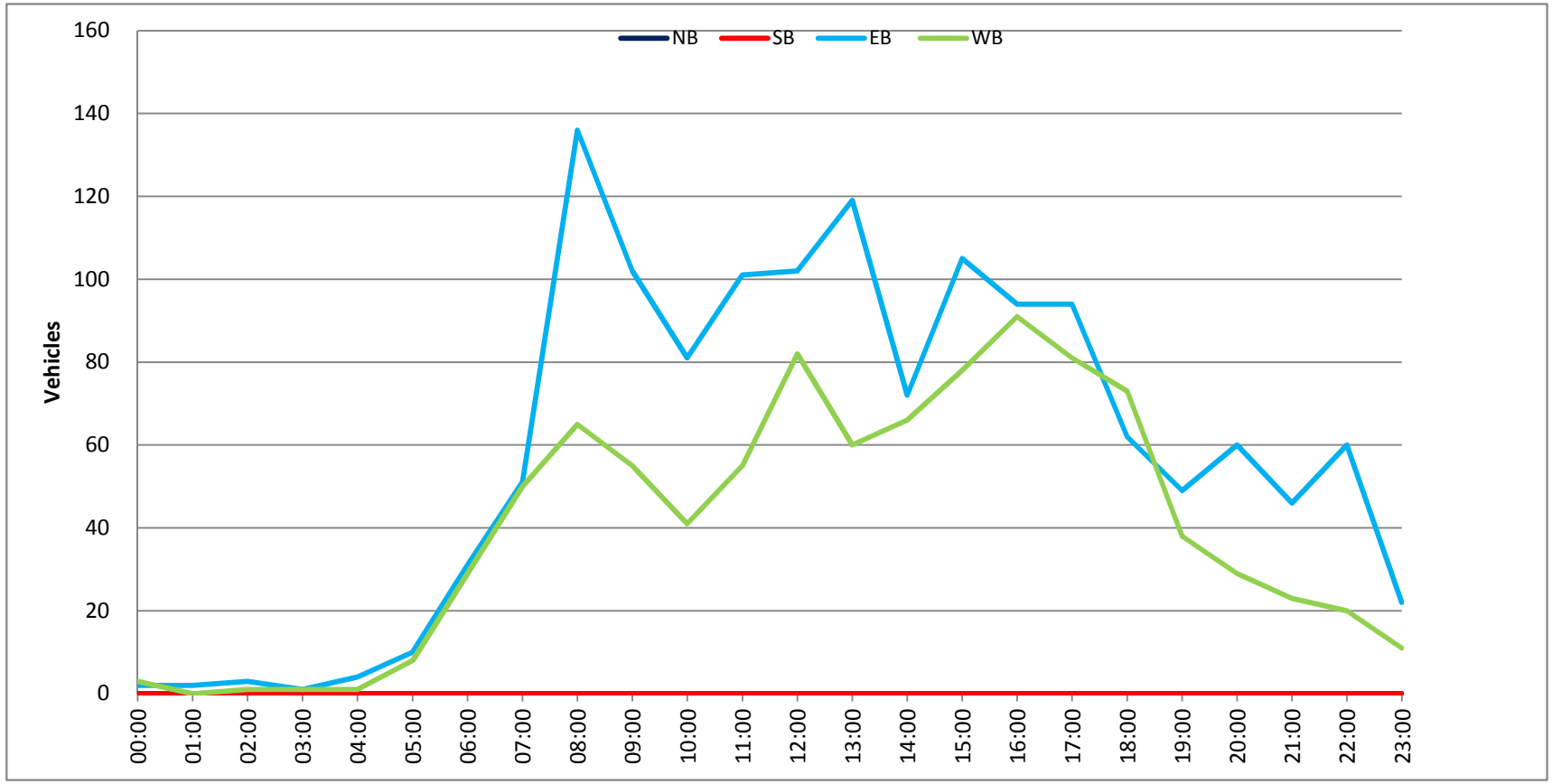
Location: Nardo Ave Bet. E Solana Cir & Fresca St **Date:** 6/24/2015



Prepared by NDS/ATD

Project #: CA15_4197_002 **City:** Solana Beach

Location: Nardo Ave Bet. E Solana Cir & Fresca St **Date:** 6/25/2015



Prepared by NDS/ATD

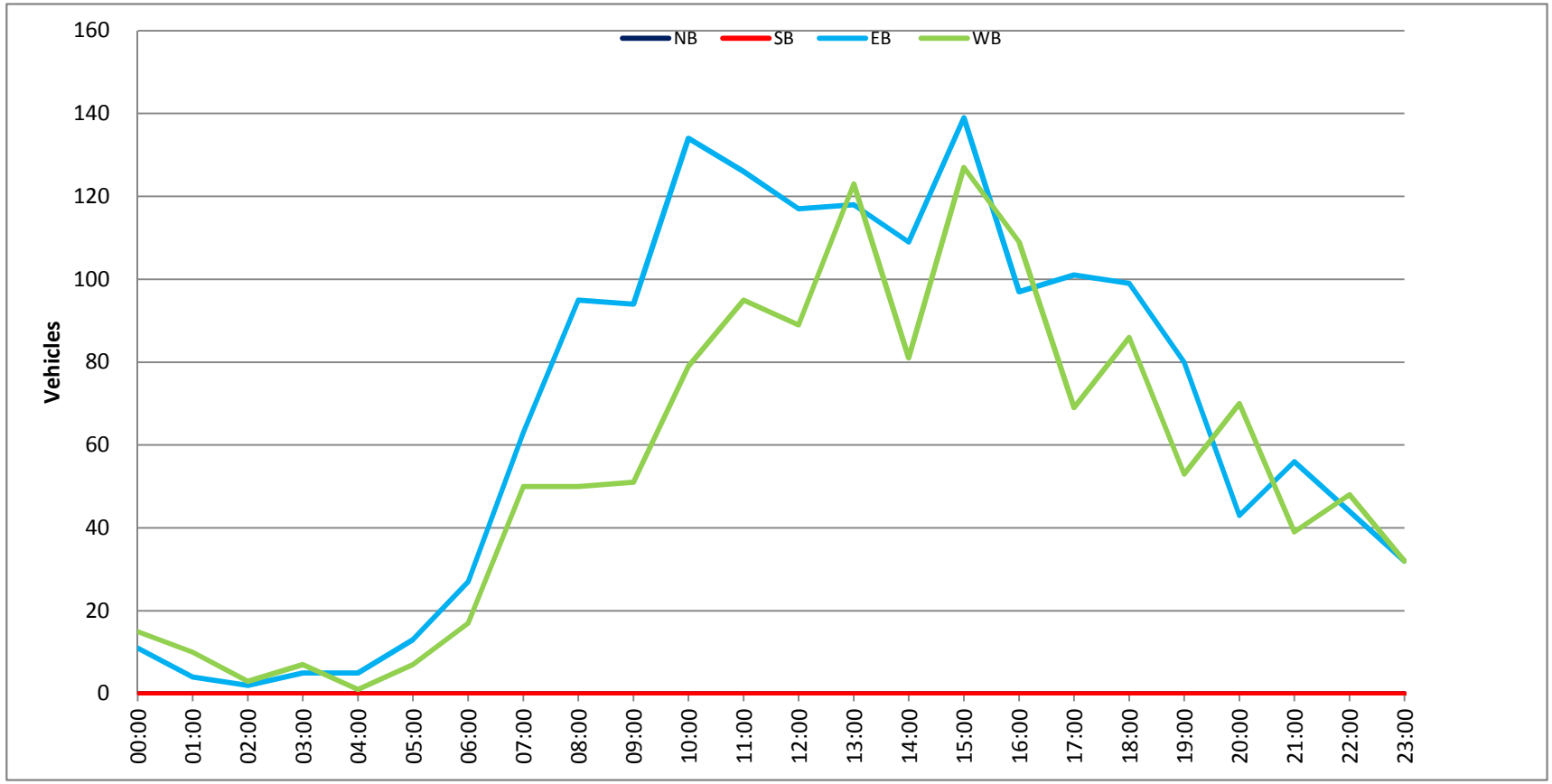
Project #: CA15_4197_002 **City:** Solana Beach

Location: Nardo Ave Bet. E Solana Cir & Fresca St **Date:** 6/26/2015

Prepared by NDS/ATD

Project #: CA15_4191_003 **City:** Solana Beach

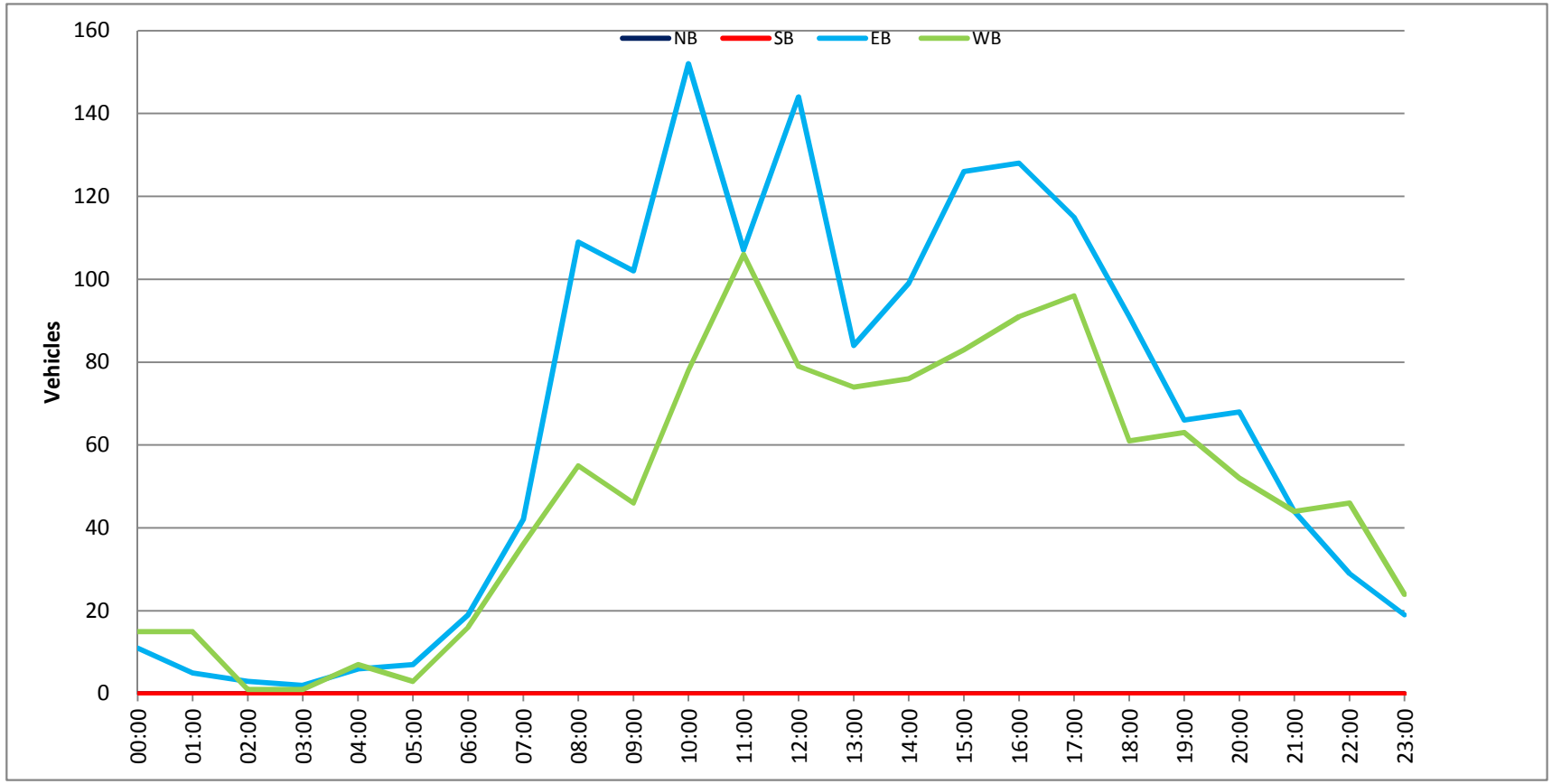
Location: Nardo Ave Bet. Stevens Ave & Fresca St **Date:** 6/20/2015



Prepared by NDS/ATD

Project #: CA15_4191_003 **City:** Solana Beach

Location: Nardo Ave Bet. Stevens Ave & Fresca St **Date:** 6/21/2015



Prepared by NDS/ATD

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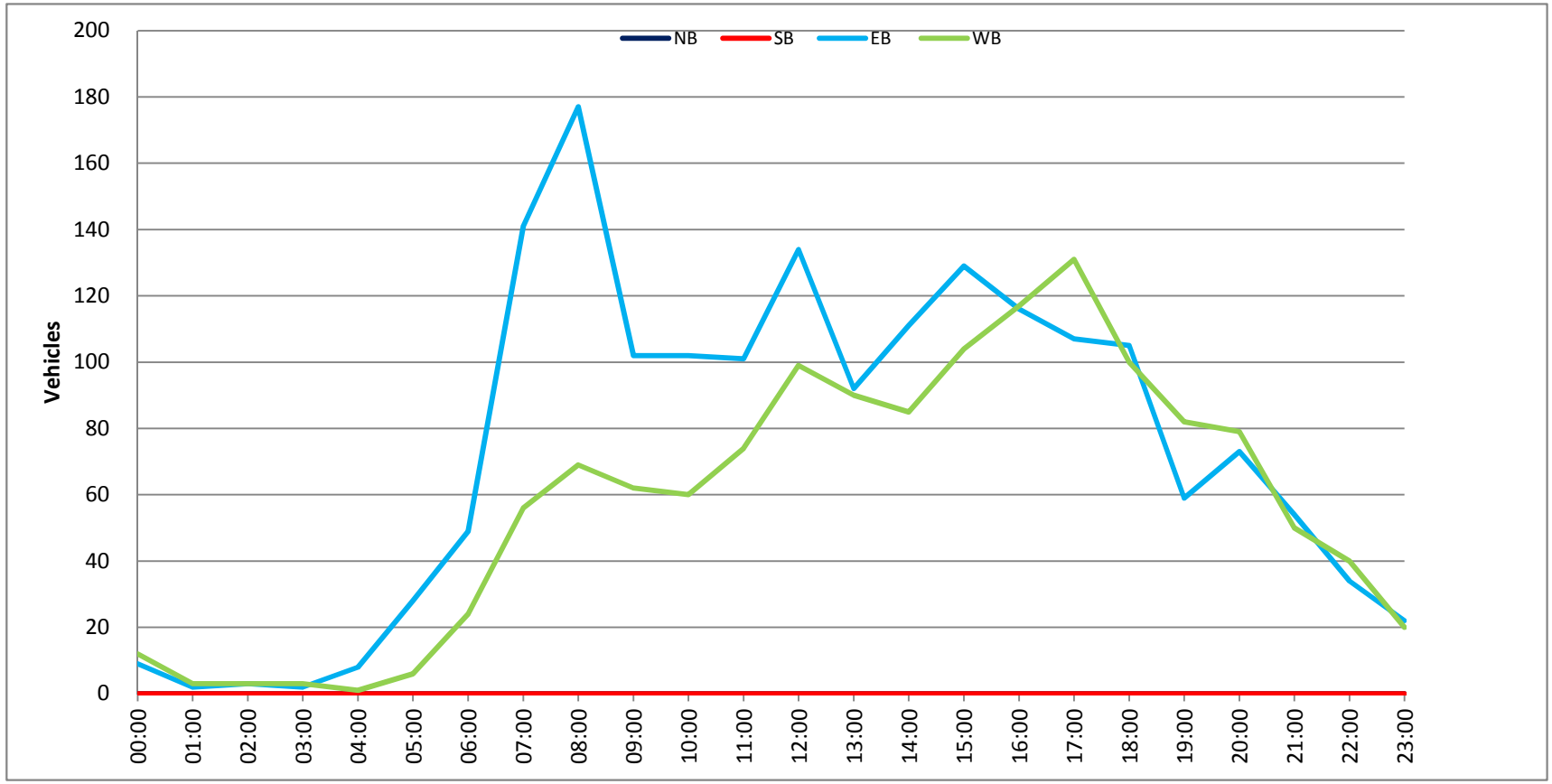


Prepared by NDS/ATD

Project #: CA15_4191_003 **City:** Solana Beach

Location: Nardo Ave Bet. Stevens Ave & Fresca St **Date:** 6/24/2015

Prepared by NDS/ATD

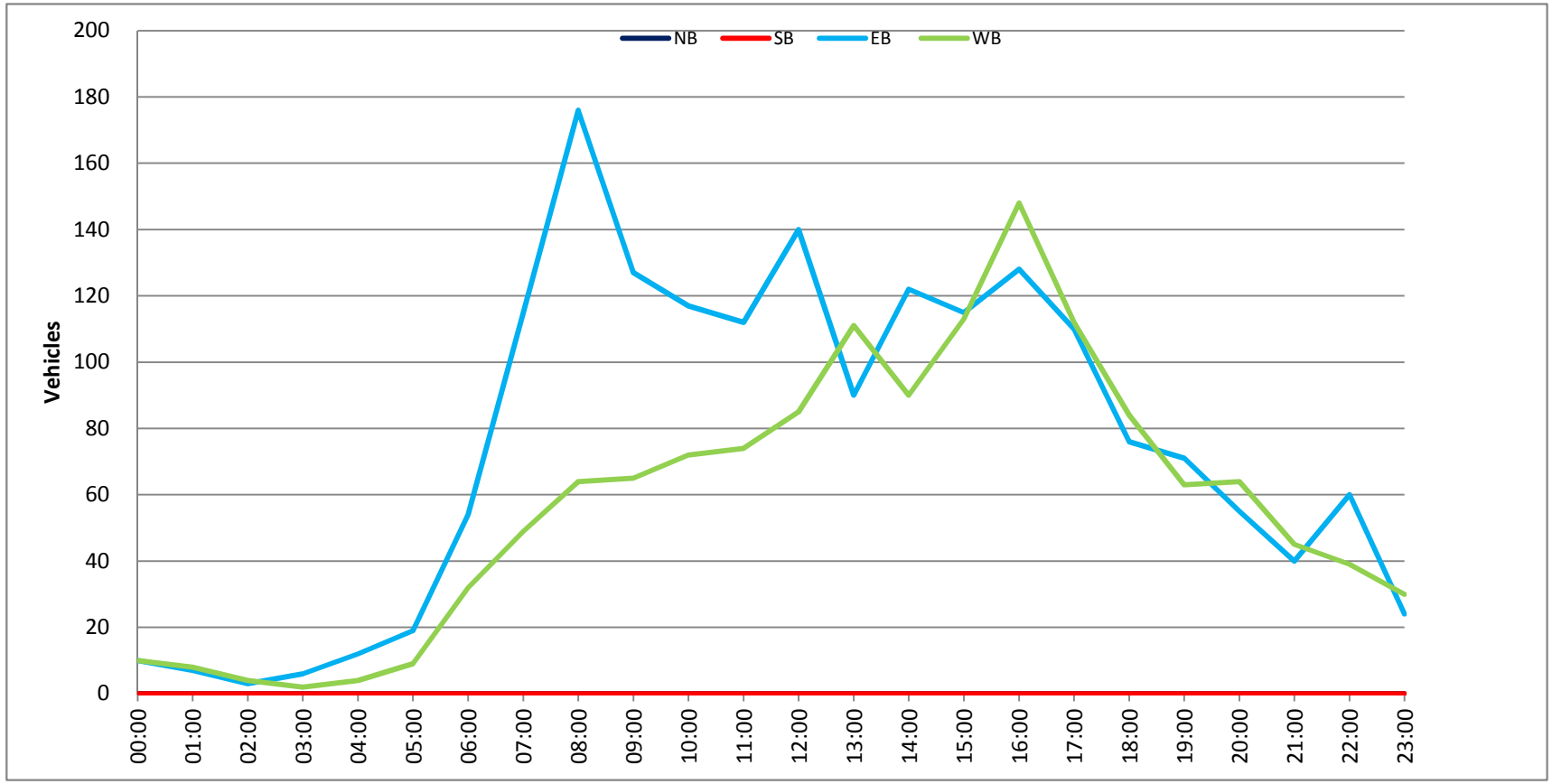
Project #: CA15_4191_003 **City:** Solana Beach

Location: Nardo Ave Bet. Stevens Ave & Fresca St **Date:** 6/25/2015

Prepared by NDS/ATD

Project #: CA15_4191_003 **City:** Solana Beach

Location: Nardo Ave Bet. Stevens Ave & Fresca St **Date:** 6/26/2015



Prepared by NDS/ATD

VOLUME

Stevens Ave Bet. Nardo Ave & Genevieve St

Day: Saturday
Date: 6/20/2015

City: Solana Beach
Project #: CA15_4191_004

DAILY TOTALS	NB	SB	EB	WB	Total
	2,923	3,978	0	0	6,901

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	7		10						17		12:00	56		81						137	
00:15	3		1						4		12:15	43		74						117	
00:30	4		4						8		12:30	66		70						136	
00:45	2	16	2	17					4	33	12:45	48	213	74	299					122	512
01:00	2		0						2		13:00	61		89						150	
01:15	1		3						4		13:15	52		92						144	
01:30	2		3						5		13:30	53		67						120	
01:45	2	7	1	7					3	14	13:45	44	210	83	331					127	541
02:00	1		0						1		14:00	53		68						121	
02:15	1		3						4		14:15	39		78						117	
02:30	0		1						1		14:30	46		65						111	
02:45	0	2	1	5					1	7	14:45	52	190	75	286					127	476
03:00	1		0						1		15:00	54		79						133	
03:15	2		1						3		15:15	58		108						166	
03:30	0		2						2		15:30	60		102						162	
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09:00	38		66						104		21:00	22		24						46	
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09:45	60	194	93	323					153	517	21:45	18	82	20	86					38	168
10:00	60		82						142		22:00	26		14						40	
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10:30	60		83						143		22:30	26		12						38	
10:45	67	248	92	325					159	573	22:45	15	85	14	56					29	141
11:00	49		68						117		23:00	14		17						31	
11:15	59		79						138		23:15	18		11						29	
11:30	63		94						157		23:30	16		7						23	
11:45	58	229	75	316					133	545	23:45	13	61	10	45					23	106
TOTALS		1052		1305						2357	TOTALS		1871		2673						4544
SPLIT %		44.6%		55.4%						34.2%	SPLIT %		41.2%		58.8%						65.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	2,923	3,978	0	0	6,901

AM Peak Hour	10:00	09:15			10:00	PM Peak Hour	12:30	16:00			15:15
AM Pk Volume	248	339			573	PM Pk Volume	227	398			596
Pk Hr Factor	0.925	0.911			0.901	Pk Hr Factor	0.860	0.957			0.898
7 - 9 Volume	294	269	0	0	563	4 - 6 Volume	389	688	0	0	1077
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:30	16:00			16:00
7 - 9 Pk Volume	191	188	0	0	379	4 - 6 Pk Volume	199	398	0	0	591
Pk Hr Factor	0.868	0.516	0.000	0.000	0.649	Pk Hr Factor	0.921	0.957	0.000	0.000	0.947

Prepared by NDS/ATD

VOLUME

Stevens Ave Bet. Nardo Ave & Valley Ave

Day: Saturday
Date: 6/20/2015

City: Solana Beach
Project #: CA15_4191_006

DAILY TOTALS	NB	SB	EB	WB	Total
	2,645	4,053	0	0	6,698

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	7		12						19		12:00	42		85						127	
00:15	9		5						14		12:15	38		70						108	
00:30	5		2						7		12:30	55		67						122	
00:45	5	26	4	23					9	49	12:45	44	179	70	292					114	471
01:00	2		1						3		13:00	47		75						122	
01:15	3		3						6		13:15	41		79						120	
01:30	6		2						8		13:30	49		64						113	
01:45	2	13	1	7					3	20	13:45	41	178	76	294					117	472
02:00	3		0						3		14:00	46		78						124	
02:15	1		5						6		14:15	35		72						107	
02:30	1		0						1		14:30	47		70						117	
02:45	0	5	1	6					1	11	14:45	39	167	70	290					109	457
03:00	2		0						2		15:00	55		71						126	
03:15	5		1						6		15:15	47		102						149	
03:30	1		2						3		15:30	48		84						132	
03:45	2	10	2	5					4	15	15:45	45	195	88	345					133	540
04:00	1		2						3		16:00	38		86						124	
04:15	1		0						1		16:15	36		84						120	
04:30	3		5						8		16:30	48		99						147	
04:45	1	6	2	9					3	15	16:45	44	166	84	353					128	519
05:00	1		3						4		17:00	44		77						121	
05:15	0		3						3		17:15	45		64						109	
05:30	3		6						9		17:30	44		80						124	
05:45	5	9	4	16					9	25	17:45	37	170	75	296					112	466
06:00	3		8						11		18:00	37		64						101	
06:15	11		8						19		18:15	33		56						89	
06:30	14		11						25		18:30	31		47						78	
06:45	11	39	18	45					29	84	18:45	27	128	50	217					77	345
07:00	26		22						48		19:00	22		43						65	
07:15	27		22						49		19:15	35		38						73	
07:30	23		52						75		19:30	37		38						75	
07:45	32	108	37	133					69	241	19:45	40	134	45	164					85	298
08:00	37		51						88		20:00	39		22						61	
08:15	36		31						67		20:15	40		38						78	
08:30	47		39						86		20:30	32		34						66	
08:45	43	163	98	219					141	382	20:45	32	143	38	132					70	275
09:00	33		70						103		21:00	26		32						58	
09:15	45		83						128		21:15	30		34						64	
09:30	38		95						133		21:30	18		20						38	
09:45	49	165	90	338					139	503	21:45	26	100	25	111					51	211
10:00	38		90						128		22:00	28		24						52	
10:15	48		75						123		22:15	25		16						41	
10:30	55		81						136		22:30	31		12						43	
10:45	49	190	86	332					135	522	22:45	22	106	19	71					41	177
11:00	37		67						104		23:00	16		19						35	
11:15	46		74						120		23:15	16		11						27	
11:30	47		82						129		23:30	21		7						28	
11:45	51	181	85	308					136	489	23:45	11	64	10	47					21	111
TOTALS		915		1441						2356	TOTALS		1730		2612						4342
SPLIT %		38.8%		61.2%						35.2%	SPLIT %		39.8%		60.2%						64.8%

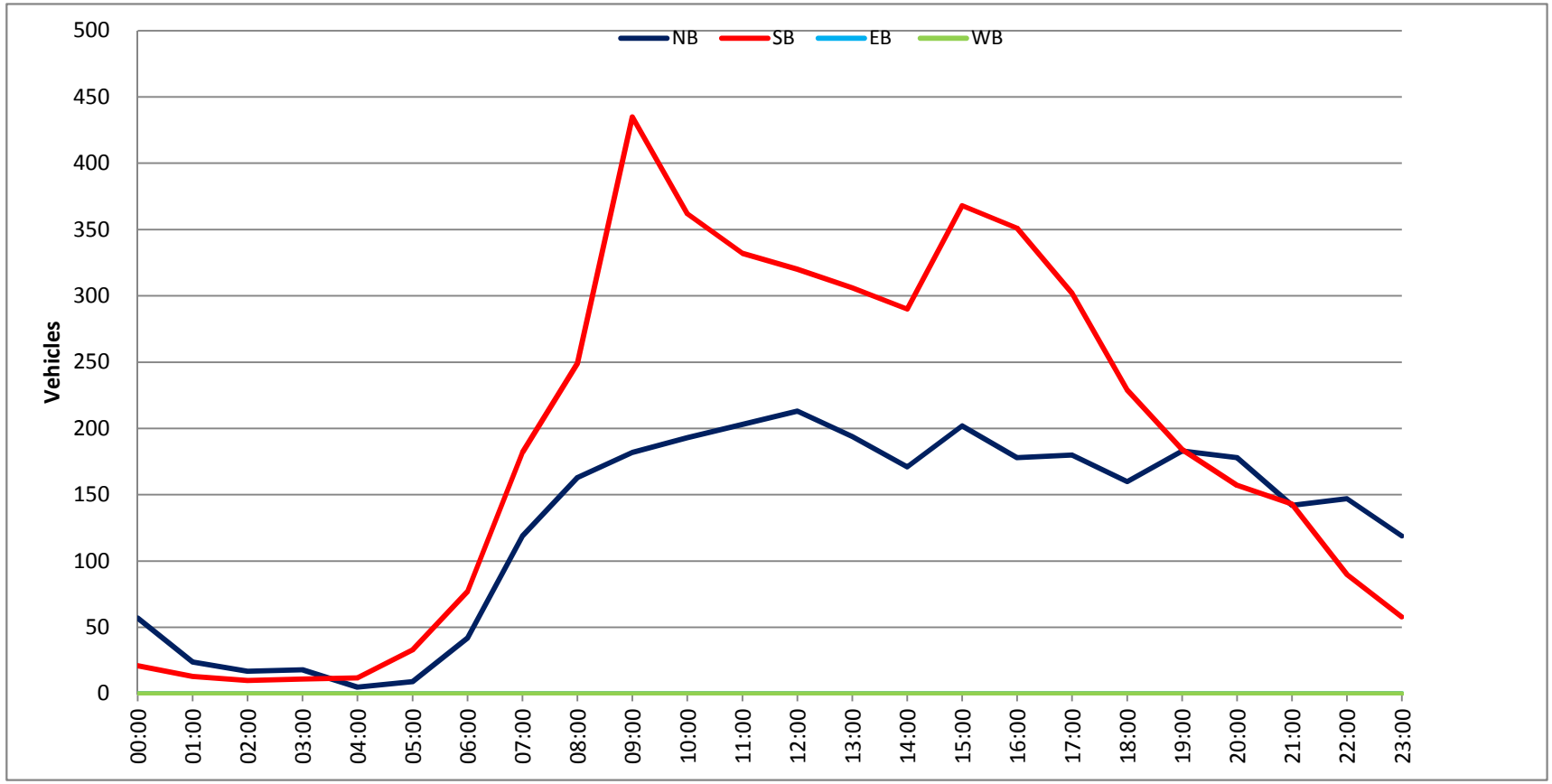
DAILY TOTALS	NB	SB	EB	WB	Total
	2,645	4,053	0	0	6,698

AM Peak Hour	09:45	09:15			09:15	PM Peak Hour	15:00	15:15			15:00
AM Pk Volume	190	358			528	PM Pk Volume	195	360			540
Pk Hr Factor	0.864	0.942			0.950	Pk Hr Factor	0.886	0.882			0.906
7 - 9 Volume	271	352	0	0	623	4 - 6 Volume	336	649	0	0	985
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:30	16:00			16:00
7 - 9 Pk Volume	163	219	0	0	382	4 - 6 Pk Volume	181	353	0	0	519
Pk Hr Factor	0.867	0.559	0.000	0.000	0.677	Pk Hr Factor	0.943	0.891	0.000	0.000	0.883

Prepared by NDS/ATD

Project #: CA15_4197_001 **City:** Solana Beach

Location: Valley Ave Bet. Valley Ave & Via De La Valle **Date:** 6/20/2015



Prepared by NDS/ATD

Project #: CA15_4197_001 **City:** Solana Beach

Location: Valley Ave Bet. Valley Ave & Via De La Valle **Date:** 6/21/2015

Prepared by NDS/ATD

Project #: CA15_4197_001 **City:** Solana Beach

Location: Valley Ave Bet. Valley Ave & Via De La Valle **Date:** 6/22/2015

APPENDIX N

Supplemental Traffic Memo

FEHR PEERS

MEMORANDUM

Date: November 10, 2017

To: John LaRaia, H.G. Fenton Company

From: Dawn Wilson, STC Traffic, Inc.
Anjuli Bakhru, Fehr & Peers

Subject: Supplemental Traffic Assessment

SD14-0152

The Solana Highlands Residential Project Draft TIA was prepared by Fehr & Peers in November 2016. Since the time the TIA was finalized, changes to the site plan have been discussed, considered and integrated into the proposed project. This memorandum addresses the changes to site access considered, as well as other conditions that have been integrated into the site plan since the November TIA was finalized:

- **Relocation of Driveway A** – This memorandum evaluates the impacts of relocating Driveway A 100 feet west of the location proposed on the site plan included in the November 2016 TIA. Although evaluated in this technical memorandum, the most recent site plan for the project indicates that the location of the driveway remains unchanged from what was presented in the TIA. Therefore, this analysis is provided for informational purposes only and does not supersede any information included in the November 2016 TIA.

- **Right In-Right Out Only Access at Driveway A** – The potential impacts associated with changing the access at Driveway A to right in-right out only were evaluated in response to community input on the project. Although evaluated in this technical memorandum, the most recent version of the site plan indicates that Driveway A remains a full access driveway as evaluated in the TIA. Therefore, this analysis is provided for informational purposes only and does not supersede any information included in the November 2016 TIA.

- **New Driveway C on Stevens Avenue** – The most recent site plan for the project does include a driveway not previously evaluated in the November 2016 TIA. Driveway C takes access from Stevens Avenue-Valley Avenue south of Nardo Avenue and provides access to the senior housing component of the project. This technical memorandum provides a summary of the operating conditions at this driveway without and with the project. This information is supplemental to the information in the November 2016 TIA as this driveway was not included in the site plan evaluated in that report.

- **Cumulative Projects Update** – Since the TIA was initiated in 2014, the list of pending and approved projects within the study area have changed and project opening year has shifted from 2017 to 2020. The City of Solana Beach provided an updated list of projects to be included in this supplemental traffic memorandum. In addition, the City requested an updated analysis of the project opening year to reflect year 2020. The updated list of pending and approved projects and cumulative year analysis supersedes the information included in the November 2016 TIA.

- **Complete Streets Discussion for Stevens Avenue** – Stevens Avenue has been restriped and now sidewalks have been constructed since the project was initiated. This section discusses the changes that have occurred along Stevens Avenue as a result of the complete streets project. This information is supplemental to the information provided in the November 2016 TIA.

- **Construction Traffic Assessment** – The November 2016 traffic impact analysis report evaluated construction related impacts associated with 19,500 cubic yards of export from the site. Since that time, the project site plan has been revised to include re-grading the site such that 154,000 cubic yards of material will be removed. This technical memorandum evaluates the traffic impacts associated with the export of 154,000 cubic yards of material under two scenarios: one where the project is constructed in three phases and one where the project is constructed in one phase. This technical analysis supersedes the analysis of Construction Traffic included in the November 2016 TIA.

RELOCATION OF DRIVEWAY A

Driveway A is the westernmost driveway as illustrated in **Figure 1**. Moving the driveway 100 feet to the west would align the driveway at the approximate location of the existing driveway into the project site.

Figure 1: Existing and Proposed Conditions with Future Driveways Shown

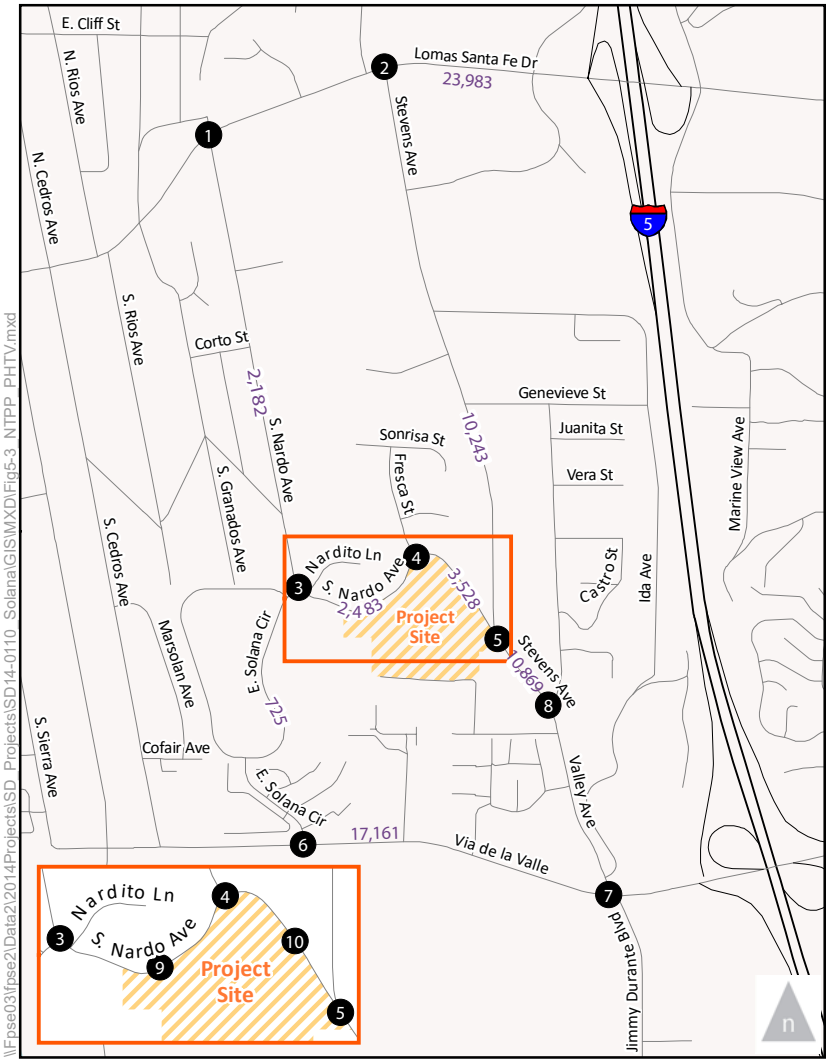
Moving the driveway 100 feet to the west would place the driveway near another existing driveway that is also located on the south side of Nardo Avenue. Operationally, the relocation of the driveway would not result in a change in the findings of the traffic impact analysis report. However, an in-depth review of the line of sight from these driveways may be necessary to ensure the relocation would not have any design related issues should the project plan to pursue this driveway relocation. Line of sight issues could be resolved through removing on-street parking and/or landscaping that may obstruct lines of sight at the driveway. Since there are existing driveways, we would assume that the geometry of the road would not affect the line of sight, but further field assessments may be necessary to make that determination. The line of sight analysis for all property driveways will be conducted by the civil engineer as part of the site plan design.

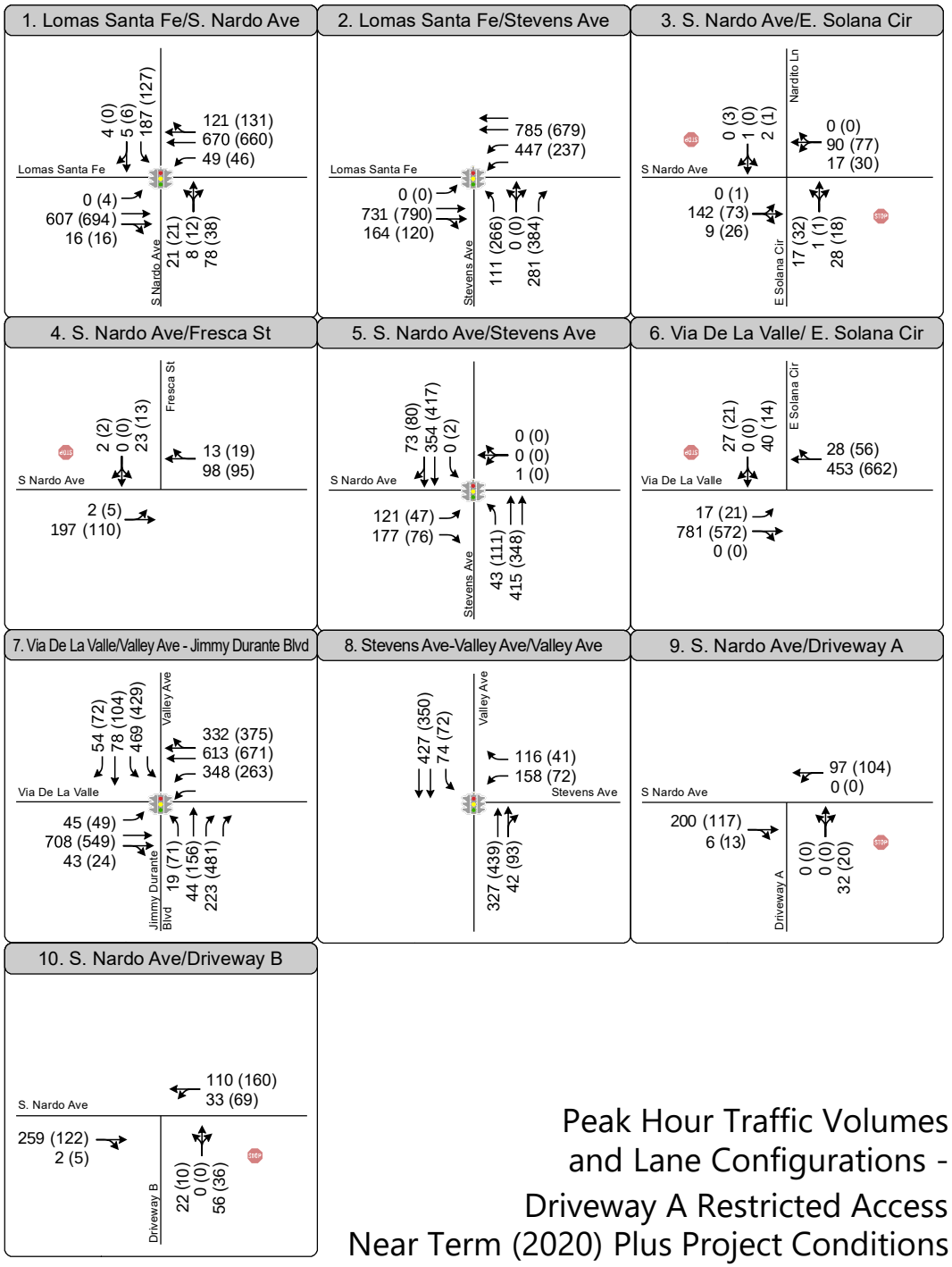
RIGHT IN-RIGHT OUT ONLY ACCESS AT DRIVEWAY A

An alternative access scenario was evaluated to determine the impact of designating Driveway A on S. Nardo Avenue as right turn in-right turn out only, while Driveway B would continue to provide full access. This alteration would result in a re-assignment of project trips at only three locations:

- S. Nardo Ave / Driveway A
- S. Nardo Ave / Fresca St
- S. Nardo Ave / Driveway B

Table 1 displays the results of the peak hour intersection level of service analysis for both driveways providing full access, as well as a scenario in which Driveway A would be restricted to right turn in-right turn out traffic only. This analysis reflects the Year 2020 with project conditions traffic volumes. The methodology for forecasting Year 2020 volumes is outlined later in the memorandum. **Figure 2** illustrates the volumes used in this analysis. The results show that restricting access at Driveway A, but maintaining Driveway B as full access, would result in only minor changes in delay at each location. LOS worksheets are provided as an attachment to this memorandum. These results conclude that there would be no negative impact to restricting access at Driveway A to either right turn in-right turn out only or restricting access to inbound only. However, the current site plan does not restrict access at Driveway A. See the attachments for the current site plan.





1 Study Intersection

#,### Average Daily Traffic Volume

Turn Lane

AM (PM) Peak Hour Traffic Volume

Traffic Signal

Stop Sign

Peak Hour Traffic Volumes and Lane Configurations - Driveway A Restricted Access Near Term (2020) Plus Project Conditions

Figure 2

\\Fpse03\fpse2\Data2\2014Projects\SD_Projects\SD14-0110_Solana\GIS\MXD\Fig5-3_NTPP_PHTV.mxd

TABLE 1
Comparison Summary of Peak Hour Intersection Level of Service Results

Location	Existing plus Project (Dwy A Full Access)				Existing plus Project (Dwy A Right In/Right Out)			
	AM		PM		AM		PM	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Driveway A / S. Nardo Ave	9.8	A	9.1	A	9.3	A	8.9	A
Driveway B / S. Nardo Ave	10.2	B	9.3	A	10.7	B	9.6	A
Location	**Near Term (2020) + Project (Dwy A Full Access)**				**Near Term (2020) + Project (Dwy A Right In/Right Out)**			
	AM		**PM**		**AM**		**PM**	
	Delay	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**
Driveway A / S. Nardo Ave	10.1	A	9.1	A	9.5	A	9.0	A
Driveway B / S. Nardo Ave	10.3	A	9.3	A	10.9	B	9.8	A
Location	**Horizon Year plus Project (Dwy A Full Access)**				**Long Term plus Project (Dwy A Right In/Right Out)**			
	AM		**PM**		**AM**		**PM**	
	Delay	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**
Driveway A / S. Nardo Ave	10.1	B	9.3	A	9.6	A	9.0	A
Driveway B / S. Nardo Ave	10.4	B	9.5	A	11.0	B	9.8	A

NEW DRIVEWAY C – STEVENS AVENUE

A third driveway (Driveway C shown in **Figure 3**) into the site is being considered, which would provide direct access to the Senior affordable units planned for the site. The third driveway would be located on Stevens Avenue approximately 50 feet south of Nardo Avenue. There is an existing driveway at this location that provides access to a small parking lot serving a four-unit apartment complex. Based on the SANDAG "(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region" trip generation rate for apartments (6 trips per dwelling unit), the existing 4 apartment units generate approximately 24 trips per day with 2 trips in the AM peak and 4 trips in the PM peak. The existing four-unit apartment complex would be removed with this project and the driveway would extend west connecting to Building 25 on the project site.

Figure 3: Location of Driveway C

dThere are 32 Senior affordable units proposed for Building 25. This driveway would provide access to their assigned parking and would be the only point of vehicular access to those spaces. Based on the number of units in Building 25, the forecast trip generation for this driveway is 128 trips per day with 6 in the AM peak and 9 in the PM peak with less than 10 trips forecast either inbound or outbound during the peak hours throughout the day. Senior affordable trip generation is based upon the SANDAG "(Not So) Brief Guide of Vehicular Traffic Generation Rates" (April 2002) for "Retirement Community" land uses. The change in trips to and from this driveway when compared to the existing use is nominal (less than 10 trips per peak hour), since affordable senior housing is a low traffic generator when compared to other residential uses.

There is an existing driveway at this location and left turns into and out of the driveway use the existing northbound lane on Stevens Avenue to access the site. An increase in units taking access to and from this driveway will result in an increase in both inbound and outbound turn movements from that lane. **Figure 4** illustrates the volumes evaluated. Year 2020 without and with project volumes were used to assess operating conditions. The operations of this driveway were evaluated both as a full access driveway as well as a restricted (right turn in-right turn out) driveway. The results of the operational analysis are summarized in **Table 2**. As shown, the driveway operates at acceptable LOS as a full access driveway with no change when compared to existing conditions. LOS worksheets are provided as an attachment to this report.

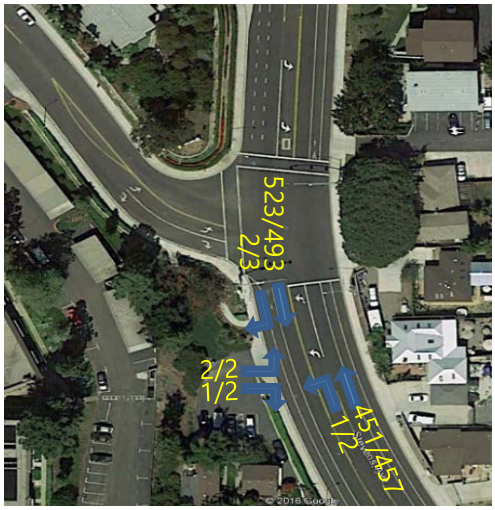


Figure 4: Volumes at Driveway C (am/pm)

TABLE 2:
DRIVEWAY C PEAK HOUR INTERSECTION LEVEL OF SERVICE RESULTS

Location	Year 2020 with Project (Full Access)				Year 2020 with Project (Right in / Right out)			
	AM		PM		AM		PM	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Driveway C / Stevens Avenue	15.1	C	14.0	B	12.4	B	11.9	B

CUMULATIVE PROJECTS UPDATE

On September 13, 2017, the City of Solana Beach provided the project applicant with a new cumulative project list, which includes a total of 21 projects (including the Solana Highlands project) located in and around the City. **Table 3** summarizes the list of cumulative projects provided by the City that have been approved or are in the process of being reviewed by the City of Solana Beach or the surrounding jurisdictions. These projects are

anticipated to be approved and/or occupied in the foreseeable future. **Figure 5** illustrates the location of these projects relative to the Solana Highlands project site. As shown in Table 3 and illustrated in the Figure 5, most of the projects identified are either outside the study area or generate little to no project traffic.

The NCTD train station project is also under consideration by the City and NCTD. At the time this memorandum was prepared the final land use and site plan had not been completed. Therefore, this project is not considered in the Year 2020 conditions.

When the traffic impact analysis report was initiated in 2014, a similar condition existed where the three cumulative projects identified were low traffic generators. Due to the limited number of projects identified by Solana Beach and the surrounding cities, near term cumulative conditions volumes were forecast using an ambient growth rate in lieu of determining the individual trips for each cumulative project. This growth rate accounted for the cumulative projects identified by the City as well as general changes to traffic patterns that occur over time and traffic associated other planned regional projects outside the study area that may have some impact on the local neighborhoods as trips distribute through and around the Solana Beach community.

The ambient growth rate calculated for use in the traffic report was determined by reviewing the SANDAG Series 12 model for the horizon year 2035 model volumes, the 2008 base year model volumes and the existing conditions volumes. An annual growth rate of 0.5% per year was calculated was based on the annual change in traffic volumes forecast from 2008 to 2035 and adjusted to reflect growth that has occurred from 2008 to 2013, when the existing counts were conducted. This methodology was confirmed by Staff at the City of Solana Beach. The annual growth rate (0.5% year compounded annually) was then applied from 2013 to 2017 to reflect the anticipated project opening year.

At the time this Traffic Supplement was prepared, the project is anticipated to open in year 2020 and the list of cumulative projects has changed. Therefore, the cumulative volumes have been updated to reflect the 2020 opening year. Following the same logic that the cumulative projects identified are both primarily outside the study area and are low volume generators, the forecast 2020 opening year volume were calculated using the 0.5% per year annual growth rate compounded annually and reflect volumes associated with cumulative projects as well as other regional changes in traffic patterns. Project Opening Year 2020 peak hour volumes without and with the project are illustrated in **Figures 5 and 6**.

Intersection and roadway segment analysis was therefore updated to reflect the new project opening year. As shown in **Table 4**, updating the cumulative conditions roadway segment analysis to reflect the 2020 project opening year demonstrates no change to the findings presented in the November 2016 TIA. **Table 5** reflects the Year 2020 intersection analysis. As shown, updating the cumulative conditions resulted in no change to the findings in the November 2016 TIA. Therefore, the Solana Highlands project is not forecast to result in a significant impact at Project Opening Year (2020).

TABLE 3
RECENT PAST, PRESENT AND PROBABLE FUTURE CUMULATIVE PROJECTS

Cumulative Project	Location	Project Description	Status	Forecast Daily Trips
The Pearl	555 South Sierra Avenue	Three-story building designed to provide 10 housing units, commercial office space, and 53 parking spaces. Residential units would range from one to four bedrooms.	Approved by City Council in April 2014. Litigation resolved.	207
San Andres Drive Median Improvements	San Andres Drive	Construction of curb medians, pedestrian ramps, asphalt concrete overlays, traffic striping and markings, and traffic signage along San Andres Drive.	Project Completed	0
Ocean Ranch Estates	512 - 538 S. Nardo Avenue	Subdivision and construction of eight additional single-family homes as well as purchasing one off-site affordable accessible dwelling unit (ADU).	Project Planning. CEQA document in process.	80
330. S. Cedros Mixed Use	330 S. Cedros Avenue	Construction of a new 26,127 sq. ft., two-story, mixed-use project with four (4) dwelling units, four (4) retail suites, and one (1) restaurant.	Project approved in December 2016. Construction expected 2017-	494
North Bluff Resort	929 & 101 Border Avenue (Del Mar)	Proposed resort, hotel and villas on 16.6 acres.	Project Planning. Citizen Participation Program initiated in May 2017.	1,660
Stevens Ave. CATS Project	Stevens Ave.	Complete streets improvements	Under construction	0
Lomas Santa Fe Corridor Study	Lomas Santa Fe	Corridor Study	Phase 1 of Planning Process	**0**
Feather Acres 7- lot residential subdivision	980 Avocado Place	Seven lot subdivision to be graded. Lots developed individually.	Final Map Approved. Grading Underway	70
Skyline Elementary School Reconstruction	606 Lomas Santa Fe	Reconstruction of School Campus	Construction underway	0
Earl Warren Middle School Reconstruction	155 Stevens Ave.	Reconstruction of School Campus	Construction completed	0
Harbaugh Trails Public Open Space and Trails Project	Highway 101 at the north end of the City and adjacent to the San Elijo	Open space and public trails improvements, public viewing platform	Site designation from Commercial to Open Space is complete, City permitting underway	0

TABLE 3
RECENT PAST, PRESENT AND PROBABLE FUTURE CUMULATIVE PROJECTS

Cumulative Project	Location	Project Description	Status	Forecast Daily Trips
Santa Fe Christian School Master Plan Update	838 Academy Dr.	K-12th grade campus wide improvement plan. 172,336 SF buildings 266 parking spaces. 9000 cubic yards of cut 6,000 cubic yards of fill.	Phase 1A under construction	**0**
I-5 North Coast Corridor	I-5 Freeway from Vandergrift Boulevard in Oceanside to La Jolla	27-mile long Interstate 5 improvement project. Includes construction of express lanes, interchanges, and soundwalls.	Phase I: I-5 Express lane construction along median from Lomas Santa Fe to	**0**
Del Mar Surfside Race Place	Del Mar Fairgrounds, 2260 Jimmy Durante Boulevard, Surfside Race	1,900 seat concert venue	Approved	1,530
Watermark Project	Jimmy Durante Boulevard / San Dieguito Road	48 condominiums	Planning	384
El Camino Real Bridge Road Widening	El Camino Real from Via de la Valle to San Dieguito Road	Replacement of existing 2-lane bridge to a 4-lane bridge and widening existing 2-lane roadway to 4-lane roadway.	Design Stage. Construction September 2019.	**0**
Via de la Valle Underground Utilities District for Utilities	Via de la Valle (0.5 mi south)	Streetlight and undergrounding utility improvements.	Design Stage. Construction September 2018.	**0**
Roadway and Sidewalk Improvements	Camino Del Mar, Jimmy Durante Blvd., Via de la Valle.	Construction of improved sidewalk, bicycle, vehicular, and drainage infrastructure on Camino Del Mar, Jimmy Durante Blvd., and Via de la Valle.	Camino del Mar-Carmel Valley Road in progress	**0**
City Hall/Town Hall Project	1050 Camino Del Mar, Del Mar, CA 92014 (2.3 mi southwest)	Construction of new City Hall/Town Hall.	Construction started September 2016, completion expected June 2018	558
Del Mar Village Specific Plan	Camino Del Mar (2 mi southwest)	Public improvements to streetscape and incorporation of strategies to protect community resources/village atmosphere	Program EIR certified, Planning and construction [1]	0

Notes:

[1] The Specific Plan was taken to a vote in November 2012 (Measure J). The plan was not approved by the voters and is therefore not considered in the trip generation and cumulative traffic analysis.

TABLE 4
PROJECT CONDITIONS (2020) SEGMENT LEVEL OF SERVICE

Roadway Segment	Class & Capacity	No Project (2020)			With Project (2020)				
		ADT	V/C	LOS[1]	ADT	V/C	LOS	Δ[2]	S?[3]
Stevens Avenue From Lomas Santa Fe Drive To S. Nardo Avenue	Collector (continuous LTL) 15,000	10,085	0.67	D	10,243	0.68	D	0.01	N
Stevens Avenue From S. Nardo Avenue To Valley Avenue	Collector (continuous LTL) 15,000	10,605	0.71	D	10,869	0.72	D	0.01	N
S. Nardo Avenue From Lomas Santa Fe Drive To E. Solana Circle	Sub-Collector (SF) 2,200	2,129	n/a [5]	C	2,182	n/a[5]	C	n/a[5]	N
S. Nardo Avenue From E. Solana Circle To Fresca Street	Collector (MF) 8,000	2,377	0.30	A	2,483	0.31	A	0.01	N
S. Nardo Avenue From Fresca Street To Stevens Avenue	Collector (MF) 8,000	3,106	0.39	B	3,528	0.44	B	0.05	N
E. Solana Circle From S. Nardo Avenue To Via De La Valle	Sub-Collector (SF) 2,200	672	n/a[5]	A	725	n/a[5]	A	n/a[5]	N
Lomas Santa Fe[4] From Stevens Avenue To Solana Hills Drive	Major Arterial 40,000	23,824	0.60	C	23,983	0.60	C	0.0	N
Via de la Valle[4] From Camino Del Mar To Jimmy Durante Boulevard	Collector (continuous LTL) 15,000	17,109	1.14	F	17,161	1.14	F	0.0	N

Source: Fehr & Peers, September 2017

Note:
1. LOS = Level of Service.
2. Δ = Change in V/C
3. S? = Significant impact?
4. Lomas Santa Fe and Via de la Valle counts were provided by City of Solana Beach for the "typical conditions". Data reported was collected in 2012
5. n/a = not applicable. The City roadway capacity thresholds provide a capacity at LOS C only. V/C ratio is based on the volume to the capacity at LOS E. Volumes along the arterial fall below the LOS C threshold, therefore the C/C ratio need not be calculated.

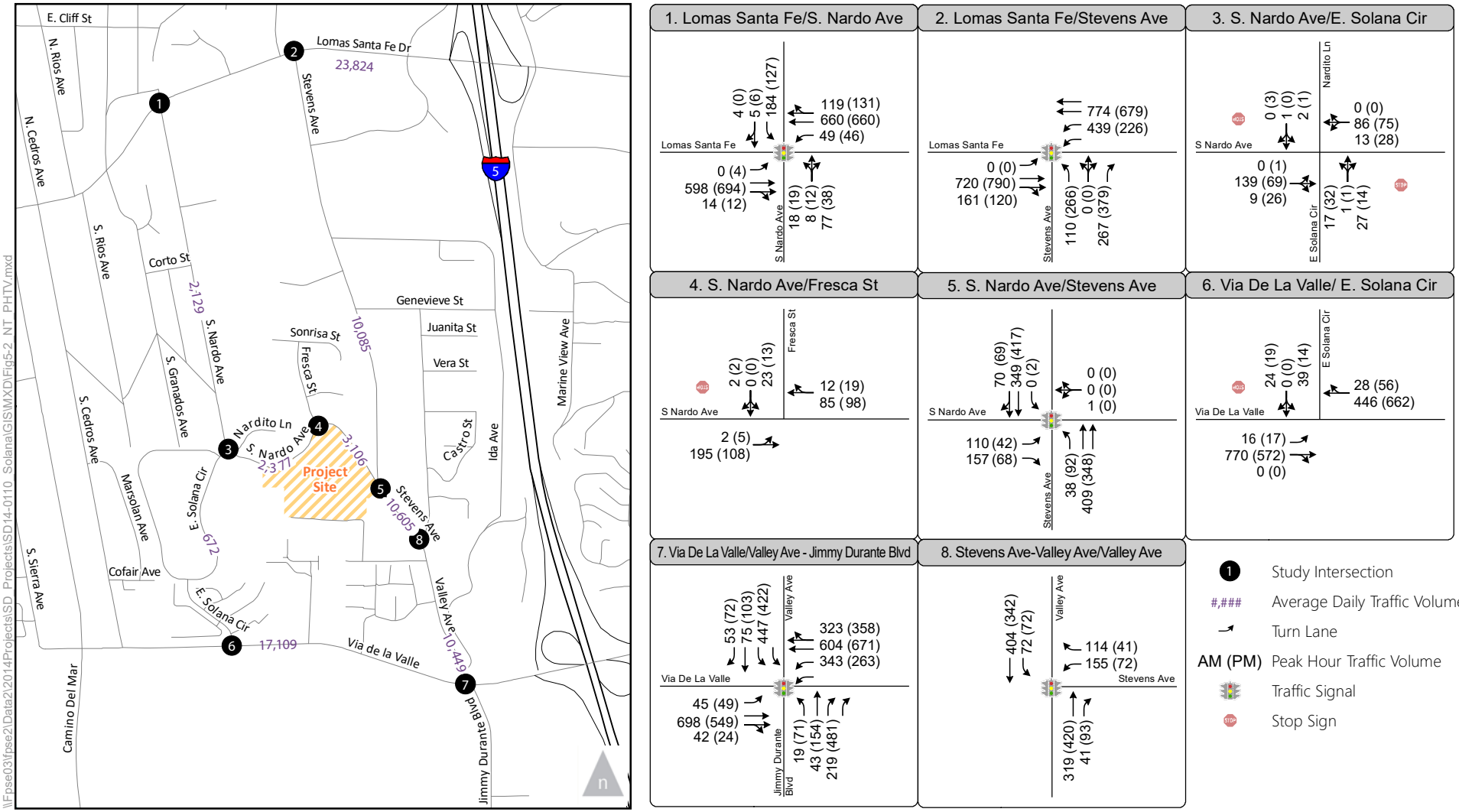
TABLE 5
PROJECT CONDITIONS (2020) CONDITIONS PEAK HOUR INTERSECTION LEVEL OF SERVICE

#	Intersection	AM					PM					S?[4]
		Near Term (2020)		Near Term (2020) Plus Project		Δ[3]	Near Term (2020)		Near Term (2020) Plus Project		Δ[3]	
		Delay[1]	LOS[2]	Delay[1]	LOS[2]		Delay[1]	LOS[2]	Delay[1]	LOS[2]		
1	Lomas Santa Fe Drive / S. Nardo Avenue*	15.0	B	15.0	B	0.0	11.6	B	11.6[5]	B	0.0	N
2	Lomas Santa Fe Drive / Stevens Avenue*	24.1	C	24.4	C	0.3	24.3	C	24.5	C	0.2	N
3	S. Nardo Avenue / E. Solana Circle	11.2	B	11.2	B	0.0	10.6	B	10.7	B	0.1	N
4	S. Nardo Avenue / Fresca Street	11.0	B	11.2	B	0.2	9.8	A	9.9	A	0.1	N
5	Stevens Avenue / S. Nardo Avenue*	18.4	B	19.2	B	0.8	15.0	B	16.3	B	1.3	N
6	Via de La Valle / E. Solana Circle	28.5	D	28.5[5]	D	0.0	22.2	C	22.2[5]	C	0.0	N
7	Stevens Avenue-Valley Avenue / Via de la Valle*	29.2	C	29.3	C	0.2	33.7	C	33.9	C	0.2	N
8	Stevens Avenue / Valley Avenue*	19.2	B	19.2[5]	B	0.0	13.0	B	13.0[5]	B	0.0	N
9	Driveway A / S. Nardo Avenue	N/A	N/A	10.1	A	N/A	N/A	N/A	9.3	A	N/A	N/A
10	Driveway B / S. Nardo Avenue	N/A	N/A	10.3	A	N/A	N/A	N/A	9.5	A	N/A	N/A

Source: Fehr & Peers, January 2014

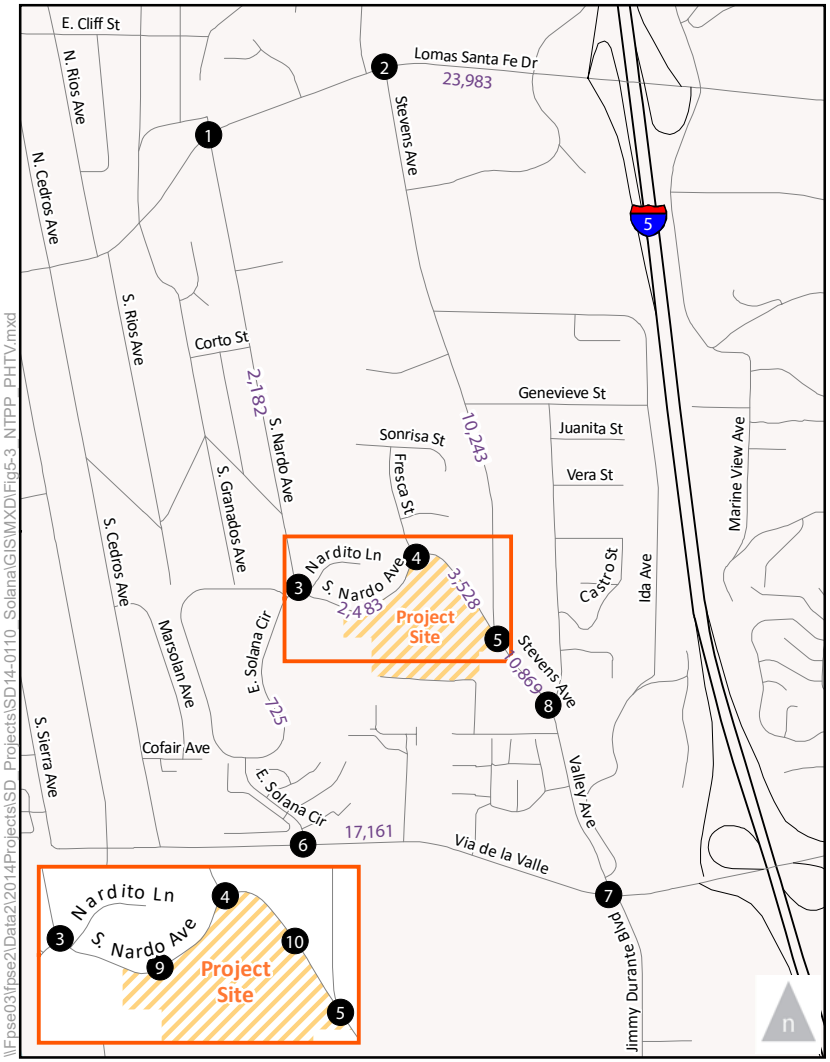
Note:
1. Whole intersection weighted average stopped delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections.
2. LOS = Level of Service.
3. Δ = Change in delay, seconds
4. S? = Significant impact?
5. Delay reported in HCM is lower than the No Project conditions. This is due to the addition of project trips to non-critical movements. For the purpose of this evaluation, it is assumed that the project has no impact and the delay with project is equal to the delay without the project.

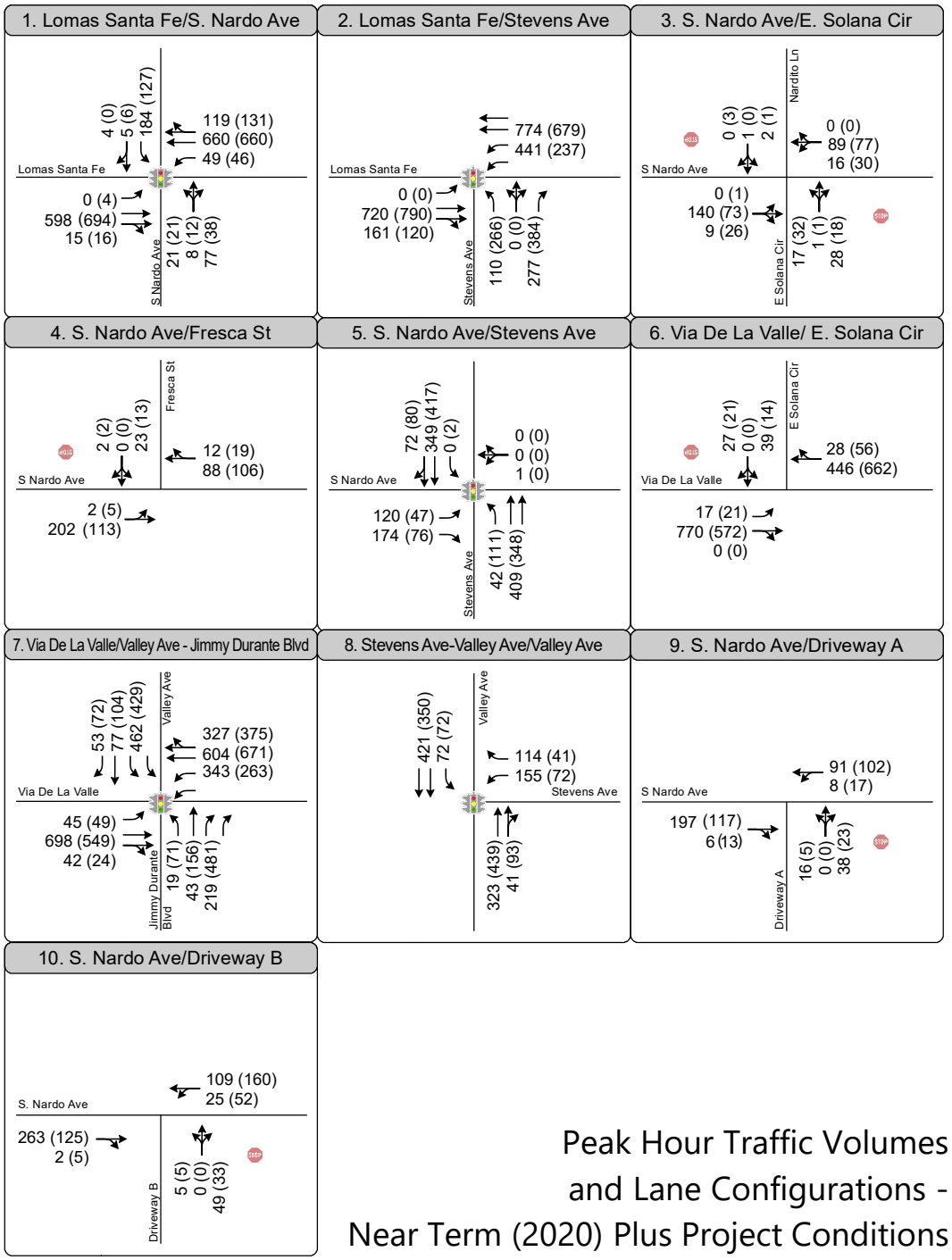
N/A = Not Applicable. Driveway intersections were only analyzed under "Plus Project" scenarios. * = Signalized intersection. ** = All-way stop controlled intersection.



Peak Hour Traffic Volumes and Lane Configuration Near Term (2020) Conditions

Figure 5





1 Study Intersection

#,### Average Daily Traffic Volume

Turn Lane

AM (PM) Peak Hour Traffic Volume

Traffic Signal

Stop Sign

Peak Hour Traffic Volumes and Lane Configurations - Near Term (2020) Plus Project Conditions

Figure 6

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STEVENS AVENUE COMPLETE STREET

At the time this Traffic Supplement was prepared, improvements along Stevens Avenue were under construction as part of a Complete Streets project. The improvement project will:

- Slurry seal or overlay and restripe Stevens Avenue from Lomas Santa Fe to just north of Highland Drive
- Install sidewalks, curbs and gutters along both the east and west sides of Stevens and Valley Avenues, where they do not currently exist, to improve public safety by providing continuous pedestrian facilities
- Provide a pedestrian crosswalk pop-out along Stevens Avenue at Genevieve Street to reduce pedestrian crossing distance at this intersection
- Provide continuous designated/striped Class 2 bike lanes (5 to 6 feet wide) along the northbound and southbound lanes of Stevens and Valley Avenues to enhance non-vehicular facilities
- Add bike racks at the east side of Stevens Avenue at the intersection with Valley Avenue
- Traffic signal loop detector modifications at San Rodolfo Drive and Academy Drive to provide pedestrian and right lane detection
- Construction-phase traffic management plan to ensure that temporary lane or intersection movement restrictions and traffic detours during construction are minimized.

The City restriped Valley Ave between Via de la Valle and the Stevens Avenue-Valley Avenue split from 4 lanes to 2 lanes in 2010, which is represented in the *Solana Highland Transportation Impact Analysis Report (2016)*. More recently, the City restriped Stevens Avenue between the Stevens Avenue / Valley Avenue split to 550 feet north of Nardo Avenue at La Colonia Park at the beginning of 2016. From La Colonia Park to just south of Academy Drive, Stevens Avenue is currently 2 lanes, then transitions to 4 lanes as it approaches Lomas Santa Fe Drive. Therefore, the majority of this roadway has already existed or been restriped as a 2-lane roadway.

With construction of the Complete Streets project, Stevens Avenue will have a daily traffic capacity of up to 15,000 vehicles per day. The *Solana Highlands Transportation Impact Analysis Report (2016)* forecasts the volume along Stevens Avenue to range from 11,464 vehicles per day (Lomas Santa Fe to Nardo Avenue) to 9,960 vehicles per day (Nardo Avenue to Valley Avenue). South of Valley Avenue, Stevens Avenue changes name to Valley Avenue, where the volume from Stevens Avenue to Via de la Valle is forecast to be 11,958 vehicles per day. Based on the forecast volumes included in the 2016 study, the restriping and reconstruction of Stevens Avenue will provide sufficient capacity to meet the long-term forecast volumes along Stevens Avenue and will provide necessary pedestrian and bicycle connectivity

along the corridor to assist residents of Solana Highlands and surrounding community travel by foot or by bicycle.

CONSTRUCTION TRAFFIC ASSESSMENT

The revised site plan will remove 154,000 cubic yards of material from the project site. Two scenarios for project construction are evaluated in this technical memorandum:

- **Scenario 1:** Three phase project. This would include a total of three months of demolition and six months of grading (approximately 90 days of material export), for an average of 1 month of demolition and 2 months of grading for each phase.

- **Scenario 2:** One phase project. This would include 2 months of demolition and 5 months of grading (approximately 77 days of exporting material).

SCENARIO 1: THREE PHASE PROJECT

As stated in the Traffic Impact Analysis report ("TIA"), the Solana Highlands site currently generates approximately 1,552 trips per day and upon project completion the site will generate approximately 2,080 trips per day. As determined in the TIA, the activities at the site do not cause a significant impact to traffic conditions under either the existing or the existing plus project condition.

Throughout each phase of construction, there will be a removal of buildings that will result in a daily loss in project-related trips by residents. As the buildings are demolished, the lost resident trips will be partially replaced by construction trips as well as trips from residents as new buildings are opened. The TIA evaluated the construction-related traffic impacts associated with a three-phase project with approximately 19,500 cy of export evenly distributed across the three phases and determined that construction-related impacts would not be significant and, in fact, that daily trips during the construction phase would always be less than the 1,552 daily trips in the existing condition.

The purpose of this analysis is to determine if traffic impacts during construction would remain less than significant even with an increase to 154,000 cy of export from the site. Should the additional haul trips during construction caused by the increased export remain below the additional trips generated under the existing plus project condition, the construction-related impacts are consistent with the findings in the TIA and no additional analysis is necessary. In contrast, should the additional haul trips during construction exceed the additional trips analyzed in the TIA for the site under the existing plus project condition, then additional analysis may be necessary to determine construction-related impacts.

The trip generation for each of the three phases is provided in **Table 6** below. In this study scenario, it is assumed that the site is lowered and that 154,000 cy of export are removed from the site in total during the three grading phases.

TABLE 6
PROJECT TRIP GENERATION PER STAGE OF CONSTRUCTION

Phase	Daily Worker Trips (one-way)	Daily Vendor Trips (one-way)	Total Hauling Trips (one way) over entire phase (1)(2)	Worker Trip Length (model default)	Vendor Trip length (model default)	Hauling Trip Length (nearest disposal facility)
Demolition	12 (6 workers)	4 (2 delivery trucks)	302 (default demolition haul trucks)	10.8 miles	7.3 miles	22 miles (Sycamore Landfill)
Grading	28 (14 workers)	0	7,333 (51,333 cy/14 cy truck capacity*2)	10.8 miles	7.3 miles	33 miles (Otay Landfill)
Building Construction	80 (40 workers)	20 (10 delivery trucks)	0	10.8 miles	7.3 miles	0
Paving	12 (6 workers)	0	0	10.8 miles	7.3 miles	0
Arch Coating	12 (6 workers)	0	0	10.8 miles	7.3 miles	0

Source: Dudek, 2015
Note:
(1) Each load includes two one-way trips – one trip with an empty trailer to the site and the other trips with a loaded trailer to the landfill.
(2) The material is assumed to be hauled across each of the three phases equally. Therefore, it is assumed 51,333 cy of material is removed in each phase. The 7,333 one-way trips is equivalent to 3,667 loads of material hauled from the site.

As shown in the TIA, grading during each construction phase included approximately 814 one-way haul trips (24 haul trips per day). With 154,000 cy of export, a total of 22,000 one-way truck trips would be required (154,000 cubic yards divided by 14 cy/truck, multiplied by two one-way trips), or an increase of 21,186 haul trips over the total of three phases. Spreading the 22,000 haul trips over the 90-day total export period, amounts to 244 trips per day, an increase of approximately 220 haul trips per day over the 19,500 cy haul scenario evaluated in the TIA. Table 6 shows the estimated project trip generation for each stage of construction, assuming the export and duration is evenly split among each of the three phases. In reality, the export quantity and export duration during each phase differs from the average, but the export quantity and duration remain proportional to each other (phases with more export have longer export time periods) and the 244 trips per day remains constant.

The total 244 haul trips per day during grading activities can be compared to the 528 additional trips per day that will be generated by the additional 66 new dwelling units that the project will add to the site (8 trips per unit). Because the TIA determined that the existing plus project condition does not cause significant traffic impacts, this comparison demonstrates that the additional haul trips associated with

the increased export scenario will not cause significant traffic impacts and do not need additional analysis.

This analysis can be made even more conservative by assuming that (i) each construction worker makes an average of 3 one-way trips to and from the site (assuming that half of all construction workers will leave from and return to the site during the day, for lunch for example), and (ii) each truck haul trip has an impact on traffic conditions equivalent to 2.5 automobile trip (passenger car equivalency factor or PCE factor). These conservative assumptions were also included in TIA to increase confidence in the conclusions. The TIA concluded that, during construction of Phase 3 of the project, effective daily trips from construction activities (workers and haul trips, adjusted as described above) and apartment units that had been completed totaled 1,460 trips based on 19,500 cy of haul material from the site. This was the highest number of total trips during construction according to the TIA analysis.

Following this same methodology to evaluate the total effective trips occurring during Phase 3 construction, the total number of trips to/from the site is 2,050:

244 haul trips * 2.5 =	611
24 vendor trips =	24
144 construction worker trips * 1.5 =	216
302 demo haul trips/20 working days =	15
Phase 3 residential trips =	1,184
TOTAL TRIPS =	2,050 effective trips per day

This is still below the 2,080 total trips that will be generated at the site once construction is complete and all apartment units are occupied. Accordingly, the increased export will not cause significant traffic impacts in a three-phase construction scenario.

SCENARIO 2: SINGLE STAGE CONSTRUCTION

The TIA evaluated the potential traffic impacts associated with construction of the project across three phases. During each stage of construction, it was assumed that there would be removal of buildings that will result in a net daily loss in project related trips. Should the construction be completed in one phase, all existing buildings would be vacated during construction (resulting in no residential related trips to/from the site during construction). Occupancy of the site would not occur until after the construction was completed. **Table 7** summarizes the forecast trips generated by the project site due to construction traffic ONLY.

As shown in Table 7, 268 worker trips per day are forecast to occur with an additional 48 vendor trips per day for a total of 316 worker and vendor construction trips per day, assuming all phases of

construction occur simultaneously, which is a conservative assumption. During the course of construction, there will be 906 haul trips associated with the 2-month demolition phase and 22,000 one-way haul trips associated with the 77-day grading phase (154,000 cy/14 cy truck capacityx2 trips per delivery). This equates to 20 daily haul trips during the demolition phase (906 trips/45 work days) and 286 daily haul trips during the grading phase (22,000 trips/77 work days). Because the demolition haul trips and the grading haul trips will not happen concurrently during single stage construction, and the grading phase would generate more daily trips, we focused on construction impacts during grading, although we still assumed all construction worker and vendor trips would occur each day. Combining worker and vendor trips with grading haul trips nets a total of 602 construction-related trips per day, far below the existing total of 1,552 trips per day generated by the site.

TABLE 7
CONSTRUCTION TRIP GENERATION (SINGLE PHASE CONSTRUCTION)

Phase	Daily Worker Trips (one-way)	Daily Vendor Trips (one-way)	Total Hauling Trips (one way) *over entire PROJECT	Worker Trip Length (model default)	Vendor Trip length (model default)	Hauling Trip Length (nearest disposal facility)
Demolition	24 (12 workers)	8 (4 delivery trucks)	906 (default demolition haul trucks)	10.8 miles	7.3 miles	22 miles (Sycamore Landfill)
Grading	36 (18 workers)	0	22,000 (154,000 cy/14 cy truck capacity*2)	10.8 miles	7.3 miles	33 miles (Otay Landfill)
Building Construction	160 (80 workers)	40 (20 delivery trucks)	0	10.8 miles	7.3 miles	0
Paving	24 (12 workers)	0	0	10.8 miles	7.3 miles	0
Arch Coating	24 (12 workers)	0	0	10.8 miles	7.3 miles	0

Source: Dudek, 2015
Note:
(1) Each load includes two one-way trips – one trip with an empty trailer to the site and the other trips with a loaded trailer to the landfill.
(2) The material is assumed to be hauled in a single phase. The 22,000 one-way trips is equivalent to 11,000 loads of material hauled from the site.

Following the same methodology to evaluate the effective number of trips during the single phase construction:

286 haul trips * 2.5 =	715
48 vendor trips =	48
268 construction worker trips * 1.5 =	402
Demo haul trips =	0
Phase 3 residential trips =	0
TOTAL TRIPS =	1,165 effective trips per day

The total effective trips (1,165) falls below the existing number of trips generated by the site and evaluated in the TIA. Since the number of construction-related daily trips falls within the number of daily trips currently generated by the site, no additional traffic analysis is required for the single phase project.

Site Plan

2017 COMMUNITY INPUT SCENARIO WITH MODIFIED GRADES ACROSS SITE

2-STORY

3-STORY

260 TOTAL UNITS

PARKING: 529 STALLS

19.38 DU/AC

LEGEND:

- CROSS SECTION LOCATION (SEE SHEET G 2.11)
- PROPERTY LINE
- EXIST. CONTOUR
- EXISTING SEWER MAIN
- EXISTING SEWER CLEANOUT
- EXISTING WATER MAIN
- EXISTING STORM DRAIN
- PROPOSED FOOTPRINT
- PROPOSED WALKWAY
- PROPOSED CONTOUR
- PROPOSED TREATED AND DETAINED STORMWATER PIPE
- PROPOSED UNTREATED STORMWATER PIPE
- PROPOSED 2'X2' DRAIN
- PROPOSED 4'X4' DRAIN
- PROPOSED RETAINING WALL
- PROPOSED BUILDING WALL PER STRUCTURAL
- PROPOSED AC PAVEMENT ACCESS DRIVE NOT TO EXCEED 14.5%
- PROPOSED BIORETENTION AREA
- PROPOSED CUT/FILL

PRELIMINARY EARTHWORK QUANTITIES

CUT: 176,000 CY
FILL: 22,000 CY
EXPORT: 154,000 CY

WALLS NOTE:

RETAINING WALLS NECESSARY TO FACILITATE SITE GRADING ARE SHOWN ON THIS SHEET. FENCES AND SCREEN WALLS ARE NOT SHOWN TO PROVIDE CLARITY FOR DEPICTING THE GRADING. PLEASE REFER TO ARCHITECTS AND LANDSCAPE ARCHITECTS PLANS FOR FENCING AND SCREEN WALL LOCATIONS AND HEIGHTS.

FIRE NOTES:

1. ALL FIRE ACCESS ROADS SHALL BE AN ALL WEATHER SURFACE SUPPORT THE IMPOSED LOAD OF FIRE APPARATUS 75,000 LB. LOAD MEET GRADE REQUIREMENTS AND POSTED AS FIRE LANES WITH SIGNS MEETING THE REQUIREMENT OF CA VEHICLE CODE.
2. GRADES EXCEEDING 15% (INCLINE OR DECLINE) ON FIRE APPARATUS ROADS SHALL NOT BE PERMITTED WITHOUT MITIGATION. A SURFACE OF PORTLAND CEMENT CONCRETE (PCC) WITH A DEEP BROOM FINISH PERPENDICULAR TO THE ENTIRE DIRECTION/LENGTH OF TRAVEL AND GRADE. THE ANGLE OF DEPARTURE AND APPROACH OF FIRE DEPARTMENT ACCESS ROADWAYS SHALL NOT EXCEED SEVEN DEGREES (12%). SEE SHEET G 3.1 FOR FIRE AND UTILITY PLAN.
3. PRIOR TO DELIVERY OF COMBUSTIBLE BUILDING CONSTRUCTION MATERIALS TO THE PROJECT SITE ALL OF THE FOLLOWING CONDITIONS SHALL BE COMPLETED TO THE SATISFACTION OF THE FIRE DEPARTMENT: (1) FIRE LANE OR ACCESS ROADS SHALL HAVE THE FOLLOWING AS A MINIMUM: THE FIRST LIFT OF ASPHALT PAVING SHALL BE IN PLACE TO PROVIDE A PERMANENT ALL WEATHER SURFACE FOR EMERGENCY VEHICLES; OR, PROVIDE A LETTER FROM A LICENSED CIVIL ENGINEER THAT STATES OTHER ROAD SURFACE WILL SUPPORT WEIGHT OF FIRE APPARATUS (75,000 LBS) AND IS CONSIDERED AN ALL-WEATHER SURFACE FOR TEMPORARY USE NOT TO EXCEED THE 60 DAYS. IF EXISTING ROADS ARE TO REMAIN DURING CONSTRUCTION SHOW PROPER ACCESS/LOAD REQUIREMENTS FOR EACH PHASE OF THE PROJECT.
4. A RESIDENTIAL FIRE SPRINKLER SYSTEM SHALL BE INSTALLED IN ALL LIVING AREAS OF THE DWELLING. THE DWELLING SHALL HAVE A MINIMUM 1-INCH WATER METERS TO SERVE FIRE SPRINKLER AND DOMESTIC WATER SUPPLY. A C-16 LICENSED FIRE PROTECTION CONTRACTOR SHALL SUBMIT PLANS FOR APPROVAL AND PERFORM ALL INSTALLATION WORK.
5. AN AUTOMATIC GATE ACROSS A FIRE ACCESS ROADWAY OR DRIVEWAY SHALL BE EQUIPPED WITH AN APPROVED EMERGENCY KEY-OPERATED SWITCH OVERRIDING ALL COMMAND FUNCTIONS AND OPENING THE GATE.
6. A GATE ACCESSING MORE THAN FOUR RESIDENCES OR RESIDENTIAL LOTS SHALL ALSO BE EQUIPPED WITH AN APPROVED TRAFFIC CONTROL-ACTIVATING STROBE LIGHT SENSOR OR OTHER DEVICE APPROVED BY THE FIRE CODE OFFICIAL, WHICH WILL ACTIVATE THE GATE ON THE APPROACH OF EMERGENCY APPARATUS WITH BATTERY BACKUP OR MANUAL MECHANICAL DISCONNECT IN CASE OF POWER FAILURE.
7. CLASS 'A' ROOFING MATERIAL IS REQUIRED FOR ALL NEW ROOFS.

STEPHEN DALTON ARCHITECTS
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SOLANA BEACH, CA 92075

H.G. FENTON COMPANY
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REVITALIZING SOLANA HIGHLANDS

PRELIMINARY GRADING PLAN

DEVELOPMENT REVIEW PERMIT
SUBMITTAL 3
08/18/2017

G 2.1

J:\Active Jobs\1782 Fenton\DRAWING\1782DRP-comm input bung at Nardo grades.proAug 16, 2017

DRIVEWAY ANALYSIS

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	1	1	451	523	2
Future Volume (Veh/h)	2	1	1	451	523	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	1	1	490	568	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					100	
pX, platoon unblocked	0.90	0.90	0.90			
vC, conflicting volume	816	569	570			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	737	462	463			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	317	490	982			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	3	164	327	570
Volume Left	2	1	0	0
Volume Right	1	0	0	2
cSH	359	982	1700	1700
Volume to Capacity	0.01	0.00	0.19	0.34
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	15.1	0.1	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	15.1	0.0		0.0
Approach LOS	C			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	37.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	3	0	451	523	3
Future Volume (Veh/h)	0	3	0	451	523	3
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	3	0	490	568	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					100	
pX, platoon unblocked	0.90	0.90	0.90			
vC, conflicting volume	814	570	571			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	735	462	464			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	318	490	981			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	3	163	327	571
Volume Left	0	0	0	0
Volume Right	3	0	0	3
cSH	490	981	1700	1700
Volume to Capacity	0.01	0.00	0.19	0.34
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	12.4	0.0	0.0	0.0
Lane LOS	B			
Approach Delay (s)	12.4	0.0		0.0
Approach LOS	B			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	37.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	2	2	457	493	3
Future Volume (Veh/h)	2	2	2	457	493	3
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	2	2	497	536	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					100	
pX, platoon unblocked	0.88	0.88	0.88			
vC, conflicting volume	790	538	539			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	691	404	405			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	332	524	1009			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	4	168	331	539
Volume Left	2	2	0	0
Volume Right	2	0	0	3
cSH	406	1009	1700	1700
Volume to Capacity	0.01	0.00	0.19	0.32
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	14.0	0.1	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	14.0	0.0		0.0
Approach LOS	B			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	36.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	4	0	457	493	5
Future Volume (Veh/h)	0	4	0	457	493	5
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	4	0	497	536	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					100	
pX, platoon unblocked	0.88	0.88	0.88			
vC, conflicting volume	787	538	541			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	688	405	408			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	334	523	1008			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	4	166	331	541
Volume Left	0	0	0	0
Volume Right	4	0	0	5
cSH	523	1008	1700	1700
Volume to Capacity	0.01	0.00	0.19	0.32
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	11.9	0.0	0.0	0.0
Lane LOS	B			
Approach Delay (s)	11.9	0.0		0.0
Approach LOS	B			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	36.3%	ICU Level of Service	A
Analysis Period (min)	15		

Existing Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: A[9.8]

Street Name:	Driveway A									Nardo Avenue							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	11		0		30	0		0		0	0		168		5	6		66		0
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	11		0		30	0		0		0	0		168		5	6		66		0
Added Vol:	5		0		7	0		0		0	0		0		1	2		2		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	16		0		37	0		0		0	0		168		6	8		68		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92	
PHF Volume:	17		0		40	0		0		0	0		183		7	9		74		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	17		0		40	0		0		0	0		183		7	9		74		0
Critical Gap Module:																				
Critical Gp:	6.4	6.5		6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx						
FollowUpTim:	3.5	4.0		3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx						
Capacity Module:																				
Cnflict Vol:	277	277		186	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		189	xxxx	xxxxx						
Potent Cap.:	717	634		861	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1397	xxxx	xxxxx						
Move Cap.:	713	630		861	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1397	xxxx	xxxxx						
Volume/Cap:	0.02	0.00		0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.01	xxxx	xxxx						
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx						
Control Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.6	xxxx	xxxxx						
LOS by Move:	*	*		*	*	*	*	*	*	*		A	*	*						
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT					
Shared Cap.:	xxxx		811	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx		0.2	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx							
Shrd ConDel:	xxxxx		9.8	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx							
Shared LOS:	*		A	*		*	*	*			*	*	*							
ApproachDel:			9.8			xxxxxx					xxxxxx									
ApproachLOS:			A			*					*									

Note: Queue reported is the number of cars per lane.

Existing Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: B[10.2]

Street Name:	Driveway B									Nardo Avenue							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	3		0		28	0		0		0	0		238		2	19		99		0
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	3		0		28	0		0		0	0		238		2	19		99		0
Added Vol:	2		0		20	0		0		0	0		7		0	5		2		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	5		0		48	0		0		0	0		245		2	24		101		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92	
PHF Volume:	5		0		52	0		0		0	0		266		2	26		110		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	5		0		52	0		0		0	0		266		2	26		110		0
Critical Gap Module:																				
Critical Gp:	6.4	6.5		6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx						
FollowUpTim:	3.5	4.0		3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx						
Capacity Module:																				
Cnflict Vol:	429	429		267	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		268	xxxx	xxxxx						
Potent Cap.:	586	521		776	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1307	xxxx	xxxxx						
Move Cap.:	577	511		776	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1307	xxxx	xxxxx						
Volume/Cap:	0.01	0.00		0.07	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.02	xxxx	xxxx						
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx						
Control Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.8	xxxx	xxxxx						
LOS by Move:	*	*		*	*	*	*	*	*	*		A	*	*						
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT					
Shared Cap.:	xxxx		752	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx		0.2	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx							
Shrd ConDel:	xxxxx		10.2	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx							
Shared LOS:	*		B	*		*	*	*			*	*	*							
ApproachDel:			10.2			xxxxxx					xxxxxx									
ApproachLOS:			B			*					*									

Note: Queue reported is the number of cars per lane.

Existing Plus Project (right in /right out only)
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: A[9.3]

Street Name:	Driveway A												Nardo Avenue											
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
Volume Module:																				
Base Vol:	0	0	30			0	0	0			0	168	5			0	77	0		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	0	0	30			0	0	0			0	168	5			0	77	0		
Added Vol:	0	0	0			0	0	0			0	0	1			0	7	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	0	0	30			0	0	0			0	168	6			0	84	0		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.92	0.92	0.92			0.92	0.92	0.92			0.92	0.92	0.92			0.92	0.92	0.92		
PHF Volume:	0	0	33			0	0	0			0	183	7			0	91	0		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
FinalVolume:	0	0	33			0	0	0			0	183	7			0	91	0		
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	186	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Potent Cap.:	xxxx	xxxx	861	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Move Cap.:	xxxx	xxxx	861	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	xxxx	xxxx	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	9.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	*	*	A	*	*	*	*	*	*	*	*	*								
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*								
ApproachDel:	9.3			xxxxxx			xxxxxx			xxxxxx										
ApproachLOS:	A			*			*			*										

Note: Queue reported is the number of cars per lane.

Existing Plus Project (right in/right out only)
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: B[10.7]

Street Name:	Driveway B												Nardo Avenue											
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	14	0	28			0	0	0			0	238	2			25	93	0		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	14	0	28			0	0	0			0	238	2			25	93	0		
Added Vol:	7	0	27			0	0	0			0	0	0			6	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	21	0	55			0	0	0			0	238	2			31	93	0		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.92	0.92	0.92			0.92	0.92	0.92			0.92	0.92	0.92			0.92	0.92	0.92		
PHF Volume:	23	0	60			0	0	0			0	259	2			34	101	0		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
FinalVolume:	23	0	60			0	0	0			0	259	2			34	101	0		
Critical Gap Module:																				
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			4.1	xxxx	xxxxx						
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			2.2	xxxx	xxxxx						
Capacity Module:																				
Cnflict Vol:	428	428	260	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			261	xxxx	xxxxx						
Potent Cap.:	587	522	784	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			1315	xxxx	xxxxx						
Move Cap.:	576	508	784	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			1315	xxxx	xxxxx						
Volume/Cap:	0.04	0.00	0.08	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx			0.03	xxxx	xxxx						
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			0.1	xxxx	xxxxx						
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			7.8	xxxx	xxxxx						
LOS by Move:	*	*	*	*	*	*	*	*	*			A	*	*						
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	713	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			0.1	xxxx	xxxxx						
Shrd ConDel:	xxxxx	10.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			7.8	xxxx	xxxxx						
Shared LOS:	*	B	*	*	*	*	*	*	*			A	*	*						
ApproachDel:	10.7			xxxxxx			xxxxxx			xxxxxx										
ApproachLOS:	B			*			*			*										

Note: Queue reported is the number of cars per lane.

Existing Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: A[9.1]

Street Name:	Driveway A									Nardo Avenue							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	3	0	19		0	0		0		0	92		7	10		84		0
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00		1.00		1.00
Initial Bse:	3	0	19		0	0		0		0	92		7	10		84		0
Added Vol:	2	0	3		0	0		0		0	2		6	7		1		0
PasserByVol:	0	0	0		0	0		0		0	0		0	0		0		0
Initial Fut:	5	0	22		0	0		0		0	94		13	17		85		0
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.92	0.92	0.92		0.92	0.92		0.92		0.92	0.92		0.92	0.92		0.92		0.92
PHF Volume:	5	0	24		0	0		0		0	102		14	18		92		0
Reduct Vol:	0	0	0		0	0		0		0	0		0	0		0		0
FinalVolume:	5	0	24		0	0		0		0	102		14	18		92		0
Critical Gap Module:																				
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx							
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx							
Capacity Module:																				
Cnflict Vol:	239	239	109	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		116	xxxx	xxxxx							
Potent Cap.:	754	666	950	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1485	xxxx	xxxxx							
Move Cap.:	747	658	950	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1485	xxxx	xxxxx							
Volume/Cap:	0.01	0.00	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.01	xxxx	xxxx							
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx							
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.5	xxxx	xxxxx							
LOS by Move:	*	*	*	*	*	*	*	*	*		A	*	*							
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	904	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx							
Shrd ConDel:	xxxxx	9.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.5	xxxx	xxxxx							
Shared LOS:	*	A	*	*	*	*	*	*	*		A	*	*							
ApproachDel:	9.1			xxxxxx			xxxxxx				xxxxxx									
ApproachLOS:	A			*			*				*									

Note: Queue reported is the number of cars per lane.

Existing Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: A[9.3]

Street Name:	Driveway B									Nardo Avenue							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	4	0	22		0	0		0		0	102		3	29		135		0
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00		1.00		1.00
Initial Bse:	4	0	22		0	0		0		0	102		3	29		135		0
Added Vol:	1	0	10		0	0		0		0	3		2	22		7		0
PasserByVol:	0	0	0		0	0		0		0	0		0	0		0		0
Initial Fut:	5	0	32		0	0		0		0	105		5	51		142		0
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.92	0.92	0.92		0.92	0.92		0.92		0.92	0.92		0.92	0.92		0.92		0.92
PHF Volume:	5	0	35		0	0		0		0	114		5	55		154		0
Reduct Vol:	0	0	0		0	0		0		0	0		0	0		0		0
FinalVolume:	5	0	35		0	0		0		0	114		5	55		154		0
Critical Gap Module:																				
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx							
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx							
Capacity Module:																				
Cnflict Vol:	382	382	117	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		120	xxxx	xxxxx							
Potent Cap.:	624	554	941	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1481	xxxx	xxxxx							
Move Cap.:	606	533	941	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1481	xxxx	xxxxx							
Volume/Cap:	0.01	0.00	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.04	xxxx	xxxx							
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx							
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.5	xxxx	xxxxx							
LOS by Move:	*	*	*	*	*	*	*	*	*		A	*	*							
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	875	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.1	xxxx	xxxxx							
Shrd ConDel:	xxxxx	9.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.5	xxxx	xxxxx							
Shared LOS:	*	A	*	*	*	*	*	*	*		A	*	*							
ApproachDel:	9.3			xxxxxx			xxxxxx				xxxxxx									
ApproachLOS:	A			*			*				*									

Note: Queue reported is the number of cars per lane.

Existing Plus Project (right in / right out only)
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: A[8.9]

Street Name:	Driveway A									Nardo Avenue							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
Volume Module:																				
Base Vol:	0	0	19	0	0	0	0	92	7	0	87	0								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	0	0	19	0	0	0	0	92	7	0	87	0								
Added Vol:	0	0	0	0	0	0	0	2	6	0	3	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	0	0	19	0	0	0	0	94	13	0	90	0								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92								
PHF Volume:	0	0	21	0	0	0	0	102	14	0	98	0								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	0	0	21	0	0	0	0	102	14	0	98	0								
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	109	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Potent Cap.:	xxxx	xxxx	950	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Move Cap.:	xxxx	xxxx	950	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	8.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	*	*	A	*	*	*	*	*	*	*	*	*								
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*								
ApproachDel:	8.9			xxxxxx			xxxxxx			xxxxxx										
ApproachLOS:	A			*			*			*										

Note: Queue reported is the number of cars per lane.

Existing Plus Project (right in / right out only)
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 2.8 Worst Case Level Of Service: A[9.6]

Street Name:	Driveway B									Nardo Avenue							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	7	0	22	0	0	0	0	102	3	39	125	0								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	7	0	22	0	0	0	0	102	3	39	125	0								
Added Vol:	3	0	13	0	0	0	0	0	2	30	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	10	0	35	0	0	0	0	102	5	69	125	0								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92								
PHF Volume:	11	0	38	0	0	0	0	111	5	75	136	0								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	11	0	38	0	0	0	0	111	5	75	136	0								
Critical Gap Module:																				
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	399	399	114	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	116	xxxx	xxxxx								
Potent Cap.:	610	542	945	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1485	xxxx	xxxxx								
Move Cap.:	586	513	945	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1485	xxxx	xxxxx								
Volume/Cap:	0.02	0.00	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*								
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	831	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx								
Shrd ConDel:	xxxxx	9.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx								
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*								
ApproachDel:	9.6			xxxxxx			xxxxxx			xxxxxx										
ApproachLOS:	A			*			*			*										

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: B[10.1]

Street Name:	Driveway A											
							Nardo Avenue					
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	11		0		30	0		0		0	0		190		5	6		86		0
Growth Adj:	1.04	1.04		1.04		1.04	1.04		1.04		1.04	1.04		1.04		1.04	1.04		1.04	
Initial Bse:	11		0		31	0		0		0	0		197		5	6		89		0
Added Vol:	5		0		7	0		0		0	0		0		1	2		2		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	16		0		38	0		0		0	0		197		6	8		91		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92	
PHF Volume:	18		0		41	0		0		0	0		214		7	9		99		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	18		0		41	0		0		0	0		214		7	9		99		0
Critical Gap Module:																				
Critical Gp:	6.4	6.5		6.2		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx	
FollowUpTim:	3.5	4.0		3.3		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx	
Capacity Module:																				
Cnflict Vol:	334	334		217		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		220	xxxx		xxxxx	
Potent Cap.:	665	590		828		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		1361	xxxx		xxxxx	
Move Cap.:	662	586		828		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		1361	xxxx		xxxxx	
Volume/Cap:	0.03	0.00		0.05		xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		0.01	xxxx		xxxx	
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		0.0	xxxx		xxxxx	
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		7.7	xxxx		xxxxx	
LOS by Move:	*	*		*		*	*		*		*	*		*		A	*		*	
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	770		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	0.2		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		0.0	xxxx		xxxxx	
Shrd ConDel:	xxxxx	10.1		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		7.7	xxxx		xxxxx	
Shared LOS:	*	B		*		*	*		*		*	*		*		A	*		*	
ApproachDel:	10.1					xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:	B					*					*					*				

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: B[10.3]

Street Name:	Driveway B											
							Nardo Avenue					
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	3		0		28	0		0		0	0		247		2	19		103		0
Growth Adj:	1.04	1.04		1.04		1.04	1.04		1.04		1.04	1.04		1.04		1.04	1.04		1.04	
Initial Bse:	3		0		29	0		0		0	0		256		2	20		107		0
Added Vol:	2		0		20	0		0		0	0		7		0	5		2		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	5		0		49	0		0		0	0		263		2	25		109		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92	
PHF Volume:	6		0		53	0		0		0	0		285		2	27		118		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	6		0		53	0		0		0	0		285		2	27		118		0
Critical Gap Module:																				
Critical Gp:	6.4	6.5		6.2		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx	
FollowUpTim:	3.5	4.0		3.3		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx	
Capacity Module:																				
Cnflict Vol:	458	458		287		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		288	xxxx		xxxxx	
Potent Cap.:	564	502		757		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		1286	xxxx		xxxxx	
Move Cap.:	555	491		757		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		1286	xxxx		xxxxx	
Volume/Cap:	0.01	0.00		0.07		xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		0.02	xxxx		xxxx	
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		0.1	xxxx		xxxxx	
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		7.9	xxxx		xxxxx	
LOS by Move:	*	*		*		*	*		*		*	*		*		A	*		*	
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	732		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	0.3		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		0.1	xxxx		xxxxx	
Shrd ConDel:	xxxxx	10.3		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		7.9	xxxx		xxxxx	
Shared LOS:	*	B		*		*	*		*		*	*		*		A	*		*	
ApproachDel:	10.3					xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:	B					*					*					*				

Note: Queue reported is the number of cars per lane.

Near Term Plus Project (right in /right out)
AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: A[9.5]

Street Name:	Driveway A									Nardo Avenue								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
Volume Module:																				
Base Vol:	0		0		30	0		0		0	0		190		5	0		97		0
Growth Adj:	1.04	1.04		1.04	1.04	1.04	1.04		1.04	1.04	1.04	1.04	1.04		1.04	1.04	1.04	1.04		1.04
Initial Bse:	0		0		31	0		0		0	0		197		5	0		100		0
Added Vol:	0		0		0	0		0		0	0		0		1	0		7		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	0		0		31	0		0		0	0		197		6	0		107		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.92	0.92		0.92	0.92	0.92		0.92		0.92	0.92	0.92		0.92	0.92	0.92	0.92		0.92	0.92
PHF Volume:	0		0		34	0		0		0	0		214		7	0		117		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	0		0		34	0		0		0	0		214		7	0		117		0

```
Critical Gap Module:
Critical Gp:xxxxx xxxx   6.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Capacity Module:
Cnflict Vol: xxxx xxxx   217  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx   828  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx   828  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  0.04  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx
Level Of Service Module:
2Way95thQ:   xxxx xxxx   0.1  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx   9.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     A     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:       9.5           xxxxxx            xxxxxx            xxxxxx
ApproachLOS:         A                 *                 *                 *
```

Note: Queue reported is the number of cars per lane.

Near Term Plus Project (right in / right out)
AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: B[10.9]

Street Name:	Driveway B									Nardo Avenue								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	14		0		28	0		0		0	0		247		2	25		97		0
Growth Adj:	1.04	1.04		1.04	1.04	1.04		1.04		1.04	1.04	1.04		1.04	1.04	1.04	1.04		1.04	1.04
Initial Bse:	14		0		29	0		0		0	0		256		2	26		100		0
Added Vol:	7		0		27	0		0		0	0		0		0	6		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	21		0		56	0		0		0	0		256		2	32		100		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.92	0.92		0.92	0.92	0.92		0.92		0.92	0.92	0.92		0.92	0.92	0.92	0.92		0.92	0.92
PHF Volume:	23		0		61	0		0		0	0		278		2	35		109		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	23		0		61	0		0		0	0		278		2	35		109		0

```
Critical Gap Module:
Critical Gp:  6.4  6.5   6.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   4.1 xxxx xxxxx
FollowUpTim:  3.5  4.0   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.2 xxxx xxxxx
Capacity Module:
Cnflict Vol:  457  457   279  xxxx xxxx xxxxx  xxxx xxxx xxxxx   280 xxxx xxxxx
Potent Cap.:  565  503   765  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1294 xxxx xxxxx
Move Cap.:    553  489   765  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1294 xxxx xxxxx
Volume/Cap:  0.04 0.00  0.08  xxxx xxxx  xxxx  xxxx xxxx  xxxx  0.03 xxxx  xxxx
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.1 xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.9 xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     *     A    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx  691 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx  0.4 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.1 xxxx xxxxx
Shrd ConDel:xxxxx 10.9 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.9 xxxx xxxxx
Shared LOS:     *    B     *     *    *     *     *    *     *     A    *     *
ApproachDel:      10.9           xxxxxx            xxxxxx            xxxxxx
ApproachLOS:         B                 *                 *                 *
```

Note: Queue reported is the number of cars per lane.

Near Term
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: A[9.1]

Street Name:	Driveway A									Nardo Avenue							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	3	0	19	0	0	0	0	111	7	10	98	0								
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04								
Initial Bse:	3	0	20	0	0	0	0	115	7	10	101	0								
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	3	0	20	0	0	0	0	115	7	10	101	0								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92								
PHF Volume:	3	0	21	0	0	0	0	125	8	11	110	0								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	3	0	21	0	0	0	0	125	8	11	110	0								
Critical Gap Module:																				
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	262	262	129	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	133	xxxx	xxxxx								
Potent Cap.:	732	647	926	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1465	xxxx	xxxxx								
Move Cap.:	727	642	926	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1465	xxxx	xxxxx								
Volume/Cap:	0.00	0.00	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*								
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	893	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx								
Shrd ConDel:	xxxxx	9.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx								
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*								
ApproachDel:	9.1			xxxxxx			xxxxxx			xxxxxx										
ApproachLOS:	A			*			*			*										

Note: Queue reported is the number of cars per lane.

Near Term
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: A[9.3]

Street Name:	Driveway B									Nardo Avenue							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	4	0	22	0	0	0	0	118	3	29	148	0								
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04								
Initial Bse:	4	0	23	0	0	0	0	122	3	30	153	0								
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	4	0	23	0	0	0	0	122	3	30	153	0								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92								
PHF Volume:	4	0	25	0	0	0	0	133	3	33	166	0								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	4	0	25	0	0	0	0	133	3	33	166	0								
Critical Gap Module:																				
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	366	366	134	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	136	xxxx	xxxxx								
Potent Cap.:	638	566	920	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1460	xxxx	xxxxx								
Move Cap.:	626	553	920	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1460	xxxx	xxxxx								
Volume/Cap:	0.01	0.00	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*								
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	858	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx								
Shrd ConDel:	xxxxx	9.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx								
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*								
ApproachDel:	9.3			xxxxxx			xxxxxx			xxxxxx										
ApproachLOS:	A			*			*			*										

Note: Queue reported is the number of cars per lane.

Near Term Plus Project (right in / right out)
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A[9.0]

Street Name:	Driveway A												Nardo Avenue											
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0
Volume Module:																		
Base Vol:	0	0	19	0	0	0	0	111	7	0	101	0						
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04						
Initial Bse:	0	0	20	0	0	0	0	115	7	0	105	0						
Added Vol:	0	0	0	0	0	0	0	2	6	0	3	0						
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0						
Initial Fut:	0	0	20	0	0	0	0	117	13	0	108	0						
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92						
PHF Volume:	0	0	21	0	0	0	0	127	14	0	117	0						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	0	0	21	0	0	0	0	127	14	0	117	0						
Critical Gap Module:																		
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	xxxx	xxxx	134	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Potent Cap.:	xxxx	xxxx	920	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Move Cap.:	xxxx	xxxx	920	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Volume/Cap:	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Control Del:	xxxxx	xxxx	9.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
LOS by Move:	*	*	A	*	*	*	*	*	*	*	*	*						
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*						
ApproachDel:	9.0			xxxxxx			xxxxxx			xxxxxx								
ApproachLOS:	A				*				*				*					

Note: Queue reported is the number of cars per lane.

Near Term Plus Project (right in / right out)
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: A[9.8]

Street Name:	Driveway B												Nardo Avenue											
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0
Volume Module:																		
Base Vol:	7	0	22	0	0	0	0	118	3	39	138	0						
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04						
Initial Bse:	7	0	23	0	0	0	0	122	3	40	143	0						
Added Vol:	3	0	13	0	0	0	0	0	2	30	0	0						
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0						
Initial Fut:	10	0	36	0	0	0	0	122	5	70	143	0						
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92						
PHF Volume:	11	0	39	0	0	0	0	133	6	76	155	0						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	11	0	39	0	0	0	0	133	6	76	155	0						
Critical Gap Module:																		
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx						
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	444	444	136	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	138	xxxx	xxxxx						
Potent Cap.:	575	512	919	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1458	xxxx	xxxxx						
Move Cap.:	551	484	919	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1458	xxxx	xxxxx						
Volume/Cap:	0.02	0.00	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx						
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx						
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*						
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	800	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx						
Shrd ConDel:	xxxxx	9.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx						
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*						
ApproachDel:	9.8			xxxxxx			xxxxxx			xxxxxx								
ApproachLOS:	A				*				*				*					

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: B[10.1]

```
Street Name:            Driveway A                      Nardo Avenue
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:        0  0  1! 0  0    0  0  0  0  0    0  0  0  1  0    0  1  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      11    0    30     0    0     0     0  202     5     6   87     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   11    0    30     0    0     0     0  202     5     6   87     0
Added Vol:      5    0     7     0    0     0     0    0     1     2    2     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   16    0    37     0    0     0     0  202     6     8   89     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.92 0.92  0.92  0.92 0.92  0.92  0.92 0.92  0.92  0.92 0.92  0.92
PHF Volume:    17    0    40     0    0     0     0  220     7     9   97     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   17    0    40     0    0     0     0  220     7     9   97     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  6.4  6.5   6.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   4.1 xxxx xxxxx
FollowUpTim:  3.5  4.0   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.2 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  337  337   223  xxxx xxxx xxxxx  xxxx xxxx xxxxx   226 xxxx xxxxx
Potent Cap.:  663  587   822  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1354 xxxx xxxxx
Move Cap.:    659  583   822  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1354 xxxx xxxxx
Volume/Cap:  0.03 0.00  0.05  xxxx xxxx  xxxx  xxxx xxxx  xxxx  0.01 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.0 xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.7 xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     *     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx  765 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx  0.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx
Shrd ConDel:xxxxx 10.1 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.7 xxxx xxxxx
Shared LOS:     *    B     *     *    *     *     *    *     *     A    *     *
ApproachDel:      10.1           xxxxxx           xxxxxx           xxxxxx
ApproachLOS:         B                *                *                *
```

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: B[10.4]

```
Street Name:            Driveway B                      Nardo Avenue
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:        0  0  1! 0  0    0  0  0  0  0    0  0  0  1  0    0  1  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       3    0    28     0    0     0     0  265     2    19  109     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    3    0    28     0    0     0     0  265     2    19  109     0
Added Vol:      2    0    20     0    0     0     0    7     0     5    2     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    5    0    48     0    0     0     0  272     2    24  111     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.92 0.92  0.92  0.92 0.92  0.92  0.92 0.92  0.92  0.92 0.92  0.92
PHF Volume:     5    0    52     0    0     0     0  296     2    26  121     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    5    0    52     0    0     0     0  296     2    26  121     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  6.4  6.5   6.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   4.1 xxxx xxxxx
FollowUpTim:  3.5  4.0   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.2 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  470  470   297  xxxx xxxx xxxxx  xxxx xxxx xxxxx   298 xxxx xxxxx
Potent Cap.:  556  495   747  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1275 xxxx xxxxx
Move Cap.:    547  485   747  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1275 xxxx xxxxx
Volume/Cap:  0.01 0.00  0.07  xxxx xxxx  xxxx  xxxx xxxx  xxxx  0.02 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.1 xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.9 xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     *     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx  722 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx  0.3 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.1 xxxx xxxxx
Shrd ConDel:xxxxx 10.4 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.9 xxxx xxxxx
Shared LOS:     *    B     *     *    *     *     *    *     *     A    *     *
ApproachDel:      10.4           xxxxxx           xxxxxx           xxxxxx
ApproachLOS:         B                *                *                *
```

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project (right in / right out)
AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: A[9.6]

Street Name:	Driveway A											
Approach:	North Bound				South Bound				East Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
Volume Module:																				
Base Vol:	0	0	30	0	0	0	0	202	5	0	98	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	30	0	0	0	0	202	5	0	98	0
Added Vol:	0	0	0	0	0	0	0	0	1	0	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	30	0	0	0	0	202	6	0	105	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	0	33	0	0	0	0	220	7	0	114	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	33	0	0	0	0	220	7	0	114	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	223	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	822	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	822	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	9.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	A	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	9.6			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	A			*			*			*		

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project (right in / right out)
AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: B[11.0]

Street Name:	Driveway B											
Approach:	North Bound				South Bound				East Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	14	0	28	0	0	0	0	265	2	25	103	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	0	28	0	0	0	0	265	2	25	103	0
Added Vol:	7	0	27	0	0	0	0	0	0	6	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	0	55	0	0	0	0	265	2	31	103	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	23	0	60	0	0	0	0	288	2	34	112	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	23	0	60	0	0	0	0	288	2	34	112	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	468	468	289	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	290	xxxx	xxxxx
Potent Cap.:	557	495	755	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1283	xxxx	xxxxx
Move Cap.:	545	482	755	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1283	xxxx	xxxxx
Volume/Cap:	0.04	0.00	0.08	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	682	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Shrd ConDel:	xxxxx	11.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	A	*	*
ApproachDel:	11.0			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: A[9.3]

Street Name:	Driveway A						Nardo Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	3	0	19	0	0	0	0	119	7	10	99	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	0	19	0	0	0	0	119	7	10	99	0
Added Vol:	2	0	3	0	0	0	0	1	3	7	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	22	0	0	0	0	120	10	17	100	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	5	0	24	0	0	0	0	130	11	18	109	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	5	0	24	0	0	0	0	130	11	18	109	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	282	282	136	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	141	xxxx	xxxxx
Potent Cap.:	713	630	918	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1454	xxxx	xxxxx
Move Cap.:	706	622	918	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1454	xxxx	xxxxx
Volume/Cap:	0.01	0.00	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	870	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd ConDel:	xxxxx	9.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	9.3			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	A			*			*			*		

Note: Queue reported is the number of cars per lane.

Horizon Year Plus Project
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: A[9.5]

Street Name:	Driveway B						Nardo Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	4	0	22	0	0	0	0	129	3	29	157	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	0	22	0	0	0	0	129	3	29	157	0
Added Vol:	1	0	10	0	0	0	0	3	1	22	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	32	0	0	0	0	132	4	51	164	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	5	0	35	0	0	0	0	143	4	55	178	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	5	0	35	0	0	0	0	143	4	55	178	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	435	435	146	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	148	xxxx	xxxxx
Potent Cap.:	582	518	907	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1446	xxxx	xxxxx
Move Cap.:	565	497	907	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1446	xxxx	xxxxx
Volume/Cap:	0.01	0.00	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	838	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Shrd ConDel:	xxxxx	9.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	9.5			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	A			*			*			*		

Note: Queue reported is the number of cars per lane.

- Horizon Year Plus Project (right in / right out)
PM

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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* Intersection #20 Driveway A

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* Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A[9.0]

Street Name: Driveway A Nardo Avenue

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
Volume Module:																				
Base Vol:	0	0	19	0	0	0	0	119	7	0	102	0								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	0	0	19	0	0	0	0	119	7	0	102	0								
Added Vol:	0	0	0	0	0	0	0	2	6	0	3	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	0	0	19	0	0	0	0	121	13	0	105	0								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92								
PHF Volume:	0	0	21	0	0	0	0	132	14	0	114	0								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	0	0	21	0	0	0	0	132	14	0	114	0								
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	139	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Potent Cap.:	xxxx	xxxx	915	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Move Cap.:	xxxx	xxxx	915	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	9.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	*	*	A	*	*	*	*	*	*	*	*	*								
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*								
ApproachDel:	9.0			xxxxxx			xxxxxx			xxxxxx										
ApproachLOS:	A			*			*			*										

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Note: Queue reported is the number of cars per lane.

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- Horizon Year Plus Project (right in/ right out)
PM

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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* Intersection #21 Driveway B

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* Average Delay (sec/veh): 2.5 Worst Case Level Of Service: A[9.8]

Street Name: Driveway B Nardo Avenue

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	7	0	22	0	0	0	0	129	3	39	147	0								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	7	0	22	0	0	0	0	129	3	39	147	0								
Added Vol:	3	0	13	0	0	0	0	0	2	30	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	10	0	35	0	0	0	0	129	5	69	147	0								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92								
PHF Volume:	11	0	38	0	0	0	0	140	5	75	160	0								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	11	0	38	0	0	0	0	140	5	75	160	0								
Critical Gap Module:																				
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	453	453	143	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	146	xxxx	xxxxx								
Potent Cap.:	569	506	910	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1449	xxxx	xxxxx								
Move Cap.:	545	478	910	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1449	xxxx	xxxxx								
Volume/Cap:	0.02	0.00	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*								
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	792	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx								
Shrd ConDel:	xxxxx	9.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx								
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*								
ApproachDel:	9.8			xxxxxx			xxxxxx			xxxxxx										
ApproachLOS:	A			*			*			*										

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Note: Queue reported is the number of cars per lane.

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NEAR TERM
2020 ANALYSIS

Near Term
AM

Scenario Report

Scenario:	Near Term AM
Command:	Near Term AM
Volume:	Near Term AM
Geometry:	Near Term AM
Impact Fee:	Default Impact Fee
Trip Generation:	No Project
Trip Distribution:	Project
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Near Term
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 S. Nardo Ave & Lomas Santa Fe

Cycle (sec):	69	Critical Vol./Cap.(X):	0.489
Loss Time (sec):	12	Average Delay (sec/veh):	15.0
Optimal Cycle:	45	Level Of Service:	B

Street Name:	S. Nardo Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	8	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0	0 1	0	1	0	1	0 1	0	1	0	1	0	1	0
Volume Module:												
Base Vol:	17	8	74	178	5	4	0	578	14	47	638	115
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	18	8	77	184	5	4	0	598	14	49	660	119
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	8	77	184	5	4	0	598	14	49	660	119
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	21	10	92	222	6	5	0	721	17	59	796	143
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	10	92	222	6	5	0	721	17	59	796	143
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	21	10	92	222	6	5	0	721	17	59	796	143
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.70	0.93	0.93	1.00	0.95	0.95	0.95	0.93	0.93
Lanes:	0.17	0.08	0.75	1.00	0.56	0.44	1.00	1.95	0.05	1.00	1.69	0.31
Final Sat.:	282	133	1230	1338	985	788	1900	3511	85	1805	2988	539
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.08	0.17	0.01	0.01	0.00	0.21	0.21	0.03	0.27	0.27
Crit Moves:				****				****		****		
Green Time:	23.2	23.2	23.2	23.2	23.2	23.2	0.0	28.8	28.8	5.0	33.8	33.8
Volume/Cap:	0.22	0.22	0.22	0.49	0.02	0.02	0.00	0.49	0.49	0.45	0.54	0.54
Delay/Veh:	16.6	16.6	16.6	19.0	15.3	15.3	0.0	15.0	15.0	33.1	12.6	12.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.6	16.6	16.6	19.0	15.3	15.3	0.0	15.0	15.0	33.1	12.6	12.6
LOS by Move:	B	B	B	B	B	B	A	B	B	C	B	B
HCM2kAvgQ:	2	2	2	4	0	0	0	6	6	1	7	7

Note: Queue reported is the number of cars per lane.

Near Term
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Stevens Av & Lomas Santa Fe

Cycle (sec): 112 Critical Vol./Cap.(X): 0.624
Loss Time (sec): 14 Average Delay (sec/veh): 24.1
Optimal Cycle: 56 Level Of Service: C

Street Name:	Stevens Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	8	1	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0 1	0	0	1! 0 0	1	0	1 1 0	2	0	2 0 0
Volume Module:												
Base Vol:	106	0	258	0	0	0	0	696	156	424	748	0
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	110	0	267	0	0	0	0	720	161	439	774	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	110	0	267	0	0	0	0	720	161	439	774	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	128	0	311	0	0	0	0	838	188	510	900	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	0	311	0	0	0	0	838	188	510	900	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	0	311	0	0	0	0	838	188	510	900	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	1.00	1.00	1.00	1.00	0.92	0.92	0.92	0.95	1.00
Lanes:	1.29	0.00	1.71	0.00	1.00	0.00	1.00	1.63	0.37	2.00	2.00	0.00
Final Sat.:	2163	0	2862	0	1900	0	1900	2869	643	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.11	0.00	0.00	0.00	0.00	0.29	0.29	0.15	0.25	0.00
Crit Moves:			****					****		****		
Green Time:	19.5	0.0	19.5	0.0	0.0	0.0	0.0	52.4	52.4	26.1	78.5	0.0
Volume/Cap:	0.34	0.00	0.62	0.00	0.00	0.00	0.00	0.62	0.62	0.62	0.36	0.00
Delay/Veh:	40.8	0.0	44.6	0.0	0.0	0.0	0.0	23.2	23.2	40.0	6.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.8	0.0	44.6	0.0	0.0	0.0	0.0	23.2	23.2	40.0	6.7	0.0
LOS by Move:	D	A	D	A	A	A	A	C	C	D	A	A
HCM2kAvgQ:	3	0	6	0	0	0	0	14	14	9	6	0

Note: Queue reported is the number of cars per lane.

Near Term
AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 S. Nardo Ave & E. Solana Circle/Nardito Ln

Average Delay (sec/veh): 9.7 Worst Case Level Of Service: B[11.2]

Street Name:	S. Nardo Ave						E. Solana Circle/Nardito Ln					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0 0	0	1	0 0 0	0	0	0 1 0	0	1	0 0 0
Volume Module:												
Base Vol:	16	1	26	2	1	0	0	134	9	13	83	0
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	17	1	27	2	1	0	0	139	9	13	86	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	1	27	2	1	0	0	139	9	13	86	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
PHF Volume:	24	2	39	3	2	0	0	201	14	20	125	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	24	2	39	3	2	0	0	201	14	20	125	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	6.5	6.2	7.1	6.5	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	4.0	3.3	3.5	4.0	xxxxx
Capacity Module:												
Cnflict Vol:	2	xxxx	xxxxx	41	xxxx	xxxxx	xxxx	96	2	184	77	xxxxx
Potent Cap.:	1634	xxxx	xxxxx	1582	xxxx	xxxxx	xxxx	798	1089	782	818	xxxxx
Move Cap.:	1634	xxxx	xxxxx	1582	xxxx	xxxxx	xxxx	784	1089	612	804	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	0.26	0.01	0.03	0.15	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.2	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	799	771	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	1.1	0.7	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	11.2	10.7	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	B	B	*	*
ApproachDel:	xxxxxx			xxxxxx			11.2			10.7		
ApproachLOS:	*			*			B			B		

Note: Queue reported is the number of cars per lane.

Near Term
AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Fresca St & S. Nardo Ave

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[11.0]

Street Name:	Fresca St								Nardo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0	0	0		22	0		2		2	188		0		0	82		12
Growth Adj:	1.04	1.04	1.04		1.04	1.04		1.04		1.04	1.04		1.04		1.04	1.04		1.04
Initial Bse:	0	0	0		23	0		2		2	195		0		0	85		12
Added Vol:	0	0	0		0	0		0		0	0		0		0	0		0
PasserByVol:	0	0	0		0	0		0		0	0		0		0	0		0
Initial Fut:	0	0	0		23	0		2		2	195		0		0	85		12
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00
PHF Adj:	0.73	0.73	0.73		0.73	0.73		0.73		0.73	0.73		0.73		0.73	0.73		0.73
PHF Volume:	0	0	0		31	0		3		3	267		0		0	116		17
Reduct Vol:	0	0	0		0	0		0		0	0		0		0	0		0
FinalVolume:	0	0	0		31	0		3		3	267		0		0	116		17
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	6.5		6.2		4.1	xxxx	xxxxx	xxxxx		xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	4.0		3.3		2.2	xxxx	xxxxx	xxxxx		xxxx	xxxxx				
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx		397	397		125		133	xxxx	xxxxx		xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx		612	544		931		1464	xxxx	xxxxx		xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx		611	542		931		1464	xxxx	xxxxx		xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx		0.05	0.00		0.00		0.00	xxxx	xxxx		xxxx	xxxx	xxxx				
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx		xxxxx		0.0	xxxx	xxxxx		xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx		xxxxx		7.5	xxxx	xxxxx		xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*		*	*		*		A	*	*		*	*	*				
Movement:	LT - LTR - RT					LT - LTR - RT				LT - LTR - RT				LT - LTR - RT						
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	629		xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	0.2		xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	11.0		xxxxx		7.5	xxxx	xxxxx		xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*		*	B		*		A	*	*		*	*	*				
ApproachDel:	xxxxxx					11.0				xxxxxx				xxxxxx						
ApproachLOS:	*					B				*				*						

Note: Queue reported is the number of cars per lane.

Near Term
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Stevens Ave & S. Nardo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.294
Loss Time (sec): 12 Average Delay (sec/veh): 18.4
Optimal Cycle: 31 Level Of Service: B

Street Name:	Stevens Ave								S. Nardo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0		0	0		0		0	0		0		0	0		0		0
Y+R:	4.0	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0		4.0	4.0		4.0		4.0
Lanes:	1	0	2	0	0	1	0	1	1	0	1	0	0	0	1	1	0	0	0	0
Volume Module:																				
Base Vol:	37	395		0		0	337		68		106		0		152		1		0	
Growth Adj:	1.04	1.04	1.04		1.04	1.04	1.04		1.04		1.04	1.04	1.04		1.04	1.04	1.04		1.04	
Initial Bse:	38	409		0		0	349		70		110		0		157		1		0	
Added Vol:	0	0		0		0	0		0		0		0		0		0		0	
PasserByVol:	0	0		0		0	0		0		0		0		0		0		0	
Initial Fut:	38	409		0		0	349		70		110		0		157		1		0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	
PHF Adj:	0.92	0.92	0.92		0.92	0.92	0.92		0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92	
PHF Volume:	42	444		0		0	379		76		119		0		171		1		0	
Reduct Vol:	0	0		0		0	0		0		0		0		0		0		0	
Reduced Vol:	42	444		0		0	379		76		119		0		171		1		0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	
FinalVolume:	42	444		0		0	379		77		119		0		171		1		0	
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900		1900	1900	1900		1900	1900	1900		1900	
Adjustment:	0.95	0.95	1.00		1.00	0.93	0.93		0.95		1.00	0.85	0.95		1.00	1.00				
Lanes:	1.00	2.00	0.00		1.00	1.66	0.34		1.00		0.00	1.00	1.00		0.00	0.00				
Final Sat.:	1805	3610		0	1900	2929		591		1805		0	1615		1805		0		0	
Capacity Analysis Module:																				
Vol/Sat:	0.02	0.12	0.00		0.00	0.13	0.13		0.07		0.00	0.11	0.00		0.00	0.00				
Crit Moves:	****					****						****	****							
Green Time:	7.8	51.8	0.0		0.0	44.0	44.0		36.2		0.0	36.0	0.2		0.0	0.0				
Volume/Cap:	0.29	0.24	0.00		0.00	0.29	0.29		0.18		0.00	0.29	0.29		0.00	0.00				
Delay/Veh:	44.6	13.3	0.0		0.0	18.1	18.1		21.9		0.0	23.2	88.4		0.0	0.0				
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00				
AdjDel/Veh:	44.6	13.3	0.0		0.0	18.1	18.1		21.9		0.0	23.2	88.4		0.0	0.0				
LOS by Move:	D	B	A		A	B	B		C		A	C	F		A	A				
HCM2kAvgQ:	1	4	0		0	5	5		2		0	4	0		0	0				

Note: Queue reported is the number of cars per lane.

Near Term
AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 E. Solana Circle & Via De La Valle

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: D[28.5]

Street Name:	E. Solana Circle									Via De La Valle							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	0	1	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0	0	0		38	0		23		15	744		0		0	431		27
Growth Adj:	1.04	1.04	1.04		1.04	1.04		1.04		1.04	1.04		1.04		1.04	1.04		1.04
Initial Bse:	0	0	0		39	0		24		16	770		0		0	446		28
Added Vol:	0	0	0		0	0		0		0	0		0		0	0		0
PasserByVol:	0	0	0		0	0		0		0	0		0		0	0		0
Initial Fut:	0	0	0		39	0		24		16	770		0		0	446		28
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00
PHF Adj:	0.92	0.92	0.92		0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92
PHF Volume:	0	0	0		43	0		26		17	837		0		0	485		30
Reduct Vol:	0	0	0		0	0		0		0	0		0		0	0		0
FinalVolume:	0	0	0		43	0		26		17	837		0		0	485		30
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2		6.4	6.5		6.2		4.1	xxxx	xxxxx	xxxxx		xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3		3.5	4.0		3.3		2.2	xxxx	xxxxx	xxxxx		xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	1384	1386	837		1371	1371		500		515	xxxx	xxxxx		xxxx	xxxx	xxxxx		
Potent Cap.:	122	144	370		163	148		575		1061	xxxx	xxxxx		xxxx	xxxx	xxxxx		
Move Cap.:	115	142	370		161	145		575		1061	xxxx	xxxxx		xxxx	xxxx	xxxxx		
Volume/Cap:	0.00	0.00	0.00		0.27	0.00		0.05		0.02	xxxx		xxxx		xxxx	xxxx		xxxx
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx		xxxxx		0.0	xxxx	xxxxx		xxxx	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx		xxxxx		8.4	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*		*	*		*		A	*		*		*	*		*
Movement:	LT -	LTR -	RT		LT -	LTR -		RT		LT -	LTR -		RT		LT -	LTR -		RT
Shared Cap.:	xxxx	0	xxxxx		xxxx	221		xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	1.3		xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx		xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	28.5		xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx		xxxxx
Shared LOS:	*	*	*		*	D		*		*	*		*		*	*		*
ApproachDel:	xxxxxx					28.5				xxxxxx					xxxxxx			
ApproachLOS:	*					D					*					*		

Note: Queue reported is the number of cars per lane.

Near Term
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Stevens Ave/Valley Ave & Via De La Valle

Cycle (sec): 98 Critical Vol./Cap.(X): 0.582
Loss Time (sec): 12 Average Delay (sec/veh): 29.2
Optimal Cycle: 47 Level Of Service: C

Street Name:	Stevens Ave/Valley Ave									Via De La Valle							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	5	0		5	0		0		5	10		0		5	10		0
Y+R:	4.0	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0		4.0	4.0		4.0
Lanes:	1	0	1	0	2	2	0	1	0	1	1	0	1	1	0	2	0	1	1	0
Volume Module:																				
Base Vol:	18	42	212		432	72		51		43	674		41		331	584		312
Growth Adj:	1.04	1.04	1.04		1.04	1.04		1.04		1.04	1.04		1.04		1.04	1.04		1.04
Initial Bse:	19	43	219		447	75		53		45	698		42		343	604		323
Added Vol:	0	0	0		0	0		0		0	0		0		0	0		0
PasserByVol:	0	0	0		0	0		0		0	0		0		0	0		0
Initial Fut:	19	43	219		447	75		53		45	698		42		343	604		323
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00
PHF Adj:	0.98	0.98	0.98		0.98	0.98		0.98		0.98	0.98		0.98		0.98	0.98		0.98
PHF Volume:	19	44	224		456	76		54		45	712		43		350	617		330
Reduct Vol:	0	0	0		0	0		0		0	0		0		0	0		0
Reduced Vol:	19	44	224		456	76		54		45	712		43		350	617		330
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00
FinalVolume:	19	44	224		456	76		54		45	712		43		350	617		330
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900		1900	1900		1900		1900	1900		1900		1900	1900		1900
Adjustment:	0.95	1.00	0.75		0.92	1.00		0.85		0.95	0.94		0.94		0.92	0.90		0.90
Lanes:	1.00	1.00	2.00		2.00	1.00		1.00		1.00	1.89		0.11		2.00	1.30		0.70
Final Sat.:	1805	1900	2842		3502	1900		1615		1805	3372		205		3502	2231		1192
Capacity Analysis Module:																				
Vol/Sat:	0.01	0.02	0.08		0.13	0.04		0.03		0.03	0.21		0.21		0.10	0.28		0.28
Crit Moves:			****		****					****						****		
Green Time:	13.1	13.1	13.1		21.7	21.7		21.7		5.0	34.7		34.7		16.4	46.1		46.1
Volume/Cap:	0.08	0.17	0.59		0.59	0.18		0.15		0.49	0.60		0.60		0.60	0.59		0.59
Delay/Veh:	37.3	37.9	42.3		35.3	31.1		30.9		49.4	26.7		26.7		39.4	19.5		19.5
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00
AdjDel/Veh:	37.3	37.9	42.3		35.3	31.1		30.9		49.4	26.7		26.7		39.4	19.5		19.5
LOS by Move:	D	D	D		D	C		C		D	C		C		D	B		B
HCM2kAvgQ:	1	1	5		6	2		1		2	10		10		6	11		11

Note: Queue reported is the number of cars per lane.

Near Term
AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: A[9.9]

Street Name:	Driveway A									Nardo Avenue							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	11		0		30	0		0		0	0		190		5	6		86		0
Growth Adj:	1.04	1.04		1.04	1.04	1.04	1.04		1.04	1.04	1.04	1.04		1.04	1.04	1.04	1.04		1.04	1.04
Initial Bse:	11		0		31	0		0		0	0		197		5	6		89		0
Added Vol:	0		0		0	0		0		0	0		0		0	0		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	11		0		31	0		0		0	0		197		5	6		89		0
User Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.92	0.92		0.92	0.92	0.92	0.92		0.92	0.92	0.92	0.92		0.92	0.92	0.92	0.92		0.92	0.92
PHF Volume:	12		0		34	0		0		0	0		214		6	7		97		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	12		0		34	0		0		0	0		214		6	7		97		0
Critical Gap Module:																				
Critical Gp:	6.4	6.5		6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx						
FollowUpTim:	3.5	4.0		3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx						
Capacity Module:																				
Cnflict Vol:	327	327		217	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		219	xxxx	xxxxx						
Potent Cap.:	672	595		828	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1362	xxxx	xxxxx						
Move Cap.:	669	592		828	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1362	xxxx	xxxxx						
Volume/Cap:	0.02	0.00		0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.00	xxxx	xxxx						
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx						
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.7	xxxx	xxxxx						
LOS by Move:	*	*	*		*	*	*	*	*	*		A	*	*						
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	779	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	0.2	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx						
Shrd ConDel:	xxxxx	9.9	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.7	xxxx	xxxxx						
Shared LOS:	*	A	*		*	*	*	*	*	*		A	*	*						
ApproachDel:	9.9				xxxxxx			xxxxxx				xxxxxx								
ApproachLOS:	A					*				*					*					

Note: Queue reported is the number of cars per lane.

Near Term
AM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: B[10.1]

Street Name:	Driveway B									Nardo Avenue							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	3		0		28	0		0		0	0		247		2	19		103		0
Growth Adj:	1.04	1.04		1.04	1.04	1.04	1.04		1.04	1.04	1.04	1.04		1.04	1.04	1.04	1.04		1.04	1.04
Initial Bse:	3		0		29	0		0		0	0		256		2	20		107		0
Added Vol:	0		0		0	0		0		0	0		0		0	0		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	3		0		29	0		0		0	0		256		2	20		107		0
User Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.92	0.92		0.92	0.92	0.92	0.92		0.92	0.92	0.92	0.92		0.92	0.92	0.92	0.92		0.92	0.92
PHF Volume:	3		0		31	0		0		0	0		278		2	21		116		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	3		0		31	0		0		0	0		278		2	21		116		0
Critical Gap Module:																				
Critical Gp:	6.4	6.5		6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx						
FollowUpTim:	3.5	4.0		3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx						
Capacity Module:																				
Cnflict Vol:	438	438		279	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		280	xxxx	xxxxx						
Potent Cap.:	580	516		765	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1294	xxxx	xxxxx						
Move Cap.:	573	507		765	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1294	xxxx	xxxxx						
Volume/Cap:	0.01	0.00		0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.02	xxxx	xxxx						
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx						
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.8	xxxx	xxxxx						
LOS by Move:	*	*	*		*	*	*	*	*	*		A	*	*						
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	741	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	0.1	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.1	xxxx	xxxxx						
Shrd ConDel:	xxxxx	10.1	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.8	xxxx	xxxxx						
Shared LOS:	*	B	*		*	*	*	*	*	*		A	*	*						
ApproachDel:	10.1				xxxxxx			xxxxxx				xxxxxx								
ApproachLOS:	B					*				*					*					

Note: Queue reported is the number of cars per lane.

Near Term
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Stevens Avenue-Valley Avenue / Valley Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.269
Loss Time (sec):	8	Average Delay (sec/veh):	19.2
Optimal Cycle:	23	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0	0	1	1 0	1	0	2	0 0	0	0	0	0 0	1	0	0	0 1
Volume Module:																
Base Vol:	0	308	40		70	390	0		0	0	0		150	0	110	
Growth Adj:	1.04	1.04	1.04		1.04	1.04	1.04		1.04	1.04	1.04		1.04	1.04	1.04	
Initial Bse:	0	319	41		72	404	0		0	0	0		155	0	114	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	319	41		72	404	0		0	0	0		155	0	114	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	319	41		72	404	0		0	0	0		155	0	114	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	319	41		72	404	0		0	0	0		155	0	114	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	319	41		72	404	0		0	0	0		155	0	114	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.93	0.93		0.95	0.95	1.00		1.00	1.00	1.00		0.77	1.00	0.85	
Lanes:	0.00	1.77	0.23		1.00	2.00	0.00		0.00	0.00	0.00		1.00	0.00	1.00	
Final Sat.:	0	3141	408		1805	3610	0		0	0	0		1467	0	1615	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.10	0.10		0.04	0.11	0.00		0.00	0.00	0.00		0.11	0.00	0.07	
Crit Moves:		****			****								****			
Green Time:	0.0	37.7	37.7		14.9	52.7	0.0		0.0	0.0	0.0		39.3	0.0	39.3	
Volume/Cap:	0.00	0.27	0.27		0.27	0.21	0.00		0.00	0.00	0.00		0.27	0.00	0.18	
Delay/Veh:	0.0	21.7	21.7		38.2	12.7	0.0		0.0	0.0	0.0		20.8	0.0	19.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	21.7	21.7		38.2	12.7	0.0		0.0	0.0	0.0		20.8	0.0	19.9	
LOS by Move:	A	C	C		D	B	A		A	A	A		C	A	B	
HCM2kAvgQ:	0	4	4		2	3	0		0	0	0		3	0	2	

Note: Queue reported is the number of cars per lane.

Near Term
PM

Scenario Report

Scenario:	Near Term PM
Command:	Near Term PM
Volume:	Near Term PM
Geometry:	Near Term PM
Impact Fee:	Default Impact Fee
Trip Generation:	No Project
Trip Distribution:	Project
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Near Term
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 S. Nardo Ave & Lomas Santa Fe

Cycle (sec):	69	Critical Vol./Cap.(X):	0.345
Loss Time (sec):	12	Average Delay (sec/veh):	11.6
Optimal Cycle:	45	Level Of Service:	B

Street Name:	S. Nardo Ave									Lomas Santa Fe							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Permitted					Permitted					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	8	0			0	8	0			5	20	0			5	20	0		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0		
Lanes:	0	0	1!	0	0	1	0	0	1	0	1	0	1	1	0	1	0	1	1	0
Volume Module:																				
Base Vol:	18	12	37			123	6	0			4	671	12			44	638	127		
Growth Adj:	1.04	1.04	1.04			1.04	1.04	1.04			1.04	1.04	1.04			1.04	1.04	1.04		
Initial Bse:	19	12	38			127	6	0			4	694	12			46	660	131		
Added Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	19	12	38			127	6	0			4	694	12			46	660	131		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.95	0.95	0.95			0.95	0.95	0.95			0.95	0.95	0.95			0.95	0.95	0.95		
PHF Volume:	20	13	40			134	7	0			4	731	13			48	695	138		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	20	13	40			134	7	0			4	731	13			48	695	138		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	20	13	40			134	7	0			4	731	13			48	695	138		
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900		
Adjustment:	0.85	0.85	0.85			0.76	1.00	1.00			0.95	0.95	0.95			0.95	0.93	0.93		
Lanes:	0.27	0.18	0.55			1.00	1.00	0.00			1.00	1.96	0.04			1.00	1.67	0.33		
Final Sat.:	432	288	888			1452	1900	0			1805	3536	63			1805	2935	584		
Capacity Analysis Module:																				
Vol/Sat:	0.05	0.05	0.05			0.09	0.00	0.00			0.00	0.21	0.21			0.03	0.24	0.24		
Crit Moves:		****									****						****			
Green Time:	8.4	8.4	8.4			8.4	8.4	0.0			5.0	38.9	38.9			9.7	43.6	43.6		
Volume/Cap:	0.37	0.37	0.37			0.76	0.03	0.00			0.03	0.37	0.37			0.19	0.37	0.37		
Delay/Veh:	29.1	29.1	29.1			46.9	26.8	0.0			29.9	8.4	8.4			26.5	6.2	6.2		
User DelAdj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
AdjDel/Veh:	29.1	29.1	29.1			46.9	26.8	0.0			29.9	8.4	8.4			26.5	6.2	6.2		
LOS by Move:	C	C	C			D	C	A			C	A	A			C	A	A		
HCM2kAvgQ:	2	2	2			5	0	0			0	5	5			1	4	4		

Note: Queue reported is the number of cars per lane.

Near Term
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Stevens Av & Lomas Santa Fe

Cycle (sec): 112 Critical Vol./Cap.(X): 0.556
Loss Time (sec): 14 Average Delay (sec/veh): 24.3
Optimal Cycle: 50 Level Of Service: C

Street Name:	Stevens Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	8	1	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1! 0	1	0 0	1! 0	0	1 0	1 1	0	2 0	2 0	0
Volume Module:												
Base Vol:	257	0	366	0	0	0	0	763	116	218	656	0
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	266	0	379	0	0	0	0	790	120	226	679	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	266	0	379	0	0	0	0	790	120	226	679	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	280	0	399	0	0	0	0	831	126	238	715	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	0	399	0	0	0	0	831	126	238	715	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	280	0	399	0	0	0	0	831	126	238	715	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	0.93	0.93	0.92	0.95	1.00
Lanes:	1.41	0.00	1.59	0.00	1.00	0.00	1.00	1.74	0.26	2.00	2.00	0.00
Final Sat.:	2399	0	2696	0	1900	0	1900	3071	467	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.12	0.00	0.15	0.00	0.00	0.00	0.00	0.27	0.27	0.07	0.20	0.00
Crit Moves:			****					****		****		
Green Time:	29.8	0.0	29.8	0.0	0.0	0.0	0.0	54.5	54.5	13.7	68.2	0.0
Volume/Cap:	0.44	0.00	0.56	0.00	0.00	0.00	0.00	0.56	0.56	0.56	0.33	0.00
Delay/Veh:	34.4	0.0	36.0	0.0	0.0	0.0	0.0	20.6	20.6	47.9	10.8	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.4	0.0	36.0	0.0	0.0	0.0	0.0	20.6	20.6	47.9	10.8	0.0
LOS by Move:	C	A	D	A	A	A	A	C	C	D	B	A
HCM2kAvgQ:	5	0	7	0	0	0	0	12	12	5	6	0

Note: Queue reported is the number of cars per lane.

Near Term
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 S. Nardo Ave & E. Solana Circle/Nardito Ln

Average Delay (sec/veh): 9.1 Worst Case Level Of Service: B[10.6]

Street Name:	S. Nardo Ave						E. Solana Circle/Nardito Ln					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 1	0	0
Volume Module:												
Base Vol:	31	1	14	1	0	3	1	67	25	27	72	0
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	32	1	14	1	0	3	1	69	26	28	75	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	1	14	1	0	3	1	69	26	28	75	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	38	1	17	1	0	4	1	83	31	33	89	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	38	1	17	1	0	4	1	83	31	33	89	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	xxxxx
Capacity Module:												
Cnflict Vol:	4	xxxx	xxxxx	18	xxxx	xxxxx	135	99	2	147	92	xxxxx
Potent Cap.:	1631	xxxx	xxxxx	1611	xxxx	xxxxx	841	795	1088	826	801	xxxxx
Move Cap.:	1631	xxxx	xxxxx	1611	xxxx	xxxxx	754	775	1088	723	782	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	0.00	xxxx	xxxx	0.00	0.11	0.03	0.05	0.11	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.3	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	840	xxxxx	765	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	0.6	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.0	xxxxx	10.6	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	A	*	B	*	*
ApproachDel:	xxxxxx			xxxxxx			10.0			10.6		
ApproachLOS:	*			*			A			B		

Note: Queue reported is the number of cars per lane.

Near Term
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Fresca St & S. Nardo Ave

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: A[9.8]

Street Name:	Fresca St								Nardo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0	0	0	13	0	2	5	104	0	0	95	18								
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04								
Initial Bse:	0	0	0	13	0	2	5	108	0	0	98	19								
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	0	0	0	13	0	2	5	108	0	0	98	19								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90								
PHF Volume:	0	0	0	15	0	2	6	120	0	0	109	21								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	0	0	0	15	0	2	6	120	0	0	109	21								
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx	251	251	120	130	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Potent Cap.:	xxxx	xxxx	xxxxx	742	656	937	1468	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Move Cap.:	xxxx	xxxx	xxxxx	740	653	937	1468	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	xxxx	xxxx	xxxx	0.02	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*								
Movement:	LT - LTR - RT						LT - LTR - RT						LT - LTR - RT						LT - LTR - RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	761	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	9.8	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	A	*	A	*	*	*	*	*								
ApproachDel:	xxxxxx				9.8		xxxxxx			xxxxxx										
ApproachLOS:	*				A			*			*									

Note: Queue reported is the number of cars per lane.

Near Term
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Stevens Ave & S. Nardo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.295
Loss Time (sec): 12 Average Delay (sec/veh): 15.0
Optimal Cycle: 31 Level Of Service: B

Street Name:	Stevens Ave								S. Nardo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0								
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0								
Lanes:	1	0	2	0	0	1	0	1	1	0	1	0	0	0	1	0	0	0	0	0
Volume Module:																				
Base Vol:	89	336	0	2	403	67	41	0	66	0	0	0								
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04								
Initial Bse:	92	348	0	2	417	69	42	0	68	0	0	0								
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	92	348	0	2	417	69	42	0	68	0	0	0								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89								
PHF Volume:	104	391	0	2	469	78	48	0	77	0	0	0								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	104	391	0	2	469	78	48	0	77	0	0	0								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	104	391	0	2	469	78	48	0	77	0	0	0								
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900								
Adjustment:	0.95	0.95	1.00	0.95	0.93	0.93	0.95	1.00	0.85	1.00	1.00	1.00								
Lanes:	1.00	2.00	0.00	1.00	1.71	0.29	1.00	0.00	1.00	0.00	0.00	0.00								
Final Sat.:	1805	3610	0	1805	3030	504	1805	0	1615	0	0	0								
Capacity Analysis Module:																				
Vol/Sat:	0.06	0.11	0.00	0.00	0.15	0.15	0.03	0.00	0.05	0.00	0.00	0.00								
Crit Moves:	****				****				****											
Green Time:	19.4	71.0	0.0	0.8	52.4	52.4	16.1	0.0	16.1	0.0	0.0	0.0								
Volume/Cap:	0.29	0.15	0.00	0.15	0.29	0.29	0.16	0.00	0.29	0.00	0.00	0.00								
Delay/Veh:	34.9	4.7	0.0	53.8	13.5	13.5	36.4	0.0	37.6	0.0	0.0	0.0								
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
AdjDel/Veh:	34.9	4.7	0.0	53.8	13.5	13.5	36.4	0.0	37.6	0.0	0.0	0.0								
LOS by Move:	C	A	A	D	B	B	D	A	D	A	A	A								
HCM2kAvgQ:	3	2	0	0	5	5	1	0	2	0	0	0								

Note: Queue reported is the number of cars per lane.

Near Term
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 E. Solana Circle & Via De La Valle

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[22.2]

Street Name:	E. Solana Circle						Via De La Valle					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	14	0	18	16	553	0	0	640	54
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	14	0	19	17	572	0	0	662	56
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	14	0	19	17	572	0	0	662	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	0	0	15	0	20	18	609	0	0	705	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	15	0	20	18	609	0	0	705	59
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1388	1408	609	1379	1379	734	764	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	121	140	499	161	146	423	858	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	114	137	499	159	143	423	858	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.00	0.10	0.00	0.05	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	245	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	22.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			22.2			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Note: Queue reported is the number of cars per lane.

Near Term
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Stevens Ave/Valley Ave & Via De La Valle

Cycle (sec): 98 Critical Vol./Cap.(X): 0.757
Loss Time (sec): 12 Average Delay (sec/veh): 33.7
Optimal Cycle: 68 Level Of Service: C

Street Name:	Stevens Ave/Valley Ave						Via De La Valle					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	5	0	5	0	0	5	10	0	5	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	69	149	465	408	100	70	47	530	23	254	648	346
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	71	154	481	422	103	72	49	549	24	263	671	358
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	154	481	422	103	72	49	549	24	263	671	358
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	77	166	518	454	111	78	52	590	26	283	721	385
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	166	518	454	111	78	52	590	26	283	721	385
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	166	518	454	111	78	52	590	26	283	721	385
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.75	0.92	1.00	0.85	0.95	0.94	0.94	0.92	0.90	0.90
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.92	0.08	2.00	1.30	0.70
Final Sat.:	1805	1900	2842	3502	1900	1615	1805	3439	149	3502	2231	1191
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.18	0.13	0.06	0.05	0.03	0.17	0.17	0.08	0.32	0.32
Crit Moves:			****	****			****				****	
Green Time:	23.2	23.2	23.2	16.5	16.5	16.5	5.0	31.4	31.4	14.8	41.2	41.2
Volume/Cap:	0.18	0.37	0.77	0.77	0.35	0.29	0.57	0.53	0.53	0.53	0.77	0.77
Delay/Veh:	30.0	31.8	40.2	45.0	36.6	36.2	53.6	27.8	27.8	39.5	26.9	26.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.0	31.8	40.2	45.0	36.6	36.2	53.6	27.8	27.8	39.5	26.9	26.9
LOS by Move:	C	C	D	D	D	D	D	C	C	D	C	C
HCM2kAvgQ:	2	4	10	7	3	2	2	8	8	5	16	16

Note: Queue reported is the number of cars per lane.

Near Term
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: A[9.1]

Street Name:	Driveway A									Nardo Avenue							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	3	0	19	0	0	0	0	111	7	10	98	0								
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04								
Initial Bse:	3	0	20	0	0	0	0	115	7	10	101	0								
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	3	0	20	0	0	0	0	115	7	10	101	0								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92								
PHF Volume:	3	0	21	0	0	0	0	125	8	11	110	0								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	3	0	21	0	0	0	0	125	8	11	110	0								
Critical Gap Module:																				
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	262	262	129	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	133	xxxx	xxxxx								
Potent Cap.:	732	647	926	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1465	xxxx	xxxxx								
Move Cap.:	727	642	926	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1465	xxxx	xxxxx								
Volume/Cap:	0.00	0.00	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*								
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	893	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx								
Shrd ConDel:	xxxxx	9.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx								
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*								
ApproachDel:	9.1			xxxxxx			xxxxxx			xxxxxx										
ApproachLOS:	A			*			*			*										

Note: Queue reported is the number of cars per lane.

Near Term
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: A[9.3]

Street Name:	Driveway B									Nardo Avenue							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	4	0	22	0	0	0	0	118	3	29	148	0								
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04								
Initial Bse:	4	0	23	0	0	0	0	122	3	30	153	0								
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	4	0	23	0	0	0	0	122	3	30	153	0								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92								
PHF Volume:	4	0	25	0	0	0	0	133	3	33	166	0								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	4	0	25	0	0	0	0	133	3	33	166	0								
Critical Gap Module:																				
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	366	366	134	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	136	xxxx	xxxxx								
Potent Cap.:	638	566	920	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1460	xxxx	xxxxx								
Move Cap.:	626	553	920	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1460	xxxx	xxxxx								
Volume/Cap:	0.01	0.00	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*								
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	858	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx								
Shrd ConDel:	xxxxx	9.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx								
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*								
ApproachDel:	9.3			xxxxxx			xxxxxx			xxxxxx										
ApproachLOS:	A			*			*			*										

Note: Queue reported is the number of cars per lane.

Near Term
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Stevens Avenue-Valley Avenue / Valley Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.255
Loss Time (sec):	8	Average Delay (sec/veh):	13.0
Optimal Cycle:	22	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0	0	1	1 0	1	0	2	0 0	0	0	0	0 0	1	0	0	0 1
Volume Module:																
Base Vol:	0	406	90		70	330	0		0	0	0		70	0	40	
Growth Adj:	1.04	1.04	1.04		1.04	1.04	1.04		1.04	1.04	1.04		1.04	1.04	1.04	
Initial Bse:	0	420	93		72	342	0		0	0	0		72	0	41	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	420	93		72	342	0		0	0	0		72	0	41	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	420	93		72	342	0		0	0	0		72	0	41	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	420	93		72	342	0		0	0	0		72	0	41	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	420	93		72	342	0		0	0	0		72	0	41	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.92	0.92		0.95	0.95	1.00		1.00	1.00	1.00		0.79	1.00	0.85	
Lanes:	0.00	1.64	0.36		1.00	2.00	0.00		0.00	0.00	0.00		1.00	0.00	1.00	
Final Sat.:	0	2875	637		1805	3610	0		0	0	0		1495	0	1615	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.15	0.15		0.04	0.09	0.00		0.00	0.00	0.00		0.05	0.00	0.03	
Crit Moves:		****			****								****			
Green Time:	0.0	57.3	57.3		15.7	73.0	0.0		0.0	0.0	0.0		19.0	0.0	19.0	
Volume/Cap:	0.00	0.26	0.26		0.26	0.13	0.00		0.00	0.00	0.00		0.26	0.00	0.13	
Delay/Veh:	0.0	10.8	10.8		37.5	4.0	0.0		0.0	0.0	0.0		35.0	0.0	33.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	10.8	10.8		37.5	4.0	0.0		0.0	0.0	0.0		35.0	0.0	33.9	
LOS by Move:	A	B	B		D	A	A		A	A	A		C	A	C	
HCM2kAvgQ:	0	4	4		2	2	0		0	0	0		2	0	1	

Note: Queue reported is the number of cars per lane.

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Scenario Report

Scenario:	Near Term Plus Project AM
Command:	Near Term AM
Volume:	Near Term AM
Geometry:	Near Term AM
Impact Fee:	Default Impact Fee
Trip Generation:	Project AM
Trip Distribution:	Project
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Near Term Plus Project
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 S. Nardo Ave & Lomas Santa Fe

Cycle (sec):	69	Critical Vol./Cap.(X):	0.489
Loss Time (sec):	12	Average Delay (sec/veh):	15.0
Optimal Cycle:	45	Level Of Service:	B

Street Name:	S. Nardo Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	8	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0	0 1	0	1	0	1	0 1	0	1	0	1	0	1	0
Volume Module:												
Base Vol:	17	8	74	178	5	4	0	578	14	47	638	115
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	18	8	77	184	5	4	0	598	14	49	660	119
Added Vol:	3	0	0	0	0	0	0	0	1	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	8	77	184	5	4	0	598	15	49	660	119
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	25	10	92	222	6	5	0	721	19	59	796	143
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	10	92	222	6	5	0	721	19	59	796	143
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	25	10	92	222	6	5	0	721	19	59	796	143
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	0.86	0.70	0.93	0.93	1.00	0.95	0.95	0.95	0.93	0.93
Lanes:	0.19	0.08	0.73	1.00	0.56	0.44	1.00	1.95	0.05	1.00	1.69	0.31
Final Sat.:	320	128	1189	1336	985	788	1900	3505	91	1805	2988	539
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.08	0.17	0.01	0.01	0.00	0.21	0.21	0.03	0.27	0.27
Crit Moves:				****				****		****		
Green Time:	23.2	23.2	23.2	23.2	23.2	23.2	0.0	28.8	28.8	5.0	33.8	33.8
Volume/Cap:	0.23	0.23	0.23	0.49	0.02	0.02	0.00	0.49	0.49	0.45	0.54	0.54
Delay/Veh:	16.7	16.7	16.7	19.1	15.3	15.3	0.0	15.0	15.0	33.1	12.6	12.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.7	16.7	16.7	19.1	15.3	15.3	0.0	15.0	15.0	33.1	12.6	12.6
LOS by Move:	B	B	B	B	B	B	A	B	B	C	B	B
HCM2kAvgQ:	2	2	2	4	0	0	0	6	6	1	7	7

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Stevens Av & Lomas Santa Fe

Cycle (sec): 112 Critical Vol./Cap.(X): 0.629
Loss Time (sec): 14 Average Delay (sec/veh): 24.4
Optimal Cycle: 57 Level Of Service: C

Street Name:	Stevens Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	8	1	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	1! 0	0	1	0	1	1	0
Volume Module:												
Base Vol:	106	0	258	0	0	0	0	696	156	424	748	0
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	110	0	267	0	0	0	0	720	161	439	774	0
Added Vol:	0	0	10	0	0	0	0	0	0	2	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	110	0	277	0	0	0	0	720	161	441	774	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	128	0	322	0	0	0	0	838	188	513	900	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	0	322	0	0	0	0	838	188	513	900	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	0	322	0	0	0	0	838	188	513	900	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	1.00	1.00	1.00	1.00	0.92	0.92	0.92	0.95	1.00
Lanes:	1.28	0.00	1.72	0.00	1.00	0.00	1.00	1.63	0.37	2.00	2.00	0.00
Final Sat.:	2148	0	2871	0	1900	0	1900	2869	643	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.11	0.00	0.00	0.00	0.00	0.29	0.29	0.15	0.25	0.00
Crit Moves:			****					****		****		
Green Time:	20.0	0.0	20.0	0.0	0.0	0.0	0.0	52.0	52.0	26.1	78.0	0.0
Volume/Cap:	0.33	0.00	0.63	0.00	0.00	0.00	0.00	0.63	0.63	0.63	0.36	0.00
Delay/Veh:	40.3	0.0	44.4	0.0	0.0	0.0	0.0	23.5	23.5	40.2	7.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.3	0.0	44.4	0.0	0.0	0.0	0.0	23.5	23.5	40.2	7.0	0.0
LOS by Move:	D	A	D	A	A	A	A	C	C	D	A	A
HCM2kAvgQ:	3	0	6	0	0	0	0	14	14	9	7	0

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 S. Nardo Ave & E. Solana Circle/Nardito Ln

Average Delay (sec/veh): 9.7 Worst Case Level Of Service: B[11.2]

Street Name:	S. Nardo Ave						E. Solana Circle/Nardito Ln					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0	0	0	1 0	0	0	0	1 0	0	1 0
Volume Module:												
Base Vol:	16	1	26	2	1	0	0	134	9	13	83	0
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	17	1	27	2	1	0	0	139	9	13	86	0
Added Vol:	0	0	1	0	0	0	0	1	0	3	3	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	1	28	2	1	0	0	140	9	16	89	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
PHF Volume:	24	2	40	3	2	0	0	202	14	24	129	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	24	2	40	3	2	0	0	202	14	24	129	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	6.5	6.2	7.1	6.5	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	4.0	3.3	3.5	4.0	xxxxx
Capacity Module:												
Cnflict Vol:	2	xxxx	xxxxx	42	xxxx	xxxxx	xxxx	97	2	185	77	xxxxx
Potent Cap.:	1634	xxxx	xxxxx	1580	xxxx	xxxxx	xxxx	796	1089	780	817	xxxxx
Move Cap.:	1634	xxxx	xxxxx	1580	xxxx	xxxxx	xxxx	783	1089	609	803	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	0.26	0.01	0.04	0.16	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.2	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	797	765	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	1.1	0.7	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	11.2	10.9	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	B	B	*	*
ApproachDel:	xxxxxx			xxxxxx			11.2			10.9		
ApproachLOS:	*			*			B			B		

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Fresca St & S. Nardo Ave

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[11.2]

Street Name:	Fresca St								Nardo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0	0	0	22	0	2	2	188	0	0	82	12								
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04								
Initial Bse:	0	0	0	23	0	2	2	195	0	0	85	12								
Added Vol:	0	0	0	0	0	0	0	7	0	0	3	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	0	0	0	23	0	2	2	202	0	0	88	12								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73								
PHF Volume:	0	0	0	31	0	3	3	276	0	0	120	17								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	0	0	0	31	0	3	3	276	0	0	120	17								
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx	411	411	129	137	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Potent Cap.:	xxxx	xxxx	xxxxx	601	534	926	1459	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Move Cap.:	xxxx	xxxx	xxxxx	600	533	926	1459	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	xxxx	xxxx	xxxx	0.05	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*								
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	618	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	11.2	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*								
ApproachDel:	xxxxxx				11.2		xxxxxx			xxxxxx										
ApproachLOS:	*				B		*			*										

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Stevens Ave & S. Nardo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.311
Loss Time (sec): 12 Average Delay (sec/veh): 19.2
Optimal Cycle: 31 Level Of Service: B

Street Name:	Stevens Ave								S. Nardo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	0	0	1	0	1	1	0	1	0	0	0	1	1	0	0	0	0
Volume Module:																				
Base Vol:	37	395	0	0	337	68	106	0	152	1	0	0								
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04								
Initial Bse:	38	409	0	0	349	70	110	0	157	1	0	0								
Added Vol:	4	0	0	0	0	2	10	0	17	0	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	42	409	0	0	349	72	120	0	174	1	0	0								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92								
PHF Volume:	46	444	0	0	379	79	130	0	189	1	0	0								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	46	444	0	0	379	79	130	0	189	1	0	0								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	46	444	0	0	379	79	130	0	189	1	0	0								
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900								
Adjustment:	0.95	0.95	1.00	1.00	0.93	0.93	0.95	1.00	0.85	0.95	1.00	1.00								
Lanes:	1.00	2.00	0.00	1.00	1.66	0.34	1.00	0.00	1.00	1.00	0.00	0.00								
Final Sat.:	1805	3610	0	1900	2912	604	1805	0	1615	1805	0	0								
Capacity Analysis Module:																				
Vol/Sat:	0.03	0.12	0.00	0.00	0.13	0.13	0.07	0.00	0.12	0.00	0.00	0.00								
Crit Moves:	****				****				****	****										
Green Time:	8.2	50.1	0.0	0.0	41.9	41.9	37.9	0.0	37.7	0.2	0.0	0.0								
Volume/Cap:	0.31	0.25	0.00	0.00	0.31	0.31	0.19	0.00	0.31	0.31	0.00	0.00								
Delay/Veh:	44.4	14.3	0.0	0.0	19.5	19.5	20.9	0.0	22.3	93.2	0.0	0.0								
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
AdjDel/Veh:	44.4	14.3	0.0	0.0	19.5	19.5	20.9	0.0	22.3	93.2	0.0	0.0								
LOS by Move:	D	B	A	A	B	B	C	A	C	F	A	A								
HCM2kAvgQ:	1	4	0	0	5	5	3	0	4	0	0	0								

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 E. Solana Circle & Via De La Valle

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: D[28.1]

Street Name:	E. Solana Circle								Via De La Valle							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	0	1	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0	0	0			38	0	23			15	744	0			0	431	27		
Growth Adj:	1.04	1.04	1.04			1.04	1.04	1.04			1.04	1.04	1.04			1.04	1.04	1.04		
Initial Bse:	0	0	0			39	0	24			16	770	0			0	446	28		
Added Vol:	0	0	0			0	0	3			1	0	0			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	0	0	0			39	0	27			17	770	0			0	446	28		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.92	0.92	0.92			0.92	0.92	0.92			0.92	0.92	0.92			0.92	0.92	0.92		
PHF Volume:	0	0	0			43	0	29			18	837	0			0	485	30		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
FinalVolume:	0	0	0			43	0	29			18	837	0			0	485	30		
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2			6.4	6.5	6.2			4.1	xxxx	xxxxx	xxxxx		xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3			3.5	4.0	3.3			2.2	xxxx	xxxxx	xxxxx		xxxx	xxxxx			
Capacity Module:																				
Cnflict Vol:	1388	1388	837			1373	1373	500			515	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Potent Cap.:	121	144	370			162	147	575			1061	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Move Cap.:	114	142	370			160	145	575			1061	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Volume/Cap:	0.00	0.00	0.00			0.27	0.00	0.05			0.02	xxxx	xxxx			xxxx	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.1	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			8.5	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*			*	*	*			A	*	*			*	*	*		
Movement:	LT -	LTR -	RT			LT -	LTR -	RT			LT -	LTR -	RT			LT -	LTR -	RT		
Shared Cap.:	xxxx	0	xxxxx			xxxx	226	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx	1.3	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx			xxxxx	28.1	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*			*	D	*			*	*	*			*	*	*		
ApproachDel:	xxxxxx					28.1					xxxxxx					xxxxxx				
ApproachLOS:	*					D					*					*				

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Stevens Ave/Valley Ave & Via De La Valle

Cycle (sec): 98 Critical Vol./Cap.(X): 0.589
Loss Time (sec): 12 Average Delay (sec/veh): 29.3
Optimal Cycle: 47 Level Of Service: C

Street Name:	Stevens Ave/Valley Ave								Via De La Valle							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	5	0			5	0	0			5	10	0			5	10	0		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0		
Lanes:	1	0	1	0	2	2	0	1	0	1	1	0	1	1	0	2	0	1	1	0
Volume Module:																				
Base Vol:	18	42	212			432	72	51			43	674	41			331	584	312		
Growth Adj:	1.04	1.04	1.04			1.04	1.04	1.04			1.04	1.04	1.04			1.04	1.04	1.04		
Initial Bse:	19	43	219			447	75	53			45	698	42			343	604	323		
Added Vol:	0	0	0			15	2	0			0	0	0			0	0	4		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	19	43	219			462	77	53			45	698	42			343	604	327		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.98	0.98	0.98			0.98	0.98	0.98			0.98	0.98	0.98			0.98	0.98	0.98		
PHF Volume:	19	44	224			472	78	54			45	712	43			350	617	334		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	19	44	224			472	78	54			45	712	43			350	617	334		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	19	44	224			472	78	54			45	712	43			350	617	334		
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900		
Adjustment:	0.95	1.00	0.75			0.92	1.00	0.85			0.95	0.94	0.94			0.92	0.90	0.90		
Lanes:	1.00	1.00	2.00			2.00	1.00	1.00			1.00	1.89	0.11			2.00	1.30	0.70		
Final Sat.:	1805	1900	2842			3502	1900	1615			1805	3372	205			3502	2219	1200		
Capacity Analysis Module:																				
Vol/Sat:	0.01	0.02	0.08			0.13	0.04	0.03			0.03	0.21	0.21			0.10	0.28	0.28		
Crit Moves:			****			****					****						****			
Green Time:	13.0	13.0	13.0			22.2	22.2	22.2			5.0	34.5	34.5			16.3	45.8	45.8		
Volume/Cap:	0.08	0.18	0.59			0.59	0.18	0.15			0.49	0.60	0.60			0.60	0.59	0.59		
Delay/Veh:	37.4	38.1	42.6			35.1	30.8	30.5			49.4	26.9	26.9			39.6	19.9	19.9		
User DelAdj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
AdjDel/Veh:	37.4	38.1	42.6			35.1	30.8	30.5			49.4	26.9	26.9			39.6	19.9	19.9		
LOS by Move:	D	D	D			D	C	C			D	C	C			D	B	B		
HCM2kAvgQ:	1	1	5			7	2	1			2	10	10			6	11	11		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: B[10.1]

Street Name:	Driveway A											
							Nardo Avenue					
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	11		0		30	0		0		0	0		190		5	6		86		0
Growth Adj:	1.04	1.04		1.04		1.04	1.04		1.04		1.04	1.04		1.04		1.04	1.04		1.04	
Initial Bse:	11		0		31	0		0		0	0		197		5	6		89		0
Added Vol:	5		0		7	0		0		0	0		0		1	2		2		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	16		0		38	0		0		0	0		197		6	8		91		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92	
PHF Volume:	18		0		41	0		0		0	0		214		7	9		99		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	18		0		41	0		0		0	0		214		7	9		99		0
Critical Gap Module:																				
Critical Gp:	6.4	6.5		6.2		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx	
FollowUpTim:	3.5	4.0		3.3		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx	
Capacity Module:																				
Cnflict Vol:	334	334		217		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		220	xxxx		xxxxx	
Potent Cap.:	665	590		828		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		1361	xxxx		xxxxx	
Move Cap.:	662	586		828		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		1361	xxxx		xxxxx	
Volume/Cap:	0.03	0.00		0.05		xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		0.01	xxxx		xxxx	
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		0.0	xxxx		xxxxx	
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		7.7	xxxx		xxxxx	
LOS by Move:	*	*		*		*	*		*		*	*		*		A	*		*	
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	770		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	0.2		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		0.0	xxxx		xxxxx	
Shrd ConDel:	xxxxx	10.1		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		7.7	xxxx		xxxxx	
Shared LOS:	*	B		*		*	*		*		*	*		*		A	*		*	
ApproachDel:	10.1					xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:	B					*					*					*				

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: B[10.3]

Street Name:	Driveway B											
							Nardo Avenue					
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module:																				
Base Vol:	3		0		28	0		0		0	0		247		2	19		103		0
Growth Adj:	1.04	1.04		1.04		1.04	1.04		1.04		1.04	1.04		1.04		1.04	1.04		1.04	
Initial Bse:	3		0		29	0		0		0	0		256		2	20		107		0
Added Vol:	2		0		20	0		0		0	0		7		0	5		2		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	5		0		49	0		0		0	0		263		2	25		109		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92	
PHF Volume:	6		0		53	0		0		0	0		285		2	27		118		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	6		0		53	0		0		0	0		285		2	27		118		0
Critical Gap Module:																				
Critical Gp:	6.4	6.5		6.2		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx	
FollowUpTim:	3.5	4.0		3.3		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx	
Capacity Module:																				
Cnflict Vol:	458	458		287		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		288	xxxx		xxxxx	
Potent Cap.:	564	502		757		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		1286	xxxx		xxxxx	
Move Cap.:	555	491		757		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		1286	xxxx		xxxxx	
Volume/Cap:	0.01	0.00		0.07		xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		0.02	xxxx		xxxx	
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		0.1	xxxx		xxxxx	
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		7.9	xxxx		xxxxx	
LOS by Move:	*	*		*		*	*		*		*	*		*		A	*		*	
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	732		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	0.3		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		0.1	xxxx		xxxxx	
Shrd ConDel:	xxxxx	10.3		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		7.9	xxxx		xxxxx	
Shared LOS:	*	B		*		*	*		*		*	*		*		A	*		*	
ApproachDel:	10.3					xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:	B					*					*					*				

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
AM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Stevens Avenue-Valley Avenue / Valley Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.270
Loss Time (sec):	8	Average Delay (sec/veh):	19.1
Optimal Cycle:	23	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0	0	1	1 0	1	0	2	0 0	0	0	0	0 0	1	0	0	0 1
Volume Module:																
Base Vol:	0	308	40		70	390	0		0	0	0		150	0	110	
Growth Adj:	1.04	1.04	1.04		1.04	1.04	1.04		1.04	1.04	1.04		1.04	1.04	1.04	
Initial Bse:	0	319	41		72	404	0		0	0	0		155	0	114	
Added Vol:	0	4	0		0	17	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	323	41		72	421	0		0	0	0		155	0	114	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	323	41		72	421	0		0	0	0		155	0	114	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	323	41		72	421	0		0	0	0		155	0	114	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	323	41		72	421	0		0	0	0		155	0	114	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.93	0.93		0.95	0.95	1.00		1.00	1.00	1.00		0.77	1.00	0.85	
Lanes:	0.00	1.77	0.23		1.00	2.00	0.00		0.00	0.00	0.00		1.00	0.00	1.00	
Final Sat.:	0	3145	403		1805	3610	0		0	0	0		1467	0	1615	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.10	0.10		0.04	0.12	0.00		0.00	0.00	0.00		0.11	0.00	0.07	
Crit Moves:		****			****								****			
Green Time:	0.0	38.0	38.0		14.9	52.8	0.0		0.0	0.0	0.0		39.2	0.0	39.2	
Volume/Cap:	0.00	0.27	0.27		0.27	0.22	0.00		0.00	0.00	0.00		0.27	0.00	0.18	
Delay/Veh:	0.0	21.5	21.5		38.3	12.7	0.0		0.0	0.0	0.0		20.9	0.0	20.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	21.5	21.5		38.3	12.7	0.0		0.0	0.0	0.0		20.9	0.0	20.0	
LOS by Move:	A	C	C		D	B	A		A	A	A		C	A	C	
HCM2kAvgQ:	0	4	4		2	3	0		0	0	0		3	0	2	

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
PM

Scenario Report

Scenario:	Near Term Plus Project PM
Command:	Near Term Plus Project PM
Volume:	Near Term PM
Geometry:	Near Term PM
Impact Fee:	Default Impact Fee
Trip Generation:	Project PM
Trip Distribution:	Project
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Near Term Plus Project
PM

Trip Generation Report

Forecast for Project PM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1	Project	1.00	Project	37.00	16.00	37	16	53	100.0
	Zone 1 Subtotal		.....			37	16	53	100.0
TOTAL			.....			37	16	53	100.0

Near Term Plus Project
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Trip Distribution Report

Percent Of Trips Project

Zone	To Gates 1	2	3	4	5	6
1	10.0	5.0	35.0	10.0	10.0	30.0

Near Term Plus Project
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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 S. Nardo Ave & Lomas Santa Fe	B	11.6	0.345	B	11.5	0.346	-0.092 D/V
# 2 Stevens Av & Lomas Santa Fe	C	24.3	0.556	C	24.5	0.562	+ 0.272 D/V
# 3 S. Nardo Ave & E. Solana Circl	B	10.6	0.113	B	10.7	0.117	+ 0.086 D/V
# 4 Fresca St & S. Nardo Ave	A	9.8	0.020	A	9.9	0.021	+ 0.091 D/V
# 5 Stevens Ave & S. Nardo Ave	B	15.0	0.295	B	16.3	0.319	+ 1.245 D/V
# 6 E. Solana Circle & Via De La V	C	22.2	0.097	C	22.1	0.099	-0.110 D/V
# 7 Stevens Ave/Valley Ave & Via D	C	33.7	0.757	C	33.9	0.766	+ 0.211 D/V
# 20 Driveway A	A	9.1	0.023	A	9.3	0.027	+ 0.136 D/V
# 21 Driveway B	A	9.3	0.027	A	9.5	0.039	+ 0.131 D/V
# 24 Stevens Avenue-Valley Avenue /	B	13.0	0.255	B	12.8	0.261	-0.234 D/V

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 S. Nardo Ave & Lomas Santa Fe

Cycle (sec):	69	Critical Vol./Cap.(X):	0.346
Loss Time (sec):	12	Average Delay (sec/veh):	11.5
Optimal Cycle:	45	Level Of Service:	B

Street Name:	S. Nardo Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	8	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0	0	1	0	1	0	1
Volume Module:												
Base Vol:	18	12	37	123	6	0	4	671	12	44	638	127
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	19	12	38	127	6	0	4	694	12	46	660	131
Added Vol:	2	0	0	0	0	0	0	0	4	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	12	38	127	6	0	4	694	16	46	660	131
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	22	13	40	134	7	0	4	731	17	48	695	138
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	13	40	134	7	0	4	731	17	48	695	138
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	22	13	40	134	7	0	4	731	17	48	695	138
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.84	0.84	0.84	0.76	1.00	1.00	0.95	0.95	0.95	0.95	0.93	0.93
Lanes:	0.29	0.17	0.54	1.00	1.00	0.00	1.00	1.95	0.05	1.00	1.67	0.33
Final Sat.:	463	279	860	1452	1900	0	1805	3516	83	1805	2935	584
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.05	0.09	0.00	0.00	0.00	0.21	0.21	0.03	0.24	0.24
Crit Moves:		****					****				****	
Green Time:	8.6	8.6	8.6	8.6	8.6	0.0	5.0	38.7	38.7	9.7	43.4	43.4
Volume/Cap:	0.38	0.38	0.38	0.74	0.03	0.00	0.03	0.37	0.37	0.19	0.38	0.38
Delay/Veh:	28.9	28.9	28.9	44.3	26.6	0.0	29.9	8.5	8.5	26.6	6.3	6.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.9	28.9	28.9	44.3	26.6	0.0	29.9	8.5	8.5	26.6	6.3	6.3
LOS by Move:	C	C	C	D	C	A	C	A	A	C	A	A
HCM2kAvgQ:	2	2	2	5	0	0	0	5	5	1	4	4

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
PM

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Stevens Av & Lomas Santa Fe

Cycle (sec):	112	Critical Vol./Cap.(X):	0.562
Loss Time (sec):	14	Average Delay (sec/veh):	24.5
Optimal Cycle:	50	Level Of Service:	C

Street Name:	Stevens Ave						Lomas Santa Fe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	8	1	0	0	8	0	5	20	0	5	20	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	1! 0	0	1	0	1	0
Volume Module:												
Base Vol:	257	0	366	0	0	0	0	763	116	218	656	0
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	266	0	379	0	0	0	0	790	120	226	679	0
Added Vol:	0	0	5	0	0	0	0	0	0	11	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	266	0	384	0	0	0	0	790	120	237	679	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	280	0	404	0	0	0	0	831	126	249	715	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	0	404	0	0	0	0	831	126	249	715	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	280	0	404	0	0	0	0	831	126	249	715	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	0.93	0.93	0.92	0.95	1.00
Lanes:	1.41	0.00	1.59	0.00	1.00	0.00	1.00	1.74	0.26	2.00	2.00	0.00
Final Sat.:	2391	0	2698	0	1900	0	1900	3071	467	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.12	0.00	0.15	0.00	0.00	0.00	0.00	0.27	0.27	0.07	0.20	0.00
Crit Moves:			****					****		****		
Green Time:	29.9	0.0	29.9	0.0	0.0	0.0	0.0	54.0	54.0	14.2	68.1	0.0
Volume/Cap:	0.44	0.00	0.56	0.00	0.00	0.00	0.00	0.56	0.56	0.56	0.33	0.00
Delay/Veh:	34.3	0.0	36.0	0.0	0.0	0.0	0.0	21.0	21.0	47.6	10.8	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.3	0.0	36.0	0.0	0.0	0.0	0.0	21.0	21.0	47.6	10.8	0.0
LOS by Move:	C	A	D	A	A	A	A	C	C	D	B	A
HCM2kAvgQ:	6	0	7	0	0	0	0	12	12	5	6	0

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
PM

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 S. Nardo Ave & E. Solana Circle/Nardito Ln

Average Delay (sec/veh): 9.1 Worst Case Level Of Service: B[10.7]

Street Name:	S. Nardo Ave									E. Solana Circle/Nardito Ln							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	1	0	0	0
Volume Module:																				
Base Vol:	31		1		14	1		0		3	1		67		25	27		72		0
Growth Adj:	1.04	1.04		1.04		1.04	1.04		1.04		1.04	1.04		1.04		1.04	1.04		1.04	
Initial Bse:	32		1		14	1		0		3	1		69		26	28		75		0
Added Vol:	0		0		4	0		0		0	0		4		0	2		2		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	32		1		18	1		0		3	1		73		26	30		77		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.84	0.84		0.84		0.84	0.84		0.84		0.84	0.84		0.84		0.84	0.84		0.84	
PHF Volume:	38		1		22	1		0		4	1		87		31	36		91		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	38		1		22	1		0		4	1		87		31	36		91		0
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx			4.1	xxxx	xxxxx			7.1		6.5		6.2	7.1		6.5	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx			2.2	xxxx	xxxxx			3.5		4.0		3.3	3.5		4.0	xxxxx	
Capacity Module:																				
Cnflict Vol:	4	xxxx	xxxxx			23	xxxx	xxxxx			138		104		2	152		95	xxxxx	
Potent Cap.:	1631	xxxx	xxxxx			1605	xxxx	xxxxx			837		790		1088	820		799	xxxxx	
Move Cap.:	1631	xxxx	xxxxx			1605	xxxx	xxxxx			748		770		1088	714		779	xxxxx	
Volume/Cap:	0.02	xxxx	xxxx			0.00	xxxx	xxxx			0.00		0.11		0.03	0.05		0.12	xxxx	

Level Of Service Module:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
2Way95thQ:	0.1 xxxx xxxxx	0.0 xxxx xxxxx	xxxx xxxx xxxxx	xxxx xxxx xxxxx
Control Del:	7.3 xxxx xxxxx	7.2 xxxx xxxxx	xxxxx xxxx xxxxx	xxxxx xxxx xxxxx
LOS by Move:	A * *	A * *	* * *	* * *
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx xxxx xxxxx	xxxx xxxx xxxxx	xxxx 833 xxxxx	760 xxxx xxxxx
SharedQueue:	xxxxx xxxx xxxxx	xxxxx xxxx xxxxx	xxxxx 0.5 xxxxx	0.6 xxxx xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx	xxxxx xxxx xxxxx	xxxxx 10.0 xxxxx	10.7 xxxx xxxxx
Shared LOS:	* * *	* * *	* B *	B * *
ApproachDel:	xxxxxx	xxxxxx	10.0	10.7
ApproachLOS:	*	*	B	B

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Fresca St & S. Nardo Ave

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A[9.9]

Street Name:	Fresca St									Nardo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0		0		0	13		0		2	5		104		0	0		95		18
Growth Adj:	1.04	1.04		1.04		1.04	1.04		1.04		1.04	1.04		1.04		1.04	1.04		1.04	
Initial Bse:	0		0		0	13		0		2	5		108		0	0		98		19
Added Vol:	0		0		0	0		0		0	0		5		0	0		8		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	0		0		0	13		0		2	5		113		0	0		106		19
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	0		0		0	15		0		2	6		125		0	0		118		21
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	0		0		0	15		0		2	6		125		0	0		118		21
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx			6.4		6.5		6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx			3.5		4.0		3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx			265		265		128	139	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx			728		644		927	1457	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx			726		641		927	1457	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx			0.02	0.00		0.00		0.00	xxxx	xxxx	xxxx	xxxx	xxxx				

Level Of Service Module:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
2Way95thQ:	xxxx xxxx xxxxx	xxxx xxxx xxxxx	0.0 xxxx xxxxx	xxxx xxxx xxxxx
Control Del:	xxxxx xxxx xxxxx	xxxxx xxxx xxxxx	7.5 xxxx xxxxx	xxxxx xxxx xxxxx
LOS by Move:	* * *	* * *	A * *	* * *
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx xxxx xxxxx	xxxx 748 xxxxx	xxxx xxxx xxxxx	xxxx xxxx xxxxx
SharedQueue:	xxxxx xxxx xxxxx	xxxxx 0.1 xxxxx	0.0 xxxx xxxxx	xxxxx xxxx xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx	xxxxx 9.9 xxxxx	7.5 xxxx xxxxx	xxxxx xxxx xxxxx
Shared LOS:	* * *	* A *	A * *	* * *
ApproachDel:	xxxxxx	9.9	xxxxxx	xxxxxx
ApproachLOS:	*	A	*	*

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Stevens Ave & S. Nardo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.319
Loss Time (sec): 12 Average Delay (sec/veh): 16.3
Optimal Cycle: 32 Level Of Service: B

Street Name:	Stevens Ave									S. Nardo Ave		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	1 0	1 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	89	336	0	2	403	67	41	0	66	0	0	0
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	92	348	0	2	417	69	42	0	68	0	0	0
Added Vol:	19	0	0	0	0	11	5	0	8	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	348	0	2	417	80	47	0	76	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	125	391	0	2	469	90	53	0	86	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	391	0	2	469	90	53	0	86	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	125	391	0	2	469	90	53	0	86	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	0.95	0.93	0.93	0.95	1.00	0.85	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	1.00	1.68	0.32	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1805	3610	0	1805	2954	569	1805	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.11	0.00	0.00	0.16	0.16	0.03	0.00	0.05	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green Time:	21.7	70.5	0.0	0.8	49.7	49.7	16.6	0.0	16.6	0.0	0.0	0.0
Volume/Cap:	0.32	0.15	0.00	0.15	0.32	0.32	0.18	0.00	0.32	0.00	0.00	0.00
Delay/Veh:	33.4	4.9	0.0	53.9	15.1	15.1	36.1	0.0	37.4	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.4	4.9	0.0	53.9	15.1	15.1	36.1	0.0	37.4	0.0	0.0	0.0
LOS by Move:	C	A	A	D	B	B	D	A	D	A	A	A
HCM2kAvgQ:	3	2	0	0	5	5	1	0	3	0	0	0

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 E. Solana Circle & Via De La Valle

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[22.1]

Street Name:	E. Solana Circle						Via De La Valle					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	14	0	18	16	553	0	0	640	54
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	14	0	19	17	572	0	0	662	56
Added Vol:	0	0	0	0	0	2	4	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	14	0	21	21	572	0	0	662	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	0	0	15	0	22	22	609	0	0	705	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	15	0	22	22	609	0	0	705	59
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1398	1417	609	1387	1387	734	764	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	119	138	499	159	144	423	858	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	111	135	499	156	141	423	858	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.00	0.10	0.00	0.05	0.03	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	0	xxxxx	xxxx	248	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	22.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			22.1			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Stevens Ave/Valley Ave & Via De La Valle

Cycle (sec): 98 Critical Vol./Cap.(X): 0.766
Loss Time (sec): 12 Average Delay (sec/veh): 33.9
Optimal Cycle: 70 Level Of Service: C

Street Name:	Stevens Ave/Valley Ave									Via De La Valle					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	5	0	5	0	0	5	10	0	5	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	69	149	465	408	100	70	47	530	23	254	648	346
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	71	154	481	422	103	72	49	549	24	263	671	358
Added Vol:	0	2	0	7	1	0	0	0	0	0	0	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	156	481	429	104	72	49	549	24	263	671	375
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	77	168	518	462	112	78	52	590	26	283	721	403
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	168	518	462	112	78	52	590	26	283	721	403
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	168	518	462	112	78	52	590	26	283	721	403
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.75	0.92	1.00	0.85	0.95	0.94	0.94	0.92	0.90	0.90
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.92	0.08	2.00	1.28	0.72
Final Sat.:	1805	1900	2842	3502	1900	1615	1805	3439	149	3502	2190	1225
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.18	0.13	0.06	0.05	0.03	0.17	0.17	0.08	0.33	0.33
Crit Moves:			****	****			****				****	
Green Time:	22.9	22.9	22.9	16.6	16.6	16.6	5.0	31.6	31.6	14.9	41.5	41.5
Volume/Cap:	0.18	0.38	0.78	0.78	0.35	0.28	0.57	0.53	0.53	0.53	0.78	0.78
Delay/Veh:	30.2	32.1	41.0	45.4	36.6	36.1	53.6	27.6	27.6	39.4	27.1	27.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.2	32.1	41.0	45.4	36.6	36.1	53.6	27.6	27.6	39.4	27.1	27.1
LOS by Move:	C	C	D	D	D	D	D	C	C	D	C	C
HCM2kAvgQ:	2	4	10	7	3	2	2	8	8	5	17	17

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Driveway A

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: A[9.3]

Street Name:	Driveway A									Nardo Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	3	0	19	0	0	0	0	111	7	10	98	0
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	3	0	20	0	0	0	0	115	7	10	101	0
Added Vol:	2	0	3	0	0	0	0	2	6	7	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	23	0	0	0	0	117	13	17	102	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	6	0	25	0	0	0	0	127	14	19	111	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	6	0	25	0	0	0	0	127	14	19	111	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	283	283	134	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	141	xxxx	xxxxx
Potent Cap.:	711	629	920	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1454	xxxx	xxxxx
Move Cap.:	704	621	920	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1454	xxxx	xxxxx
Volume/Cap:	0.01	0.00	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	871	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd ConDel:	xxxxx	9.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	9.3			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	A			*			*			*		

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Driveway B

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: A[9.5]

Street Name: Driveway B Nardo Avenue

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1!	0 0	0	0	0	0 0	0	0	0	1 0	0	1	0	0 0
Volume Module:																
Base Vol:	4		0	22	0		0	0	0		118	3	29		148	0
Growth Adj:	1.04	1.04		1.04	1.04	1.04		1.04	1.04	1.04		1.04	1.04	1.04		1.04
Initial Bse:	4		0	23	0		0	0	0		122	3	30		153	0
Added Vol:	1		0	10	0		0	0	0		3	2	22		7	0
PasserByVol:	0		0	0	0		0	0	0		0	0	0		0	0
Initial Fut:	5		0	33	0		0	0	0		125	5	52		160	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92
PHF Volume:	6		0	36	0		0	0	0		136	6	57		174	0
Reduct Vol:	0		0	0	0		0	0	0		0	0	0		0	0
FinalVolume:	6		0	36	0		0	0	0		136	6	57		174	0
Critical Gap Module:																
Critical Gp:	6.4	6.5		6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0		3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	426	426		139	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		142	xxxx	xxxxx		
Potent Cap.:	589	524		915	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1454	xxxx	xxxxx		
Move Cap.:	571	503		915	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1454	xxxx	xxxxx		
Volume/Cap:	0.01	0.00		0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.04	xxxx	xxxx		
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx		
Control Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.6	xxxx	xxxxx		
LOS by Move:	*	*		*	*	*	*	*	*	*		A	*	*		
Movement:	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT
Shared Cap.:	xxxx	846		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	0.2		xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.1	xxxx	xxxxx		
Shrd ConDel:	xxxxx	9.5		xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.6	xxxx	xxxxx		
Shared LOS:	*	A		*	*	*	*	*	*	*		A	*	*		
ApproachDel:		9.5			xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:		A				*				*				*		

Note: Queue reported is the number of cars per lane.

Near Term Plus Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Stevens Avenue-Valley Avenue / Valley Avenue

Cycle (sec): 100 Critical Vol./Cap.(X): 0.261
Loss Time (sec): 8 Average Delay (sec/veh): 12.8
Optimal Cycle: 23 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0		0	0	0		0	0	0		0	0	0		0	0
Y+R:	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0
Lanes:	0	0	1	1 0	1	0	2	0 0	0	0	0	0 0	1	0	0	0 1
Volume Module:																
Base Vol:	0		406	90	70		330	0	0		0	0	70		0	40
Growth Adj:	1.04	1.04		1.04	1.04	1.04		1.04	1.04	1.04		1.04	1.04	1.04		1.04
Initial Bse:	0		420	93	72		342	0	0		0	0	72		0	41
Added Vol:	0		19	0	0		8	0	0		0	0	0		0	0
PasserByVol:	0		0	0	0		0	0	0		0	0	0		0	0
Initial Fut:	0		439	93	72		350	0	0		0	0	72		0	41
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	0		439	93	72		350	0	0		0	0	72		0	41
Reduct Vol:	0		0	0	0		0	0	0		0	0	0		0	0
Reduced Vol:	0		439	93	72		350	0	0		0	0	72		0	41
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	0		439	93	72		350	0	0		0	0	72		0	41
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	0.93		0.93	0.95	0.95		1.00	1.00	1.00		1.00	0.79	1.00		0.85
Lanes:	0.00	1.65		0.35	1.00	2.00		0.00	0.00	0.00		0.00	1.00	0.00		1.00
Final Sat.:	0	2901		615	1805	3610		0	0	0		0	1493	0		1615
Capacity Analysis Module:																
Vol/Sat:	0.00	0.15		0.15	0.04	0.10		0.00	0.00	0.00		0.00	0.05	0.00		0.03
Crit Moves:		****			****								****			
Green Time:	0.0	58.0		58.0	15.4	73.4		0.0	0.0	0.0		0.0	18.6	0.0		18.6
Volume/Cap:	0.00	0.26		0.26	0.26	0.13		0.00	0.00	0.00		0.00	0.26	0.00		0.14
Delay/Veh:	0.0	10.4		10.4	37.8	3.9		0.0	0.0	0.0		0.0	35.3	0.0		34.2
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	10.4		10.4	37.8	3.9		0.0	0.0	0.0		0.0	35.3	0.0		34.2
LOS by Move:	A	B		B	D	A		A	A	A		A	D	A		C
HCM2kAvgQ:	0	4		4	2	2		0	0	0		0	2	0		1

Note: Queue reported is the number of cars per lane.

APPENDIX O

Sewer Study Letter

PASCO LARET SUITER
& ASSOCIATES
CIVIL ENGINEERING + LAND PLANNING + LAND SURVEYING

August 11, 2014

City of Solana Beach
635 South Hwy. 101
Solana Beach, CA 92075-2215

Attn: Engineering Department

RE: SEWER CAPACITY STUDY – REVITALIZING SOLANA HIGHLANDS

To Whom it May Concern:

The purpose of this letter is to demonstrate that the project known as "Revitalizing Solana Highlands" does not over burden the existing sanitary sewer system from the connection point downstream toward the Eden Gardens pump station. Data used herein is available from the City of Solana Beach 2000 Sewer Master Plan and Flow calculations. The data used in the 2000 Master Plan computed base flow is approximately 170gpd/EDU, however, a conservative value of 200gpd/EDU is used to determine system capacity since it is a conservative value, "accounting for additional wastewater generation capacity within the currently developed service area." This coupled with the statement that the City of Solana Beach is nearly entirely built out serves as sufficient data to account for any development that may have occurred in the area tributary to the stretch of pipe studied herein, between the year 2000 and today.

The existing Solana Highlands development consists of 196 multi-family units which is equivalent to 176.4 EDUs . (196 x 0.9). The proposed project "Revitalizing Solana Highlands" proposes 260 multi-family units which is equivalent to 234 EDUs (260 x 0.9). The resultant increase in sewer discharge from the site is equivalent to 57.6 EDUs which converts to 0.0624 cfs after applying a peaking factor of 3.5 and converting to cubic feet per second. The specific calculations for Revitalizing Solana Highlands follow:

Check that the actual peak flow volume: <u>Design Peak Flows ("DESIGNQ-Peak cfs" column) + 0.064cfs (additional project discharge)</u> for the proportional depth of flow (ratio of fluid depth to pipe diameter) within the sewer main reaches downstream from the Solana Highlands connection location: (See sewer line map Exhibit A and Proportional Depth of Flow chart Exhibit B attached)

G_ID	OBJECTID	AVERAGE FLO cfs	DESIGNQ-Peak cfs	Actual peak design flow - cfs	SY_SIZE (Pipe Dia. Inches)	PIPE SLOPE	EPI_d-OVER-D 0.5=half	EPI_QFULL d/D-1.0 cfs	Proportional flow (actual/full)	Proportional Depth of Flow (d/D) -see chart
922.000	1760	0.0000	0.0000		8.000	0.0031	0.0000	0.000		
951.000	1761	0.0000	0.0000		8.000	0.0221	0.0000	0.000		
950.000	1762	0.0000	0.0000		8.000	0.0824	0.0000	0.000		
949.000	312	0.0721	0.1069	0.1693	8.000	0.0654	0.1440	3.767	0.045	0.130
10031.000	1373	0.0721	0.1069	0.1693	8.000	0.0030	0.1800	2.068	0.082	0.190
10022.000	1369	0.5362	0.8035	0.8659	15.000	0.0027	0.3840	3.371	0.257	0.360
10021.000	1368	0.6087	0.9115	0.9739	15.000	0.0022	0.3333	4.960	0.196	0.310
10020.000	1367	0.6305	0.9437	1.0061	15.000	0.0023	0.4480	3.038	0.331	0.390

(Values of 0.000 indicates that data is not available for those pipe segments)

From the table above, the Proportional Flow values are plotted on the attached chart. Then, reading up to the proportional discharge curve line, and tracing horizontally to the left reveals the Proportional Depth of Flow (d/D) for that value. This d/D value is shown in the right hand column in the table above. The typical maximum Proportional Depth of Flow (d/D) value for public sewer design is 0.5. The value of 0.5 is the indicator that shows a sewer main is flowing at half full.

For the pipe segments downstream of the Revitalizing Solana Highlands project, the proportional depth of flow is less than 0.5. Therefore the proposed additional flow from the Solana Highlands does not over-burden the existing sewer system.

Sincerely,
Pasco Laret Suiter and Associates

Michael H. Smith RCE 65090
Senior Project Manager