AIR QUALITY ASSESSMENT

Otay Mesa Central Village Specific Plan Update to the Otay Mesa Community Planning Area

City of San Diego, CA

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LIST OF ACRONYMS

Air Quality Impact Assessments (AQIA) Assembly
Bill 32 (AB32)
Best available control technology (T-BACT)
California Air Resource Board (CARB)
California Ambient Air Quality Standards (CAAQS)
California Environmental Quality Act (CEQA)
Carbon Dioxide (CO2)
Central Village Specific Plan (CVSP)
Cubic Yards (CY)
Diesel Particulate Matter (DPM) Environmental
Protection Agency (EPA)
EPA Office of Air Quality Planning and Standards
Environmental Impact Report (EIR)
(OAQPS) Hazardous Air Pollutants (HAPs)
Hydrogen Sulfide (H2S) International Residential
Code (IRC) Level of Service (LOS)
Low Carbon Fuel Standard (LCFS) Methane (CH4)
National ambient air quality standards (NAAQS)
Nitrous Oxide (N2O)
North County Transit District (NCTD) Reactive
Organic Gas (ROG)
Otay Mesa Community Plan Update (OMCPU)
Regional Air Quality Strategy (RAQS) San Diego
Air Basin (SDAB)
San Diego Air Pollution Control District (SDAPCD)
South Coast Air Quality Management District (SCAQMD)
Specific Plan Area (SPA)
State Implementation Plan (SIP) Toxic Air
Contaminants (TACs) Vehicle Miles Traveled (VMT)

EXECUTIVE SUMMARY

The City of San Diego certified a Final Environmental Impact Report for the Otay Mesa Community Plan Update in 2014 (EIR). The EIR disclosed potential air quality impacts that would result from implementing the Otay Mesa Community Plan Update (March 2014, "OMCPU") and presented mitigation measures to address the impacts. After the application of mitigation measures, the OMCPU concluded that construction-related and operational-related air quality impacts would be significant and unavoidable. The OMCPU requires the City of San Diego to adopt a Specific Plan for the Central Village portion of the community. The purpose of this Air Quality impact analysis is to evaluate the currently proposed Central Village Specific Plan (CVSP) and determine if expected air quality impacts fall within the scope of impacts disclosed in the EIR, and whether any additional mitigation measures beyond those presented in the EIR are warranted. Neither the OMCPU nor the proposed CVSP authorize the construction of any development. Future development proposals in the CVSP area would require discretionary approval and be subject to additional CEQA review.

The OMCPU and associated EIR assumed the following land uses within the Central Village portion of the OMCPU area:

- 5,246 multi-family dwelling units
- 32.7 ksf of community commercial
- 32.3 acres of active park space
- 1 elementary school

The CVSP is proposing to change the land uses within the Central Village area to the following:

- 425 multi-family dwelling units (<20 du/ac)
- 4,060 multi-family dwelling units (>20 du/ac)
- 139.7 ksf of community commercial
- 16.1 acres of active park space
- 1 elementary school

The land use modifications proposed by the CVSP in comparison to the mix of land uses assumed for the Central Village by the OMCPU EIR are summarized below.

- A reduction of 761 Multi-family dwelling units
- An increase of 107 ksf of community commercial floor space
- A reduction of 16.2 acres of active park space

Because the development area (229.2 acres) assumed by the OMCPU EIR and the development area (229.2 acres) proposed by the CVSP are substantially similar, it is assumed that construction activities associated with buildout of the Central Village would largely remain the same as

assumed by the OMCPU EIR in the Central Village area. The EIR's analysis of construction emissions assumed that sources of construction-related air emissions would include: a) fugitive dust from grading activities; b) construction equipment exhaust; c) construction-related trips by workers, delivery trucks, and material-hauling trucks; and d) construction-related power consumption. (RECON, 2013). Based on industry-standard construction practices, these are reasonable assumptions for sources of construction activity air emissions in the Central Village. Thus, the CVSP would not result in an increase of construction emissions as compared to what was assumed in the OMCPU EIR.

Comparing the operational air quality emissions disclosed by the OMCPU EIR to the air quality emissions expected with buildout of the CVSP project demonstrates that the proposed CVSP project would decrease emissions of criteria air pollutants by between 8 and 14%, primarily due to the reduction in traffic that would be generated by the CVSP in compared to the amount of traffic assumed to be generated by the Central Village by the OMCPU EIR. According to the CVSP's *Transportation Facilities Trigger Analysis* (Chen Ryan & Associates, 2017), the CVSP is calculated to generate 36,345 average daily vehicular trips (ADT), which is less traffic than was assumed for the Central Village by the OMCPU EIR, at 45,429 ADT. This report concludes that although operational air emissions would be 8% to 14% less, impacts would still be significant and, as such, the mitigation measures presented in the OMCPU EIR with respect to air quality emissions would still be applicable to implementing development projects. As noted above, neither the OMCPU nor the proposed CVSP authorize the construction of any development. Future development proposals in the CVSP area would require discretionary approval by the City and be subject to additional CEQA review.

The CVSP would not result in the emission of any increased toxic air emissions in comparison to the OMCPU. In fact, the reduction in traffic volumes that would occur under the CVSP would reduce the potential emissions of air pollutants associated with vehicle exhaust. Regarding the potential for uses in the CVSP to be exposed to toxic air contaminants, the conclusions drawn herein are consistent with those drawn by the OMCPU EIR; Polices and Design Standards incorporated into the CVSP and mitigation measures required by the OMCPU EIR would preclude the exposure of on-site sensitive receptors to carcinogenic and non-carcinogenic health risk levels that exceed significance thresholds. Nonetheless, the OMCPU EIR disclosed the potential for significant and unavoidable effects associated with the collection of residential, commercial, and industrial land uses. Policies and Design Standards provided in the CVSP address this concern.

1.0 INTRODUCTION

1.1 Purpose of this Study

The purpose of this Air Quality study is to determine whether the proposed Central Village Specific Plan (CVSP) project, which implements the Central Village portion of the Otay Mesa Community Plan Update (March 2014, "OMCPU"), would result in any new or more severe impacts associated with air quality emissions as compared to the impacts disclosed in the Environmental Impact Report (EIR) prepared for the OMCPU. Because the proposed CVSP implements and is fully consistent with the OMCPU, the comparative portion of the analysis in this report focuses on differences in air quality emissions and diesel particulate matter emissions disclosed by the OMCPU EIR in comparison to the quantity of construction and operational air quality and diesel particulate matter emissions calculated by Ldn Consulting for the proposed CVSP project.

1.2 Project Location

The Central Village Specific Plan (CVSP) area is located in the southern portion of the City of San Diego, within Otay Mesa Community. The CVSP is situated immediately south of California State Route 905 (SR-905), approximately 2.4 miles east of Interstate 805 (I-805) and Interstate 5 (I-5), and 0.5 mile north of the United States and Mexico International Border. Specifically, the CVSP is bordered by SR-905 and Airway Road to the north, Cactus Road and Continental Road to the east, and Siempre Viva Road to the south, which terminates at its western extent at Cactus Road at the southwest corner of the CVSP boundary. A general vicinity map showing the Otay Mesa Community Plan boundaries is shown in Figure 1–A and a map showing the CVSP within the Otay Mesa Community Plan is shown in Figure 1-B.

1.3 Project Description

The OMCPU and associated EIR assumed the following land uses within the Central Village portion of the OMCPU area:

- 5,246 multi-family dwelling units
- 32.7 ksf of community commercial
- 32.3 acres of active park space
- 1 elementary school

The CVSP is proposing to change the land uses within the Central Village area to the following:

- 425 multi-family dwelling units (<20 du/ac)
- 4,060 multi-family dwelling units (>20 du/ac)
- 139.7 ksf of community commercial
- 16.1 acres of active park space

- 1 elementary school

The land use modifications proposed by the CVSP in comparison to the mix of land uses assumed for the Central Village by the OMCPU EIR are summarized below. The proposed CVSP Land Use Plan is shown in Figure 1-C.

- A reduction of 761 Multi-family dwelling units
- An increase of 107 ksf of community commercial floor space
- A reduction of 16.2 acres of active park space

Because the development area (229.2 acres) assumed by the OMCPU EIR and the development area (229.2 acres) proposed by the CVSP are substantially similar, it is assumed that construction activities associated with buildout of the Central Village would largely remain the same as assumed by the OMCPU EIR in the Central Village area. The EIR's analysis of construction emissions assumed that sources of construction-related air emissions would include: a) fugitive dust from grading activities; b) construction equipment exhaust; c) construction-related trips by workers, delivery trucks, and material-hauling trucks; and d) construction-related power consumption. (RECON, 2013). Based on industry-standard construction practices, these are reasonable assumptions for sources of construction activity air emissions in the Central Village.

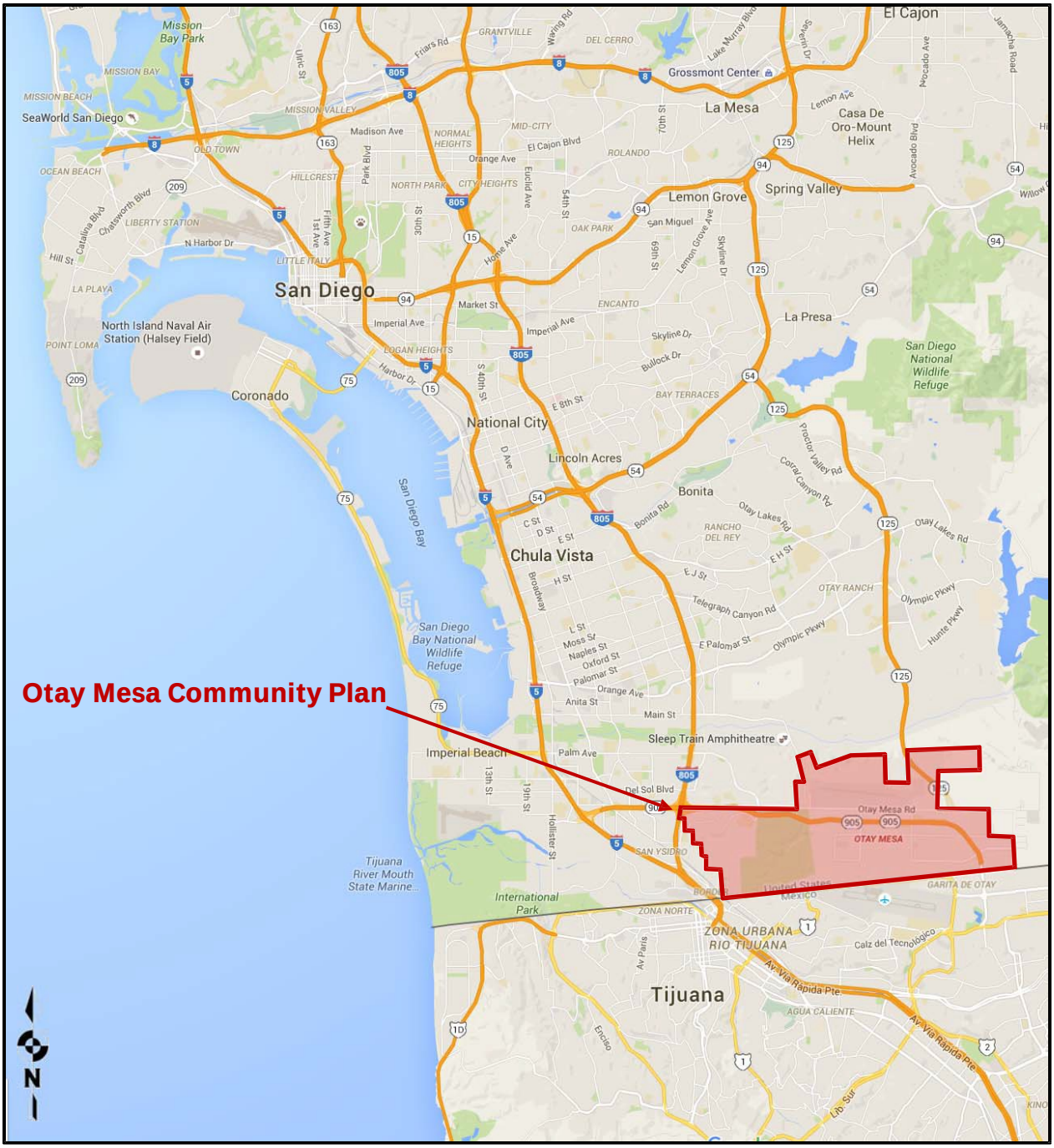
In regards to long-term operation of land uses in the CVSP, the proposed land use changes described above were analyzed in the CVSP's *Transportation Facilities Trigger Analysis* (Chen Ryan & Associates, 2017), and as stated therein, the CVSP is calculated to generate 36,345 average daily vehicular trips (ADT), which is less traffic than was assumed for the Central Village by the OMCPU EIR, at 45,429 ADT. Also, the transportation analysis found that the increased commercial square footage would increase internal traffic from 4.67% to 9.4% or an additional 1,547 ADT. Given this, fewer vehicles will travel outside of the CVSP boundaries. Less external traffic means that vehicles will travel fewer miles, resulting in less vehicle miles traveled (VMT) and a lesser quantity of mobile source (vehicle tailpipe) air pollutant emissions.

The proposed CVSP's arrangement of land uses provides four times as much commercial area along the more heavily traveled Airway Road as compared to the less traveled Cactus Avenue as originally planned for by the OMCPU. Because Airway Road will carry higher traffic volumes than Cactus Road, it is expected that the CVSP would have increased pass-by trip usage. A pass-by trip means that a vehicle that is already on the road will stop to use a convenience use (to shop, get food, etc.) and reduce the need for an additional trip or longer trip for that purpose. Increased pass-by trips along Airway Road may ultimately reduce the number of trips from origin and destination points outside the CVSP boundaries. Less regional traffic means that vehicles will travel fewer miles, resulting in a less VMT and a lesser quantity of mobile source (vehicle tailpipe) emissions.

Additionally, the provision of more commercial square footage within the CVSP compared to the

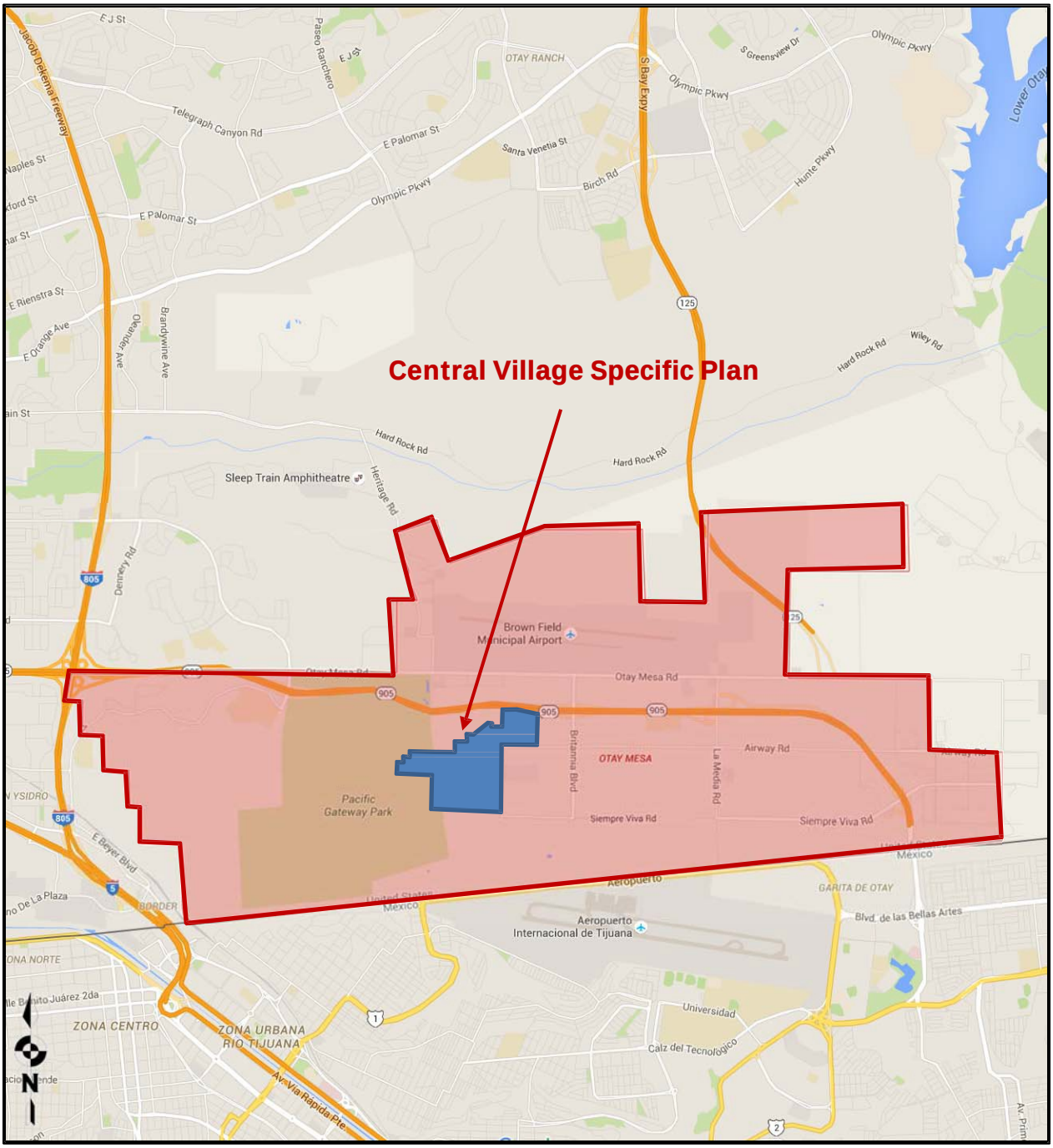
amount assumed under the OMCPU, the "Jobs to Housing" ratio would increase. This means that more people residing in the CVSP and OMCPU would have access to employment within the same area, reducing commute distances and potentially allowing for walking and biking to/from work. Shorter home/work commute distances and the facilitation of walking and biking trips through arrangement of land uses and site planning as recommended by CVSP policies also means that means that vehicles will travel fewer miles, resulting in a less VMT and a lesser quantity of mobile source (vehicle tailpipe) emissions.

Figure 1-A: Otay Mesa Community Plan Location



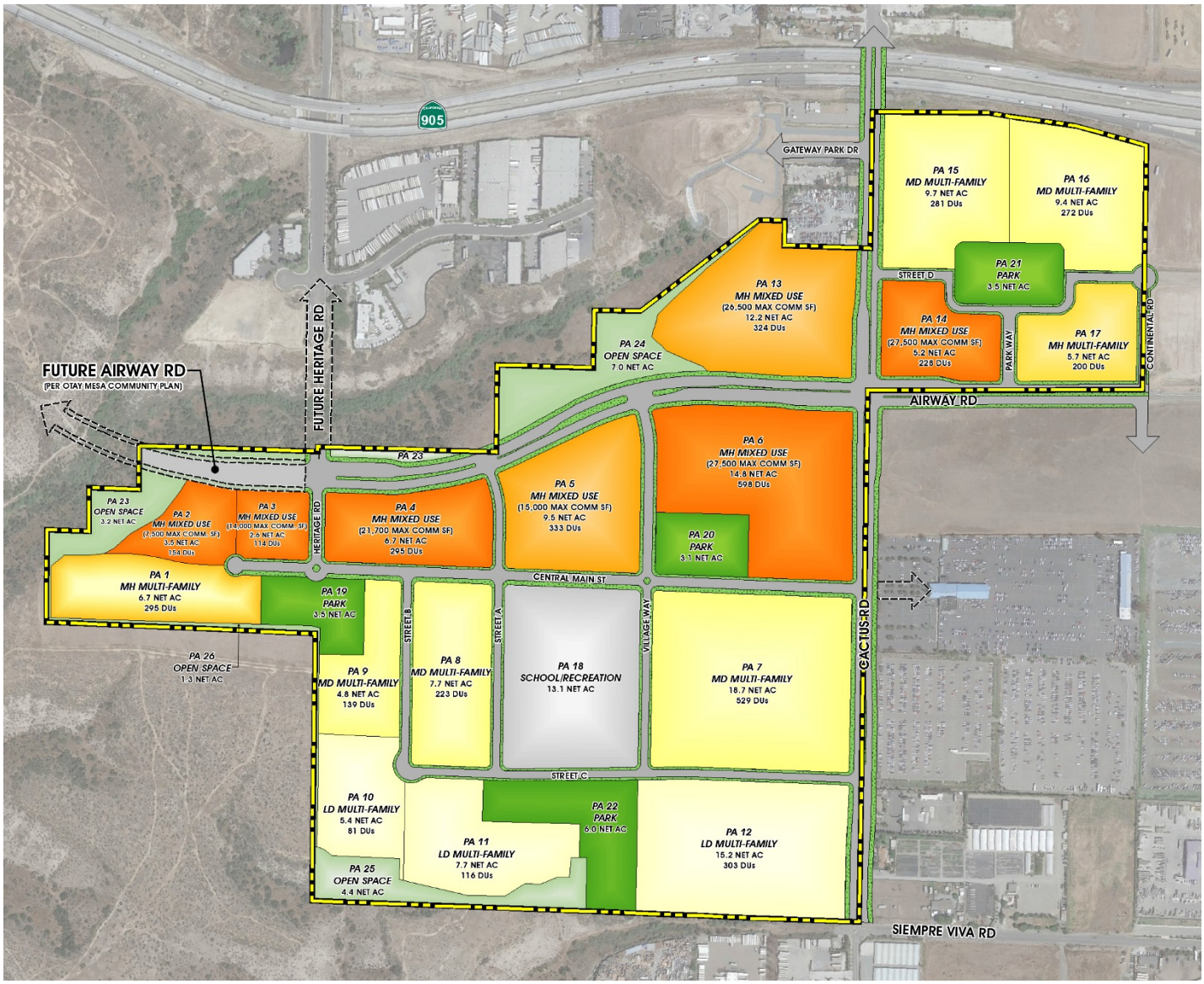
Source: (Google 2016)

Figure 1-B: Central Village Specific Plan Location



Source: (Google 2016)

Figure 1-C: Central Village Specific Plan



The CVSP was planned in accordance with the Otay Mesa Community Plan which identifies the vision for the Central Village Community as:

> "*a medium to high density residential community centered along Airway Road, and focused around school and park uses, as well as village-scale retail"*

The proposed CVSP includes many Polices and Design Standards to encourage walking, biking, and the use of transit, which also would reduce VMT and associated mobile source air emissions. Some of these Policies and Design Standards are provided below as examples. Please refer to the CVSP for a full list.

"Policy 2.3-1 If possible, include transit stops to support transit use within the Central Village."

"Policy 2.3-3 Design street corners to accommodate safe pedestrian crossings. Include ample unobstructed space at the street corner for people waiting to cross the street. Where there is demand for a pedestrian street crossing that does not align with an intersection, apply a mid-block crossing."

"Policy 2.3-4 Provide interconnected streets and pedestrian walkways. Avoid barriers to pedestrian access…."

"Policy 2.3-10 Incorporate traffic calming measures at intersections with pedestrian crossings."

"Policy 2.3-14 Design trails to include major gateways and intersections to enable trail users to connect to other segments of the on-site pedestrian network."

"Design Standard 2.3-13 Sidewalk widths shall be 8 or 10-feet wide where transit stops and shelters are proposed and shall extend for 25 feet parallel to the curb measured from the bus stop sign to provide adequate clearance to accommodate bus lifts for disabled persons."

"Design Standard 2.3-15 Bus facilities shall be developed in accordance with the standards provided in the City of San Diego Street Design Manual."

"Design Standard 2.3-16 Rapid Transit stops shall be designed to allow pedestrians to cross the street safely and within proximity to the stop."

"Design Standard 2.3-17 Rapid Transit facilities shall be developed in accordance with the standards provided in the City of San Diego Street Design Manual."

"Design Standard 2.3-18 Class I and Class II bike lanes shall be developed in locations shown on [CVSP] Figure 2.3-4, Alternative Transportation Plan…."

"Policy 2.5-1 Pedestrian plazas, either within the interior of the development or at building street corners, should be provided where possible to help activate street corners, provide a foreground to building entrances, and/or to serve adjacent uses (such as a retail space, café, or office use)."

"Policy 2.5-6 Pedestrian paseos are encouraged in all developments to provide enhanced connectivity and usable open space."

"Policy 2.5-8 Incorporate informal outdoor gathering areas and pedestrian nodes into design plans in ways that allow these spaces to function as community gathering spaces."

"Policy 2.5-15 Orient development in ways that create compact blocks and lots. A 'block' is defined as an area of development that is delineated on all sides by public streets, paseos, trails, parks, community facilities, landscaped setbacks, and/or private internal streets. Except where site-specific circumstances preclude it, blocks within the Central Village shall have a maximum of perimeter of 2,000 feet."

"Policy 2.5-17 Developments should incorporate safe pedestrian connections to adjoining residential developments, commercial projects, and open space areas."

"Policy 2.5-20 Proposed developments should provide an interconnected system of paths, sidewalks, corridors, and walkways that create a safe and pleasant pedestrian environment, connect dwelling units and common areas, are well-integrated with the surrounding neighborhood, and provide multiple pedestrian access points."

"Policy 2.5-22 Drive-through commercial site design is prohibited within Central Village."

"Policy 2.5-105 The following amenities may be provided to support bicyclists and pedestrians: street furniture, public art, bike paths, multiple access points, and safe street crossing opportunities."

"Policy 2.5-175 Pedestrian scaled lighting, such as low profile bollards, should be selected from highly durable materials that contribute to the overall design theme of Central Village."

Finally, it should be noted that the street sections illustrated in the proposed CVSP for Airway Road, Cactus Road, Heritage Road, Village Entry Streets, and Green Streets, all include bike lanes and sidewalks. Sidewalks are planned along every street interior to the Central Village, except alleys. Refer to the CVSP's Vehicular Mobility Plan (CVSP Figure 2.3-1), Street Cross-Sections (CVSP Figures 2.3-2 and 2.3-3), and Alternative Transportation Plan (CVSP Figure 2.3-4).

2.0 EXISTING ENVIRONMENTAL SETTING

2.1 Existing Setting

Existing land uses within the Central Village area consist of undeveloped lands, agricultural operations, a few single-family residential homes, and open space. Consistent with the existing conditions reported in the OMCPU EIR, air pollutant emissions generated by these existing uses is nominal. Off-site land uses surrounding the Central Village area include a mixture of roadways, open space, undeveloped lands, agricultural uses, and light and heavy industrial uses.

2.2 Climate and Meteorology

The OMCPU area (including the CVSP area) is located in the San Diego Air Basin (SDAB). Climate within the SDAB area often varies dramatically over short geographical distances due to the Air Basin's size and topography. Most of southern California is dominated by high pressure systems for much of the year, which keeps San Diego mostly sunny and warm. Typically, during the winter months, the high pressure system drops to the south and brings cooler, moister weather from the north.

It is common for inversion layers to develop within high pressure areas which mostly define pressure patterns over the SDAB. These inversions are caused when a thin layer of the atmosphere increases in temperature with height. An inversion acts like a lid preventing vertical mixing of air through convective overturning.

Daytime temperature highs within the Otay Community Plan is most like that of nearby Chula Vista. The project areas typically range between 68 ºF in the winter to approximately 80 ºF in the summer with the month of August usually being the hottest month. Median temperatures range from approximately 57 ºF in the winter to approximately 72 ºF in the summer. Chula Vista usually receives approximately 10 inches of rain per year with the month of March usually being the wettest month of the year. The average humidity is approximately 65% in the winter and about 73% in the summer (City-Data, 2016).

2.3 Regulatory Standards

2.3.1 Federal Standards and Definitions

The Federal Air Quality Standards were developed per the requirements of The Federal Clean Air Act, which is a federal law that was passed in 1970 and further amended in 1990. This law provides the basis for the national air pollution control effort. An important element

of the act included the development of national ambient air quality standards (NAAQS) for major air pollutants.

The Clean Air Act established two types of air quality standards otherwise known as primary and secondary standards. ***Primary Standards*** set limits for the intention of protecting public health, which includes sensitive populations such as people with asthma, children and elderly. ***Secondary Standards*** set limits to protect public welfare to include the protection against decreased visibility, damage to animals, crops, vegetation and buildings.

The EPA Office of Air Quality Planning and Standards (OAQPS) has set National Ambient Air Quality Standards for principal pollutants, which are called "criteria" pollutants. These pollutants are defined below:

1. ***Carbon Monoxide (CO):*** *is a colorless, odorless, and tasteless gas and is produced from the partial combustion of carbon-containing compounds, notably in internal-combustion engines. Carbon monoxide usually forms when there is a reduced availability of oxygen present during the combustion process. Exposure to CO near the levels of the ambient air quality standards can lead to fatigue, headaches, confusion, and dizziness. CO interferes with the blood's ability to carry oxygen.*
2. ***Lead (Pb):*** *is a potent neurotoxin that accumulates in soft tissues and bone over time. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Because lead is only slowly excreted, exposures to small amounts of lead from a variety of sources can accumulate to harmful levels. Effects from inhalation of lead near the level of the ambient air quality standard include impaired blood formation and nerve conduction. Lead can adversely affect the nervous, reproductive, digestive, immune, and blood-forming systems. Symptoms can include fatigue, anxiety, short-term memory loss, depression, weakness in the extremities, and learning disabilities in children.*
3. ***Nitrogen Dioxide (NO_2):*** *is a reactive, oxidizing gas capable of damaging cells lining the respiratory tract and is one of the nitrogen oxides emitted from high-temperature combustion, such as those occurring in trucks, cars, power plants, home heaters, and gas stoves. In the presence of other air contaminants, NO_2 is usually visible as a reddish-brown air layer over urban areas. NO_2 along with other traffic-related pollutants is associated with respiratory symptoms, respiratory illness and respiratory impairment. Studies in animals have reported biochemical, structural, and cellular changes in the lung when exposed to NO_2 above the level of the current state air quality standard. Clinical studies of human subjects suggest that NO_2 exposure to levels near the current standard may worsen the effect of allergens in allergic asthmatics, especially in children.*
4. ***Particulate Matter (PM_{10} or $PM_{2.5}$):*** *is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of*

liquid. These particles vary in shape, size and chemical composition, and can be made up of multiple materials such as metal, soot, soil, and dust. PM_{10} particles are 10 microns (µm) or less and $PM_{2.5}$ particles are 2.5 (µm) or less. These particles can contribute significantly to regional haze and reduction of visibility in California. Exposure to PM levels exceeding current air quality standards increases the risk of allergies such as asthma and respiratory illness.

5. ***Ozone (O_3)**: is a highly oxidative unstable gas capable of damaging the linings of the respiratory tract. This pollutant forms in the atmosphere through reactions between chemicals directly emitted from vehicles, industrial plants, and many other sources. Exposure to ozone above ambient air quality standards can lead to human health effects such as lung inflammation, tissue damage and impaired lung functioning. Ozone can also damage materials such as rubber, fabrics and plastics.*
6. ***Sulfur Dioxide (SO_2)**: is a gaseous compound of sulfur and oxygen and is formed when sulfur-containing fuel is burned by mobile sources, such as locomotives, ships, and off-road diesel equipment. SO_2 is also emitted from several industrial processes, such as petroleum refining and metal processing. Effects from SO_2 exposures at levels near the one-hour standard include bronchoconstriction accompanied by symptoms, which may include wheezing, shortness of breath and chest tightness, especially during exercise or physical activity. Children, the elderly, and people with asthma, cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most susceptible to these symptoms. Continued exposure at elevated levels of SO_2 results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality.*

2.3.2 State Standards and Definitions

The State of California Air Resources Board (ARB) sets the laws and regulations for air quality on the state level. The California Ambient Air Quality Standards (CAAQS) are either the same as or more restrictive then the NAAQS and also set limits for four additional contaminants. Table 2.1 on Page 13 of this report identifies both the NAAQS and CAAQS. The additional contaminants as regulated by the CAAQS are defined below:

1. ***Visibility Reducing Particles**: Particles in the air that obstruct the visibility.*
2. ***Sulfates**: are salts of Sulfuric Acid. Sulfates occur as microscopic particles (aerosols) resulting from fossil fuel and biomass combustion. They increase the acidity of the atmosphere and form acid rain.*
3. ***Hydrogen Sulfide (H_2S)**: is a colorless, toxic and flammable gas with a recognizable smell of rotten eggs or flatulence. H_2S occurs naturally in crude petroleum, natural gas, volcanic gases, and hot springs. Usually, H_2S is formed from bacterial breakdown of organic matter. Exposure to low concentrations of hydrogen sulfide may cause irritation*

to the eyes, nose, or throat. It may also cause difficulty in breathing for some people with asthma. Brief exposures to high concentrations of hydrogen sulfide (greater than 500 ppm) can cause a loss of consciousness and possibly death.

4. ***Vinyl Chloride**: also known as chloroethene and is a toxic, carcinogenic, colorless gas with a sweet odor. It is an industrial chemical mainly used to produce its polymer, polyvinyl chloride (PVC).*

2.3.3 Regional Standards

The State of California has 35 air districts, which are each responsible for ensuring that the criteria pollutants are below the NAAQS and CAAQS. Air basins that exceed either the NAAQS or the CAAQS for any criteria pollutants are designated as "non-attainment areas" for that pollutant. Currently, there are 15 non-attainment areas for the federal ozone standard and two non-attainment areas for the $PM_{2.5}$ standard and many areas are in non-attainment for PM_{10} as well. The State therefore created the California State Implementation Plan (SIP), which is designed to provide control measures needed for California Air basis to attain ambient air quality standards.

The San Diego Air Pollution Control District (SDAPCD) is the government agency which regulates sources of air pollution within San Diego County. Therefore, the SDAPCD developed a Regional Air Quality Strategy (RAQS) to provide control measures designed to achieve attainment status. Currently, San Diego is in "non-attainment" status for federal and State O_3 standards and the State PM_{10} and $PM_{2.5}$ standards; however, an attainment plan is only available for O_3. The RAQS was adopted in 1992 and has been updated as recently as 2009 which was the latest update incorporating minor changes to the prior 2004 update.

The 2009 update mostly clarifies and enhances emission reductions by implementing new volatile organic compounds (VOC) and oxides of nitrogen (NO_X) reduction measures. The criteria pollutant standards are generally attained when each monitor within the region has had no exceedances during the previous three calendar years. A complete listing of the current attainment status with respect to both federal and state standards by pollutants for San Diego County is shown in Table 2.2 on Page 14 of this report.

The RAQS is largely based on population predictions by the San Diego Association of Governments (SANDAG). Projects that produce less growth than predicted by SANDAG would generally conform to the RAQS and projects create more growth than projected by SANDAG may create a significant impact especially if the project produces unmitigable emission generation in excess of the regional standards. Also, the project would be considered to have a significant impact if the project produces cumulative impacts.

Table 2.1: Ambient Air Quality Standards

Ambient Air Quality Standards						
Pollutant	**Average Time**	**California Standards[1]**		**Federal Standards[2]**		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m3)	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m3)		0.070 ppm (137 µg/m3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m3	Gravimetric or Beta Attenuation	150 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m3		-		
Fine Particulate Matter (PM2.5)[9]	24 Hour	No Separate State Standard		35 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m3	Gravimetric or Beta Attenuation	12.0 µg/m3	15 µg/m3	
Carbon Monoxide (CO)	8 hour	9.0 ppm (10mg/m3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m3)	-	Non-Dispersive Infrared Photometry
	1 hour	20 ppm (23 mg/m3)		35 ppm (40 mg/m3)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m3)		-	-	-
Nitrogen Dioxide (NO_2)[10]	Annual Arithmetic Mean	0.030 ppm (57 µg/m3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m3)[8]	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m3)		0.100 ppm[8] (188/ µg/m3)	-	
Sulfur Dioxide (SO_2)[11]	Annual Arithmetic Mean	-	Ultraviolet Fluorescence	0.030 ppm[10] (for Certain Areas)	-	Ultraviolet Flourescence; Spectrophotometry (Pararoosaniline Method)[9]
	24 Hour	0.04 ppm (105 µg/m3)		0.14 ppm[10] (for Certain Areas) (See Footnote 9)	-	
	3 Hour	-		-	0.5 ppm (1300 µg/m3)	
	1 Hour	0.25 ppm (655 µg/m3)		75 ppb (196 µg/m3)	-	
Lead[12,13]	30 Day Average	1.5 µg/m3	Atomic Absorption	-		-
	Calendar Quarter	-		1.5 µg/m3	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Average	-		0.15 µg/m3		
Visibility Reducing Particles	8 Hour	See footnote 13				
Sulfates	24 Hour	25 µg/m3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m3)	Gas Chromatography			

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, 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 one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon 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.
4. Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 µg/m3 to 12.0 µg/m3 . The existing national 24- hour PM2.5 standards (primary and secondary) were retained at 35 µg/m3, as was the annual secondary standard of 15 µg/m3. The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (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.
11. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national 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 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
12. The ARB 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.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m3 as a quarterly average) remains in effect until one 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.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: (California Air Resources Board, 10/1/15)

Table 2.2: San Diego County Air Basin Attainment Status by Pollutant

San Diego County Air Basin Attainment Status by Pollutant			
Pollutant	Average Time	California Standards	Federal Standards
Ozone (O_3)	1 Hour	Non-attainment	No Federal Standard
	8 Hour		Marginal Non-attainment
Respirable Particulate Matter (PM_{10})	24 Hour	Non-attainment	Unclassified[1]
	Annual Arithmetic Mean	No State Standard	Unclassified[2]
Fine Particulate Matter $PM_{2.5}$	24 Hour	No State Standard	Attainment
	Annual Arithmetic Mean	Non-attainment	Attainment
Carbon Monoxide (CO)	8 hour	Attainment	Maintenance Area[3]
	1 hour		
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	No State Standard	Attainment
	1 Hour	Attainment	No Federal Standard
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	No State Standard	Attainment
	24 Hour	Attainment	Attainment
	1 Hour	Attainment	No Federal Standard
Lead	30 Day Average	Attainment	No Federal Standard
	Calendar Quarter	No State Standard	Attainment
Visibility Reducing Particles	8 Hour (10AM to 6PM, PST)	Unclassified	No Federal Standard
Sulfates	24 Hour	Attainment	No Federal Standard
Hydrogen Sulfide	1 Hour	Unclassified	No Federal Standard

1. Data reflects status as of March 19, 2009.

2. Unclassified; indicates data are not sufficient for determining attainment or nonattainment.

3. Maintenance Area (defined by U.S. Department of Transportation) is any geographic region of the United States previously designated nonattainment pursuant to the CAA Amendments of 1990 and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under section 175A of the CAA, as amended.

2.4 SDAPCD Rule 20.2 – Air Quality Impact Assessment Screening Thresholds

The SDAPCD has established thresholds in Rule 20.2 for new or modified stationary sources. The County's Guidelines for Determining Significance and Report Format and Content Requirements include screening level thresholds for all County-related Air Quality Impact Assessments (AQIA) and for determining CEQA air quality impacts. These screening criteria can be used to demonstrate whether a project's total emissions would result in a significant impact as defined by CEQA. Should emissions be found to exceed these thresholds, additional modeling is required to demonstrate that the project's total air quality impacts are below the state and federal ambient air quality standards. These daily screening thresholds for construction and operations are shown in Table 2.3 below.

The U.S. Environmental Protection Agency (U.S. EPA) uses the term Volatile Organic Compounds (VOC) and the California Air Resources Board's (CARB's) Emission Inventory Branch (EIB) uses the term Reactive Organic Gases (ROG) to essentially define the same thing. There are minor deviations between compounds that define each term however for

purposes of this study we will assume they are essentially the same due to the fact SCAQMD interchanges these words and because CALEEMOD 2013.2.2 directly calculates ROG in place of VOC.

Table 2.3: Screening Thresholds for Criteria Pollutants

Pollutant	Total Emissions (Pounds per Day)
Construction Emissions	
Respirable Particulate Matter (PM_{10} and $PM_{2.5}$)	100 and 55
Nitrogen Oxide (NO_x)	250
Sulfur Oxide (SO_X)	250
Carbon Monoxide (CO)	550
Volatile Organic Compounds (VOCs)	75
Reactive Organic Gases (ROG) SCAQMD	75
Operational Emissions	
Respirable Particulate Matter (PM_{10} and $PM_{2.5}$)	100 and 55
Nitrogen Oxide (NO_x)	250
Sulfur Oxide (SO_X)	250
Carbon Monoxide (CO)	550
Lead and Lead Compounds	3.2
Volatile Organic Compounds (VOCs)	75
Reactive Organic Gases (ROG) SCAQMD	75

2.5 SDAPCD Rule 1200

Non-criteria pollutants such as Hazardous Air Pollutants (HAPs) or Toxic Air Contaminants (TACs) are also regulated by the SDAPCD. Rule 1200 (Toxic Air Contaminants - New Source Review) adopted on June 12, 1996, requires evaluation of potential health risks for any new, relocated, or modified emission unit which may increase emissions of one or more toxic air contaminants. The rule requires that projects that could increase cancer risk to between 1 and 10 in one million need to implement toxics best available control technology (T-BACT) or impose the most effective emission limitation, emission control device or control technique to reduce the cancer risk. At no time shall a project increase the cancer risk to over 10 in one million or a health hazard index (chronic and acute) greater than one. Projects creating cancer risks less than one in one million are not required to implement T-BACT technology.

2.6 Local Air Quality

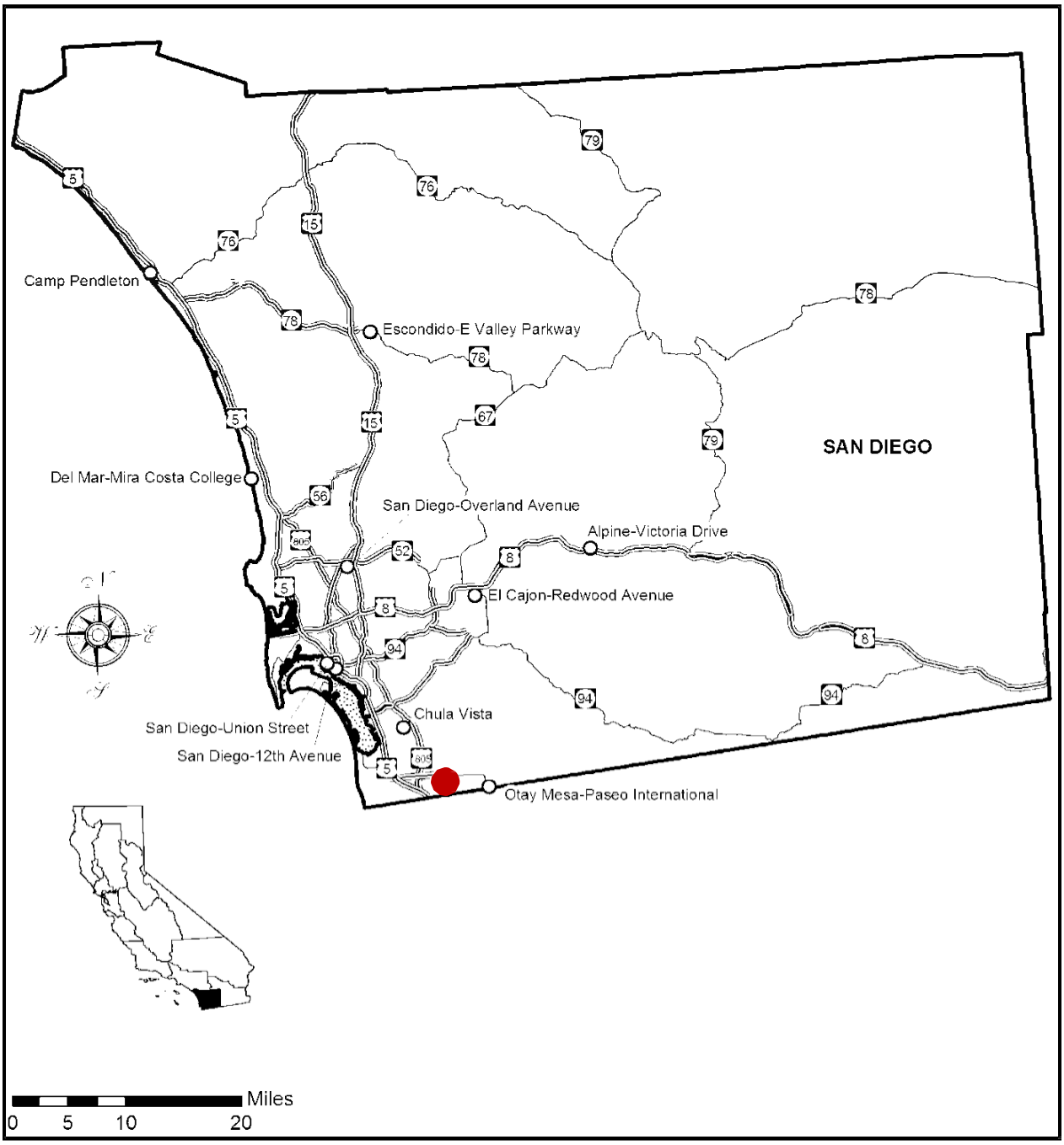
Criteria pollutants are measured continuously throughout the San Diego Air Basin. This data is used to track ambient air quality patterns throughout the County. As mentioned earlier, this data is also used to determine attainment status when compared to the

NAAQS and CAAQS.

The SDAPCD is responsible for monitoring and reporting monitoring data. The District operates 10 monitoring sites, which collect data on criteria pollutants. Four additional sites collect meteorological data which is used by the District to assist with pollutant forecasting, data analysis and characterization of pollutant transport. Figure 2-A shows the relative locations of the monitoring sites.

SDAPCD published the five-year air quality summary for all of the monitoring stations within the San Diego basin (SDAPCD, 2015). The CVSP area is located near the Chula Vista monitoring station, roughly 12 miles away. Table 2.4 identifies the criteria pollutants monitored at the aforementioned station.

Figure 2-A: Ambient Air Quality Monitoring Stations within SDAB – CARB



Source: (California Air Resources Board, 2014)

Table 2.4: Three-Year Ambient Air Quality Summary near the Project Site

Pollutant	Closest Recorded Ambient Monitoring Site	Averaging Time	CAAQS	NAAQS	2012	2013	2014
O3 (ppm)	Chula Vista Monitoring Station	1 Hour	0.09 ppm	-	0.09	0.07	0.09
		8 Hour	0.070 ppm	0.075 ppm	0.08	0.06	0.07
PM10 (µg/m3)		24 Hour	50 µg/m3	150 µg/m3	37	38	38
		Annual Arithmetic Mean	20 µg/m3	-	21.5	23.7	23.4
PM2.5 (µg/m3)		24 Hour	-	35 µg/m3	34.3	21.9	26.5
		Annual Arithmetic Mean	12 µg/m3	15 µg/m3	-	9.5	9.3
NO2 (ppm)		Annual Arithmetic Mean	0.030 ppm	0.053 ppm	0.011	0.011	0.011
CO (ppm)		1 Hour	0.18 ppm	-	0.057	0.056	0.056
		8 Hour	9 ppm	9 ppm	1.6	-	-

3.0 METHODOLOGY

3.1 Construction Criteria Pollutant Emissions

The mix of land uses proposed by the CVSP in comparison to the mix of land uses assumed for the Central Village by the OMCPU EIR are similar, and contain residential uses, mixed-use areas accommodating commercial uses, parks, trails, and one elementary school. The land uses changes proposed by the CVSP include:

- A reduction of 761 Multi-family dwelling units
- An increase of 107 ksf of community commercial floor space
- A reduction of 16.2 acres of active park space

Because the mix of land uses assumed by the OMCPU EIR and the land uses proposed by the CVSP are substantially similar, it is assumed that construction activities associated with buildout of the Central Village would largely remain the same as assumed by the OMCPU EIR in the Central Village area. The EIR's analysis of construction activity assumed that sources of construction-related air emissions would include: a) fugitive dust from grading activities; b) construction equipment exhaust; c) construction-related trips by workers, delivery trucks, and material-hauling trucks; and d) construction-related power consumption. (RECON, 2013). Based on industry-standard construction practices, these are reasonable assumptions for sources of construction activity air emissions in the Central Village. Thus, the CVSP would not result in an increase of construction emissions as compared to what was assumed in the OMCPU EIR. For this reason, detailed construction-related air quality modeling is not required, because the results for the Central Village would be identical to those reported in the OMCPU EIR. Because daily and total construction-related air emissions associated with the CVSP would not increase in relation to what was evaluated and disclosed in the OMCPU EIR, no new or more severe construction-related air quality impacts would result.

3.2 Operational Criteria Pollutant Emissions

The largest changes in air emission quantities associated with the land use changes proposed by the CVSP would be expected during the operational life of the CVSP project. Air emissions from daily operations would include sources such as Area, Energy, and Mobile. Area Source emissions include emissions from consumer products, landscaping maintenance equipment, and architectural coatings (such as painting) as part of regular maintenance activities in a predominately residential community. Energy sources emissions would be generated from the production and consumption of energy to operate the Central Village community, such as electricity and natural gas. Mobile (or transportation-related) source emissions would occur from motor vehicles (tailpipe emissions) generated by land uses in the Central Village, which are calculated in CalEEMod through the use of EMFAC2011. In the

EMFAC model, an emissions inventory is based on the emission rate (e.g., grams per pollutant emitted over a mile) and vehicle activity (e.g., miles driven per day). Area sources originate from daily onsite uses, which require either burning fuel to generate energy (i.e. natural gas fireplaces, gas furnaces, gas water heaters and small engines) or the evaporation of organic gases such as from paints (architectural coatings).

CalEEMod 2013.2.2 and EMFAC2011 represent the most recent model versions available at the time environmental analysis of the CVSP project commenced. The operational model outputs for operation of land uses in the Central Village under the land use assumptions of the OMCPU and the land uses proposed by the CVSP are provided in ***Attachments A and B,*** respectively, at the end of this report. Traffic data for the Central Village relied upon in the modeling efforts were taken from the OMCPU EIR's traffic report (Urban Systems Associates, Inc. 2012) as summarized in the CVSP's *Transportation Facilities Trigger Analysis* (Chen Ryan & Associates, 2017), and traffic data for buildout of the CVSP as disclosed in the CVSP's *Transportation Facilities Trigger Analysis.* At full buildout of the Central Village, the OMCPU EIR assumed the generation of 45,429 daily trips. In comparison, 36,345 daily trips would be generated by land uses in the Central Village under the proposed CVSP. The CalEEMod 2013.2.2 air quality model was run on both scenarios to remain consistent. (The OMCPU EIR used CalEEMod 2011). The only modifications to the model run for the Central Village under the OMCPU scenario and the proposed CVSP scenario were the above-described land use changes within the Central Village as proposed by the CVSP. The differences in land use data projected changes through the model to include Mobile, Area, Energy Usage, Water and Sewer and Solid Waste usage.

3.3 Toxic Air Contaminant Emissions

This health risk analysis uses the California Office of Environmental Health Hazard Assessment (OEHHA) methodologies which is required as of 2015 (OEHHA, 2015) and roadway modeling methodologies outlined by the California Air Pollution Control Officers Association (CAPCOA, July 2009). Health risk impacts can exist when a project is exposed to toxic emissions. Sensitive receptors (and the facilities that house them) in proximity to sources of air pollutants that emit TACs are of particular concern. Exposure to TACs can increase the risk of contracting cancer or result in adverse non-cancer health effects. Non-cancer health risks associated with TAC exposure include birth defects and other reproductive damage, neurological disorders, and damage to the respiratory system (California Air Resources Board, 2005).

Generally, cancer risk can exist within 500-feet of a freeway or busy traffic corridor but the risk will substantially drop off with distance from a ground level pollution source. Freeways and busy traffic corridors are defined as traffic volume of over 100,000 vehicles per day in urban areas and 50,000 vehicles per day in rural areas (Education Code Section 17312). CARB studies show that air pollution levels can be substantially higher within 500 feet (150 meters) of

freeways or busy traffic corridors (SCAQMD, 2005).

Projects within the SDAB are generally regulated by San Diego Air Pollution Control District (SDAPCD). Significance thresholds have been established under SDAPCDs "Hot Spots" and permitting program (SDAPCD Rule 1200 and 1210). Under this program, excess cancer risk significance threshold is set at **10 in 1 million** and acute and chronic, non-carcinogenic health effect, a hazard index of **one** must not be exceeded.

Based on reviews of the CVSP's *Transportation Facilities Trigger Analysis*, only I-905 would generate traffic in excess of 100,000 vehicles per day, however, for purposes of analysis and consistency with the OMCPU EIR, sections of both Airway Road and Heritage roads are also analyzed. For this analysis, the AERMOD (version 15181) model was utilized, which is recommended by the U.S. Environmental Protection Agency (EPA) and SDAPCD for roadway modeling that uses local meteorology. The model input/output is shown in ***Attachment C*** to this report.

AERMOD requires external data sources such as meteorological data, traffic data as well as vehicular emission data from EMFAC 2011. AERMOD inputs for roadways and receptors were adjusted geospatially within AERMOD using AERMAP and the latest topographical data provided by the United States Geological Survey (USGS). Vehicular traffic volumes for the CVSP were taken from the *Transportation Facilities Trigger Analysis* (Chen Ryan & Associates, 2017). The roadway emission inputs are shown in ***Attachment D*** to this report.

Once the dispersed concentrations of diesel particulates are estimated in the surrounding air, they are used to evaluate estimated exposure to people. Exposure is evaluated by calculating the dose in milligrams per kilogram body weight per day (mg/kg/d). Under the current OEHHA methodologies for residential exposure, the breathing rates are determined for specific age groups, so inhalation dose (Dose-air) is calculated for each of these age groups, 3rd trimester, 0<2, 2<9, 2<16, 16<30 and 16-70 years. The following algorithms calculate this dose for exposure through the inhalation pathways. The worst-case cancer risk dose calculation is defined in Equation 1 below (OEHHA, February 2015).

Equation 1: $Dose_{air}=C_{air}*(BR/BW)*A*EF*(1x10^{-6})$

$Dose_{air}$	=	Dose through inhalation (mg/kg/d)
C_{air}	=	Concentration in air (µg/m^3) Annual average DPM concentration in µg/m^3
BR/BW	=	Daily breathing rate normalized to body weight (L/kg BW-day). See Table I.2 for the daily breathing rate for each age range.
A	=	Inhalation absorption factor (assumed to be 1)
EF	=	Exposure frequency
1x10-6	=	Milligrams to micrograms conversion (10^{-3} mg/µg), cubic meters to liters conversion (10^{-3} m^3/l)

Once the dose is determined then cancer risk is calculated. The average daily inhalation dose (mg/kg-day) multiplied by the cancer potency factor (mg/kg-day)-1 will give the inhalation cancer risk (unitless), which is an expression of the chemical's cancer risk during a specific duration a 70-year lifespan of exposure is the typical duration analyzed but could be 9 or 30 years too. For example, an inhalation cancer risk of 5 x 10-6 is the same as stating that an individual has an estimated probability of developing cancer from their exposure of 5 chances per one million people exposed.

Cancer risk is calculated by multiplying the daily inhalation dose, by a cancer potency factor, the age sensitivity factor, the frequency of time spent at home and the exposure duration divided by averaging time, to yield the excess cancer risk. As described below, the excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk for any given location. Specific factors as modeled are shown within the project models attached to this report. The worst-case cancer risk calculation is defined in Equation 2 below (OEHHA, February 2015).

Equation 2:

$$RISKinh\text{-}res = DOSEair \times CPF \times ASF \times ED/AT \times FAH$$

RISKinh-res	=	Residential inhalation cancer risk
DOSEair	=	Daily inhalation dose (mg/kg-day)
CPF	=	Inhalation cancer potency factor (mg/kg-day^{-1})
ASF	=	Age sensitivity factor for a specified age group (unitless)
ED	=	Exposure duration (in years) for a specified age group
AT	=	Averaging time for lifetime cancer risk (years)
FAH	=	Fraction of time spent at home (unitless)

OEHHA recommends that exposure durations (residency time) of 30 years be used to estimate individual cancer risk for the Maximally Exposed Individual Resident (MEIR). OEHHA also recommends that the 30-year exposure duration be used as the basis for public notification and risk reduction audits and plans as a worst-case analysis. Exposure durations of 9-years and 70-years are also recommended to be evaluated for the MEIR to show the range of cancer risk based on residency periods.

3.4 Odors

The mix of land uses proposed by the CVSP in comparison to the mix of land uses assumed for the Central Village by the OMCPU EIR are similar, and contain residential uses, mixed-use areas accommodating commercial uses, parks, trails, and one elementary school. In comparison, the CVSP proposes 761 fewer multi-family dwelling units, an additional 107 ksf of community commercial floor space, and 16.2 fewer acres of active park space.

In relation to the potential for odor generation, the OMCPU EIR concluded that "[w]hile the

CPU would allow a variety of land uses, none of the identified land uses are typically associated with the creation of objectionable odors." Because the CVSP proposes the same types of land uses, the potential for objectional odor creation would be similarly less than significant and a detailed analysis is not warranted.

4.0 SIGNIFICANCE THRESHOLDS, ANALSYSIS, AND FINDINGS

4.1 Significance Determination Thresholds

The City developed and published Significance Determination Thresholds for use in California Environmental Quality Act (CEQA) determinations; these thresholds were used by the OMCPU EIR to determine the significance of air quality impacts associated with implementation of the OMCPU. Those same thresholds are used herein to evaluate potential air quality impacts associated with approval of the CVSP. Impacts would be significant if the CVSP would result in any of the following:

A: Conflict with or obstruct implementation of the San Diego Regional Air Quality Strategy (RAQS) or applicable portions of the State Implementation Plan (SIP)?

B: Result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation?

C: Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable Federal or State ambient air quality standard (PM10, PM2.5 or exceed quantitative thresholds for O3 precursors, oxides of nitrogen [NOX] and Volatile Organic Compounds [VOCs] for the County)?

D: Expose sensitive receptors (including, but not limited to, schools, hospitals, resident care facilities, or day-care centers) to substantial pollutant concentrations?

E: Create objectionable odors affecting a substantial number of people?

4.2 Analysis of Compliance with the RAQS

The two pollutants addressed in the RAQS are volatile organic compounds (VOCs) and nitrogen oxide (NOx), which are precursors to the formation of ozone. The RAQS uses available data regarding projected increases in motor vehicle usage, population, and industrial growth to address challenges in controlling emissions and to maintain and further improve air quality. Relative to the adopted OMCPU, the proposed CVSP would result in:

- A reduction of 761 multi-family dwelling units
- An increase of 107 ksf of community commercial floor space
- A reduction of 16.2 acres of active park space

Further, according to the CVSP's *Transportation Facilities Trigger Analysis* (Chen Ryan & Associates, 2017), the CVSP is calculated to generate 36,345 average daily vehicular trips

(ADT), which is less traffic than was assumed for the Central Village by the OMCPU EIR, at 45,429 ADT. Thus, the reduction in traffic would reduce mobile source air pollutant emissions, including VOC and NOx. Refer to the analysis under Section 4.4 below for a comparative quantification. As the primary goal of the RAQS is to reduce ozone precursor emissions and the CVSP would result in lower emissions than would occur under the adopted OMCPU, the CVSP would not obstruct or conflict with the implementation of the San Diego RAQS or applicable portions of the State Implementation Plan (SIP).

4.3 Air Emissions in Comparison to Air Quality Standards – Construction

Because the mix of land uses assumed by the OMCPU EIR and the land uses proposed by the CVSP are substantially similar, it is assumed that construction activities associated with buildout of the Central Village would largely remain the same as assumed by the OMCPU EIR in the Central Village area. The EIR's analysis of construction activity assumed that sources of construction-related air emissions would include: a) fugitive dust from grading activities; b) construction equipment exhaust; c) construction-related trips by workers, delivery trucks, and material-hauling trucks; and d) construction-related power consumption. (RECON, 2013). Based on industry-standard construction practices, these are reasonable assumptions for sources of construction activity air emissions in the Central Village. Thus, the CVSP would not result in an increase of construction emissions as compared to what was assumed in the OMCPU EIR. For this reason, detailed construction-related air quality modeling is not required, because the results for the Central Village would be identical to those reported in the OMCPU EIR. Because daily and total construction-related air emissions associated with the CVSP would not increase in relation to what was evaluated and disclosed in the OMCPU EIR, no new or more severe construction-related air quality impacts would result. Nonetheless, as concluded in the OMCPU EIR, construction-related air pollutant emissions would still exceed significance thresholds. For this reason, the applicable mitigation measures presented in the Air Quality section of the OMCPU EIR would apply to construction projects that implement the CVSP.

4.4 Air Emissions in Comparison to Air Quality Standards - Operational

Based on the CalEEMod 2013.2.2 air quality model, which is based on assumptions utilized in the OMCPU EIR for the Central Village, buildout of the Central Village in accordance with the OMCPU would generate approximately 47,654 ADT with 129,134,582 VMT while the proposed CVSP project would generate 36,354 ADT with 121,237,271 VMT.

The reduction in VMTs under the proposed CVSP project is largely due to the fact that the CVSP orients higher density residential and commercial land uses along Airway Road which will have better public transit access, and better access from areas outside of the CVSP to allow pass-by usage. In addition, the CVSP would accomplish a better job to housing ratio

and better internal connectivity to parks, the school site, and open space/trails than was expected in the Central Village under the adopted OMCPU, which will encourage bilking and walking within the community.

The expected daily pollutant generation was calculated utilizing the product of the average daily miles traveled and the expected emissions inventory calculated by CALEEMOD utilizing emissions from EMFAC2011. Tables 4.1 below and Table 4.2 on the following page show the OMCPU and proposed CVSP seasonal emissions for the Central Village area, and indicate the differences in emissions between the CVSP project and the level of emissions disclosed in the OMCPU EIR for the Central Village.

Based on these findings, operational air quality emissions will be reduced with implementation of the proposed CVSP in comparison to the emissions disclosed for the Central Village by the OMCPU EIR. Given this, no new or more severe air quality impacts would result from implementation of the CVSP project, and no new mitigation would be required. Nonetheless, as concluded in the OMCPU EIR, operational air pollutant emissions would still exceed significance thresholds. For this reason, the applicable mitigation measures presented in the Air Quality Section of the OMCPU EIR would apply to all development projects that implement the CVSP.

Table 4.1: Summer Operational Emissions (Approved (OMCPU) vs. Proposed (CVSP))

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Summer Existing Approved OMCPU Central Village Land Use Scenario						
Area (Lb/Day)	8,239.99	113.95	10,324.53	3.89	1,391.90	1,391.86
Energy (Lb/Day)	0.87	7.41	3.21	0.05	0.60	0.60
Mobile (Lb/Day)	140.76	287.62	1,400.62	4.09	280.09	77.71
Total (Lb/Day)	8,381.61	408.97	11,728.36	8.02	1,672.59	1,470.17
Summer Proposed CVSP Scenario						
Area (Lb/Day)	7,034.40	97.42	8,826.85	3.32	1,189.99	1,189.95
Energy (Lb/Day)	0.75	6.42	2.82	0.04	0.52	0.52
Mobile (Lb/Day)	138.57	273.61	1,339.27	3.85	263.14	73.02
Total (Lb/Day)	7,173.72	377.44	10,168.94	7.21	1,453.64	1,263.49
Difference						
Area (Lb/Day)	-1,205.59	-16.53	-1,497.68	-0.56	-201.91	-201.91
Energy (Lb/Day)	-0.12	-0.99	-0.39	-0.01	-0.08	-0.08
Mobile (Lb/Day)	-2.19	-14.01	-61.35	-0.24	-16.96	-4.69
Total (Lb/Day)	-1,207.89	-31.53	-1,559.42	-0.81	-218.95	-206.67
Percentage Reduction in Emissions	**-14%**	**-8%**	**-13%**	**-10%**	**-13%**	**-14%**
Daily pollutant generation assumes trip distances within CalEEMod						

Table 4.2: Winter Operational Emissions (Approved (OMCPU) vs. Proposed (CVSP))

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Summer Existing Approved OMCPU Central Village Land Use Scenario						
Area (Lb/Day)	8,239.99	113.95	10,324.53	3.89	1,391.90	1,391.86
Energy (Lb/Day)	0.87	7.41	3.21	0.05	0.60	0.60
Mobile (Lb/Day)	140.76	287.62	1,400.62	4.09	280.09	77.71
Total (Lb/Day)	8,381.61	408.97	11,728.36	8.02	1,672.59	1,470.17
Summer Proposed CVSP Scenario						
Area (Lb/Day)	7,034.40	97.42	8,826.85	3.32	1,189.99	1,189.95
Energy (Lb/Day)	0.75	6.42	2.82	0.04	0.52	0.52
Mobile (Lb/Day)	138.57	273.61	1,339.27	3.85	263.14	73.02
Total (Lb/Day)	7,173.72	377.44	10,168.94	7.21	1,453.64	1,263.49
Difference						
Area (Lb/Day)	-1,205.59	-16.53	-1,497.68	-0.56	-201.91	-201.91
Energy (Lb/Day)	-0.12	-0.99	-0.39	-0.01	-0.08	-0.08
Mobile (Lb/Day)	-2.19	-14.01	-61.35	-0.24	-16.96	-4.69
Total (Lb/Day)	-1,207.89	-31.53	-1,559.42	-0.81	-218.95	-206.67
Percentage Reduction in Emissions	**-14%**	**-8%**	**-13%**	**-10%**	**-13%**	**-14%**
Daily pollutant generation assumes trip distances within CalEEMod						

4.5 Air Toxics Effects to Sensitive Receptors

The OMCPU presented an analysis of potential carcinogenic and non-carcinogenic risks to sensitive receptors from mobile sources of air emissions (vehicle tailpipes) and stationary sources. Within the Central Village area, the EIR noted potential health risks to sensitive receptor land uses in the northern portion of the Central Village area, primarily from traffic volumes on I-905 and Airway Road. In all instances, the OMCPU EIR concluded that impacts resulting from mobile source emissions on area roadways would be less than 10 in 1 million (the significance threshold) and less than significant.

The OMCPU EIR also disclosed that in areas where residential and other sensitive uses would be located adjacent to industrial and commercial areas, the collocation of these uses would have the potential to result in air pollution-related health effects to sensitive receptors. The EIR indicated that implementation of the OMCPU would place residential, commercial, and industrial uses in proximity to one another, and impacts could occur associated with exposure of sensitive receptors to pollutants from the operation of industrial and commercial facilities, which can include diesel particulate matter (DPM) emitted by heavy trucks and diesel engines, chromium emitted by chrome platers, and perchloroethylene emitted by dry cleaning operations. The OMCPU contains policies and performance standards to avoid and/or reduce potential impacts associated with collocation of diverse land uses. Even so, the OMCPU EIR concluded that the potential exposure of sensitive receptors to air toxics would be significant and unavoidable.

Policies and Design Standards that are incorporated into the proposed CVSP to address collocation of residential, commercial, and industrial uses include the following. It is noted that although no industrial uses would occur within the Central Village, light and heavy industrial uses are located to the west and south of the CVSP area, that could have effects to sensitive receivers in the CVSP area.

"Policy 2.5-22 Drive-through commercial site design is prohibited within Central Village."

"Policy 2.5-46 Address the challenges presented by the collocation of industrial and residential uses by implementing the following design strategies:

- Provide landscape screening and/or patio walls to reduce noise impacts and protect the privacy of residential units along high traffic streets and intense uses.
- Address noise through the use of berms, planting, setbacks, and architectural design rather than with conventional wall barriers for generating uses.
- Minimize the number of residential units that have window and door openings that afford views into adjacent industrial uses located east of the Central Village. Whenever possible, orient the short end of buildings towards industrial uses."

"Policy 2.5-59 Provide mechanical ventilation in all residential units proposed along roadways

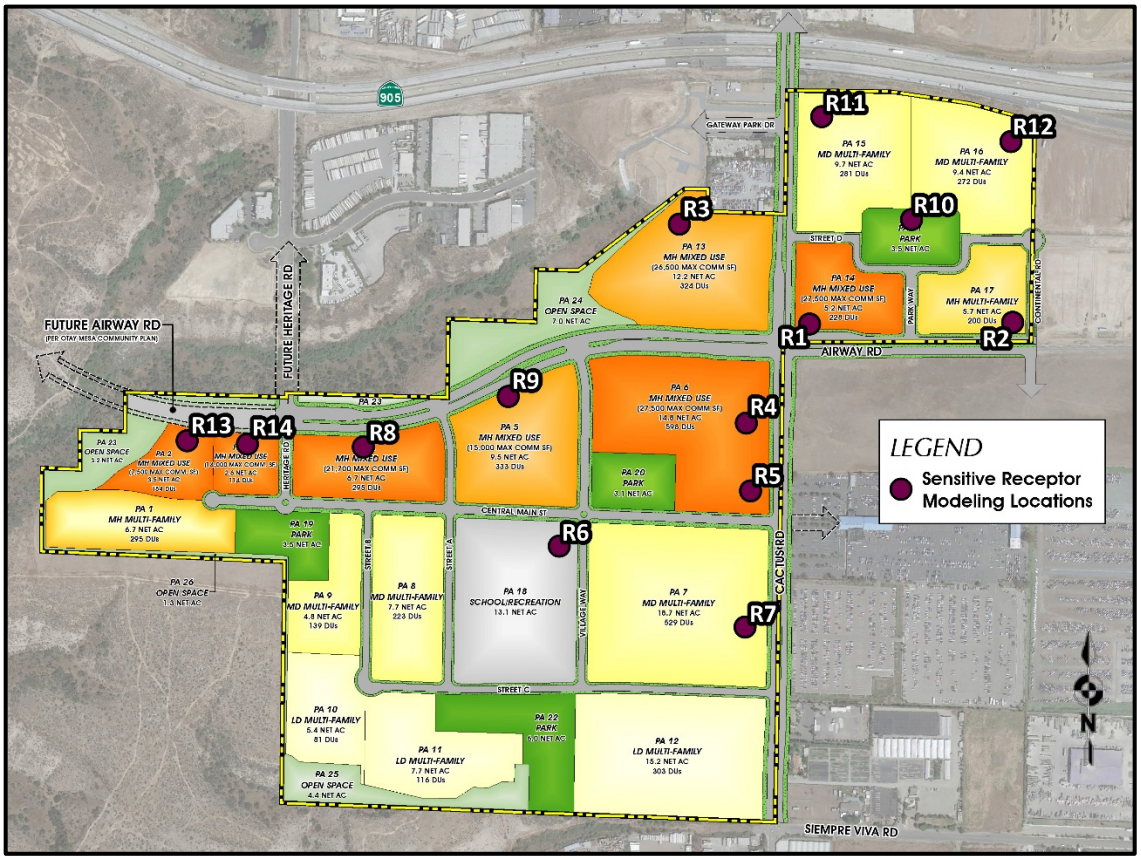
carrying high traffic volumes…."

"Policy 2.5-60 In commercial buildings, place loading and unloading areas so that commercial buildings shield nearby residential land uses…."

The CVSP proposes multi-family residential planning area (PA) 15 and PA 16 immediately south of SR-905 and mixed-use PA 13 approximately 525 feet south of SR-905. PA 13 also abuts light industrial land uses to the north. According to the CVSP's *Transportation Facilities Trigger Analysis*, the average daily trips (ADT) for I-905 near the CVSP area ranges from 164,100 ADT at Caliente Road to 133,500 ADT at La Media Road. Airway Road, a segment of which traverses the northern portion of the CVSP area, is calculated to carry between 11,900 ADT to 39,200 ADT from sections bordering the Central Village. Due to these traffic volumes, there is a potential that sensitive receivers in the Central Village could be exposed to air toxics associated with mobile source (vehicle tailpipe) emissions and particularly DPM from diesel-fueled vehicles.

Modeling at the CVSP site included coordinates for SR-905 (where DPM emitting vehicles could travel) and 14 receptor points in the CVSP area identified by red circles in Figure 4-A below. These points are representative of the unobstructed areas onsite to SR-915 and nearby Airway Road, as well as Heritage Road.

Figure 4-A: Modeling Graphical Representation



Siempre Viva Road is designated by the OMCPU as a "Truck Activity Road," indicating that offsite truck traffic and associated DPM emissions along this road would be increased due to truck activity. Truck traffic and associated DPM emissions along Siempre Viva could have the potential to impact future residents of the Central Village. Based on a review of traffic data for this road from the CVSP's *Transportation Facilities Trigger Analysis*, traffic along Siempre Viva Road (east of Cactus) is not calculated to exceed 6,400 ADT at buildout which is much less than the 50,000 ADT needed to generate a significant toxics air impact. Also, land uses changes within Central Village proposed by the CVSP would not increase traffic along Siempre Viva Road and would not generate any additional impacts from those already identified in the OMCPU EIR. Thus, less than significant impacts would occur and no new or more severe impacts would result from the CVSP.

Emissions from diesel exhaust along heavily traveled roadways near the Central Village were derived using data in CVSP's *Transportation Facilities Trigger Analysis* in association with area wide fleet averages from EMFAC 2011. Results are shown in ***Attachment E*** to this report. Compared to the amount of traffic assumed to be generated by land uses in the Central Village by the OMCPU EIR, the land use arrangement proposed by the CVSP would generate approximately 7,528 fewer vehicle trips but would potentially increase truck trips from the proposed increase of 107 ksf of commercial floor space. The air modeling conducted for this analysis made a reasonable assumption that 40% of the commercial trips within the CVSP area would be from trucks and assumed an industry-standard vehicle mix ratio for the other uses.

Based on the modeling results that show impacts from vehicle exhaust along heavily traveled roadways, the portions of the CVSP area north of Airway Road (PAs 13 and 14 (mixed use), PAs 15, 16, and 17 (multi-family residential) and PA 21 (park)) would be exposed to carcinogenic risks from DPM that could exceed 10 in one million for 70 year exposure durations (assuming a person stayed in this location for 70 years, 365 days per year, 24 hours per day), which is an unlikely potential. Sensitive receivers located in PA 15 and PA 16 could also exceed a risk potential of 10 in one million for the 9-year exposure duration (assuming a person stayed in this location for 9 years, 365 days per year, 24 hours per day), which is also an unlikely potential. The traffic volumes on SR-905 and the location of sensitive receivers the Central Village area are no higher under the CVSP that would have occurred under the OMCPU; in fact, the CVSP will reduce traffic volumes on regional roadways, including SR-905, due the changes in land uses proposed in the Central Village by the CVSP. As such, the CVSP reduces risk potential compared to the OMCPU.

Table 4.3 on the following page shows the AERMOD predicted DPM concentrations as well as calculated cancer risks from vehicular traffic from SR-905 as well as Heritage Road and Airway Road. Also, it should be noted that these risk rates would not be expected until and unless SR-905 carries its calculated buildout traffic volume of 164,100 ADT. The detailed cancer risk calculations are shown in ***Attachment F*** to this report. The predicted AERMOD contours are shown in Figure 4-B of this report. After reviewing the modeling results, it is reasonable to conclude that these worst-case potential impacts would be

reduced to less than significant by installing mechanical air quality filtration systems on the fresh air intake systems of the residential uses in affected areas. Filtration systems with a Maximum Efficiency

Table 4.3: Potential Cancer Risk Calculations at each Receptor

Modeling Results		Cancer Risk per one million exposed		
Receptor	Emission Concentration (ug/m^3)	9 Years	30 Years	70 Years
R1	**0.009560907**	4.7	7.5	**11.7**
R2	**0.00952616**	4.6	7.5	**11.7**
R3	**0.016906339**	8.2	**13.3**	**20.8**
R4	0.00662113	3.2	5.2	8.1
R5	0.004695002	2.3	3.7	5.8
R6	0.003822957	1.9	3.0	4.7
R7	0.002980091	1.5	2.3	3.7
R8	0.005317525	2.6	4.2	6.5
R9	0.006548992	3.2	5.1	8.0
R10 Park*	0.01747005	8.5	13.7	21.5
R11	**0.047848336**	**23.3**	**37.6**	**58.8**
R12	**0.04643322**	**22.6**	**36.5**	**57.0**
R13	0.005279119	2.6	4.1	6.5
R14	0.00517814	2.5	4.1	6.4
*A Park is not considered a use with long exposure times and therefore is not considered sensitive				

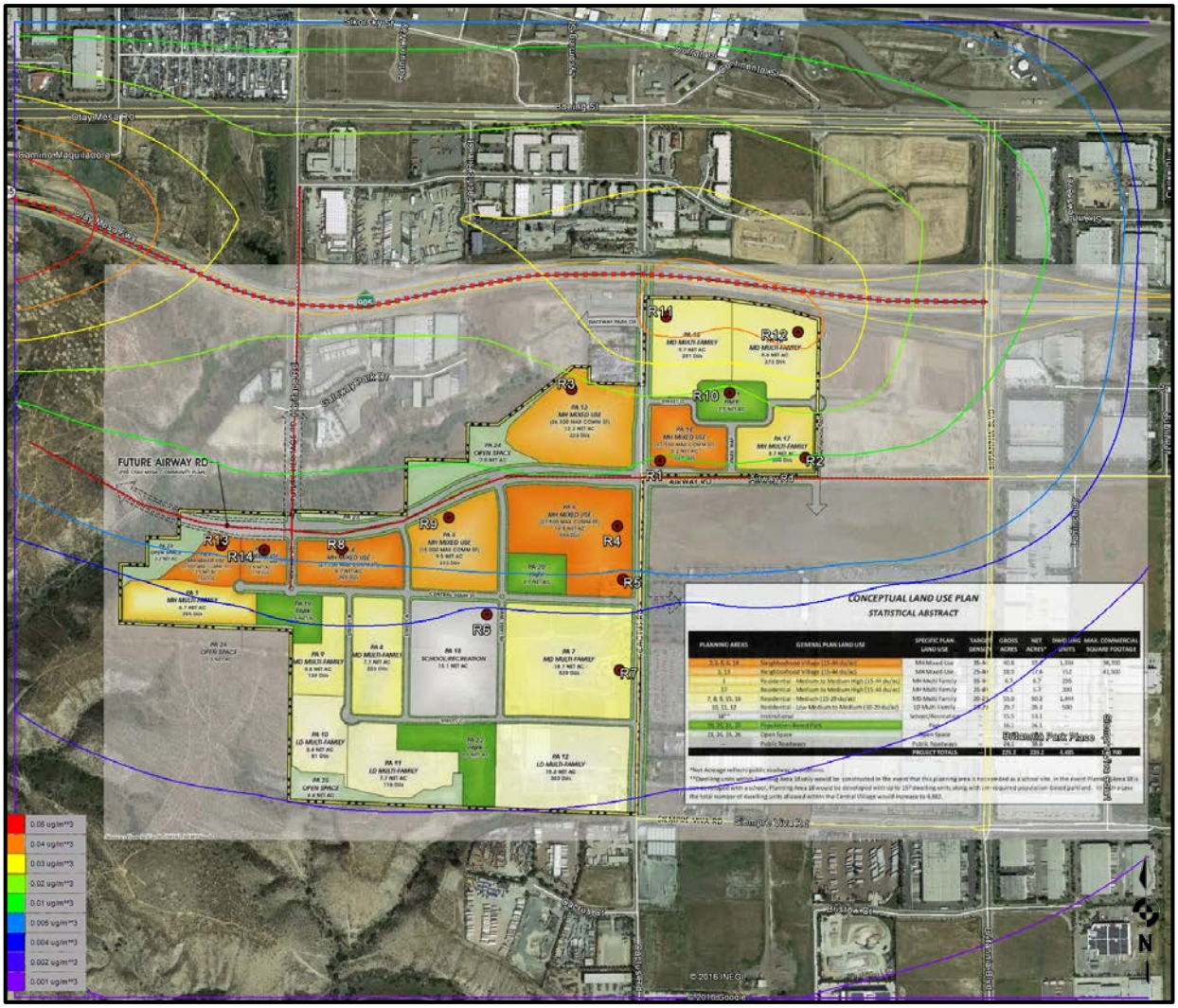
Reporting Value (MERV) of 13, which has been found to reduce particulates 2.5 microns or less by 87 to 95% (CARB, 2012) would likely achieve this result. A requirement for this feature is specified as a Design Standard in the CVSP as follows. Thus, the impact would be reduced to less than significant. In addition, the CVSP includes a Policy to orient residential uses away from SR-905.

"Design Standard 2.2-12: Mechanical air quality filtration systems shall be required for residential units in Planning Areas 13, 14, 16, 16, and 17 (the planning areas closest to SR-905) and for residential units in Planning Areas 7 and 12 that are within 500 feet of the Specific Plan's eastern and southern boundary lines (the planning areas closest to off-site light and heavy industrial uses) as part of implementing development projects. The heating and ventilation filtration systems shall have at least a Maximum Efficiency Reporting Value (MERV) of 13. These systems are required to improve indoor air quality in areas of the Specific Plan that could be most affected by vehicular-related air pollutant emissions along SR-905 and nearby stationary sources associated with off-site industrial land uses."

"Policy 2.5-56: Residential units located north of Airway Road should be designed to minimize building openings (windows and doors) and usable outdoor spaces (balconies, patios, etc.) from having a direct line-of-sight with SR-905."

Also, physical barriers such as walls and vegetative buffers that would occur between sensitive receivers in these locations and sounding roadways would likely increase DPM deposition rates causing airborne DPM to settle out of the air, which will further reduce cancer risks.

Figure 4-B: Modeling Graphical Representation



Residential PAs 7 and 12 of the CVSP would be located in close proximity to off-site light and heavy industrial uses to the south and southeast. As concluded by the OMCPU EIR, the collocation of residential and industrial uses would have the potential to result in air pollution-related health effects to sensitive receptors. Therefore, the OMCPU EIR concluded that the potential exposure of sensitive receptors to air toxics would be significant and unavoidable. The CVSP would have no effect on the location, composition, or operational characteristics of off-site industrial uses, and the CVSP plans for the locations of residential uses in the same proximity to off-site areas as called for by the OMCPU. Therefore, the CVSP would not create any new impacts or more severe impacts. Further, Design Standard 2.2-12 (listed on the prior page of this report) would contribute to reducing the impact.

Additionally, the following CVSP Policy is related to noise would similarly benefit the project with respect to Air Quality:
"Policy 2.5-46 Address the challenges presented by the collocation of industrial and residential uses with any combination of the following design strategies:

- Provide landscape screening and/or patio walls to reduce noise impacts and protect the privacy of residential units along high traffic streets and intense uses.
- Address noise through the use of berms, planting, setbacks, and architectural design rather than with conventional wall barriers for generating uses.
- Minimize the number of residential units that have window and door openings that afford views into adjacent industrial uses located east of the Central Village. Whenever possible, orient the short end of buildings towards industrial uses."

Finally, it should be noted that all offsite sources which have the ability to generate toxic air contaminants from operations are required to work with the SDAPCD and report emissions and obtain permits to operate. These requirements are independent of the proposed CVSP project, so impacts caused by existing and future off-site industrial activities or operations would be expected to be less than significant.

4.6 Mitigation Measures

The following mitigation measures from the OMCPU EIR are applicable to the CVSP:

AQ-1: For projects that would exceed daily construction emissions thresholds established by the City of San Diego, best available control measures/technology shall be incorporated to reduce construction emissions to below daily emission standards established by the City of San Diego. Best available control measures/technology shall include:

a. Minimizing simultaneous operation of multiple pieces of construction equipment;
b. Use of more efficient, or low pollutant emitting, equipment, e.g. Tier III or IV rated equipment;
c. Use of alternative fueled construction equipment;
d. Dust control measures for construction sites to minimize fugitive dust, e.g. watering, soil stabilizers, and speed limits; and
e. Minimizing idling time by construction vehicles.

AQ-2: Development [implementing the CVSP] that would significantly impact air quality, either individually or cumulatively, shall receive entitlement only if it is conditioned with all reasonable mitigation to avoid, minimize, or offset the impact. As a part of this process, future projects shall be required to buffer sensitive receptors from air pollution sources through the use of landscaping, open space, and other separation techniques.

AQ-4: Prior to the issuance of building permits for any project containing a facility identified in Table 5.3-7 [of the OMCPU EIR], or locating air quality sensitive receptors closer than the recommended buffer distances [of the OMCPU], future projects implemented in accordance with the CPU [CVSP] shall be required to prepare a health risk assessment (HRA) with a Tier I analysis in accordance with APCD HRA Guidelines and the Office of Environmental Health Hazard Assessment (OEHHA) Air Toxics "Hot Spots" Program Risk Assessment Guidelines (APCD 2006; OEHHA 2003). All HRAs shall include:

1. the estimated maximum 70-year lifetime cancer risk,
2. the estimated maximum non-cancer chronic health hazard index (HHI), and
3. the estimated maximum non-cancer acute health hazard index (HHI).

Risk estimates shall each be made for the off-site point of maximum health impact (PMI), the maximally exposed individual resident (MEIR), and the maximally exposed individual worker (MEIW). The location of each of these receptors shall be specified. The lifetime cancer risk, non-cancer chronic and acute health hazard indexes for nearby sensitive receptors shall also be reported. Cancer and non-cancer chronic risk estimates shall be based on inhalation risks. HRAs shall include estimates of population exposure, including cancer burden, as well as cancer and noncancer chronic and acute risk isopleths (contours). The HRA shall identify best available control technology (BACT) required to reduce risk to less than 10 in 1,000,000.

Mitigation Measure **AQ-3** from the OMCPU EIR is not applicable because it addresses potential stationary source emissions, and no potential sources of substantial stationary source emissions are planned within the CVSP area.

5.0 REFERENCES

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ATTACHMENT A: CALEEMOD 2013.2.2 – APPROVED CVSP SUMMER, WINTER

ATTACHMENT B: CALEEMOD 2013.2.2 – PROPOSED CVSP SUMMER, WINTER

ATTACHMENT C: AERMOD OUTPUT FILE

ATTACHMENT D: AERMOD EMISSION INPUTS

ATTACHMENT E: EMFAC BURDEN MODEL 2020

ATTACHMENT F: DETAILED CANCER RISK CALCULATIONS AT EACH RECEPTOR

6.0 CERTIFICATIONS

The contents of this report represent an accurate depiction of the air quality environment and impacts within and surrounding the proposed CVSP development. This report was prepared utilizing the latest emission rates and reduction methodologies.

Jeremy Louden, Principal
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Date: January 20 2017

ATTACHMENT A

CALEEMOD 2013.2.2 – APPROVED CVSP SUMMER, WINTER

Central Village Specific Plan (Existing Approved Specific Plan)

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	900.00	Student	13.10	75,243.03	0
City Park	32.30	Acre	32.30	1,406,988.00	0
Apartments Mid Rise	5,246.00	Dwelling Unit	150.00	5,246,000.00	15004
Strip Mall	32.70	1000sqft	33.80	32,700.00	0

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)	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 - Project Size

Construction Phase -

Off-road Equipment -

Grading - 229.2 acre site

Architectural Coating -

Vehicle Trips - Adjusted to meet Otay Community Plan Assumptions

Area Coating - 150 g/l

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	250
tblGrading	AcresOfGrading	1,162.50	229.20
tblGrading	AcresOfGrading	0.00	229.20
tblLandUse	LotAcreage	1.73	13.10
tblLandUse	LotAcreage	138.05	150.00
tblLandUse	LotAcreage	0.75	33.80
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	8.00
tblVehicleTrips	ST_TR	1.59	45.24
tblVehicleTrips	ST_TR	42.04	67.06
tblVehicleTrips	SU_TR	6.07	8.00
tblVehicleTrips	SU_TR	1.59	45.24
tblVehicleTrips	SU_TR	20.43	67.06
tblVehicleTrips	WD_TR	6.59	8.00
tblVehicleTrips	WD_TR	1.59	45.24
tblVehicleTrips	WD_TR	1.29	1.98
tblVehicleTrips	WD_TR	44.32	67.06

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					
2017	6.1627	69.6666	47.6143	0.0638	19.5645	3.3184	22.3198	10.1157	3.0529	12.6506	0.0000	6,480.3725	6,480.3725	1.9425	0.0000	6,521.1641
2018	5.3475	59.6018	43.0414	0.0638	6.7091	2.7892	9.4983	3.4103	2.5661	5.9763	0.0000	6,373.5434	6,373.5434	1.9416	0.0000	6,414.3174
2019	21.0413	91.2110	242.9901	0.6772	41.5957	2.5061	44.0063	11.1406	2.3056	13.3860	0.0000	55,071.5946	55,071.5946	2.3161	0.0000	55,120.2324
2020	19.7975	80.0780	230.3740	0.6769	41.5954	2.1487	43.7442	11.1405	2.0013	13.1418	0.0000	53,239.0457	53,239.0457	2.2269	0.0000	53,285.8114
2021	18.6865	68.9066	219.9409	0.6773	41.5956	1.9172	43.5128	11.1405	1.7851	12.9257	0.0000	52,666.9868	52,666.9868	2.1638	0.0000	52,712.4274
2022	17.7774	61.6495	209.9233	0.6771	41.5958	1.7586	43.3544	11.1406	1.6368	12.7774	0.0000	52,114.5573	52,114.5573	2.1046	0.0000	52,158.7548
2023	16.8193	55.3874	200.5072	0.6766	41.5962	1.6350	43.2312	11.1408	1.5209	12.6617	0.0000	51,598.4514	51,598.4514	2.0425	0.0000	51,641.3447
2024	16.0083	53.5217	191.8472	0.6765	41.5962	1.5534	43.1496	11.1408	1.4439	12.5846	0.0000	51,173.8822	51,173.8822	1.9958	0.0000	51,215.7932
2025	15.4179	51.8207	185.7204	0.6765	41.5965	1.4725	43.0691	11.1409	1.3677	12.5086	0.0000	50,807.5905	50,807.5905	1.9566	0.0000	50,848.6800
2026	15.0111	51.0229	181.1206	0.6765	41.5970	1.4680	43.0650	11.1411	1.3636	12.5047	0.0000	50,491.1539	50,491.1539	1.9272	0.0000	50,531.6247
2027	14.6351	50.4503	176.5814	0.6765	41.5975	1.4714	43.0688	11.1413	1.3667	12.5080	0.0000	50,219.6253	50,219.6253	1.9023	0.0000	50,259.5734
2028	14.3212	49.9362	173.3254	0.6765	41.5980	1.4725	43.0705	11.1415	1.3677	12.5092	0.0000	49,989.2154	49,989.2154	1.8789	0.0000	50,028.6721
2029	13.9885	49.4775	169.8540	0.6765	41.5985	1.4741	43.0726	11.1417	1.3693	12.5110	0.0000	49,792.7682	49,792.7682	1.8566	0.0000	49,831.7562
2030	13.6303	44.5974	167.1295	0.6805	41.5988	1.0982	42.6970	11.1418	1.0243	12.1661	0.0000	49,965.4442	49,965.4442	1.3544	0.0000	49,993.8860
2031	13.3740	44.2749	164.9688	0.6805	41.5984	1.0991	42.6976	11.1417	1.0252	12.1669	0.0000	49,823.1945	49,823.1945	1.3371	0.0000	49,851.2745
2032	13.1367	44.0062	163.0701	0.6805	41.5981	1.0997	42.6978	11.1415	1.0257	12.1672	0.0000	49,704.5061	49,704.5061	1.3220	0.0000	49,732.2676
2033	12.8918	43.7288	161.4078	0.6805	41.5975	1.0998	42.6974	11.1413	1.0259	12.1671	0.0000	49,604.6569	49,604.6569	1.3077	0.0000	49,632.1195

	ROG	NOx	CO	SO2	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					
2034	12.6577	43.5159	159.7327	0.6805	41.5970	1.0996	42.6966	11.1411	1.0257	12.1667	0.0000	49,520.5905	49,520.5905	1.2942	0.0000	49,547.7693
2035	12.3629	42.5818	158.3620	0.6805	41.5965	1.0418	42.6383	11.1408	0.9679	12.1087	0.0000	49,451.0990	49,451.0990	1.2741	0.0000	49,477.8553
2036	1.2123	7.1510	16.0922	0.0308	35.3888	0.0901	35.4788	8.6863	0.0901	8.7764	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2037	1.2123	7.1510	16.0922	0.0308	35.3888	0.1832	35.4788	8.6863	0.1832	8.7764	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2038	362.3655	4.7892	15.4905	0.0275	6.2970	0.1832	6.3069	1.5456	0.1832	1.5555	0.0000	2,599.9866	2,599.9866	0.1001	0.0000	2,602.0881
2039	362.3655	0.7577	1.7943	2.9700e-003	6.2970	9.9000e-003	6.3069	1.5456	9.9000e-003	1.5555	0.0000	281.4481	281.4481	0.0104	0.0000	281.6665
Total	**1,000.2233**	**1,075.2839**	**3,296.9802**	**11.7466**	**816.7937**	**31.9896**	**847.8583**	**223.3881**	**29.7086**	**252.2521**	**0.0000**	**886,739.3727**	**886,739.3727**	**34.4705**	**0.0000**	**887,463.2542**

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					
2017	6.1627	69.6666	47.6143	0.0638	19.5645	3.3184	22.3198	10.1157	3.0529	12.6506	0.0000	6,480.3725	6,480.3725	1.9425	0.0000	6,521.1641
2018	5.3475	59.6018	43.0414	0.0638	6.7091	2.7892	9.4983	3.4103	2.5661	5.9763	0.0000	6,373.5434	6,373.5434	1.9416	0.0000	6,414.3174
2019	21.0413	91.2110	242.9901	0.6772	41.5957	2.5061	44.0063	11.1406	2.3056	13.3860	0.0000	55,071.5946	55,071.5946	2.3161	0.0000	55,120.2324
2020	19.7975	80.0780	230.3740	0.6769	41.5954	2.1487	43.7442	11.1405	2.0013	13.1418	0.0000	53,239.0456	53,239.0456	2.2269	0.0000	53,285.8114
2021	18.6865	68.9066	219.9409	0.6773	41.5956	1.9172	43.5128	11.1405	1.7851	12.9257	0.0000	52,666.9868	52,666.9868	2.1638	0.0000	52,712.4274
2022	17.7774	61.6495	209.9233	0.6771	41.5958	1.7586	43.3544	11.1406	1.6368	12.7774	0.0000	52,114.5573	52,114.5573	2.1046	0.0000	52,158.7548

	ROG	NOx	CO	SO2	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					
2023	16.8193	55.3874	200.5072	0.6766	41.5962	1.6350	43.2312	11.1408	1.5209	12.6617	0.0000	51,598.4514	51,598.4514	2.0425	0.0000	51,641.3447
2024	16.0083	53.5217	191.8472	0.6765	41.5962	1.5534	43.1496	11.1408	1.4439	12.5846	0.0000	51,173.8822	51,173.8822	1.9958	0.0000	51,215.7932
2025	15.4179	51.8207	185.7204	0.6765	41.5965	1.4725	43.0691	11.1409	1.3677	12.5086	0.0000	50,807.5905	50,807.5905	1.9566	0.0000	50,848.6800
2026	15.0111	51.0229	181.1206	0.6765	41.5970	1.4680	43.0650	11.1411	1.3636	12.5047	0.0000	50,491.1539	50,491.1539	1.9272	0.0000	50,531.6247
2027	14.6351	50.4503	176.5814	0.6765	41.5975	1.4714	43.0688	11.1413	1.3667	12.5080	0.0000	50,219.6253	50,219.6253	1.9023	0.0000	50,259.5734
2028	14.3212	49.9362	173.3254	0.6765	41.5980	1.4725	43.0705	11.1415	1.3677	12.5092	0.0000	49,989.2154	49,989.2154	1.8789	0.0000	50,028.6721
2029	13.9885	49.4775	169.8540	0.6765	41.5985	1.4741	43.0726	11.1417	1.3693	12.5110	0.0000	49,792.7682	49,792.7682	1.8566	0.0000	49,831.7562
2030	13.6303	44.5974	167.1295	0.6805	41.5988	1.0982	42.6970	11.1418	1.0243	12.1661	0.0000	49,965.4442	49,965.4442	1.3544	0.0000	49,993.8860
2031	13.3740	44.2749	164.9688	0.6805	41.5984	1.0991	42.6976	11.1417	1.0252	12.1669	0.0000	49,823.1945	49,823.1945	1.3371	0.0000	49,851.2745
2032	13.1367	44.0062	163.0701	0.6805	41.5981	1.0997	42.6978	11.1415	1.0257	12.1672	0.0000	49,704.5061	49,704.5061	1.3220	0.0000	49,732.2676
2033	12.8918	43.7288	161.4078	0.6805	41.5975	1.0998	42.6974	11.1413	1.0259	12.1671	0.0000	49,604.6569	49,604.6569	1.3077	0.0000	49,632.1195
2034	12.6577	43.5159	159.7327	0.6805	41.5970	1.0996	42.6966	11.1411	1.0257	12.1667	0.0000	49,520.5905	49,520.5905	1.2942	0.0000	49,547.7693
2035	12.3629	42.5818	158.3620	0.6805	41.5965	1.0418	42.6383	11.1408	0.9679	12.1087	0.0000	49,451.0990	49,451.0990	1.2741	0.0000	49,477.8553
2036	1.2123	7.1510	16.0922	0.0308	35.3888	0.0901	35.4788	8.6863	0.0901	8.7764	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2037	1.2123	7.1510	16.0922	0.0308	35.3888	0.1832	35.4788	8.6863	0.1832	8.7764	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2038	362.3655	4.7892	15.4905	0.0275	6.2970	0.1832	6.3069	1.5456	0.1832	1.5555	0.0000	2,599.9866	2,599.9866	0.1001	0.0000	2,602.0881
2039	362.3655	0.7577	1.7943	2.9700e-003	6.2970	9.9000e-003	6.3069	1.5456	9.9000e-003	1.5555	0.0000	281.4481	281.4481	0.0104	0.0000	281.6665
Total	**1,000.2233**	**1,075.2839**	**3,296.9802**	**11.7466**	**816.7937**	**31.9896**	**847.8583**	**223.3881**	**29.7086**	**252.2521**	**0.0000**	**886,739.3727**	**886,739.3727**	**34.4705**	**0.0000**	**887,463.2541**

	ROG	NOx	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	8,239.9916	113.9479	10,324.5301	3.8860		1,391.8999	1,391.8999		1,391.8592	1,391.8592	145,690.4994	61,879.9873	207,570.4868	135.2086	11.4597	213,962.3616
Energy	0.8658	7.4071	3.2122	0.0472		0.5982	0.5982		0.5982	0.5982		9,444.7792	9,444.7792	0.1810	0.1732	9,502.2585
Mobile	140.7550	287.6163	1,400.6159	4.0884	275.5999	4.4917	280.0916	73.5668	4.1446	77.7114		312,177.7973	312,177.7973	11.5935		312,421.2606
Total	**8,381.6124**	**408.9714**	**11,728.3583**	**8.0216**	**275.5999**	**1,396.9898**	**1,672.5897**	**73.5668**	**1,396.6019**	**1,470.1688**	**145,690.4994**	**383,502.5638**	**529,193.0633**	**146.9831**	**11.6328**	**535,885.8807**

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	8,239.9916	113.9479	10,324.5301	3.8860		1,391.8999	1,391.8999		1,391.8592	1,391.8592	145,690.4994	61,879.9873	207,570.4868	135.2086	11.4597	213,962.3616
Energy	0.8658	7.4071	3.2122	0.0472		0.5982	0.5982		0.5982	0.5982		9,444.7792	9,444.7792	0.1810	0.1732	9,502.2585
Mobile	140.7550	287.6163	1,400.6159	4.0884	275.5999	4.4917	280.0916	73.5668	4.1446	77.7114		312,177.7973	312,177.7973	11.5935		312,421.2606
Total	**8,381.6124**	**408.9714**	**11,728.3583**	**8.0216**	**275.5999**	**1,396.9898**	**1,672.5897**	**73.5668**	**1,396.6019**	**1,470.1688**	**145,690.4994**	**383,502.5638**	**529,193.0633**	**146.9831**	**11.6328**	**535,885.8807**

	ROG	NOx	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	Site Preparation	Site Preparation	1/1/2017	9/8/2017	5	180	
2	Grading	Grading	9/9/2017	6/21/2019	5	465	
3	Building Construction	Building Construction	6/22/2019	4/17/2037	5	4650	
4	Paving	Paving	4/18/2037	7/23/2038	5	330	
5	Architectural Coating	Architectural Coating	7/24/2038	10/28/2039	5	330	

Acres of Grading (Site Preparation Phase): 229.2

Acres of Grading (Grading Phase): 229.2

Acres of Paving: 0

Residential Indoor: 10,623,150; Residential Outdoor: 3,541,050; Non-Residential Indoor: 2,272,397; Non-Residential Outdoor: 757,466 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
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
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	4,410.00	809.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	882.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

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					19.4166	0.0000	19.4166	10.0765	0.0000	10.0765			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**19.4166**	**2.7542**	**22.1709**	**10.0765**	**2.5339**	**12.6104**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

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	0.0572	0.0671	0.7284	1.8700e-003	0.1479	1.0800e-003	0.1489	0.0392	9.9000e-004	0.0402		150.3031	150.3031	7.2500e-003		150.4553
Total	**0.0572**	**0.0671**	**0.7284**	**1.8700e-003**	**0.1479**	**1.0800e-003**	**0.1489**	**0.0392**	**9.9000e-004**	**0.0402**		**150.3031**	**150.3031**	**7.2500e-003**		**150.4553**

3.2 Site Preparation - 2017

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					19.4166	0.0000	19.4166	10.0765	0.0000	10.0765			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**19.4166**	**2.7542**	**22.1709**	**10.0765**	**2.5339**	**12.6104**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

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	0.0572	0.0671	0.7284	1.8700e-003	0.1479	1.0800e-003	0.1489	0.0392	9.9000e-004	0.0402		150.3031	150.3031	7.2500e-003		150.4553
Total	**0.0572**	**0.0671**	**0.7284**	**1.8700e-003**	**0.1479**	**1.0800e-003**	**0.1489**	**0.0392**	**9.9000e-004**	**0.0402**		**150.3031**	**150.3031**	**7.2500e-003**		**150.4553**

3.3 Grading - 2017

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**6.5448**	**3.3172**	**9.8620**	**3.3667**	**3.0518**	**6.4185**		**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

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	0.0635	0.0746	0.8093	2.0800e-003	0.1643	1.1900e-003	0.1655	0.0436	1.1000e-003	0.0447		167.0035	167.0035	8.0500e-003		167.1726
Total	**0.0635**	**0.0746**	**0.8093**	**2.0800e-003**	**0.1643**	**1.1900e-003**	**0.1655**	**0.0436**	**1.1000e-003**	**0.0447**		**167.0035**	**167.0035**	**8.0500e-003**		**167.1726**

3.3 Grading - 2017

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518	0.0000	6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**6.5448**	**3.3172**	**9.8620**	**3.3667**	**3.0518**	**6.4185**	**0.0000**	**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

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	0.0635	0.0746	0.8093	2.0800e-003	0.1643	1.1900e-003	0.1655	0.0436	1.1000e-003	0.0447		167.0035	167.0035	8.0500e-003		167.1726
Total	**0.0635**	**0.0746**	**0.8093**	**2.0800e-003**	**0.1643**	**1.1900e-003**	**0.1655**	**0.0436**	**1.1000e-003**	**0.0447**		**167.0035**	**167.0035**	**8.0500e-003**		**167.1726**

3.3 Grading - 2018

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	5.2895	59.5338	42.3068	0.0617		2.7880	2.7880		2.5650	2.5650		6,212.8042	6,212.8042	1.9341		6,253.4209
Total	**5.2895**	**59.5338**	**42.3068**	**0.0617**	**6.5448**	**2.7880**	**9.3328**	**3.3667**	**2.5650**	**5.9317**		**6,212.8042**	**6,212.8042**	**1.9341**		**6,253.4209**

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	0.0579	0.0680	0.7346	2.0800e-003	0.1643	1.1700e-003	0.1655	0.0436	1.0800e-003	0.0447		160.7393	160.7393	7.4900e-003		160.8966
Total	**0.0579**	**0.0680**	**0.7346**	**2.0800e-003**	**0.1643**	**1.1700e-003**	**0.1655**	**0.0436**	**1.0800e-003**	**0.0447**		**160.7393**	**160.7393**	**7.4900e-003**		**160.8966**

3.3 Grading - 2018

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	5.2895	59.5338	42.3068	0.0617		2.7880	2.7880		2.5650	2.5650	0.0000	6,212.8041	6,212.8041	1.9341		6,253.4209
Total	**5.2895**	**59.5338**	**42.3068**	**0.0617**	**6.5448**	**2.7880**	**9.3328**	**3.3667**	**2.5650**	**5.9317**	**0.0000**	**6,212.8041**	**6,212.8041**	**1.9341**		**6,253.4209**

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	0.0579	0.0680	0.7346	2.0800e-003	0.1643	1.1700e-003	0.1655	0.0436	1.0800e-003	0.0447		160.7393	160.7393	7.4900e-003		160.8966
Total	**0.0579**	**0.0680**	**0.7346**	**2.0800e-003**	**0.1643**	**1.1700e-003**	**0.1655**	**0.0436**	**1.0800e-003**	**0.0447**		**160.7393**	**160.7393**	**7.4900e-003**		**160.8966**

3.3 Grading - 2019

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045		6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**6.5448**	**2.5049**	**9.0497**	**3.3667**	**2.3045**	**5.6712**		**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

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	0.0538	0.0629	0.6775	2.0800e-003	0.1643	1.1600e-003	0.1655	0.0436	1.0800e-003	0.0447		154.9305	154.9305	7.0400e-003		155.0784
Total	**0.0538**	**0.0629**	**0.6775**	**2.0800e-003**	**0.1643**	**1.1600e-003**	**0.1655**	**0.0436**	**1.0800e-003**	**0.0447**		**154.9305**	**154.9305**	**7.0400e-003**		**155.0784**

3.3 Grading - 2019

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045	0.0000	6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**6.5448**	**2.5049**	**9.0497**	**3.3667**	**2.3045**	**5.6712**	**0.0000**	**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

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	0.0538	0.0629	0.6775	2.0800e-003	0.1643	1.1600e-003	0.1655	0.0436	1.0800e-003	0.0447		154.9305	154.9305	7.0400e-003		155.0784
Total	**0.0538**	**0.0629**	**0.6775**	**2.0800e-003**	**0.1643**	**1.1600e-003**	**0.1655**	**0.0436**	**1.0800e-003**	**0.0447**		**154.9305**	**154.9305**	**7.0400e-003**		**155.0784**

3.4 Building Construction - 2019

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

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	6.8182	56.3811	76.4846	0.1915	5.3686	0.8689	6.2375	1.5315	0.7992	2.3307		18,328.6609	18,328.6609	0.1348		18,331.4908
Worker	11.8715	13.8648	149.3852	0.4588	36.2271	0.2566	36.4837	9.6091	0.2379	9.8470		34,162.1720	34,162.1720	1.5534		34,194.7937
Total	**18.6897**	**70.2459**	**225.8698**	**0.6504**	**41.5957**	**1.1255**	**42.7212**	**11.1406**	**1.0371**	**12.1778**		**52,490.8328**	**52,490.8328**	**1.6882**		**52,526.2845**

3.4 Building Construction - 2019

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

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	6.8182	56.3811	76.4846	0.1915	5.3686	0.8689	6.2375	1.5315	0.7992	2.3307		18,328.6609	18,328.6609	0.1348		18,331.4908
Worker	11.8715	13.8648	149.3852	0.4588	36.2271	0.2566	36.4837	9.6091	0.2379	9.8470		34,162.1720	34,162.1720	1.5534		34,194.7937
Total	**18.6897**	**70.2459**	**225.8698**	**0.6504**	**41.5957**	**1.1255**	**42.7212**	**11.1406**	**1.0371**	**12.1778**		**52,490.8328**	**52,490.8328**	**1.6882**		**52,526.2845**

3.4 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	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

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	6.4512	48.0358	73.7204	0.1913	5.3683	0.7789	6.1472	1.5314	0.7165	2.2479		17,909.7120	17,909.7120	0.1303		17,912.4488
Worker	11.2350	12.9583	139.8452	0.4588	36.2271	0.2570	36.4841	9.6091	0.2383	9.8474		32,786.8538	32,786.8538	1.4772		32,817.8746
Total	**17.6862**	**60.9941**	**213.5655**	**0.6501**	**41.5954**	**1.0359**	**42.6313**	**11.1405**	**0.9549**	**12.0953**		**50,696.5657**	**50,696.5657**	**1.6075**		**50,730.3234**

3.4 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	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

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	6.4512	48.0358	73.7204	0.1913	5.3683	0.7789	6.1472	1.5314	0.7165	2.2479		17,909.7120	17,909.7120	0.1303		17,912.4488
Worker	11.2350	12.9583	139.8452	0.4588	36.2271	0.2570	36.4841	9.6091	0.2383	9.8474		32,786.8538	32,786.8538	1.4772		32,817.8746
Total	**17.6862**	**60.9941**	**213.5655**	**0.6501**	**41.5954**	**1.0359**	**42.6313**	**11.1405**	**0.9549**	**12.0953**		**50,696.5657**	**50,696.5657**	**1.6075**		**50,730.3234**

3.4 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	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**		**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

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	6.0909	39.3968	70.5083	0.1909	5.3685	0.7013	6.0697	1.5314	0.6452	2.1766		17,881.2284	17,881.2284	0.1298		17,883.9543
Worker	10.7025	12.1696	132.8950	0.4596	36.2271	0.2610	36.4881	9.6091	0.2421	9.8512		32,242.9766	32,242.9766	1.4214		32,272.8269
Total	**16.7934**	**51.5664**	**203.4033**	**0.6505**	**41.5956**	**0.9623**	**42.5579**	**11.1405**	**0.8873**	**12.0278**		**50,124.2051**	**50,124.2051**	**1.5512**		**50,156.7812**

3.4 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	lb/day										lb/day					
Off-Road	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**	**0.0000**	**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

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	6.0909	39.3968	70.5083	0.1909	5.3685	0.7013	6.0697	1.5314	0.6452	2.1766		17,881.2284	17,881.2284	0.1298		17,883.9543
Worker	10.7025	12.1696	132.8950	0.4596	36.2271	0.2610	36.4881	9.6091	0.2421	9.8512		32,242.9766	32,242.9766	1.4214		32,272.8269
Total	**16.7934**	**51.5664**	**203.4033**	**0.6505**	**41.5956**	**0.9623**	**42.5579**	**11.1405**	**0.8873**	**12.0278**		**50,124.2051**	**50,124.2051**	**1.5512**		**50,156.7812**

3.4 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	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**		**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

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	5.8782	34.6144	67.9974	0.1907	5.3687	0.6900	6.0587	1.5315	0.6348	2.1663		17,862.7633	17,862.7633	0.1325		17,865.5447
Worker	10.2000	11.4988	125.5984	0.4596	36.2271	0.2629	36.4900	9.6091	0.2438	9.8529		31,708.0443	31,708.0443	1.3637		31,736.6815
Total	**16.0782**	**46.1131**	**193.5958**	**0.6503**	**41.5958**	**0.9529**	**42.5487**	**11.1406**	**0.8787**	**12.0193**		**49,570.8076**	**49,570.8076**	**1.4961**		**49,602.2261**

3.4 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	lb/day										lb/day					
Off-Road	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**	**0.0000**	**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

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	5.8782	34.6144	67.9974	0.1907	5.3687	0.6900	6.0587	1.5315	0.6348	2.1663		17,862.7633	17,862.7633	0.1325		17,865.5447
Worker	10.2000	11.4988	125.5984	0.4596	36.2271	0.2629	36.4900	9.6091	0.2438	9.8529		31,708.0443	31,708.0443	1.3637		31,736.6815
Total	**16.0782**	**46.1131**	**193.5958**	**0.6503**	**41.5958**	**0.9529**	**42.5487**	**11.1406**	**0.8787**	**12.0193**		**49,570.8076**	**49,570.8076**	**1.4961**		**49,602.2261**

3.4 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	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557		2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**		**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

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	5.5144	30.1674	65.2410	0.1902	5.3691	0.6735	6.0426	1.5316	0.6197	2.1513		17,822.9229	17,822.9229	0.1243		17,825.5325
Worker	9.7388	10.9074	119.0570	0.4596	36.2271	0.2648	36.4919	9.6091	0.2456	9.8547		31,230.9023	31,230.9023	1.3139		31,258.4931
Total	**15.2532**	**41.0748**	**184.2980**	**0.6498**	**41.5962**	**0.9383**	**42.5344**	**11.1408**	**0.8653**	**12.0060**		**49,053.8251**	**49,053.8251**	**1.4381**		**49,084.0256**

3.4 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	lb/day										lb/day					
Off-Road	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557	0.0000	2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**	**0.0000**	**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

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	5.5144	30.1674	65.2410	0.1902	5.3691	0.6735	6.0426	1.5316	0.6197	2.1513		17,822.9229	17,822.9229	0.1243		17,825.5325
Worker	9.7388	10.9074	119.0570	0.4596	36.2271	0.2648	36.4919	9.6091	0.2456	9.8547		31,230.9023	31,230.9023	1.3139		31,258.4931
Total	**15.2532**	**41.0748**	**184.2980**	**0.6498**	**41.5962**	**0.9383**	**42.5344**	**11.1408**	**0.8653**	**12.0060**		**49,053.8251**	**49,053.8251**	**1.4381**		**49,084.0256**

3.4 Building Construction - 2024

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	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744		2,545.1154	2,545.1154	0.6009		2,557.7349
Total	**1.4653**	**13.3774**	**16.1332**	**0.0268**		**0.6106**	**0.6106**		**0.5744**	**0.5744**		**2,545.1154**	**2,545.1154**	**0.6009**		**2,557.7349**

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	5.2282	29.7547	62.1722	0.1901	5.3691	0.6760	6.0451	1.5317	0.6220	2.1536		17,821.7816	17,821.7816	0.1247		17,824.3995
Worker	9.3149	10.3896	113.5417	0.4595	36.2271	0.2668	36.4939	9.6091	0.2476	9.8567		30,806.9852	30,806.9852	1.2702		30,833.6588
Total	**14.5431**	**40.1443**	**175.7140**	**0.6497**	**41.5962**	**0.9428**	**42.5390**	**11.1408**	**0.8695**	**12.0103**		**48,628.7668**	**48,628.7668**	**1.3948**		**48,658.0583**

3.4 Building Construction - 2024

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	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744	0.0000	2,545.1154	2,545.1154	0.6009		2,557.7349
Total	**1.4653**	**13.3774**	**16.1332**	**0.0268**		**0.6106**	**0.6106**		**0.5744**	**0.5744**	**0.0000**	**2,545.1154**	**2,545.1154**	**0.6009**		**2,557.7349**

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	5.2282	29.7547	62.1722	0.1901	5.3691	0.6760	6.0451	1.5317	0.6220	2.1536		17,821.7816	17,821.7816	0.1247		17,824.3995
Worker	9.3149	10.3896	113.5417	0.4595	36.2271	0.2668	36.4939	9.6091	0.2476	9.8567		30,806.9852	30,806.9852	1.2702		30,833.6588
Total	**14.5431**	**40.1443**	**175.7140**	**0.6497**	**41.5962**	**0.9428**	**42.5390**	**11.1408**	**0.8695**	**12.0103**		**48,628.7668**	**48,628.7668**	**1.3948**		**48,658.0583**

3.4 Building Construction - 2025

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	5.0999	29.4504	60.6975	0.1901	5.3694	0.6782	6.0476	1.5318	0.6240	2.1557		17,823.2907	17,823.2907	0.1250		17,825.9160
Worker	8.9565	9.9606	108.9711	0.4595	36.2271	0.2693	36.4964	9.6091	0.2499	9.8590		30,438.4093	30,438.4093	1.2341		30,464.3255
Total	**14.0564**	**39.4110**	**169.6686**	**0.6496**	**41.5965**	**0.9475**	**42.5440**	**11.1409**	**0.8738**	**12.0147**		**48,261.7000**	**48,261.7000**	**1.3591**		**48,290.2415**

3.4 Building Construction - 2025

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	5.0999	29.4504	60.6975	0.1901	5.3694	0.6782	6.0476	1.5318	0.6240	2.1557		17,823.2907	17,823.2907	0.1250		17,825.9160
Worker	8.9565	9.9606	108.9711	0.4595	36.2271	0.2693	36.4964	9.6091	0.2499	9.8590		30,438.4093	30,438.4093	1.2341		30,464.3255
Total	**14.0564**	**39.4110**	**169.6686**	**0.6496**	**41.5965**	**0.9475**	**42.5440**	**11.1409**	**0.8738**	**12.0147**		**48,261.7000**	**48,261.7000**	**1.3591**		**48,290.2415**

3.4 Building Construction - 2026

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	4.9875	28.9877	59.6120	0.1901	5.3699	0.6707	6.0405	1.5320	0.6170	2.1490		17,824.8001	17,824.8001	0.1241		17,827.4051
Worker	8.6622	9.6256	105.4568	0.4595	36.2271	0.2723	36.4994	9.6091	0.2526	9.8618		30,120.4633	30,120.4633	1.2056		30,145.7811
Total	**13.6497**	**38.6132**	**165.0688**	**0.6496**	**41.5970**	**0.9430**	**42.5400**	**11.1411**	**0.8697**	**12.0107**		**47,945.2634**	**47,945.2634**	**1.3297**		**47,973.1862**

3.4 Building Construction - 2026

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	4.9875	28.9877	59.6120	0.1901	5.3699	0.6707	6.0405	1.5320	0.6170	2.1490		17,824.8001	17,824.8001	0.1241		17,827.4051
Worker	8.6622	9.6256	105.4568	0.4595	36.2271	0.2723	36.4994	9.6091	0.2526	9.8618		30,120.4633	30,120.4633	1.2056		30,145.7811
Total	**13.6497**	**38.6132**	**165.0688**	**0.6496**	**41.5970**	**0.9430**	**42.5400**	**11.1411**	**0.8697**	**12.0107**		**47,945.2634**	**47,945.2634**	**1.3297**		**47,973.1862**

3.4 Building Construction - 2027

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	4.8840	28.7024	58.1738	0.1901	5.3704	0.6715	6.0419	1.5322	0.6178	2.1500		17,826.9478	17,826.9478	0.1243		17,829.5570
Worker	8.3897	9.3382	102.3557	0.4595	36.2271	0.2748	36.5019	9.6091	0.2550	9.8641		29,846.7870	29,846.7870	1.1805		29,871.5778
Total	**13.2737**	**38.0407**	**160.5296**	**0.6496**	**41.5975**	**0.9463**	**42.5438**	**11.1413**	**0.8728**	**12.0141**		**47,673.7348**	**47,673.7348**	**1.3048**		**47,701.1348**

3.4 Building Construction - 2027

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	4.8840	28.7024	58.1738	0.1901	5.3704	0.6715	6.0419	1.5322	0.6178	2.1500		17,826.9478	17,826.9478	0.1243		17,829.5570
Worker	8.3897	9.3382	102.3557	0.4595	36.2271	0.2748	36.5019	9.6091	0.2550	9.8641		29,846.7870	29,846.7870	1.1805		29,871.5778
Total	**13.2737**	**38.0407**	**160.5296**	**0.6496**	**41.5975**	**0.9463**	**42.5438**	**11.1413**	**0.8728**	**12.0141**		**47,673.7348**	**47,673.7348**	**1.3048**		**47,701.1348**

3.4 Building Construction - 2028

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	4.8364	28.4669	57.7294	0.1901	5.3709	0.6704	6.0413	1.5324	0.6168	2.1491		17,829.4730	17,829.4730	0.1242		17,832.0806
Worker	8.1234	9.0597	99.5443	0.4595	36.2271	0.2771	36.5042	9.6091	0.2571	9.8662		29,613.8519	29,613.8519	1.1572		29,638.1529
Total	**12.9598**	**37.5265**	**157.2737**	**0.6496**	**41.5980**	**0.9474**	**42.5455**	**11.1415**	**0.8738**	**12.0153**		**47,443.3249**	**47,443.3249**	**1.2814**		**47,470.2335**

3.4 Building Construction - 2028

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	4.8364	28.4669	57.7294	0.1901	5.3709	0.6704	6.0413	1.5324	0.6168	2.1491		17,829.4730	17,829.4730	0.1242		17,832.0806
Worker	8.1234	9.0597	99.5443	0.4595	36.2271	0.2771	36.5042	9.6091	0.2571	9.8662		29,613.8519	29,613.8519	1.1572		29,638.1529
Total	**12.9598**	**37.5265**	**157.2737**	**0.6496**	**41.5980**	**0.9474**	**42.5455**	**11.1415**	**0.8738**	**12.0153**		**47,443.3249**	**47,443.3249**	**1.2814**		**47,470.2335**

3.4 Building Construction - 2029

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	4.7673	28.2816	56.9617	0.1901	5.3714	0.6703	6.0417	1.5326	0.6167	2.1493		17,831.4322	17,831.4322	0.1242		17,834.0409
Worker	7.8597	8.7862	96.8405	0.4595	36.2271	0.2788	36.5059	9.6091	0.2587	9.8678		29,415.4455	29,415.4455	1.1348		29,439.2767
Total	**12.6270**	**37.0678**	**153.8022**	**0.6497**	**41.5985**	**0.9491**	**42.5476**	**11.1417**	**0.8754**	**12.0171**		**47,246.8777**	**47,246.8777**	**1.2591**		**47,273.3176**

3.4 Building Construction - 2029

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	4.7673	28.2816	56.9617	0.1901	5.3714	0.6703	6.0417	1.5326	0.6167	2.1493		17,831.4322	17,831.4322	0.1242		17,834.0409
Worker	7.8597	8.7862	96.8405	0.4595	36.2271	0.2788	36.5059	9.6091	0.2587	9.8678		29,415.4455	29,415.4455	1.1348		29,439.2767
Total	**12.6270**	**37.0678**	**153.8022**	**0.6497**	**41.5985**	**0.9491**	**42.5476**	**11.1417**	**0.8754**	**12.0171**		**47,246.8777**	**47,246.8777**	**1.2591**		**47,273.3176**

3.4 Building Construction - 2030

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	4.7164	28.1364	56.5689	0.1902	5.3717	0.6705	6.0422	1.5327	0.6168	2.1495		17,833.4578	17,833.4578	0.1243		17,836.0679
Worker	7.6098	8.5431	94.4293	0.4595	36.2271	0.2801	36.5072	9.6091	0.2599	9.8690		29,247.1564	29,247.1564	1.1143		29,270.5564
Total	**12.3262**	**36.6795**	**150.9982**	**0.6497**	**41.5988**	**0.9505**	**42.5494**	**11.1418**	**0.8767**	**12.0185**		**47,080.6142**	**47,080.6142**	**1.2386**		**47,106.6243**

3.4 Building Construction - 2030

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	4.7164	28.1364	56.5689	0.1902	5.3717	0.6705	6.0422	1.5327	0.6168	2.1495		17,833.4578	17,833.4578	0.1243		17,836.0679
Worker	7.6098	8.5431	94.4293	0.4595	36.2271	0.2801	36.5072	9.6091	0.2599	9.8690		29,247.1564	29,247.1564	1.1143		29,270.5564
Total	**12.3262**	**36.6795**	**150.9982**	**0.6497**	**41.5988**	**0.9505**	**42.5494**	**11.1418**	**0.8767**	**12.0185**		**47,080.6142**	**47,080.6142**	**1.2386**		**47,106.6243**

3.4 Building Construction - 2031

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	4.6751	28.0259	56.3221	0.1901	5.3713	0.6707	6.0420	1.5325	0.6170	2.1496		17,832.5063	17,832.5063	0.1244		17,835.1175
Worker	7.3948	8.3311	92.5155	0.4595	36.2271	0.2809	36.5080	9.6091	0.2606	9.8697		29,105.8582	29,105.8582	1.0970		29,128.8953
Total	**12.0699**	**36.3570**	**148.8375**	**0.6497**	**41.5984**	**0.9515**	**42.5500**	**11.1417**	**0.8776**	**12.0192**		**46,938.3645**	**46,938.3645**	**1.2214**		**46,964.0128**

3.4 Building Construction - 2031

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	4.6751	28.0259	56.3221	0.1901	5.3713	0.6707	6.0420	1.5325	0.6170	2.1496		17,832.5063	17,832.5063	0.1244		17,835.1175
Worker	7.3948	8.3311	92.5155	0.4595	36.2271	0.2809	36.5080	9.6091	0.2606	9.8697		29,105.8582	29,105.8582	1.0970		29,128.8953
Total	**12.0699**	**36.3570**	**148.8375**	**0.6497**	**41.5984**	**0.9515**	**42.5500**	**11.1417**	**0.8776**	**12.0192**		**46,938.3645**	**46,938.3645**	**1.2214**		**46,964.0128**

3.4 Building Construction - 2032

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	4.6352	27.9353	56.1223	0.1901	5.3710	0.6708	6.0417	1.5324	0.6171	2.1495		17,831.7233	17,831.7233	0.1244		17,834.3354
Worker	7.1973	8.1531	90.8165	0.4595	36.2271	0.2813	36.5084	9.6091	0.2610	9.8701		28,987.9529	28,987.9529	1.0818		29,010.6705
Total	**11.8326**	**36.0883**	**146.9388**	**0.6497**	**41.5981**	**0.9521**	**42.5502**	**11.1415**	**0.8781**	**12.0196**		**46,819.6761**	**46,819.6761**	**1.2062**		**46,845.0059**

3.4 Building Construction - 2032

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	4.6352	27.9353	56.1223	0.1901	5.3710	0.6708	6.0417	1.5324	0.6171	2.1495		17,831.7233	17,831.7233	0.1244		17,834.3354
Worker	7.1973	8.1531	90.8165	0.4595	36.2271	0.2813	36.5084	9.6091	0.2610	9.8701		28,987.9529	28,987.9529	1.0818		29,010.6705
Total	**11.8326**	**36.0883**	**146.9388**	**0.6497**	**41.5981**	**0.9521**	**42.5502**	**11.1415**	**0.8781**	**12.0196**		**46,819.6761**	**46,819.6761**	**1.2062**		**46,845.0059**

3.4 Building Construction - 2033

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	4.5852	27.8260	55.9608	0.1901	5.3704	0.6706	6.0411	1.5322	0.6170	2.1491		17,829.8142	17,829.8142	0.1244		17,832.4264
Worker	7.0026	7.9849	89.3157	0.4596	36.2271	0.2816	36.5087	9.6091	0.2613	9.8704		28,890.0127	28,890.0127	1.0676		28,912.4313
Total	**11.5877**	**35.8109**	**145.2765**	**0.6497**	**41.5975**	**0.9522**	**42.5498**	**11.1413**	**0.8783**	**12.0195**		**46,719.8269**	**46,719.8269**	**1.1919**		**46,744.8578**

3.4 Building Construction - 2033

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	4.5852	27.8260	55.9608	0.1901	5.3704	0.6706	6.0411	1.5322	0.6170	2.1491		17,829.8142	17,829.8142	0.1244		17,832.4264
Worker	7.0026	7.9849	89.3157	0.4596	36.2271	0.2816	36.5087	9.6091	0.2613	9.8704		28,890.0127	28,890.0127	1.0676		28,912.4313
Total	**11.5877**	**35.8109**	**145.2765**	**0.6497**	**41.5975**	**0.9522**	**42.5498**	**11.1413**	**0.8783**	**12.0195**		**46,719.8269**	**46,719.8269**	**1.1919**		**46,744.8578**

3.4 Building Construction - 2034

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	4.5458	27.7519	55.8254	0.1901	5.3699	0.6705	6.0404	1.5319	0.6168	2.1488		17,828.2777	17,828.2777	0.1244		17,830.8897
Worker	6.8079	7.8461	87.7759	0.4596	36.2271	0.2816	36.5087	9.6091	0.2612	9.8704		28,807.4828	28,807.4828	1.0541		28,829.6179
Total	**11.3536**	**35.5980**	**143.6014**	**0.6497**	**41.5970**	**0.9520**	**42.5490**	**11.1411**	**0.8781**	**12.0191**		**46,635.7605**	**46,635.7605**	**1.1784**		**46,660.5076**

3.4 Building Construction - 2034

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	4.5458	27.7519	55.8254	0.1901	5.3699	0.6705	6.0404	1.5319	0.6168	2.1488		17,828.2777	17,828.2777	0.1244		17,830.8897
Worker	6.8079	7.8461	87.7759	0.4596	36.2271	0.2816	36.5087	9.6091	0.2612	9.8704		28,807.4828	28,807.4828	1.0541		28,829.6179
Total	**11.3536**	**35.5980**	**143.6014**	**0.6497**	**41.5970**	**0.9520**	**42.5490**	**11.1411**	**0.8781**	**12.0191**		**46,635.7605**	**46,635.7605**	**1.1784**		**46,660.5076**

3.4 Building Construction - 2035

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**		**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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	4.5167	27.6979	55.7201	0.1901	5.3694	0.6703	6.0397	1.5317	0.6167	2.1484		17,826.8828	17,826.8828	0.1244		17,829.4946
Worker	6.6339	7.7329	86.5496	0.4596	36.2271	0.2815	36.5086	9.6091	0.2612	9.8703		28,739.3862	28,739.3862	1.0422		28,761.2728
Total	**11.1507**	**35.4308**	**142.2698**	**0.6496**	**41.5965**	**0.9518**	**42.5483**	**11.1408**	**0.8778**	**12.0187**		**46,566.2690**	**46,566.2690**	**1.1666**		**46,590.7674**

3.4 Building Construction - 2035

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901	0.0000	2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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	4.5167	27.6979	55.7201	0.1901	5.3694	0.6703	6.0397	1.5317	0.6167	2.1484		17,826.8828	17,826.8828	0.1244		17,829.4946
Worker	6.6339	7.7329	86.5496	0.4596	36.2271	0.2815	36.5086	9.6091	0.2612	9.8703		28,739.3862	28,739.3862	1.0422		28,761.2728
Total	**11.1507**	**35.4308**	**142.2698**	**0.6496**	**41.5965**	**0.9518**	**42.5483**	**11.1408**	**0.8778**	**12.0187**		**46,566.2690**	**46,566.2690**	**1.1666**		**46,590.7674**

3.4 Building Construction - 2036

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**		**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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
Vendor					3.9040	0.0000	3.9040	0.9583	0.0000	0.9583			0.0000			0.0000
Worker					31.4848	0.0000	31.4848	7.7281	0.0000	7.7281			0.0000			0.0000
Total					**35.3888**	**0.0000**	**35.3888**	**8.6863**	**0.0000**	**8.6863**			**0.0000**			**0.0000**

3.4 Building Construction - 2036

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901	0.0000	2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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
Vendor					3.9040	0.0000	3.9040	0.9583	0.0000	0.9583			0.0000			0.0000
Worker					31.4848	0.0000	31.4848	7.7281	0.0000	7.7281			0.0000			0.0000
Total					**35.3888**	**0.0000**	**35.3888**	**8.6863**	**0.0000**	**8.6863**			**0.0000**			**0.0000**

3.4 Building Construction - 2037

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**		**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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
Vendor					3.9040	0.0000	3.9040	0.9583	0.0000	0.9583			0.0000			0.0000
Worker					31.4848	0.0000	31.4848	7.7281	0.0000	7.7281			0.0000			0.0000
Total					**35.3888**	**0.0000**	**35.3888**	**8.6863**	**0.0000**	**8.6863**			**0.0000**			**0.0000**

3.4 Building Construction - 2037

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901	0.0000	2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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
Vendor					3.9040	0.0000	3.9040	0.9583	0.0000	0.9583			0.0000			0.0000
Worker					31.4848	0.0000	31.4848	7.7281	0.0000	7.7281			0.0000			0.0000
Total					**35.3888**	**0.0000**	**35.3888**	**8.6863**	**0.0000**	**8.6863**			**0.0000**			**0.0000**

3.5 Paving - 2037

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	1.1165	4.7892	15.4905	0.0275		0.1832	0.1832		0.1832	0.1832		2,599.9866	2,599.9866	0.1001		2,602.0881
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1165**	**4.7892**	**15.4905**	**0.0275**		**0.1832**	**0.1832**		**0.1832**	**0.1832**		**2,599.9866**	**2,599.9866**	**0.1001**		**2,602.0881**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1071	0.0000	0.1071	0.0263	0.0000	0.0263			0.0000			0.0000
Total					**0.1071**	**0.0000**	**0.1071**	**0.0263**	**0.0000**	**0.0263**			**0.0000**			**0.0000**

3.5 Paving - 2037

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	1.1165	4.7892	15.4905	0.0275		0.1832	0.1832		0.1832	0.1832	0.0000	2,599.9866	2,599.9866	0.1001		2,602.0881
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1165**	**4.7892**	**15.4905**	**0.0275**		**0.1832**	**0.1832**		**0.1832**	**0.1832**	**0.0000**	**2,599.9866**	**2,599.9866**	**0.1001**		**2,602.0881**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1071	0.0000	0.1071	0.0263	0.0000	0.0263			0.0000			0.0000
Total					**0.1071**	**0.0000**	**0.1071**	**0.0263**	**0.0000**	**0.0263**			**0.0000**			**0.0000**

3.5 Paving - 2038

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	1.1165	4.7892	15.4905	0.0275		0.1832	0.1832		0.1832	0.1832		2,599.9866	2,599.9866	0.1001		2,602.0881
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1165**	**4.7892**	**15.4905**	**0.0275**		**0.1832**	**0.1832**		**0.1832**	**0.1832**		**2,599.9866**	**2,599.9866**	**0.1001**		**2,602.0881**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1071	0.0000	0.1071	0.0263	0.0000	0.0263			0.0000			0.0000
Total					**0.1071**	**0.0000**	**0.1071**	**0.0263**	**0.0000**	**0.0263**			**0.0000**			**0.0000**

3.5 Paving - 2038

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	1.1165	4.7892	15.4905	0.0275		0.1832	0.1832		0.1832	0.1832	0.0000	2,599.9866	2,599.9866	0.1001		2,602.0881
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1165**	**4.7892**	**15.4905**	**0.0275**		**0.1832**	**0.1832**		**0.1832**	**0.1832**	**0.0000**	**2,599.9866**	**2,599.9866**	**0.1001**		**2,602.0881**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1071	0.0000	0.1071	0.0263	0.0000	0.0263			0.0000			0.0000
Total					**0.1071**	**0.0000**	**0.1071**	**0.0263**	**0.0000**	**0.0263**			**0.0000**			**0.0000**

3.6 Architectural Coating - 2038

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	362.2477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003		281.4481	281.4481	0.0104		281.6665
Total	**362.3655**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**		**281.4481**	**281.4481**	**0.0104**		**281.6665**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					6.2970	0.0000	6.2970	1.5456	0.0000	1.5456			0.0000			0.0000
Total					**6.2970**	**0.0000**	**6.2970**	**1.5456**	**0.0000**	**1.5456**			**0.0000**			**0.0000**

3.6 Architectural Coating - 2038

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	362.2477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003	0.0000	281.4481	281.4481	0.0104		281.6665
Total	**362.3655**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0104**		**281.6665**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					6.2970	0.0000	6.2970	1.5456	0.0000	1.5456			0.0000			0.0000
Total					**6.2970**	**0.0000**	**6.2970**	**1.5456**	**0.0000**	**1.5456**			**0.0000**			**0.0000**

3.6 Architectural Coating - 2039

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	362.2477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003		281.4481	281.4481	0.0104		281.6665
Total	**362.3655**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**		**281.4481**	**281.4481**	**0.0104**		**281.6665**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					6.2970	0.0000	6.2970	1.5456	0.0000	1.5456			0.0000			0.0000
Total					**6.2970**	**0.0000**	**6.2970**	**1.5456**	**0.0000**	**1.5456**			**0.0000**			**0.0000**

3.6 Architectural Coating - 2039

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	362.2477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003	0.0000	281.4481	281.4481	0.0104		281.6665
Total	**362.3655**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0104**		**281.6665**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					6.2970	0.0000	6.2970	1.5456	0.0000	1.5456			0.0000			0.0000
Total					**6.2970**	**0.0000**	**6.2970**	**1.5456**	**0.0000**	**1.5456**			**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	140.7550	287.6163	1,400.6159	4.0884	275.5999	4.4917	280.0916	73.5668	4.1446	77.7114		312,177.7973	312,177.7973	11.5935		312,421.2606
Unmitigated	140.7550	287.6163	1,400.6159	4.0884	275.5999	4.4917	280.0916	73.5668	4.1446	77.7114		312,177.7973	312,177.7973	11.5935		312,421.2606

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	41,968.00	41,968.00	41968.00	119,831,371	119,831,371
City Park	1,461.25	1,461.25	1461.25	3,119,558	3,119,558
Elementary School	1,782.00	0.00	0.00	2,806,572	2,806,572
Strip Mall	2,192.86	2,192.86	2192.86	3,377,080	3,377,080
Total	47,404.11	45,622.11	45,622.11	129,134,582	129,134,582

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513300	0.073549	0.191092	0.130830	0.036094	0.005140	0.012550	0.022916	0.001871	0.002062	0.006564	0.000586	0.003446

5.0 Energy Detail

4.4 Fleet Mix

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	0.8658	7.4071	3.2122	0.0472		0.5982	0.5982		0.5982	0.5982		9,444.7792	9,444.7792	0.1810	0.1732	9,502.2585
NaturalGas Unmitigated	0.8658	7.4071	3.2122	0.0472		0.5982	0.5982		0.5982	0.5982		9,444.7792	9,444.7792	0.1810	0.1732	9,502.2585

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					
Elementary School	1278.1	0.0138	0.1253	0.1053	7.5000e-004		9.5200e-003	9.5200e-003		9.5200e-003	9.5200e-003		150.3648	150.3648	2.8800e-003	2.7600e-003	151.2799
Strip Mall	205.159	2.2100e-003	0.0201	0.0169	1.2000e-004		1.5300e-003	1.5300e-003		1.5300e-003	1.5300e-003		24.1363	24.1363	4.6000e-004	4.4000e-004	24.2832
Apartments Mid Rise	78797.4	0.8498	7.2617	3.0901	0.0464		0.5871	0.5871		0.5871	0.5871		9,270.2780	9,270.2780	0.1777	0.1700	9,326.6954
City Park	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		**0.8658**	**7.4071**	**3.2123**	**0.0472**		**0.5982**	**0.5982**		**0.5982**	**0.5982**		**9,444.7792**	**9,444.7792**	**0.1810**	**0.1732**	**9,502.2585**

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					
Elementary School	1.2781	0.0138	0.1253	0.1053	7.5000e-004		9.5200e-003	9.5200e-003		9.5200e-003	9.5200e-003		150.3648	150.3648	2.8800e-003	2.7600e-003	151.2799
Strip Mall	0.205159	2.2100e-003	0.0201	0.0169	1.2000e-004		1.5300e-003	1.5300e-003		1.5300e-003	1.5300e-003		24.1363	24.1363	4.6000e-004	4.4000e-004	24.2832
Apartments Mid Rise	78.7974	0.8498	7.2617	3.0901	0.0464		0.5871	0.5871		0.5871	0.5871		9,270.2780	9,270.2780	0.1777	0.1700	9,326.6954
City Park	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		**0.8658**	**7.4071**	**3.2123**	**0.0472**		**0.5982**	**0.5982**		**0.5982**	**0.5982**		**9,444.7792**	**9,444.7792**	**0.1810**	**0.1732**	**9,502.2585**

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	8,239.9916	113.9479	10,324.5301	3.8860		1,391.8999	1,391.8999		1,391.8592	1,391.8592	145,690.4994	61,879.9873	207,570.4868	135.2086	11.4597	213,962.3616
Unmitigated	8,239.9916	113.9479	10,324.5301	3.8860		1,391.8999	1,391.8999		1,391.8592	1,391.8592	145,690.4994	61,879.9873	207,570.4868	135.2086	11.4597	213,962.3616

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	53.6234					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	144.6839					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	8,028.4520	108.9246	9,890.1906	3.8631		1,389.5118	1,389.5118		1,389.4711	1,389.4711	145,690.4994	61,100.4706	206,790.9700	134.4482	11.4597	213,166.8750
Landscaping	13.2323	5.0233	434.3395	0.0229		2.3881	2.3881		2.3881	2.3881		779.5167	779.5167	0.7605		795.4865
Total	**8,239.9916**	**113.9479**	**10,324.5301**	**3.8860**		**1,391.8999**	**1,391.8999**		**1,391.8592**	**1,391.8592**	**145,690.4994**	**61,879.9873**	**207,570.4868**	**135.2086**	**11.4597**	**213,962.3616**

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	53.6234					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	144.6839					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	8,028.4520	108.9246	9,890.1906	3.8631		1,389.5118	1,389.5118		1,389.4711	1,389.4711	145,690.4994	61,100.4706	206,790.9700	134.4482	11.4597	213,166.8750
Landscaping	13.2323	5.0233	434.3395	0.0229		2.3881	2.3881		2.3881	2.3881		779.5167	779.5167	0.7605		795.4865
Total	**8,239.9916**	**113.9479**	**10,324.5301**	**3.8860**		**1,391.8999**	**1,391.8999**		**1,391.8592**	**1,391.8592**	**145,690.4994**	**61,879.9873**	**207,570.4868**	**135.2086**	**11.4597**	**213,962.3616**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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 Vegetation

Central Village Specific Plan (Existing Approved Specific Plan)

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	900.00	Student	13.10	75,243.03	0
City Park	32.30	Acre	32.30	1,406,988.00	0
Apartments Mid Rise	5,246.00	Dwelling Unit	150.00	5,246,000.00	15004
Strip Mall	32.70	1000sqft	33.80	32,700.00	0

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)	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 - Project Size

Construction Phase -

Off-road Equipment -

Grading - 229.2 acre site

Architectural Coating -

Vehicle Trips - Adjusted to meet Otay Community Plan Assumptions

Area Coating - 150 g/l

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	250
tblGrading	AcresOfGrading	1,162.50	229.20
tblGrading	AcresOfGrading	0.00	229.20
tblLandUse	LotAcreage	1.73	13.10
tblLandUse	LotAcreage	138.05	150.00
tblLandUse	LotAcreage	0.75	33.80
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	8.00
tblVehicleTrips	ST_TR	1.59	45.24
tblVehicleTrips	ST_TR	42.04	67.06
tblVehicleTrips	SU_TR	6.07	8.00
tblVehicleTrips	SU_TR	1.59	45.24
tblVehicleTrips	SU_TR	20.43	67.06
tblVehicleTrips	WD_TR	6.59	8.00
tblVehicleTrips	WD_TR	1.59	45.24
tblVehicleTrips	WD_TR	1.29	1.98
tblVehicleTrips	WD_TR	44.32	67.06

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					
2017	6.1663	69.6757	47.5874	0.0637	19.5645	3.3184	22.3198	10.1157	3.0529	12.6506	0.0000	6,470.1987	6,470.1987	1.9425	0.0000	6,510.9902
2018	5.3506	59.6101	43.0133	0.0637	6.7091	2.7892	9.4983	3.4103	2.5661	5.9763	0.0000	6,363.7433	6,363.7433	1.9416	0.0000	6,404.5174
2019	22.6360	94.1798	265.2726	0.6479	41.5957	2.5061	44.0148	11.1406	2.3056	13.3939	0.0000	52,845.6223	52,845.6223	2.3201	0.0000	52,894.3442
2020	21.2828	82.7114	252.0603	0.6477	41.5954	2.1560	43.7514	11.1405	2.0080	13.1485	0.0000	51,098.3501	51,098.3501	2.2311	0.0000	51,145.2024
2021	20.0484	71.2440	240.8856	0.6480	41.5956	1.9234	43.5190	11.1405	1.7908	12.9314	0.0000	50,555.8294	50,555.8294	2.1682	0.0000	50,601.3604
2022	19.0423	63.7883	229.6356	0.6477	41.5958	1.7647	43.3605	11.1406	1.6424	12.7830	0.0000	50,033.9719	50,033.9719	2.1091	0.0000	50,078.2634
2023	18.0099	57.2940	219.2687	0.6472	41.5962	1.6406	43.2367	11.1408	1.5261	12.6668	0.0000	49,544.8465	49,544.8465	2.0470	0.0000	49,587.8336
2024	17.0885	55.3367	208.7689	0.6470	41.5962	1.5590	43.1552	11.1408	1.4490	12.5897	0.0000	49,144.0881	49,144.0881	2.0002	0.0000	49,186.0931
2025	16.4396	53.5640	201.9139	0.6470	41.5965	1.4781	43.0746	11.1409	1.3729	12.5138	0.0000	48,798.5816	48,798.5816	1.9611	0.0000	48,839.7652
2026	15.9903	52.7025	196.8783	0.6469	41.5970	1.4735	43.0705	11.1411	1.3687	12.5098	0.0000	48,500.1214	48,500.1214	1.9317	0.0000	48,540.6864
2027	15.5607	52.0783	191.5141	0.6469	41.5975	1.4769	43.0744	11.1413	1.3718	12.5131	0.0000	48,243.9659	48,243.9659	1.9068	0.0000	48,284.0083
2028	15.2240	51.5182	188.1727	0.6469	41.5980	1.4780	43.0760	11.1415	1.3728	12.5143	0.0000	48,026.5612	48,026.5612	1.8834	0.0000	48,066.1122
2029	14.8597	51.0157	184.3552	0.6469	41.5985	1.4797	43.0781	11.1417	1.3744	12.5161	0.0000	47,841.0087	47,841.0087	1.8611	0.0000	47,880.0911
2030	14.4839	46.0971	181.5735	0.6509	41.5988	1.1037	42.7025	11.1418	1.0294	12.1712	0.0000	48,022.7379	48,022.7379	1.3589	0.0000	48,051.2743
2031	14.2125	45.7417	179.3858	0.6509	41.5984	1.1046	42.7031	11.1417	1.0303	12.1719	0.0000	47,888.0896	47,888.0896	1.3417	0.0000	47,916.2643
2032	13.9620	45.4454	177.4781	0.6509	41.5981	1.1052	42.7033	11.1415	1.0308	12.1723	0.0000	47,775.7234	47,775.7234	1.3265	0.0000	47,803.5796
2033	13.6956	45.1406	175.8027	0.6508	41.5975	1.1054	42.7029	11.1413	1.0309	12.1722	0.0000	47,681.1547	47,681.1547	1.3123	0.0000	47,708.7120

	ROG	NOx	CO	SO2	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					
2034	13.4426	44.9063	174.1349	0.6508	41.5970	1.1051	42.7021	11.1411	1.0307	12.1718	0.0000	47,601.5162	47,601.5162	1.2987	0.0000	47,628.7898
2035	13.1327	43.9552	172.7713	0.6508	41.5965	1.0473	42.6438	11.1408	0.9730	12.1138	0.0000	47,535.7829	47,535.7829	1.2786	0.0000	47,562.6340
2036	1.2123	7.1510	16.0922	0.0308	35.3888	0.0901	35.4788	8.6863	0.0901	8.7764	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2037	1.2123	7.1510	16.0922	0.0308	35.3888	0.1832	35.4788	8.6863	0.1832	8.7764	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2038	362.3655	4.7892	15.4905	0.0275	6.2970	0.1832	6.3069	1.5456	0.1832	1.5555	0.0000	2,599.9866	2,599.9866	0.1001	0.0000	2,602.0881
2039	362.3655	0.7577	1.7943	2.9700e-003	6.2970	9.9000e-003	6.3069	1.5456	9.9000e-003	1.5555	0.0000	281.4481	281.4481	0.0104	0.0000	281.6665
Total	**1,017.7838**	**1,105.8537**	**3,579.9420**	**11.2445**	**816.7937**	**32.0811**	**847.9582**	**223.3881**	**29.7928**	**252.3440**	**0.0000**	**852,622.9881**	**852,622.9881**	**34.5459**	**0.0000**	**853,348.4520**

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					
2017	6.1663	69.6757	47.5874	0.0637	19.5645	3.3184	22.3198	10.1157	3.0529	12.6506	0.0000	6,470.1986	6,470.1986	1.9425	0.0000	6,510.9902
2018	5.3506	59.6101	43.0133	0.0637	6.7091	2.7892	9.4983	3.4103	2.5661	5.9763	0.0000	6,363.7433	6,363.7433	1.9416	0.0000	6,404.5174
2019	22.6360	94.1798	265.2726	0.6479	41.5957	2.5061	44.0148	11.1406	2.3056	13.3939	0.0000	52,845.6223	52,845.6223	2.3201	0.0000	52,894.3442
2020	21.2828	82.7114	252.0603	0.6477	41.5954	2.1560	43.7514	11.1405	2.0080	13.1485	0.0000	51,098.3501	51,098.3501	2.2311	0.0000	51,145.2024
2021	20.0484	71.2440	240.8856	0.6480	41.5956	1.9234	43.5190	11.1405	1.7908	12.9314	0.0000	50,555.8294	50,555.8294	2.1682	0.0000	50,601.3604
2022	19.0423	63.7883	229.6356	0.6477	41.5958	1.7647	43.3605	11.1406	1.6424	12.7830	0.0000	50,033.9719	50,033.9719	2.1091	0.0000	50,078.2634

	ROG	NOx	CO	SO2	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					
2023	18.0099	57.2940	219.2687	0.6472	41.5962	1.6406	43.2367	11.1408	1.5261	12.6668	0.0000	49,544.8465	49,544.8465	2.0470	0.0000	49,587.8336
2024	17.0885	55.3367	208.7689	0.6470	41.5962	1.5590	43.1552	11.1408	1.4490	12.5897	0.0000	49,144.0881	49,144.0881	2.0002	0.0000	49,186.0931
2025	16.4396	53.5640	201.9139	0.6470	41.5965	1.4781	43.0746	11.1409	1.3729	12.5138	0.0000	48,798.5816	48,798.5816	1.9611	0.0000	48,839.7652
2026	15.9903	52.7025	196.8783	0.6469	41.5970	1.4735	43.0705	11.1411	1.3687	12.5098	0.0000	48,500.1214	48,500.1214	1.9317	0.0000	48,540.6864
2027	15.5607	52.0783	191.5141	0.6469	41.5975	1.4769	43.0744	11.1413	1.3718	12.5131	0.0000	48,243.9659	48,243.9659	1.9068	0.0000	48,284.0083
2028	15.2240	51.5182	188.1727	0.6469	41.5980	1.4780	43.0760	11.1415	1.3728	12.5143	0.0000	48,026.5612	48,026.5612	1.8834	0.0000	48,066.1122
2029	14.8597	51.0157	184.3552	0.6469	41.5985	1.4797	43.0781	11.1417	1.3744	12.5161	0.0000	47,841.0086	47,841.0086	1.8611	0.0000	47,880.0911
2030	14.4839	46.0971	181.5735	0.6509	41.5988	1.1037	42.7025	11.1418	1.0294	12.1712	0.0000	48,022.7379	48,022.7379	1.3589	0.0000	48,051.2743
2031	14.2125	45.7417	179.3858	0.6509	41.5984	1.1046	42.7031	11.1417	1.0303	12.1719	0.0000	47,888.0896	47,888.0896	1.3417	0.0000	47,916.2643
2032	13.9620	45.4454	177.4781	0.6509	41.5981	1.1052	42.7033	11.1415	1.0308	12.1723	0.0000	47,775.7234	47,775.7234	1.3265	0.0000	47,803.5796
2033	13.6956	45.1406	175.8027	0.6508	41.5975	1.1054	42.7029	11.1413	1.0309	12.1722	0.0000	47,681.1547	47,681.1547	1.3123	0.0000	47,708.7120
2034	13.4426	44.9063	174.1349	0.6508	41.5970	1.1051	42.7021	11.1411	1.0307	12.1718	0.0000	47,601.5162	47,601.5162	1.2987	0.0000	47,628.7898
2035	13.1327	43.9552	172.7713	0.6508	41.5965	1.0473	42.6438	11.1408	0.9730	12.1138	0.0000	47,535.7829	47,535.7829	1.2786	0.0000	47,562.6340
2036	1.2123	7.1510	16.0922	0.0308	35.3888	0.0901	35.4788	8.6863	0.0901	8.7764	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2037	1.2123	7.1510	16.0922	0.0308	35.3888	0.1832	35.4788	8.6863	0.1832	8.7764	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2038	362.3655	4.7892	15.4905	0.0275	6.2970	0.1832	6.3069	1.5456	0.1832	1.5555	0.0000	2,599.9866	2,599.9866	0.1001	0.0000	2,602.0881
2039	362.3655	0.7577	1.7943	2.9700e-003	6.2970	9.9000e-003	6.3069	1.5456	9.9000e-003	1.5555	0.0000	281.4481	281.4481	0.0104	0.0000	281.6665
Total	**1,017.7838**	**1,105.8537**	**3,579.9420**	**11.2445**	**816.7937**	**32.0811**	**847.9582**	**223.3881**	**29.7928**	**252.3440**	**0.0000**	**852,622.9881**	**852,622.9881**	**34.5459**	**0.0000**	**853,348.4519**

	ROG	NOx	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	8,239.9916	113.9479	10,324.5301	3.8860		1,391.8999	1,391.8999		1,391.8592	1,391.8592	145,690.4994	61,879.9873	207,570.4868	135.2086	11.4597	213,962.3616
Energy	0.8658	7.4071	3.2122	0.0472		0.5982	0.5982		0.5982	0.5982		9,444.7792	9,444.7792	0.1810	0.1732	9,502.2585
Mobile	149.1779	305.7303	1,473.1035	3.8846	275.5999	4.5074	280.1073	73.5668	4.1591	77.7259		297,281.0766	297,281.0766	11.6041		297,524.7616
Total	**8,390.0353**	**427.0854**	**11,800.8458**	**7.8178**	**275.5999**	**1,397.0055**	**1,672.6054**	**73.5668**	**1,396.6164**	**1,470.1832**	**145,690.4994**	**368,605.8431**	**514,296.3425**	**146.9937**	**11.6328**	**520,989.3817**

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	8,239.9916	113.9479	10,324.5301	3.8860		1,391.8999	1,391.8999		1,391.8592	1,391.8592	145,690.4994	61,879.9873	207,570.4868	135.2086	11.4597	213,962.3616
Energy	0.8658	7.4071	3.2122	0.0472		0.5982	0.5982		0.5982	0.5982		9,444.7792	9,444.7792	0.1810	0.1732	9,502.2585
Mobile	149.1779	305.7303	1,473.1035	3.8846	275.5999	4.5074	280.1073	73.5668	4.1591	77.7259		297,281.0766	297,281.0766	11.6041		297,524.7616
Total	**8,390.0353**	**427.0854**	**11,800.8458**	**7.8178**	**275.5999**	**1,397.0055**	**1,672.6054**	**73.5668**	**1,396.6164**	**1,470.1832**	**145,690.4994**	**368,605.8431**	**514,296.3425**	**146.9937**	**11.6328**	**520,989.3817**

	ROG	NOx	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	Site Preparation	Site Preparation	1/1/2017	9/8/2017	5	180	
2	Grading	Grading	9/9/2017	6/21/2019	5	465	
3	Building Construction	Building Construction	6/22/2019	4/17/2037	5	4650	
4	Paving	Paving	4/18/2037	7/23/2038	5	330	
5	Architectural Coating	Architectural Coating	7/24/2038	10/28/2039	5	330	

Acres of Grading (Site Preparation Phase): 229.2

Acres of Grading (Grading Phase): 229.2

Acres of Paving: 0

Residential Indoor: 10,623,150; Residential Outdoor: 3,541,050; Non-Residential Indoor: 2,272,397; Non-Residential Outdoor: 757,466 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
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
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	4,410.00	809.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	882.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

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					19.4166	0.0000	19.4166	10.0765	0.0000	10.0765			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**19.4166**	**2.7542**	**22.1709**	**10.0765**	**2.5339**	**12.6104**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

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	0.0604	0.0753	0.7041	1.7600e-003	0.1479	1.0800e-003	0.1489	0.0392	9.9000e-004	0.0402		141.1467	141.1467	7.2500e-003		141.2989
Total	**0.0604**	**0.0753**	**0.7041**	**1.7600e-003**	**0.1479**	**1.0800e-003**	**0.1489**	**0.0392**	**9.9000e-004**	**0.0402**		**141.1467**	**141.1467**	**7.2500e-003**		**141.2989**

3.2 Site Preparation - 2017

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					19.4166	0.0000	19.4166	10.0765	0.0000	10.0765			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**19.4166**	**2.7542**	**22.1709**	**10.0765**	**2.5339**	**12.6104**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

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	0.0604	0.0753	0.7041	1.7600e-003	0.1479	1.0800e-003	0.1489	0.0392	9.9000e-004	0.0402		141.1467	141.1467	7.2500e-003		141.2989
Total	**0.0604**	**0.0753**	**0.7041**	**1.7600e-003**	**0.1479**	**1.0800e-003**	**0.1489**	**0.0392**	**9.9000e-004**	**0.0402**		**141.1467**	**141.1467**	**7.2500e-003**		**141.2989**

3.3 Grading - 2017

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**6.5448**	**3.3172**	**9.8620**	**3.3667**	**3.0518**	**6.4185**		**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

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	0.0671	0.0837	0.7823	1.9500e-003	0.1643	1.1900e-003	0.1655	0.0436	1.1000e-003	0.0447		156.8296	156.8296	8.0500e-003		156.9987
Total	**0.0671**	**0.0837**	**0.7823**	**1.9500e-003**	**0.1643**	**1.1900e-003**	**0.1655**	**0.0436**	**1.1000e-003**	**0.0447**		**156.8296**	**156.8296**	**8.0500e-003**		**156.9987**

3.3 Grading - 2017

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518	0.0000	6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**6.5448**	**3.3172**	**9.8620**	**3.3667**	**3.0518**	**6.4185**	**0.0000**	**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

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	0.0671	0.0837	0.7823	1.9500e-003	0.1643	1.1900e-003	0.1655	0.0436	1.1000e-003	0.0447		156.8296	156.8296	8.0500e-003		156.9987
Total	**0.0671**	**0.0837**	**0.7823**	**1.9500e-003**	**0.1643**	**1.1900e-003**	**0.1655**	**0.0436**	**1.1000e-003**	**0.0447**		**156.8296**	**156.8296**	**8.0500e-003**		**156.9987**

3.3 Grading - 2018

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	5.2895	59.5338	42.3068	0.0617		2.7880	2.7880		2.5650	2.5650		6,212.8042	6,212.8042	1.9341		6,253.4209
Total	**5.2895**	**59.5338**	**42.3068**	**0.0617**	**6.5448**	**2.7880**	**9.3328**	**3.3667**	**2.5650**	**5.9317**		**6,212.8042**	**6,212.8042**	**1.9341**		**6,253.4209**

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	0.0610	0.0763	0.7065	1.9500e-003	0.1643	1.1700e-003	0.1655	0.0436	1.0800e-003	0.0447		150.9392	150.9392	7.4900e-003		151.0965
Total	**0.0610**	**0.0763**	**0.7065**	**1.9500e-003**	**0.1643**	**1.1700e-003**	**0.1655**	**0.0436**	**1.0800e-003**	**0.0447**		**150.9392**	**150.9392**	**7.4900e-003**		**151.0965**

3.3 Grading - 2018

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	5.2895	59.5338	42.3068	0.0617		2.7880	2.7880		2.5650	2.5650	0.0000	6,212.8041	6,212.8041	1.9341		6,253.4209
Total	**5.2895**	**59.5338**	**42.3068**	**0.0617**	**6.5448**	**2.7880**	**9.3328**	**3.3667**	**2.5650**	**5.9317**	**0.0000**	**6,212.8041**	**6,212.8041**	**1.9341**		**6,253.4209**

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	0.0610	0.0763	0.7065	1.9500e-003	0.1643	1.1700e-003	0.1655	0.0436	1.0800e-003	0.0447		150.9392	150.9392	7.4900e-003		151.0965
Total	**0.0610**	**0.0763**	**0.7065**	**1.9500e-003**	**0.1643**	**1.1700e-003**	**0.1655**	**0.0436**	**1.0800e-003**	**0.0447**		**150.9392**	**150.9392**	**7.4900e-003**		**151.0965**

3.3 Grading - 2019

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045		6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**6.5448**	**2.5049**	**9.0497**	**3.3667**	**2.3045**	**5.6712**		**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

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	0.0566	0.0705	0.6492	1.9500e-003	0.1643	1.1600e-003	0.1655	0.0436	1.0800e-003	0.0447		145.4776	145.4776	7.0400e-003		145.6256
Total	**0.0566**	**0.0705**	**0.6492**	**1.9500e-003**	**0.1643**	**1.1600e-003**	**0.1655**	**0.0436**	**1.0800e-003**	**0.0447**		**145.4776**	**145.4776**	**7.0400e-003**		**145.6256**

3.3 Grading - 2019

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045	0.0000	6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**6.5448**	**2.5049**	**9.0497**	**3.3667**	**2.3045**	**5.6712**	**0.0000**	**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

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	0.0566	0.0705	0.6492	1.9500e-003	0.1643	1.1600e-003	0.1655	0.0436	1.0800e-003	0.0447		145.4776	145.4776	7.0400e-003		145.6256
Total	**0.0566**	**0.0705**	**0.6492**	**1.9500e-003**	**0.1643**	**1.1600e-003**	**0.1655**	**0.0436**	**1.0800e-003**	**0.0447**		**145.4776**	**145.4776**	**7.0400e-003**		**145.6256**

3.4 Building Construction - 2019

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

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	7.7984	57.6597	105.0133	0.1905	5.3686	0.8774	6.2460	1.5315	0.8071	2.3386		18,187.0470	18,187.0470	0.1388		18,189.9610
Worker	12.4860	15.5551	143.1389	0.4306	36.2271	0.2566	36.4837	9.6091	0.2379	9.8470		32,077.8135	32,077.8135	1.5534		32,110.4352
Total	**20.2844**	**73.2148**	**248.1523**	**0.6211**	**41.5957**	**1.1340**	**42.7297**	**11.1406**	**1.0450**	**12.1856**		**50,264.8605**	**50,264.8605**	**1.6922**		**50,300.3963**

3.4 Building Construction - 2019

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

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	7.7984	57.6597	105.0133	0.1905	5.3686	0.8774	6.2460	1.5315	0.8071	2.3386		18,187.0470	18,187.0470	0.1388		18,189.9610
Worker	12.4860	15.5551	143.1389	0.4306	36.2271	0.2566	36.4837	9.6091	0.2379	9.8470		32,077.8135	32,077.8135	1.5534		32,110.4352
Total	**20.2844**	**73.2148**	**248.1523**	**0.6211**	**41.5957**	**1.1340**	**42.7297**	**11.1406**	**1.0450**	**12.1856**		**50,264.8605**	**50,264.8605**	**1.6922**		**50,300.3963**

3.4 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	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

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	7.3643	49.0961	101.5531	0.1902	5.3683	0.7861	6.1545	1.5314	0.7232	2.2546		17,770.9022	17,770.9022	0.1345		17,773.7256
Worker	11.8072	14.5314	133.6988	0.4306	36.2271	0.2570	36.4841	9.6091	0.2383	9.8474		30,784.9680	30,784.9680	1.4772		30,815.9888
Total	**19.1715**	**63.6275**	**235.2519**	**0.6209**	**41.5954**	**1.0431**	**42.6386**	**11.1405**	**0.9615**	**12.1020**		**48,555.8702**	**48,555.8702**	**1.6116**		**48,589.7144**

3.4 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	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

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	7.3643	49.0961	101.5531	0.1902	5.3683	0.7861	6.1545	1.5314	0.7232	2.2546		17,770.9022	17,770.9022	0.1345		17,773.7256
Worker	11.8072	14.5314	133.6988	0.4306	36.2271	0.2570	36.4841	9.6091	0.2383	9.8474		30,784.9680	30,784.9680	1.4772		30,815.9888
Total	**19.1715**	**63.6275**	**235.2519**	**0.6209**	**41.5954**	**1.0431**	**42.6386**	**11.1405**	**0.9615**	**12.1020**		**48,555.8702**	**48,555.8702**	**1.6116**		**48,589.7144**

3.4 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	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**		**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

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	6.9168	40.2633	97.6911	0.1898	5.3685	0.7075	6.0759	1.5314	0.6509	2.1823		17,742.4041	17,742.4041	0.1341		17,745.2204
Worker	11.2385	13.6404	126.6568	0.4313	36.2271	0.2610	36.4881	9.6091	0.2421	9.8512		30,270.6436	30,270.6436	1.4214		30,300.4939
Total	**18.1553**	**53.9037**	**224.3479**	**0.6212**	**41.5956**	**0.9685**	**42.5641**	**11.1405**	**0.8930**	**12.0335**		**48,013.0476**	**48,013.0476**	**1.5556**		**48,045.7143**

3.4 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	lb/day										lb/day					
Off-Road	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**	**0.0000**	**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

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	6.9168	40.2633	97.6911	0.1898	5.3685	0.7075	6.0759	1.5314	0.6509	2.1823		17,742.4041	17,742.4041	0.1341		17,745.2204
Worker	11.2385	13.6404	126.6568	0.4313	36.2271	0.2610	36.4881	9.6091	0.2421	9.8512		30,270.6436	30,270.6436	1.4214		30,300.4939
Total	**18.1553**	**53.9037**	**224.3479**	**0.6212**	**41.5956**	**0.9685**	**42.5641**	**11.1405**	**0.8930**	**12.0335**		**48,013.0476**	**48,013.0476**	**1.5556**		**48,045.7143**

3.4 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	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**		**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

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	6.6332	35.3691	93.8421	0.1896	5.3687	0.6961	6.0648	1.5315	0.6404	2.1719		17,724.0310	17,724.0310	0.1369		17,726.9064
Worker	10.7099	12.8829	119.4659	0.4313	36.2271	0.2629	36.4900	9.6091	0.2438	9.8529		29,766.1912	29,766.1912	1.3637		29,794.8283
Total	**17.3431**	**48.2519**	**213.3080**	**0.6209**	**41.5958**	**0.9589**	**42.5548**	**11.1406**	**0.8842**	**12.0248**		**47,490.2222**	**47,490.2222**	**1.5006**		**47,521.7347**

3.4 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	lb/day										lb/day					
Off-Road	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**	**0.0000**	**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

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	6.6332	35.3691	93.8421	0.1896	5.3687	0.6961	6.0648	1.5315	0.6404	2.1719		17,724.0310	17,724.0310	0.1369		17,726.9064
Worker	10.7099	12.8829	119.4659	0.4313	36.2271	0.2629	36.4900	9.6091	0.2438	9.8529		29,766.1912	29,766.1912	1.3637		29,794.8283
Total	**17.3431**	**48.2519**	**213.3080**	**0.6209**	**41.5958**	**0.9589**	**42.5548**	**11.1406**	**0.8842**	**12.0248**		**47,490.2222**	**47,490.2222**	**1.5006**		**47,521.7347**

3.4 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	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557		2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**		**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

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	6.2180	30.7668	90.0409	0.1891	5.3691	0.6791	6.0482	1.5316	0.6248	2.1564		17,684.1308	17,684.1308	0.1287		17,686.8342
Worker	10.2259	12.2146	113.0185	0.4312	36.2271	0.2648	36.4919	9.6091	0.2456	9.8547		29,316.0895	29,316.0895	1.3139		29,343.6803
Total	**16.4438**	**42.9814**	**203.0594**	**0.6203**	**41.5962**	**0.9439**	**42.5400**	**11.1408**	**0.8704**	**12.0112**		**47,000.2203**	**47,000.2203**	**1.4426**		**47,030.5145**

3.4 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	lb/day										lb/day					
Off-Road	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557	0.0000	2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**	**0.0000**	**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

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	6.2180	30.7668	90.0409	0.1891	5.3691	0.6791	6.0482	1.5316	0.6248	2.1564		17,684.1308	17,684.1308	0.1287		17,686.8342
Worker	10.2259	12.2146	113.0185	0.4312	36.2271	0.2648	36.4919	9.6091	0.2456	9.8547		29,316.0895	29,316.0895	1.3139		29,343.6803
Total	**16.4438**	**42.9814**	**203.0594**	**0.6203**	**41.5962**	**0.9439**	**42.5400**	**11.1408**	**0.8704**	**12.0112**		**47,000.2203**	**47,000.2203**	**1.4426**		**47,030.5145**

3.4 Building Construction - 2024

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	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744		2,545.1154	2,545.1154	0.6009		2,557.7349
Total	**1.4653**	**13.3774**	**16.1332**	**0.0268**		**0.6106**	**0.6106**		**0.5744**	**0.5744**		**2,545.1154**	**2,545.1154**	**0.6009**		**2,557.7349**

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	5.8418	30.3298	85.0489	0.1890	5.3691	0.6816	6.0507	1.5317	0.6271	2.1587		17,682.9824	17,682.9824	0.1291		17,685.6942
Worker	9.7814	11.6295	107.5868	0.4312	36.2271	0.2668	36.4939	9.6091	0.2476	9.8567		28,915.9903	28,915.9903	1.2702		28,942.6640
Total	**15.6232**	**41.9593**	**192.6357**	**0.6202**	**41.5962**	**0.9484**	**42.5446**	**11.1408**	**0.8746**	**12.0154**		**46,598.9727**	**46,598.9727**	**1.3993**		**46,628.3582**

3.4 Building Construction - 2024

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	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744	0.0000	2,545.1154	2,545.1154	0.6009		2,557.7349
Total	**1.4653**	**13.3774**	**16.1332**	**0.0268**		**0.6106**	**0.6106**		**0.5744**	**0.5744**	**0.0000**	**2,545.1154**	**2,545.1154**	**0.6009**		**2,557.7349**

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	5.8418	30.3298	85.0489	0.1890	5.3691	0.6816	6.0507	1.5317	0.6271	2.1587		17,682.9824	17,682.9824	0.1291		17,685.6942
Worker	9.7814	11.6295	107.5868	0.4312	36.2271	0.2668	36.4939	9.6091	0.2476	9.8567		28,915.9903	28,915.9903	1.2702		28,942.6640
Total	**15.6232**	**41.9593**	**192.6357**	**0.6202**	**41.5962**	**0.9484**	**42.5446**	**11.1408**	**0.8746**	**12.0154**		**46,598.9727**	**46,598.9727**	**1.3993**		**46,628.3582**

3.4 Building Construction - 2025

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	5.6739	30.0089	82.7691	0.1890	5.3694	0.6838	6.0532	1.5318	0.6291	2.1609		17,684.4859	17,684.4859	0.1295		17,687.2052
Worker	9.4043	11.1454	103.0930	0.4311	36.2271	0.2693	36.4964	9.6091	0.2499	9.8590		28,568.2052	28,568.2052	1.2341		28,594.1214
Total	**15.0781**	**41.1543**	**185.8621**	**0.6201**	**41.5965**	**0.9531**	**42.5496**	**11.1409**	**0.8789**	**12.0198**		**46,252.6911**	**46,252.6911**	**1.3636**		**46,281.3266**

3.4 Building Construction - 2025

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	5.6739	30.0089	82.7691	0.1890	5.3694	0.6838	6.0532	1.5318	0.6291	2.1609		17,684.4859	17,684.4859	0.1295		17,687.2052
Worker	9.4043	11.1454	103.0930	0.4311	36.2271	0.2693	36.4964	9.6091	0.2499	9.8590		28,568.2052	28,568.2052	1.2341		28,594.1214
Total	**15.0781**	**41.1543**	**185.8621**	**0.6201**	**41.5965**	**0.9531**	**42.5496**	**11.1409**	**0.8789**	**12.0198**		**46,252.6911**	**46,252.6911**	**1.3636**		**46,281.3266**

3.4 Building Construction - 2026

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	5.5361	29.5256	81.1904	0.1890	5.3699	0.6762	6.0461	1.5320	0.6221	2.1541		17,685.9911	17,685.9911	0.1285		17,688.6903
Worker	9.0928	10.7672	99.6362	0.4311	36.2271	0.2723	36.4994	9.6091	0.2526	9.8618		28,268.2398	28,268.2398	1.2056		28,293.5576
Total	**14.6289**	**40.2928**	**180.8266**	**0.6201**	**41.5970**	**0.9485**	**42.5455**	**11.1411**	**0.8748**	**12.0158**		**45,954.2309**	**45,954.2309**	**1.3341**		**45,982.2478**

3.4 Building Construction - 2026

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	5.5361	29.5256	81.1904	0.1890	5.3699	0.6762	6.0461	1.5320	0.6221	2.1541		17,685.9911	17,685.9911	0.1285		17,688.6903
Worker	9.0928	10.7672	99.6362	0.4311	36.2271	0.2723	36.4994	9.6091	0.2526	9.8618		28,268.2398	28,268.2398	1.2056		28,293.5576
Total	**14.6289**	**40.2928**	**180.8266**	**0.6201**	**41.5970**	**0.9485**	**42.5455**	**11.1411**	**0.8748**	**12.0158**		**45,954.2309**	**45,954.2309**	**1.3341**		**45,982.2478**

3.4 Building Construction - 2027

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	5.3947	29.2259	78.8742	0.1889	5.3704	0.6771	6.0475	1.5322	0.6229	2.1551		17,688.1362	17,688.1362	0.1287		17,690.8397
Worker	8.8046	10.4427	96.5882	0.4311	36.2271	0.2748	36.5019	9.6091	0.2550	9.8641		28,009.9392	28,009.9392	1.1805		28,034.7300
Total	**14.1992**	**39.6686**	**175.4623**	**0.6201**	**41.5975**	**0.9519**	**42.5494**	**11.1413**	**0.8779**	**12.0192**		**45,698.0754**	**45,698.0754**	**1.3093**		**45,725.5697**

3.4 Building Construction - 2027

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	5.3947	29.2259	78.8742	0.1889	5.3704	0.6771	6.0475	1.5322	0.6229	2.1551		17,688.1362	17,688.1362	0.1287		17,690.8397
Worker	8.8046	10.4427	96.5882	0.4311	36.2271	0.2748	36.5019	9.6091	0.2550	9.8641		28,009.9392	28,009.9392	1.1805		28,034.7300
Total	**14.1992**	**39.6686**	**175.4623**	**0.6201**	**41.5975**	**0.9519**	**42.5494**	**11.1413**	**0.8779**	**12.0192**		**45,698.0754**	**45,698.0754**	**1.3093**		**45,725.5697**

3.4 Building Construction - 2028

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	5.3379	28.9800	78.2927	0.1889	5.3709	0.6759	6.0468	1.5324	0.6219	2.1542		17,690.6593	17,690.6593	0.1287		17,693.3613
Worker	8.5247	10.1285	93.8282	0.4311	36.2271	0.2771	36.5042	9.6091	0.2571	9.8662		27,790.0113	27,790.0113	1.1572		27,814.3124
Total	**13.8625**	**39.1085**	**172.1209**	**0.6201**	**41.5980**	**0.9530**	**42.5510**	**11.1415**	**0.8789**	**12.0204**		**45,480.6706**	**45,480.6706**	**1.2859**		**45,507.6737**

3.4 Building Construction - 2028

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	5.3379	28.9800	78.2927	0.1889	5.3709	0.6759	6.0468	1.5324	0.6219	2.1542		17,690.6593	17,690.6593	0.1287		17,693.3613
Worker	8.5247	10.1285	93.8282	0.4311	36.2271	0.2771	36.5042	9.6091	0.2571	9.8662		27,790.0113	27,790.0113	1.1572		27,814.3124
Total	**13.8625**	**39.1085**	**172.1209**	**0.6201**	**41.5980**	**0.9530**	**42.5510**	**11.1415**	**0.8789**	**12.0204**		**45,480.6706**	**45,480.6706**	**1.2859**		**45,507.6737**

3.4 Building Construction - 2029

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	5.2487	28.7860	77.1247	0.1889	5.3714	0.6758	6.0472	1.5326	0.6218	2.1543		17,692.6168	17,692.6168	0.1287		17,695.3201
Worker	8.2496	9.8200	91.1787	0.4311	36.2271	0.2788	36.5059	9.6091	0.2587	9.8678		27,602.5013	27,602.5013	1.1348		27,626.3325
Total	**13.4982**	**38.6060**	**168.3034**	**0.6201**	**41.5985**	**0.9547**	**42.5531**	**11.1417**	**0.8805**	**12.0221**		**45,295.1181**	**45,295.1181**	**1.2636**		**45,321.6526**

3.4 Building Construction - 2029

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	5.2487	28.7860	77.1247	0.1889	5.3714	0.6758	6.0472	1.5326	0.6218	2.1543		17,692.6168	17,692.6168	0.1287		17,695.3201
Worker	8.2496	9.8200	91.1787	0.4311	36.2271	0.2788	36.5059	9.6091	0.2587	9.8678		27,602.5013	27,602.5013	1.1348		27,626.3325
Total	**13.4982**	**38.6060**	**168.3034**	**0.6201**	**41.5985**	**0.9547**	**42.5531**	**11.1417**	**0.8805**	**12.0221**		**45,295.1181**	**45,295.1181**	**1.2636**		**45,321.6526**

3.4 Building Construction - 2030

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	5.1886	28.6337	76.6240	0.1890	5.3717	0.6760	6.0477	1.5327	0.6219	2.1546		17,694.6412	17,694.6412	0.1288		17,697.3458
Worker	7.9911	9.5456	88.8182	0.4311	36.2271	0.2801	36.5072	9.6091	0.2599	9.8690		27,443.2667	27,443.2667	1.1143		27,466.6667
Total	**13.1798**	**38.1793**	**165.4422**	**0.6201**	**41.5988**	**0.9561**	**42.5549**	**11.1418**	**0.8818**	**12.0236**		**45,137.9079**	**45,137.9079**	**1.2431**		**45,164.0126**

3.4 Building Construction - 2030

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	5.1886	28.6337	76.6240	0.1890	5.3717	0.6760	6.0477	1.5327	0.6219	2.1546		17,694.6412	17,694.6412	0.1288		17,697.3458
Worker	7.9911	9.5456	88.8182	0.4311	36.2271	0.2801	36.5072	9.6091	0.2599	9.8690		27,443.2667	27,443.2667	1.1143		27,466.6667
Total	**13.1798**	**38.1793**	**165.4422**	**0.6201**	**41.5988**	**0.9561**	**42.5549**	**11.1418**	**0.8818**	**12.0236**		**45,137.9079**	**45,137.9079**	**1.2431**		**45,164.0126**

3.4 Building Construction - 2031

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	5.1400	28.5177	76.3163	0.1889	5.3713	0.6762	6.0475	1.5325	0.6221	2.1546		17,693.6881	17,693.6881	0.1289		17,696.3940
Worker	7.7685	9.3061	86.9383	0.4311	36.2271	0.2809	36.5080	9.6091	0.2606	9.8697		27,309.5716	27,309.5716	1.0970		27,332.6086
Total	**12.9084**	**37.8238**	**163.2545**	**0.6201**	**41.5984**	**0.9570**	**42.5555**	**11.1417**	**0.8827**	**12.0243**		**45,003.2597**	**45,003.2597**	**1.2259**		**45,029.0026**

3.4 Building Construction - 2031

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	5.1400	28.5177	76.3163	0.1889	5.3713	0.6762	6.0475	1.5325	0.6221	2.1546		17,693.6881	17,693.6881	0.1289		17,696.3940
Worker	7.7685	9.3061	86.9383	0.4311	36.2271	0.2809	36.5080	9.6091	0.2606	9.8697		27,309.5716	27,309.5716	1.0970		27,332.6086
Total	**12.9084**	**37.8238**	**163.2545**	**0.6201**	**41.5984**	**0.9570**	**42.5555**	**11.1417**	**0.8827**	**12.0243**		**45,003.2597**	**45,003.2597**	**1.2259**		**45,029.0026**

3.4 Building Construction - 2032

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	5.0930	28.4225	76.0727	0.1889	5.3710	0.6763	6.0472	1.5324	0.6222	2.1546		17,692.9044	17,692.9044	0.1289		17,695.6112
Worker	7.5649	9.1051	85.2741	0.4311	36.2271	0.2813	36.5084	9.6091	0.2610	9.8701		27,197.9890	27,197.9890	1.0818		27,220.7066
Total	**12.6579**	**37.5276**	**161.3467**	**0.6200**	**41.5981**	**0.9576**	**42.5557**	**11.1415**	**0.8832**	**12.0247**		**44,890.8934**	**44,890.8934**	**1.2107**		**44,916.3179**

3.4 Building Construction - 2032

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	5.0930	28.4225	76.0727	0.1889	5.3710	0.6763	6.0472	1.5324	0.6222	2.1546		17,692.9044	17,692.9044	0.1289		17,695.6112
Worker	7.5649	9.1051	85.2741	0.4311	36.2271	0.2813	36.5084	9.6091	0.2610	9.8701		27,197.9890	27,197.9890	1.0818		27,220.7066
Total	**12.6579**	**37.5276**	**161.3467**	**0.6200**	**41.5981**	**0.9576**	**42.5557**	**11.1415**	**0.8832**	**12.0247**		**44,890.8934**	**44,890.8934**	**1.2107**		**44,916.3179**

3.4 Building Construction - 2033

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	5.0342	28.3072	75.8721	0.1889	5.3704	0.6762	6.0466	1.5322	0.6221	2.1542		17,690.9942	17,690.9942	0.1289		17,693.7011
Worker	7.3573	8.9155	83.7992	0.4311	36.2271	0.2816	36.5087	9.6091	0.2613	9.8704		27,105.3306	27,105.3306	1.0676		27,127.7492
Total	**12.3915**	**37.2227**	**159.6714**	**0.6200**	**41.5975**	**0.9578**	**42.5553**	**11.1413**	**0.8833**	**12.0246**		**44,796.3247**	**44,796.3247**	**1.1965**		**44,821.4503**

3.4 Building Construction - 2033

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	5.0342	28.3072	75.8721	0.1889	5.3704	0.6762	6.0466	1.5322	0.6221	2.1542		17,690.9942	17,690.9942	0.1289		17,693.7011
Worker	7.3573	8.9155	83.7992	0.4311	36.2271	0.2816	36.5087	9.6091	0.2613	9.8704		27,105.3306	27,105.3306	1.0676		27,127.7492
Total	**12.3915**	**37.2227**	**159.6714**	**0.6200**	**41.5975**	**0.9578**	**42.5553**	**11.1413**	**0.8833**	**12.0246**		**44,796.3247**	**44,796.3247**	**1.1965**		**44,821.4503**

3.4 Building Construction - 2034

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	4.9879	28.2290	75.7059	0.1889	5.3699	0.6760	6.0459	1.5319	0.6219	2.1538		17,689.4562	17,689.4562	0.1289		17,692.1630
Worker	7.1506	8.7594	82.2976	0.4311	36.2271	0.2816	36.5087	9.6091	0.2612	9.8704		27,027.2300	27,027.2300	1.0541		27,049.3651
Total	**12.1384**	**36.9884**	**158.0036**	**0.6200**	**41.5970**	**0.9575**	**42.5545**	**11.1411**	**0.8831**	**12.0242**		**44,716.6862**	**44,716.6862**	**1.1829**		**44,741.5281**

3.4 Building Construction - 2034

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	4.9879	28.2290	75.7059	0.1889	5.3699	0.6760	6.0459	1.5319	0.6219	2.1538		17,689.4562	17,689.4562	0.1289		17,692.1630
Worker	7.1506	8.7594	82.2976	0.4311	36.2271	0.2816	36.5087	9.6091	0.2612	9.8704		27,027.2300	27,027.2300	1.0541		27,049.3651
Total	**12.1384**	**36.9884**	**158.0036**	**0.6200**	**41.5970**	**0.9575**	**42.5545**	**11.1411**	**0.8831**	**12.0242**		**44,716.6862**	**44,716.6862**	**1.1829**		**44,741.5281**

3.4 Building Construction - 2035

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**		**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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	4.9536	28.1720	75.5805	0.1889	5.3694	0.6758	6.0452	1.5317	0.6217	2.1534		17,688.0599	17,688.0599	0.1289		17,690.7664
Worker	6.9669	8.6322	81.0986	0.4311	36.2271	0.2815	36.5086	9.6091	0.2612	9.8703		26,962.8931	26,962.8931	1.0422		26,984.7797
Total	**11.9205**	**36.8042**	**156.6791**	**0.6200**	**41.5965**	**0.9573**	**42.5538**	**11.1408**	**0.8829**	**12.0237**		**44,650.9529**	**44,650.9529**	**1.1711**		**44,675.5462**

3.4 Building Construction - 2035

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901	0.0000	2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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	4.9536	28.1720	75.5805	0.1889	5.3694	0.6758	6.0452	1.5317	0.6217	2.1534		17,688.0599	17,688.0599	0.1289		17,690.7664
Worker	6.9669	8.6322	81.0986	0.4311	36.2271	0.2815	36.5086	9.6091	0.2612	9.8703		26,962.8931	26,962.8931	1.0422		26,984.7797
Total	**11.9205**	**36.8042**	**156.6791**	**0.6200**	**41.5965**	**0.9573**	**42.5538**	**11.1408**	**0.8829**	**12.0237**		**44,650.9529**	**44,650.9529**	**1.1711**		**44,675.5462**

3.4 Building Construction - 2036

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**		**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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
Vendor					3.9040	0.0000	3.9040	0.9583	0.0000	0.9583			0.0000			0.0000
Worker					31.4848	0.0000	31.4848	7.7281	0.0000	7.7281			0.0000			0.0000
Total					**35.3888**	**0.0000**	**35.3888**	**8.6863**	**0.0000**	**8.6863**			**0.0000**			**0.0000**

3.4 Building Construction - 2036

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901	0.0000	2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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
Vendor					3.9040	0.0000	3.9040	0.9583	0.0000	0.9583			0.0000			0.0000
Worker					31.4848	0.0000	31.4848	7.7281	0.0000	7.7281			0.0000			0.0000
Total					**35.3888**	**0.0000**	**35.3888**	**8.6863**	**0.0000**	**8.6863**			**0.0000**			**0.0000**

3.4 Building Construction - 2037

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**		**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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
Vendor					3.9040	0.0000	3.9040	0.9583	0.0000	0.9583			0.0000			0.0000
Worker					31.4848	0.0000	31.4848	7.7281	0.0000	7.7281			0.0000			0.0000
Total					**35.3888**	**0.0000**	**35.3888**	**8.6863**	**0.0000**	**8.6863**			**0.0000**			**0.0000**

3.4 Building Construction - 2037

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901	0.0000	2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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
Vendor					3.9040	0.0000	3.9040	0.9583	0.0000	0.9583			0.0000			0.0000
Worker					31.4848	0.0000	31.4848	7.7281	0.0000	7.7281			0.0000			0.0000
Total					**35.3888**	**0.0000**	**35.3888**	**8.6863**	**0.0000**	**8.6863**			**0.0000**			**0.0000**

3.5 Paving - 2037

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	1.1165	4.7892	15.4905	0.0275		0.1832	0.1832		0.1832	0.1832		2,599.9866	2,599.9866	0.1001		2,602.0881
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1165**	**4.7892**	**15.4905**	**0.0275**		**0.1832**	**0.1832**		**0.1832**	**0.1832**		**2,599.9866**	**2,599.9866**	**0.1001**		**2,602.0881**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1071	0.0000	0.1071	0.0263	0.0000	0.0263			0.0000			0.0000
Total					**0.1071**	**0.0000**	**0.1071**	**0.0263**	**0.0000**	**0.0263**			**0.0000**			**0.0000**

3.5 Paving - 2037

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	1.1165	4.7892	15.4905	0.0275		0.1832	0.1832		0.1832	0.1832	0.0000	2,599.9866	2,599.9866	0.1001		2,602.0881
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1165**	**4.7892**	**15.4905**	**0.0275**		**0.1832**	**0.1832**		**0.1832**	**0.1832**	**0.0000**	**2,599.9866**	**2,599.9866**	**0.1001**		**2,602.0881**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1071	0.0000	0.1071	0.0263	0.0000	0.0263			0.0000			0.0000
Total					**0.1071**	**0.0000**	**0.1071**	**0.0263**	**0.0000**	**0.0263**			**0.0000**			**0.0000**

3.5 Paving - 2038

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	1.1165	4.7892	15.4905	0.0275		0.1832	0.1832		0.1832	0.1832		2,599.9866	2,599.9866	0.1001		2,602.0881
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1165**	**4.7892**	**15.4905**	**0.0275**		**0.1832**	**0.1832**		**0.1832**	**0.1832**		**2,599.9866**	**2,599.9866**	**0.1001**		**2,602.0881**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1071	0.0000	0.1071	0.0263	0.0000	0.0263			0.0000			0.0000
Total					**0.1071**	**0.0000**	**0.1071**	**0.0263**	**0.0000**	**0.0263**			**0.0000**			**0.0000**

3.5 Paving - 2038

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	1.1165	4.7892	15.4905	0.0275		0.1832	0.1832		0.1832	0.1832	0.0000	2,599.9866	2,599.9866	0.1001		2,602.0881
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1165**	**4.7892**	**15.4905**	**0.0275**		**0.1832**	**0.1832**		**0.1832**	**0.1832**	**0.0000**	**2,599.9866**	**2,599.9866**	**0.1001**		**2,602.0881**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1071	0.0000	0.1071	0.0263	0.0000	0.0263			0.0000			0.0000
Total					**0.1071**	**0.0000**	**0.1071**	**0.0263**	**0.0000**	**0.0263**			**0.0000**			**0.0000**

3.6 Architectural Coating - 2038

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	362.2477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003		281.4481	281.4481	0.0104		281.6665
Total	**362.3655**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**		**281.4481**	**281.4481**	**0.0104**		**281.6665**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					6.2970	0.0000	6.2970	1.5456	0.0000	1.5456			0.0000			0.0000
Total					**6.2970**	**0.0000**	**6.2970**	**1.5456**	**0.0000**	**1.5456**			**0.0000**			**0.0000**

3.6 Architectural Coating - 2038

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	362.2477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003	0.0000	281.4481	281.4481	0.0104		281.6665
Total	**362.3655**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0104**		**281.6665**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					6.2970	0.0000	6.2970	1.5456	0.0000	1.5456			0.0000			0.0000
Total					**6.2970**	**0.0000**	**6.2970**	**1.5456**	**0.0000**	**1.5456**			**0.0000**			**0.0000**

3.6 Architectural Coating - 2039

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	362.2477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003		281.4481	281.4481	0.0104		281.6665
Total	**362.3655**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**		**281.4481**	**281.4481**	**0.0104**		**281.6665**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					6.2970	0.0000	6.2970	1.5456	0.0000	1.5456			0.0000			0.0000
Total					**6.2970**	**0.0000**	**6.2970**	**1.5456**	**0.0000**	**1.5456**			**0.0000**			**0.0000**

3.6 Architectural Coating - 2039

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	362.2477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003	0.0000	281.4481	281.4481	0.0104		281.6665
Total	**362.3655**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0104**		**281.6665**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					6.2970	0.0000	6.2970	1.5456	0.0000	1.5456			0.0000			0.0000
Total					**6.2970**	**0.0000**	**6.2970**	**1.5456**	**0.0000**	**1.5456**			**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	149.1779	305.7303	1,473.1035	3.8846	275.5999	4.5074	280.1073	73.5668	4.1591	77.7259		297,281.0766	297,281.0766	11.6041		297,524.7616
Unmitigated	149.1779	305.7303	1,473.1035	3.8846	275.5999	4.5074	280.1073	73.5668	4.1591	77.7259		297,281.0766	297,281.0766	11.6041		297,524.7616

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	41,968.00	41,968.00	41968.00	119,831,371	119,831,371
City Park	1,461.25	1,461.25	1461.25	3,119,558	3,119,558
Elementary School	1,782.00	0.00	0.00	2,806,572	2,806,572
Strip Mall	2,192.86	2,192.86	2192.86	3,377,080	3,377,080
Total	47,404.11	45,622.11	45,622.11	129,134,582	129,134,582

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513300	0.073549	0.191092	0.130830	0.036094	0.005140	0.012550	0.022916	0.001871	0.002062	0.006564	0.000586	0.003446

5.0 Energy Detail

4.4 Fleet Mix

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	0.8658	7.4071	3.2122	0.0472		0.5982	0.5982		0.5982	0.5982		9,444.7792	9,444.7792	0.1810	0.1732	9,502.2585
NaturalGas Unmitigated	0.8658	7.4071	3.2122	0.0472		0.5982	0.5982		0.5982	0.5982		9,444.7792	9,444.7792	0.1810	0.1732	9,502.2585

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					
Elementary School	1278.1	0.0138	0.1253	0.1053	7.5000e-004		9.5200e-003	9.5200e-003		9.5200e-003	9.5200e-003		150.3648	150.3648	2.8800e-003	2.7600e-003	151.2799
Strip Mall	205.159	2.2100e-003	0.0201	0.0169	1.2000e-004		1.5300e-003	1.5300e-003		1.5300e-003	1.5300e-003		24.1363	24.1363	4.6000e-004	4.4000e-004	24.2832
Apartments Mid Rise	78797.4	0.8498	7.2617	3.0901	0.0464		0.5871	0.5871		0.5871	0.5871		9,270.2780	9,270.2780	0.1777	0.1700	9,326.6954
City Park	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		**0.8658**	**7.4071**	**3.2123**	**0.0472**		**0.5982**	**0.5982**		**0.5982**	**0.5982**		**9,444.7792**	**9,444.7792**	**0.1810**	**0.1732**	**9,502.2585**

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					
Elementary School	1.2781	0.0138	0.1253	0.1053	7.5000e-004		9.5200e-003	9.5200e-003		9.5200e-003	9.5200e-003		150.3648	150.3648	2.8800e-003	2.7600e-003	151.2799
Strip Mall	0.205159	2.2100e-003	0.0201	0.0169	1.2000e-004		1.5300e-003	1.5300e-003		1.5300e-003	1.5300e-003		24.1363	24.1363	4.6000e-004	4.4000e-004	24.2832
Apartments Mid Rise	78.7974	0.8498	7.2617	3.0901	0.0464		0.5871	0.5871		0.5871	0.5871		9,270.2780	9,270.2780	0.1777	0.1700	9,326.6954
City Park	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		**0.8658**	**7.4071**	**3.2123**	**0.0472**		**0.5982**	**0.5982**		**0.5982**	**0.5982**		**9,444.7792**	**9,444.7792**	**0.1810**	**0.1732**	**9,502.2585**

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	8,239.9916	113.9479	10,324.5301	3.8860		1,391.8999	1,391.8999		1,391.8592	1,391.8592	145,690.4994	61,879.9873	207,570.4868	135.2086	11.4597	213,962.3616
Unmitigated	8,239.9916	113.9479	10,324.5301	3.8860		1,391.8999	1,391.8999		1,391.8592	1,391.8592	145,690.4994	61,879.9873	207,570.4868	135.2086	11.4597	213,962.3616

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	53.6234					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	144.6839					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	8,028.4520	108.9246	9,890.1906	3.8631		1,389.5118	1,389.5118		1,389.4711	1,389.4711	145,690.4994	61,100.4706	206,790.9700	134.4482	11.4597	213,166.8750
Landscaping	13.2323	5.0233	434.3395	0.0229		2.3881	2.3881		2.3881	2.3881		779.5167	779.5167	0.7605		795.4865
Total	**8,239.9916**	**113.9479**	**10,324.5301**	**3.8860**		**1,391.8999**	**1,391.8999**		**1,391.8592**	**1,391.8592**	**145,690.4994**	**61,879.9873**	**207,570.4868**	**135.2086**	**11.4597**	**213,962.3616**

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	53.6234					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	144.6839					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	8,028.4520	108.9246	9,890.1906	3.8631		1,389.5118	1,389.5118		1,389.4711	1,389.4711	145,690.4994	61,100.4706	206,790.9700	134.4482	11.4597	213,166.8750
Landscaping	13.2323	5.0233	434.3395	0.0229		2.3881	2.3881		2.3881	2.3881		779.5167	779.5167	0.7605		795.4865
Total	**8,239.9916**	**113.9479**	**10,324.5301**	**3.8860**		**1,391.8999**	**1,391.8999**		**1,391.8592**	**1,391.8592**	**145,690.4994**	**61,879.9873**	**207,570.4868**	**135.2086**	**11.4597**	**213,962.3616**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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 Vegetation

ATTACHMENT B

CALEEMOD 2013.2.2 – PROPOSED CVSP SUMMER, WINTER

Central Village Specific Plan (Proposed Specific Plan)

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	900.00	Student	13.10	75,243.03	0
City Park	16.10	Acre	16.10	701,316.00	0
Apartments Mid Rise	4,485.00	Dwelling Unit	150.00	4,485,000.00	12827
Strip Mall	139.70	1000sqft	50.00	139,700.00	0

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)	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 - Project Size

Construction Phase -

Off-road Equipment -

Grading - 229.2 acre site

Architectural Coating - 150 g/l

Vehicle Trips - Adjusted to meet Otay Community Plan Assumptions

Area Coating - 150 g/l

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	250
tblGrading	AcresOfGrading	1,162.50	229.20
tblGrading	AcresOfGrading	0.00	229.20
tblLandUse	LotAcreage	1.73	13.10
tblLandUse	LotAcreage	118.03	150.00
tblLandUse	LotAcreage	3.21	50.00
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	8.00
tblVehicleTrips	ST_TR	1.59	45.24
tblVehicleTrips	ST_TR	42.04	67.06
tblVehicleTrips	SU_TR	6.07	8.00
tblVehicleTrips	SU_TR	1.59	45.24
tblVehicleTrips	SU_TR	20.43	67.06
tblVehicleTrips	WD_TR	6.59	8.00
tblVehicleTrips	WD_TR	1.59	45.24
tblVehicleTrips	WD_TR	1.29	1.98
tblVehicleTrips	WD_TR	44.32	67.06

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					
2017	6.1627	69.6666	47.6143	0.0638	19.5645	3.3184	22.3198	10.1157	3.0529	12.6506	0.0000	6,480.3725	6,480.3725	1.9425	0.0000	6,521.1641
2018	5.3475	59.6018	43.0414	0.0638	6.7091	2.7892	9.4983	3.4103	2.5661	5.9763	0.0000	6,373.5434	6,373.5434	1.9416	0.0000	6,414.3174
2019	17.3522	76.1894	198.6290	0.5505	33.7539	2.5061	35.9251	9.0368	2.3056	11.0617	0.0000	44,741.4955	44,741.4955	2.0010	0.0000	44,783.5154
2020	16.3065	67.0695	188.3767	0.5503	33.7537	1.9292	35.6829	9.0367	1.7990	10.8357	0.0000	43,254.2530	43,254.2530	1.9268	0.0000	43,294.7155
2021	15.3731	57.9544	179.9309	0.5507	33.7538	1.7141	35.4679	9.0368	1.5979	10.6347	0.0000	42,788.3922	42,788.3922	1.8740	0.0000	42,827.7470
2022	14.6033	51.8787	171.8091	0.5505	33.7540	1.5576	35.3116	9.0368	1.4515	10.4884	0.0000	42,338.3012	42,338.3012	1.8249	0.0000	42,376.6234
2023	13.8104	46.7091	164.2044	0.5501	33.7542	1.4374	35.1916	9.0369	1.3387	10.3756	0.0000	41,918.6487	41,918.6487	1.7737	0.0000	41,955.8969
2024	13.1407	45.0299	157.2363	0.5500	33.7543	1.3548	35.1091	9.0369	1.2608	10.2977	0.0000	41,572.1944	41,572.1944	1.7349	0.0000	41,608.6270
2025	12.6444	43.4750	152.2753	0.5500	33.7545	1.2730	35.0275	9.0370	1.1838	10.2208	0.0000	41,273.2664	41,273.2664	1.7023	0.0000	41,309.0150
2026	12.3166	42.8411	148.5612	0.5500	33.7549	1.2696	35.0245	9.0372	1.1807	10.2178	0.0000	41,014.8941	41,014.8941	1.6783	0.0000	41,050.1383
2027	12.0135	42.3844	144.9097	0.5500	33.7553	1.2723	35.0276	9.0373	1.1832	10.2205	0.0000	40,793.1574	40,793.1574	1.6580	0.0000	40,827.9747
2028	11.7591	41.9736	142.2686	0.5500	33.7557	1.2732	35.0289	9.0375	1.1841	10.2215	0.0000	40,604.9728	40,604.9728	1.6389	0.0000	40,639.3890
2029	11.4900	41.6061	139.4636	0.5500	33.7560	1.2746	35.0306	9.0376	1.1853	10.2230	0.0000	40,444.5341	40,444.5341	1.6207	0.0000	40,478.5677
2030	11.1890	36.8028	137.2689	0.5540	33.7563	0.8984	34.6547	9.0378	0.8401	9.8778	0.0000	40,647.6721	40,647.6721	1.1222	0.0000	40,671.2384
2031	10.9813	36.5437	135.5143	0.5540	33.7560	0.8991	34.6552	9.0376	0.8408	9.8784	0.0000	40,531.5856	40,531.5856	1.1081	0.0000	40,554.8566
2032	10.7891	36.3277	133.9718	0.5540	33.7557	0.8996	34.6553	9.0375	0.8413	9.8788	0.0000	40,434.7266	40,434.7266	1.0958	0.0000	40,457.7375
2033	10.5911	36.1054	132.6210	0.5540	33.7553	0.8997	34.6550	9.0373	0.8414	9.8787	0.0000	40,353.2888	40,353.2888	1.0841	0.0000	40,376.0557

	ROG	NOx	CO	SO2	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					
2034	10.4015	35.9344	131.2586	0.5540	33.7549	0.8996	34.6545	9.0372	0.8412	9.8784	0.0000	40,284.7209	40,284.7209	1.0731	0.0000	40,307.2562
2035	10.1451	35.0330	130.1364	0.5540	33.7545	0.8418	34.5963	9.0370	0.7835	9.8205	0.0000	40,228.0456	40,228.0456	1.0552	0.0000	40,250.2040
2036	1.2123	7.1510	16.0922	0.0308	28.7421	0.0901	28.8321	7.0549	0.0901	7.1449	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2037	1.2123	7.1510	16.0922	0.0308	28.7421	0.1832	28.8321	7.0549	0.1832	7.1449	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2038	293.8509	4.7892	15.4905	0.0275	5.1404	0.1832	5.1503	1.2617	0.1832	1.2716	0.0000	2,599.9866	2,599.9866	0.1001	0.0000	2,602.0881
2039	293.8509	0.7577	1.7943	2.9700e-003	5.1404	9.9000e-003	5.1503	1.2617	9.9000e-003	1.2716	0.0000	281.4481	281.4481	0.0104	0.0000	281.6665
Total	**816.5434**	**922.9752**	**2,728.5605**	**9.5959**	**667.8714**	**28.7740**	**695.4809**	**183.7911**	**26.7440**	**209.4699**	**0.0000**	**724,729.1597**	**724,729.1597**	**30.1815**	**0.0000**	**725,362.9699**

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					
2017	6.1627	69.6666	47.6143	0.0638	19.5645	3.3184	22.3198	10.1157	3.0529	12.6506	0.0000	6,480.3725	6,480.3725	1.9425	0.0000	6,521.1641
2018	5.3475	59.6018	43.0414	0.0638	6.7091	2.7892	9.4983	3.4103	2.5661	5.9763	0.0000	6,373.5434	6,373.5434	1.9416	0.0000	6,414.3174
2019	17.3522	76.1894	198.6290	0.5505	33.7539	2.5061	35.9251	9.0368	2.3056	11.0617	0.0000	44,741.4955	44,741.4955	2.0010	0.0000	44,783.5154
2020	16.3065	67.0695	188.3767	0.5503	33.7537	1.9292	35.6829	9.0367	1.7990	10.8357	0.0000	43,254.2530	43,254.2530	1.9268	0.0000	43,294.7155
2021	15.3731	57.9544	179.9309	0.5507	33.7538	1.7141	35.4679	9.0368	1.5979	10.6347	0.0000	42,788.3922	42,788.3922	1.8740	0.0000	42,827.7470
2022	14.6033	51.8787	171.8091	0.5505	33.7540	1.5576	35.3116	9.0368	1.4515	10.4884	0.0000	42,338.3012	42,338.3012	1.8249	0.0000	42,376.6234

	ROG	NOx	CO	SO2	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					
2023	13.8104	46.7091	164.2044	0.5501	33.7542	1.4374	35.1916	9.0369	1.3387	10.3756	0.0000	41,918.6487	41,918.6487	1.7737	0.0000	41,955.8969
2024	13.1407	45.0299	157.2363	0.5500	33.7543	1.3548	35.1091	9.0369	1.2608	10.2977	0.0000	41,572.1944	41,572.1944	1.7349	0.0000	41,608.6270
2025	12.6444	43.4750	152.2753	0.5500	33.7545	1.2730	35.0275	9.0370	1.1838	10.2208	0.0000	41,273.2664	41,273.2664	1.7023	0.0000	41,309.0150
2026	12.3166	42.8411	148.5612	0.5500	33.7549	1.2696	35.0245	9.0372	1.1807	10.2178	0.0000	41,014.8941	41,014.8941	1.6783	0.0000	41,050.1383
2027	12.0135	42.3844	144.9097	0.5500	33.7553	1.2723	35.0276	9.0373	1.1832	10.2205	0.0000	40,793.1574	40,793.1574	1.6580	0.0000	40,827.9747
2028	11.7591	41.9736	142.2686	0.5500	33.7557	1.2732	35.0289	9.0375	1.1841	10.2215	0.0000	40,604.9728	40,604.9728	1.6389	0.0000	40,639.3890
2029	11.4900	41.6061	139.4636	0.5500	33.7560	1.2746	35.0306	9.0376	1.1853	10.2230	0.0000	40,444.5341	40,444.5341	1.6207	0.0000	40,478.5677
2030	11.1890	36.8028	137.2689	0.5540	33.7563	0.8984	34.6547	9.0378	0.8401	9.8778	0.0000	40,647.6721	40,647.6721	1.1222	0.0000	40,671.2384
2031	10.9813	36.5437	135.5143	0.5540	33.7560	0.8991	34.6552	9.0376	0.8408	9.8784	0.0000	40,531.5856	40,531.5856	1.1081	0.0000	40,554.8566
2032	10.7891	36.3277	133.9718	0.5540	33.7557	0.8996	34.6553	9.0375	0.8413	9.8788	0.0000	40,434.7266	40,434.7266	1.0958	0.0000	40,457.7375
2033	10.5911	36.1054	132.6210	0.5540	33.7553	0.8997	34.6550	9.0373	0.8414	9.8787	0.0000	40,353.2888	40,353.2888	1.0841	0.0000	40,376.0557
2034	10.4015	35.9344	131.2586	0.5540	33.7549	0.8996	34.6545	9.0372	0.8412	9.8784	0.0000	40,284.7209	40,284.7209	1.0731	0.0000	40,307.2562
2035	10.1451	35.0330	130.1364	0.5540	33.7545	0.8418	34.5963	9.0370	0.7835	9.8205	0.0000	40,228.0456	40,228.0456	1.0552	0.0000	40,250.2040
2036	1.2123	7.1510	16.0922	0.0308	28.7421	0.0901	28.8321	7.0549	0.0901	7.1449	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2037	1.2123	7.1510	16.0922	0.0308	28.7421	0.1832	28.8321	7.0549	0.1832	7.1449	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2038	293.8509	4.7892	15.4905	0.0275	5.1404	0.1832	5.1503	1.2617	0.1832	1.2716	0.0000	2,599.9866	2,599.9866	0.1001	0.0000	2,602.0881
2039	293.8509	0.7577	1.7943	2.9700e-003	5.1404	9.9000e-003	5.1503	1.2617	9.9000e-003	1.2716	0.0000	281.4481	281.4481	0.0104	0.0000	281.6665
Total	**816.5434**	**922.9752**	**2,728.5605**	**9.5959**	**667.8714**	**28.7740**	**695.4809**	**183.7911**	**26.7440**	**209.4699**	**0.0000**	**724,729.1597**	**724,729.1597**	**30.1815**	**0.0000**	**725,362.9699**

	ROG	NOx	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	7,034.4028	97.4185	8,826.8475	3.3223		1,189.9869	1,189.9869		1,189.9521	1,189.9521	124,556.2123	52,903.5471	177,459.7594	115.5950	9.7973	182,924.4132
Energy	0.7497	6.4195	2.8193	0.0409		0.5180	0.5180		0.5180	0.5180		8,178.9840	8,178.9840	0.1568	0.1500	8,228.7599
Mobile	138.5662	273.6064	1,339.2692	3.8486	258.8907	4.2454	263.1361	69.1066	3.9175	73.0240		293,861.2244	293,861.2244	10.9695		294,091.5827
Total	**7,173.7187**	**377.4445**	**10,168.9359**	**7.2117**	**258.8907**	**1,194.7504**	**1,453.6411**	**69.1066**	**1,194.3876**	**1,263.4942**	**124,556.2123**	**354,943.7554**	**479,499.9678**	**126.7212**	**9.9472**	**485,244.7558**

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	7,034.4028	97.4185	8,826.8475	3.3223		1,189.9869	1,189.9869		1,189.9521	1,189.9521	124,556.2123	52,903.5471	177,459.7594	115.5950	9.7973	182,924.4132
Energy	0.7497	6.4195	2.8193	0.0409		0.5180	0.5180		0.5180	0.5180		8,178.9840	8,178.9840	0.1568	0.1500	8,228.7599
Mobile	138.5662	273.6064	1,339.2692	3.8486	258.8907	4.2454	263.1361	69.1066	3.9175	73.0240		293,861.2244	293,861.2244	10.9695		294,091.5827
Total	**7,173.7187**	**377.4445**	**10,168.9359**	**7.2117**	**258.8907**	**1,194.7504**	**1,453.6411**	**69.1066**	**1,194.3876**	**1,263.4942**	**124,556.2123**	**354,943.7554**	**479,499.9678**	**126.7212**	**9.9472**	**485,244.7558**

	ROG	NOx	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	Site Preparation	Site Preparation	1/1/2017	9/8/2017	5	180	
2	Grading	Grading	9/9/2017	6/21/2019	5	465	
3	Building Construction	Building Construction	6/22/2019	4/17/2037	5	4650	
4	Paving	Paving	4/18/2037	7/23/2038	5	330	
5	Architectural Coating	Architectural Coating	7/24/2038	10/28/2039	5	330	

Acres of Grading (Site Preparation Phase): 229.2

Acres of Grading (Grading Phase): 229.2

Acres of Paving: 0

Residential Indoor: 9,082,125; Residential Outdoor: 3,027,375; Non-Residential Indoor: 1,374,389; Non-Residential Outdoor: 458,130 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
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
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	3,600.00	630.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	720.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

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					19.4166	0.0000	19.4166	10.0765	0.0000	10.0765			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**19.4166**	**2.7542**	**22.1709**	**10.0765**	**2.5339**	**12.6104**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

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	0.0572	0.0671	0.7284	1.8700e-003	0.1479	1.0800e-003	0.1489	0.0392	9.9000e-004	0.0402		150.3031	150.3031	7.2500e-003		150.4553
Total	**0.0572**	**0.0671**	**0.7284**	**1.8700e-003**	**0.1479**	**1.0800e-003**	**0.1489**	**0.0392**	**9.9000e-004**	**0.0402**		**150.3031**	**150.3031**	**7.2500e-003**		**150.4553**

3.2 Site Preparation - 2017

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					19.4166	0.0000	19.4166	10.0765	0.0000	10.0765			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**19.4166**	**2.7542**	**22.1709**	**10.0765**	**2.5339**	**12.6104**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

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	0.0572	0.0671	0.7284	1.8700e-003	0.1479	1.0800e-003	0.1489	0.0392	9.9000e-004	0.0402		150.3031	150.3031	7.2500e-003		150.4553
Total	**0.0572**	**0.0671**	**0.7284**	**1.8700e-003**	**0.1479**	**1.0800e-003**	**0.1489**	**0.0392**	**9.9000e-004**	**0.0402**		**150.3031**	**150.3031**	**7.2500e-003**		**150.4553**

3.3 Grading - 2017

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**6.5448**	**3.3172**	**9.8620**	**3.3667**	**3.0518**	**6.4185**		**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

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	0.0635	0.0746	0.8093	2.0800e-003	0.1643	1.1900e-003	0.1655	0.0436	1.1000e-003	0.0447		167.0035	167.0035	8.0500e-003		167.1726
Total	**0.0635**	**0.0746**	**0.8093**	**2.0800e-003**	**0.1643**	**1.1900e-003**	**0.1655**	**0.0436**	**1.1000e-003**	**0.0447**		**167.0035**	**167.0035**	**8.0500e-003**		**167.1726**

3.3 Grading - 2017

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518	0.0000	6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**6.5448**	**3.3172**	**9.8620**	**3.3667**	**3.0518**	**6.4185**	**0.0000**	**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

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	0.0635	0.0746	0.8093	2.0800e-003	0.1643	1.1900e-003	0.1655	0.0436	1.1000e-003	0.0447		167.0035	167.0035	8.0500e-003		167.1726
Total	**0.0635**	**0.0746**	**0.8093**	**2.0800e-003**	**0.1643**	**1.1900e-003**	**0.1655**	**0.0436**	**1.1000e-003**	**0.0447**		**167.0035**	**167.0035**	**8.0500e-003**		**167.1726**

3.3 Grading - 2018

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	5.2895	59.5338	42.3068	0.0617		2.7880	2.7880		2.5650	2.5650		6,212.8042	6,212.8042	1.9341		6,253.4209
Total	**5.2895**	**59.5338**	**42.3068**	**0.0617**	**6.5448**	**2.7880**	**9.3328**	**3.3667**	**2.5650**	**5.9317**		**6,212.8042**	**6,212.8042**	**1.9341**		**6,253.4209**

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	0.0579	0.0680	0.7346	2.0800e-003	0.1643	1.1700e-003	0.1655	0.0436	1.0800e-003	0.0447		160.7393	160.7393	7.4900e-003		160.8966
Total	**0.0579**	**0.0680**	**0.7346**	**2.0800e-003**	**0.1643**	**1.1700e-003**	**0.1655**	**0.0436**	**1.0800e-003**	**0.0447**		**160.7393**	**160.7393**	**7.4900e-003**		**160.8966**

3.3 Grading - 2018

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	5.2895	59.5338	42.3068	0.0617		2.7880	2.7880		2.5650	2.5650	0.0000	6,212.8041	6,212.8041	1.9341		6,253.4209
Total	**5.2895**	**59.5338**	**42.3068**	**0.0617**	**6.5448**	**2.7880**	**9.3328**	**3.3667**	**2.5650**	**5.9317**	**0.0000**	**6,212.8041**	**6,212.8041**	**1.9341**		**6,253.4209**

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	0.0579	0.0680	0.7346	2.0800e-003	0.1643	1.1700e-003	0.1655	0.0436	1.0800e-003	0.0447		160.7393	160.7393	7.4900e-003		160.8966
Total	**0.0579**	**0.0680**	**0.7346**	**2.0800e-003**	**0.1643**	**1.1700e-003**	**0.1655**	**0.0436**	**1.0800e-003**	**0.0447**		**160.7393**	**160.7393**	**7.4900e-003**		**160.8966**

3.3 Grading - 2019

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045		6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**6.5448**	**2.5049**	**9.0497**	**3.3667**	**2.3045**	**5.6712**		**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

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	0.0538	0.0629	0.6775	2.0800e-003	0.1643	1.1600e-003	0.1655	0.0436	1.0800e-003	0.0447		154.9305	154.9305	7.0400e-003		155.0784
Total	**0.0538**	**0.0629**	**0.6775**	**2.0800e-003**	**0.1643**	**1.1600e-003**	**0.1655**	**0.0436**	**1.0800e-003**	**0.0447**		**154.9305**	**154.9305**	**7.0400e-003**		**155.0784**

3.3 Grading - 2019

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045	0.0000	6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**6.5448**	**2.5049**	**9.0497**	**3.3667**	**2.3045**	**5.6712**	**0.0000**	**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

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	0.0538	0.0629	0.6775	2.0800e-003	0.1643	1.1600e-003	0.1655	0.0436	1.0800e-003	0.0447		154.9305	154.9305	7.0400e-003		155.0784
Total	**0.0538**	**0.0629**	**0.6775**	**2.0800e-003**	**0.1643**	**1.1600e-003**	**0.1655**	**0.0436**	**1.0800e-003**	**0.0447**		**154.9305**	**154.9305**	**7.0400e-003**		**155.0784**

3.4 Building Construction - 2019

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

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	5.3096	43.9062	59.5615	0.1492	4.1808	0.6766	4.8574	1.1926	0.6224	1.8150		14,273.2464	14,273.2464	0.1049		14,275.4502
Worker	9.6910	11.3182	121.9471	0.3746	29.5731	0.2095	29.7826	7.8442	0.1942	8.0384		27,887.4873	27,887.4873	1.2681		27,914.1173
Total	**15.0006**	**55.2244**	**181.5086**	**0.5237**	**33.7539**	**0.8861**	**34.6400**	**9.0368**	**0.8166**	**9.8534**		**42,160.7337**	**42,160.7337**	**1.3730**		**42,189.5675**

3.4 Building Construction - 2019

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

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	5.3096	43.9062	59.5615	0.1492	4.1808	0.6766	4.8574	1.1926	0.6224	1.8150		14,273.2464	14,273.2464	0.1049		14,275.4502
Worker	9.6910	11.3182	121.9471	0.3746	29.5731	0.2095	29.7826	7.8442	0.1942	8.0384		27,887.4873	27,887.4873	1.2681		27,914.1173
Total	**15.0006**	**55.2244**	**181.5086**	**0.5237**	**33.7539**	**0.8861**	**34.6400**	**9.0368**	**0.8166**	**9.8534**		**42,160.7337**	**42,160.7337**	**1.3730**		**42,189.5675**

3.4 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	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

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	5.0238	37.4074	57.4089	0.1490	4.1805	0.6066	4.7871	1.1925	0.5580	1.7505		13,946.9945	13,946.9945	0.1015		13,949.1258
Worker	9.1714	10.5782	114.1593	0.3746	29.5731	0.2098	29.7829	7.8442	0.1946	8.0387		26,764.7786	26,764.7786	1.2059		26,790.1017
Total	**14.1952**	**47.9855**	**171.5683**	**0.5235**	**33.7537**	**0.8164**	**34.5700**	**9.0367**	**0.7525**	**9.7893**		**40,711.7731**	**40,711.7731**	**1.3074**		**40,739.2275**

3.4 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	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

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	5.0238	37.4074	57.4089	0.1490	4.1805	0.6066	4.7871	1.1925	0.5580	1.7505		13,946.9945	13,946.9945	0.1015		13,949.1258
Worker	9.1714	10.5782	114.1593	0.3746	29.5731	0.2098	29.7829	7.8442	0.1946	8.0387		26,764.7786	26,764.7786	1.2059		26,790.1017
Total	**14.1952**	**47.9855**	**171.5683**	**0.5235**	**33.7537**	**0.8164**	**34.5700**	**9.0367**	**0.7525**	**9.7893**		**40,711.7731**	**40,711.7731**	**1.3074**		**40,739.2275**

3.4 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	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**		**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

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	4.7433	30.6798	54.9076	0.1487	4.1806	0.5461	4.7267	1.1926	0.5024	1.6950		13,924.8132	13,924.8132	0.1011		13,926.9360
Worker	8.7367	9.9343	108.4857	0.3752	29.5731	0.2131	29.7862	7.8442	0.1976	8.0418		26,320.7973	26,320.7973	1.1604		26,345.1648
Total	**13.4800**	**40.6142**	**163.3933**	**0.5239**	**33.7538**	**0.7592**	**34.5130**	**9.0368**	**0.7001**	**9.7368**		**40,245.6105**	**40,245.6105**	**1.2614**		**40,272.1008**

3.4 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	lb/day										lb/day					
Off-Road	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**	**0.0000**	**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

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	4.7433	30.6798	54.9076	0.1487	4.1806	0.5461	4.7267	1.1926	0.5024	1.6950		13,924.8132	13,924.8132	0.1011		13,926.9360
Worker	8.7367	9.9343	108.4857	0.3752	29.5731	0.2131	29.7862	7.8442	0.1976	8.0418		26,320.7973	26,320.7973	1.1604		26,345.1648
Total	**13.4800**	**40.6142**	**163.3933**	**0.5239**	**33.7538**	**0.7592**	**34.5130**	**9.0368**	**0.7001**	**9.7368**		**40,245.6105**	**40,245.6105**	**1.2614**		**40,272.1008**

3.4 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	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**		**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

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	4.5776	26.9556	52.9522	0.1485	4.1808	0.5373	4.7182	1.1926	0.4944	1.6870		13,910.4337	13,910.4337	0.1031		13,912.5997
Worker	8.3265	9.3867	102.5293	0.3752	29.5731	0.2146	29.7877	7.8442	0.1990	8.0432		25,884.1178	25,884.1178	1.1132		25,907.4951
Total	**12.9041**	**36.3423**	**155.4815**	**0.5237**	**33.7540**	**0.7519**	**34.5059**	**9.0368**	**0.6934**	**9.7302**		**39,794.5515**	**39,794.5515**	**1.2163**		**39,820.0948**

3.4 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	lb/day										lb/day					
Off-Road	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**	**0.0000**	**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

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	4.5776	26.9556	52.9522	0.1485	4.1808	0.5373	4.7182	1.1926	0.4944	1.6870		13,910.4337	13,910.4337	0.1031		13,912.5997
Worker	8.3265	9.3867	102.5293	0.3752	29.5731	0.2146	29.7877	7.8442	0.1990	8.0432		25,884.1178	25,884.1178	1.1132		25,907.4951
Total	**12.9041**	**36.3423**	**155.4815**	**0.5237**	**33.7540**	**0.7519**	**34.5059**	**9.0368**	**0.6934**	**9.7302**		**39,794.5515**	**39,794.5515**	**1.2163**		**39,820.0948**

3.4 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	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557		2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**		**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

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	4.2943	23.4925	50.8057	0.1481	4.1811	0.5245	4.7056	1.1927	0.4826	1.6753		13,879.4084	13,879.4084	0.0968		13,881.4407
Worker	7.9501	8.9040	97.1894	0.3752	29.5731	0.2161	29.7893	7.8442	0.2005	8.0447		25,494.6141	25,494.6141	1.0725		25,517.1372
Total	**12.2443**	**32.3965**	**147.9951**	**0.5233**	**33.7542**	**0.7406**	**34.4949**	**9.0369**	**0.6831**	**9.7200**		**39,374.0225**	**39,374.0225**	**1.1693**		**39,398.5778**

3.4 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	lb/day										lb/day					
Off-Road	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557	0.0000	2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**	**0.0000**	**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

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	4.2943	23.4925	50.8057	0.1481	4.1811	0.5245	4.7056	1.1927	0.4826	1.6753		13,879.4084	13,879.4084	0.0968		13,881.4407
Worker	7.9501	8.9040	97.1894	0.3752	29.5731	0.2161	29.7893	7.8442	0.2005	8.0447		25,494.6141	25,494.6141	1.0725		25,517.1372
Total	**12.2443**	**32.3965**	**147.9951**	**0.5233**	**33.7542**	**0.7406**	**34.4949**	**9.0369**	**0.6831**	**9.7200**		**39,374.0225**	**39,374.0225**	**1.1693**		**39,398.5778**

3.4 Building Construction - 2024

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	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744		2,545.1154	2,545.1154	0.6009		2,557.7349
Total	**1.4653**	**13.3774**	**16.1332**	**0.0268**		**0.6106**	**0.6106**		**0.5744**	**0.5744**		**2,545.1154**	**2,545.1154**	**0.6009**		**2,557.7349**

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	4.0714	23.1712	48.4160	0.1481	4.1811	0.5264	4.7076	1.1928	0.4843	1.6771		13,878.5197	13,878.5197	0.0971		13,880.5583
Worker	7.6040	8.4813	92.6871	0.3751	29.5731	0.2178	29.7910	7.8442	0.2021	8.0463		25,148.5594	25,148.5594	1.0369		25,170.3337
Total	**11.6754**	**31.6524**	**141.1031**	**0.5232**	**33.7543**	**0.7443**	**34.4985**	**9.0369**	**0.6864**	**9.7234**		**39,027.0790**	**39,027.0790**	**1.1340**		**39,050.8921**

3.4 Building Construction - 2024

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	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744	0.0000	2,545.1154	2,545.1154	0.6009		2,557.7349
Total	**1.4653**	**13.3774**	**16.1332**	**0.0268**		**0.6106**	**0.6106**		**0.5744**	**0.5744**	**0.0000**	**2,545.1154**	**2,545.1154**	**0.6009**		**2,557.7349**

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	4.0714	23.1712	48.4160	0.1481	4.1811	0.5264	4.7076	1.1928	0.4843	1.6771		13,878.5197	13,878.5197	0.0971		13,880.5583
Worker	7.6040	8.4813	92.6871	0.3751	29.5731	0.2178	29.7910	7.8442	0.2021	8.0463		25,148.5594	25,148.5594	1.0369		25,170.3337
Total	**11.6754**	**31.6524**	**141.1031**	**0.5232**	**33.7543**	**0.7443**	**34.4985**	**9.0369**	**0.6864**	**9.7234**		**39,027.0790**	**39,027.0790**	**1.1340**		**39,050.8921**

3.4 Building Construction - 2025

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	3.9715	22.9342	47.2675	0.1481	4.1814	0.5281	4.7095	1.1929	0.4859	1.6788		13,879.6949	13,879.6949	0.0974		13,881.7393
Worker	7.3114	8.1311	88.9560	0.3751	29.5731	0.2199	29.7930	7.8442	0.2040	8.0482		24,847.6810	24,847.6810	1.0074		24,868.8372
Total	**11.2829**	**31.0653**	**136.2236**	**0.5232**	**33.7545**	**0.7480**	**34.5025**	**9.0370**	**0.6899**	**9.7269**		**38,727.3759**	**38,727.3759**	**1.1048**		**38,750.5764**

3.4 Building Construction - 2025

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	3.9715	22.9342	47.2675	0.1481	4.1814	0.5281	4.7095	1.1929	0.4859	1.6788		13,879.6949	13,879.6949	0.0974		13,881.7393
Worker	7.3114	8.1311	88.9560	0.3751	29.5731	0.2199	29.7930	7.8442	0.2040	8.0482		24,847.6810	24,847.6810	1.0074		24,868.8372
Total	**11.2829**	**31.0653**	**136.2236**	**0.5232**	**33.7545**	**0.7480**	**34.5025**	**9.0370**	**0.6899**	**9.7269**		**38,727.3759**	**38,727.3759**	**1.1048**		**38,750.5764**

3.4 Building Construction - 2026

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	3.8839	22.5738	46.4222	0.1481	4.1817	0.5223	4.7040	1.1930	0.4805	1.6735		13,880.8703	13,880.8703	0.0966		13,882.8989
Worker	7.0712	7.8576	86.0872	0.3751	29.5731	0.2223	29.7954	7.8442	0.2062	8.0504		24,588.1333	24,588.1333	0.9842		24,608.8009
Total	**10.9551**	**30.4314**	**132.5094**	**0.5232**	**33.7549**	**0.7446**	**34.4994**	**9.0372**	**0.6867**	**9.7239**		**38,469.0036**	**38,469.0036**	**1.0808**		**38,491.6998**

3.4 Building Construction - 2026

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	3.8839	22.5738	46.4222	0.1481	4.1817	0.5223	4.7040	1.1930	0.4805	1.6735		13,880.8703	13,880.8703	0.0966		13,882.8989
Worker	7.0712	7.8576	86.0872	0.3751	29.5731	0.2223	29.7954	7.8442	0.2062	8.0504		24,588.1333	24,588.1333	0.9842		24,608.8009
Total	**10.9551**	**30.4314**	**132.5094**	**0.5232**	**33.7549**	**0.7446**	**34.4994**	**9.0372**	**0.6867**	**9.7239**		**38,469.0036**	**38,469.0036**	**1.0808**		**38,491.6998**

3.4 Building Construction - 2027

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	3.8033	22.3517	45.3023	0.1481	4.1821	0.5230	4.7051	1.1932	0.4811	1.6743		13,882.5428	13,882.5428	0.0968		13,884.5747
Worker	6.8487	7.6231	83.5557	0.3751	29.5731	0.2243	29.7975	7.8442	0.2081	8.0523		24,364.7241	24,364.7241	0.9637		24,384.9615
Total	**10.6521**	**29.9748**	**128.8580**	**0.5232**	**33.7553**	**0.7473**	**34.5026**	**9.0373**	**0.6893**	**9.7266**		**38,247.2669**	**38,247.2669**	**1.0604**		**38,269.5362**

3.4 Building Construction - 2027

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	3.8033	22.3517	45.3023	0.1481	4.1821	0.5230	4.7051	1.1932	0.4811	1.6743		13,882.5428	13,882.5428	0.0968		13,884.5747
Worker	6.8487	7.6231	83.5557	0.3751	29.5731	0.2243	29.7975	7.8442	0.2081	8.0523		24,364.7241	24,364.7241	0.9637		24,384.9615
Total	**10.6521**	**29.9748**	**128.8580**	**0.5232**	**33.7553**	**0.7473**	**34.5026**	**9.0373**	**0.6893**	**9.7266**		**38,247.2669**	**38,247.2669**	**1.0604**		**38,269.5362**

3.4 Building Construction - 2028

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	3.7663	22.1683	44.9562	0.1481	4.1825	0.5221	4.7046	1.1933	0.4803	1.6736		13,884.5093	13,884.5093	0.0967		13,886.5399
Worker	6.6313	7.3957	81.2606	0.3751	29.5731	0.2262	29.7993	7.8442	0.2098	8.0540		24,174.5730	24,174.5730	0.9447		24,194.4106
Total	**10.3976**	**29.5639**	**126.2168**	**0.5232**	**33.7557**	**0.7482**	**34.5039**	**9.0375**	**0.6901**	**9.7276**		**38,059.0822**	**38,059.0822**	**1.0414**		**38,080.9505**

3.4 Building Construction - 2028

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	3.7663	22.1683	44.9562	0.1481	4.1825	0.5221	4.7046	1.1933	0.4803	1.6736		13,884.5093	13,884.5093	0.0967		13,886.5399
Worker	6.6313	7.3957	81.2606	0.3751	29.5731	0.2262	29.7993	7.8442	0.2098	8.0540		24,174.5730	24,174.5730	0.9447		24,194.4106
Total	**10.3976**	**29.5639**	**126.2168**	**0.5232**	**33.7557**	**0.7482**	**34.5039**	**9.0375**	**0.6901**	**9.7276**		**38,059.0822**	**38,059.0822**	**1.0414**		**38,080.9505**

3.4 Building Construction - 2029

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	3.7125	22.0240	44.3583	0.1481	4.1829	0.5220	4.7049	1.1935	0.4803	1.6737		13,886.0350	13,886.0350	0.0967		13,888.0665
Worker	6.4161	7.1724	79.0535	0.3751	29.5731	0.2276	29.8008	7.8442	0.2112	8.0554		24,012.6086	24,012.6086	0.9264		24,032.0626
Total	**10.1286**	**29.1964**	**123.4118**	**0.5232**	**33.7560**	**0.7496**	**34.5056**	**9.0376**	**0.6914**	**9.7291**		**37,898.6435**	**37,898.6435**	**1.0231**		**37,920.1291**

3.4 Building Construction - 2029

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	3.7125	22.0240	44.3583	0.1481	4.1829	0.5220	4.7049	1.1935	0.4803	1.6737		13,886.0350	13,886.0350	0.0967		13,888.0665
Worker	6.4161	7.1724	79.0535	0.3751	29.5731	0.2276	29.8008	7.8442	0.2112	8.0554		24,012.6086	24,012.6086	0.9264		24,032.0626
Total	**10.1286**	**29.1964**	**123.4118**	**0.5232**	**33.7560**	**0.7496**	**34.5056**	**9.0376**	**0.6914**	**9.7291**		**37,898.6435**	**37,898.6435**	**1.0231**		**37,920.1291**

3.4 Building Construction - 2030

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	3.6728	21.9110	44.0524	0.1481	4.1832	0.5221	4.7053	1.1936	0.4804	1.6739		13,887.6124	13,887.6124	0.0968		13,889.6449
Worker	6.2121	6.9739	77.0852	0.3751	29.5731	0.2286	29.8018	7.8442	0.2121	8.0563		23,875.2297	23,875.2297	0.9096		23,894.3318
Total	**9.8849**	**28.8849**	**121.1376**	**0.5232**	**33.7563**	**0.7508**	**34.5071**	**9.0378**	**0.6925**	**9.7302**		**37,762.8421**	**37,762.8421**	**1.0064**		**37,783.9767**

3.4 Building Construction - 2030

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	3.6728	21.9110	44.0524	0.1481	4.1832	0.5221	4.7053	1.1936	0.4804	1.6739		13,887.6124	13,887.6124	0.0968		13,889.6449
Worker	6.2121	6.9739	77.0852	0.3751	29.5731	0.2286	29.8018	7.8442	0.2121	8.0563		23,875.2297	23,875.2297	0.9096		23,894.3318
Total	**9.8849**	**28.8849**	**121.1376**	**0.5232**	**33.7563**	**0.7508**	**34.5071**	**9.0378**	**0.6925**	**9.7302**		**37,762.8421**	**37,762.8421**	**1.0064**		**37,783.9767**

3.4 Building Construction - 2031

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	3.6407	21.8249	43.8602	0.1481	4.1829	0.5223	4.7051	1.1934	0.4805	1.6739		13,886.8714	13,886.8714	0.0968		13,888.9049
Worker	6.0365	6.8009	75.5228	0.3751	29.5731	0.2293	29.8024	7.8442	0.2127	8.0569		23,759.8843	23,759.8843	0.8955		23,778.6900
Total	**9.6772**	**28.6258**	**119.3830**	**0.5232**	**33.7560**	**0.7515**	**34.5075**	**9.0376**	**0.6932**	**9.7308**		**37,646.7556**	**37,646.7556**	**0.9923**		**37,667.5949**

3.4 Building Construction - 2031

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	3.6407	21.8249	43.8602	0.1481	4.1829	0.5223	4.7051	1.1934	0.4805	1.6739		13,886.8714	13,886.8714	0.0968		13,888.9049
Worker	6.0365	6.8009	75.5228	0.3751	29.5731	0.2293	29.8024	7.8442	0.2127	8.0569		23,759.8843	23,759.8843	0.8955		23,778.6900
Total	**9.6772**	**28.6258**	**119.3830**	**0.5232**	**33.7560**	**0.7515**	**34.5075**	**9.0376**	**0.6932**	**9.7308**		**37,646.7556**	**37,646.7556**	**0.9923**		**37,667.5949**

3.4 Building Construction - 2032

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	3.6096	21.7543	43.7046	0.1481	4.1826	0.5224	4.7049	1.1933	0.4806	1.6739		13,886.2616	13,886.2616	0.0969		13,888.2958
Worker	5.8754	6.6556	74.1359	0.3751	29.5731	0.2297	29.8028	7.8442	0.2131	8.0573		23,663.6350	23,663.6350	0.8831		23,682.1800
Total	**9.4850**	**28.4099**	**117.8405**	**0.5232**	**33.7557**	**0.7520**	**34.5077**	**9.0375**	**0.6936**	**9.7311**		**37,549.8966**	**37,549.8966**	**0.9800**		**37,570.4758**

3.4 Building Construction - 2032

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	3.6096	21.7543	43.7046	0.1481	4.1826	0.5224	4.7049	1.1933	0.4806	1.6739		13,886.2616	13,886.2616	0.0969		13,888.2958
Worker	5.8754	6.6556	74.1359	0.3751	29.5731	0.2297	29.8028	7.8442	0.2131	8.0573		23,663.6350	23,663.6350	0.8831		23,682.1800
Total	**9.4850**	**28.4099**	**117.8405**	**0.5232**	**33.7557**	**0.7520**	**34.5077**	**9.0375**	**0.6936**	**9.7311**		**37,549.8966**	**37,549.8966**	**0.9800**		**37,570.4758**

3.4 Building Construction - 2033

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	3.5707	21.6692	43.5789	0.1480	4.1822	0.5223	4.7044	1.1931	0.4805	1.6736		13,884.7750	13,884.7750	0.0969		13,886.8092
Worker	5.7164	6.5183	72.9108	0.3752	29.5731	0.2299	29.8030	7.8442	0.2133	8.0575		23,583.6838	23,583.6838	0.8715		23,601.9848
Total	**9.2870**	**28.1875**	**116.4896**	**0.5232**	**33.7553**	**0.7521**	**34.5074**	**9.0373**	**0.6938**	**9.7311**		**37,468.4588**	**37,468.4588**	**0.9683**		**37,488.7940**

3.4 Building Construction - 2033

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	3.5707	21.6692	43.5789	0.1480	4.1822	0.5223	4.7044	1.1931	0.4805	1.6736		13,884.7750	13,884.7750	0.0969		13,886.8092
Worker	5.7164	6.5183	72.9108	0.3752	29.5731	0.2299	29.8030	7.8442	0.2133	8.0575		23,583.6838	23,583.6838	0.8715		23,601.9848
Total	**9.2870**	**28.1875**	**116.4896**	**0.5232**	**33.7553**	**0.7521**	**34.5074**	**9.0373**	**0.6938**	**9.7311**		**37,468.4588**	**37,468.4588**	**0.9683**		**37,488.7940**

3.4 Building Construction - 2034

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	3.5400	21.6115	43.4735	0.1480	4.1818	0.5221	4.7039	1.1930	0.4803	1.6733		13,883.5785	13,883.5785	0.0969		13,885.6125
Worker	5.5574	6.4050	71.6538	0.3752	29.5731	0.2299	29.8030	7.8442	0.2133	8.0574		23,516.3125	23,516.3125	0.8605		23,534.3820
Total	**9.0974**	**28.0165**	**115.1273**	**0.5232**	**33.7549**	**0.7520**	**34.5069**	**9.0372**	**0.6936**	**9.7308**		**37,399.8909**	**37,399.8909**	**0.9573**		**37,419.9945**

3.4 Building Construction - 2034

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	3.5400	21.6115	43.4735	0.1480	4.1818	0.5221	4.7039	1.1930	0.4803	1.6733		13,883.5785	13,883.5785	0.0969		13,885.6125
Worker	5.5574	6.4050	71.6538	0.3752	29.5731	0.2299	29.8030	7.8442	0.2133	8.0574		23,516.3125	23,516.3125	0.8605		23,534.3820
Total	**9.0974**	**28.0165**	**115.1273**	**0.5232**	**33.7549**	**0.7520**	**34.5069**	**9.0372**	**0.6936**	**9.7308**		**37,399.8909**	**37,399.8909**	**0.9573**		**37,419.9945**

3.4 Building Construction - 2035

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**		**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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	3.5173	21.5694	43.3915	0.1480	4.1814	0.5220	4.7033	1.1928	0.4802	1.6730		13,882.4922	13,882.4922	0.0969		13,884.5261
Worker	5.4155	6.3126	70.6528	0.3752	29.5731	0.2298	29.8029	7.8442	0.2132	8.0574		23,460.7234	23,460.7234	0.8508		23,478.5901
Total	**8.9328**	**27.8820**	**114.0442**	**0.5232**	**33.7545**	**0.7518**	**34.5063**	**9.0370**	**0.6934**	**9.7304**		**37,343.2156**	**37,343.2156**	**0.9476**		**37,363.1162**

3.4 Building Construction - 2035

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901	0.0000	2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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	3.5173	21.5694	43.3915	0.1480	4.1814	0.5220	4.7033	1.1928	0.4802	1.6730		13,882.4922	13,882.4922	0.0969		13,884.5261
Worker	5.4155	6.3126	70.6528	0.3752	29.5731	0.2298	29.8029	7.8442	0.2132	8.0574		23,460.7234	23,460.7234	0.8508		23,478.5901
Total	**8.9328**	**27.8820**	**114.0442**	**0.5232**	**33.7545**	**0.7518**	**34.5063**	**9.0370**	**0.6934**	**9.7304**		**37,343.2156**	**37,343.2156**	**0.9476**		**37,363.1162**

3.4 Building Construction - 2036

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**		**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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
Vendor					3.0402	0.0000	3.0402	0.7462	0.0000	0.7462			0.0000			0.0000
Worker					25.7019	0.0000	25.7019	6.3086	0.0000	6.3086			0.0000			0.0000
Total					**28.7421**	**0.0000**	**28.7421**	**7.0549**	**0.0000**	**7.0549**			**0.0000**			**0.0000**

3.4 Building Construction - 2036

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901	0.0000	2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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
Vendor					3.0402	0.0000	3.0402	0.7462	0.0000	0.7462			0.0000			0.0000
Worker					25.7019	0.0000	25.7019	6.3086	0.0000	6.3086			0.0000			0.0000
Total					**28.7421**	**0.0000**	**28.7421**	**7.0549**	**0.0000**	**7.0549**			**0.0000**			**0.0000**

3.4 Building Construction - 2037

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**		**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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
Vendor					3.0402	0.0000	3.0402	0.7462	0.0000	0.7462			0.0000			0.0000
Worker					25.7019	0.0000	25.7019	6.3086	0.0000	6.3086			0.0000			0.0000
Total					**28.7421**	**0.0000**	**28.7421**	**7.0549**	**0.0000**	**7.0549**			**0.0000**			**0.0000**

3.4 Building Construction - 2037

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901	0.0000	2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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
Vendor					3.0402	0.0000	3.0402	0.7462	0.0000	0.7462			0.0000			0.0000
Worker					25.7019	0.0000	25.7019	6.3086	0.0000	6.3086			0.0000			0.0000
Total					**28.7421**	**0.0000**	**28.7421**	**7.0549**	**0.0000**	**7.0549**			**0.0000**			**0.0000**

3.5 Paving - 2037

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	1.1165	4.7892	15.4905	0.0275		0.1832	0.1832		0.1832	0.1832		2,599.9866	2,599.9866	0.1001		2,602.0881
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1165**	**4.7892**	**15.4905**	**0.0275**		**0.1832**	**0.1832**		**0.1832**	**0.1832**		**2,599.9866**	**2,599.9866**	**0.1001**		**2,602.0881**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1071	0.0000	0.1071	0.0263	0.0000	0.0263			0.0000			0.0000
Total					**0.1071**	**0.0000**	**0.1071**	**0.0263**	**0.0000**	**0.0263**			**0.0000**			**0.0000**

3.5 Paving - 2037

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	1.1165	4.7892	15.4905	0.0275		0.1832	0.1832		0.1832	0.1832	0.0000	2,599.9866	2,599.9866	0.1001		2,602.0881
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1165**	**4.7892**	**15.4905**	**0.0275**		**0.1832**	**0.1832**		**0.1832**	**0.1832**	**0.0000**	**2,599.9866**	**2,599.9866**	**0.1001**		**2,602.0881**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1071	0.0000	0.1071	0.0263	0.0000	0.0263			0.0000			0.0000
Total					**0.1071**	**0.0000**	**0.1071**	**0.0263**	**0.0000**	**0.0263**			**0.0000**			**0.0000**

3.5 Paving - 2038

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	1.1165	4.7892	15.4905	0.0275		0.1832	0.1832		0.1832	0.1832		2,599.9866	2,599.9866	0.1001		2,602.0881
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1165**	**4.7892**	**15.4905**	**0.0275**		**0.1832**	**0.1832**		**0.1832**	**0.1832**		**2,599.9866**	**2,599.9866**	**0.1001**		**2,602.0881**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1071	0.0000	0.1071	0.0263	0.0000	0.0263			0.0000			0.0000
Total					**0.1071**	**0.0000**	**0.1071**	**0.0263**	**0.0000**	**0.0263**			**0.0000**			**0.0000**

3.5 Paving - 2038

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	1.1165	4.7892	15.4905	0.0275		0.1832	0.1832		0.1832	0.1832	0.0000	2,599.9866	2,599.9866	0.1001		2,602.0881
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1165**	**4.7892**	**15.4905**	**0.0275**		**0.1832**	**0.1832**		**0.1832**	**0.1832**	**0.0000**	**2,599.9866**	**2,599.9866**	**0.1001**		**2,602.0881**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1071	0.0000	0.1071	0.0263	0.0000	0.0263			0.0000			0.0000
Total					**0.1071**	**0.0000**	**0.1071**	**0.0263**	**0.0000**	**0.0263**			**0.0000**			**0.0000**

3.6 Architectural Coating - 2038

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	293.7330					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003		281.4481	281.4481	0.0104		281.6665
Total	**293.8509**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**		**281.4481**	**281.4481**	**0.0104**		**281.6665**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					5.1404	0.0000	5.1404	1.2617	0.0000	1.2617			0.0000			0.0000
Total					**5.1404**	**0.0000**	**5.1404**	**1.2617**	**0.0000**	**1.2617**			**0.0000**			**0.0000**

3.6 Architectural Coating - 2038

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	293.7330					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003	0.0000	281.4481	281.4481	0.0104		281.6665
Total	**293.8509**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0104**		**281.6665**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					5.1404	0.0000	5.1404	1.2617	0.0000	1.2617			0.0000			0.0000
Total					**5.1404**	**0.0000**	**5.1404**	**1.2617**	**0.0000**	**1.2617**			**0.0000**			**0.0000**

3.6 Architectural Coating - 2039

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	293.7330					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003		281.4481	281.4481	0.0104		281.6665
Total	**293.8509**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**		**281.4481**	**281.4481**	**0.0104**		**281.6665**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					5.1404	0.0000	5.1404	1.2617	0.0000	1.2617			0.0000			0.0000
Total					**5.1404**	**0.0000**	**5.1404**	**1.2617**	**0.0000**	**1.2617**			**0.0000**			**0.0000**

3.6 Architectural Coating - 2039

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	293.7330					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003	0.0000	281.4481	281.4481	0.0104		281.6665
Total	**293.8509**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0104**		**281.6665**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					5.1404	0.0000	5.1404	1.2617	0.0000	1.2617			0.0000			0.0000
Total					**5.1404**	**0.0000**	**5.1404**	**1.2617**	**0.0000**	**1.2617**			**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	138.5662	273.6064	1,339.2692	3.8486	258.8907	4.2454	263.1361	69.1066	3.9175	73.0240		293,861.2244	293,861.2244	10.9695		294,091.5827
Unmitigated	138.5662	273.6064	1,339.2692	3.8486	258.8907	4.2454	263.1361	69.1066	3.9175	73.0240		293,861.2244	293,861.2244	10.9695		294,091.5827

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	35,880.00	35,880.00	35880.00	102,448,285	102,448,285
City Park	728.36	728.36	728.36	1,554,950	1,554,950
Elementary School	1,782.00	0.00	0.00	2,806,572	2,806,572
Strip Mall	9,368.28	9,368.28	9368.28	14,427,464	14,427,464
Total	47,758.65	45,976.65	45,976.65	121,237,271	121,237,271

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513300	0.073549	0.191092	0.130830	0.036094	0.005140	0.012550	0.022916	0.001871	0.002062	0.006564	0.000586	0.003446

5.0 Energy Detail

4.4 Fleet Mix

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	0.7497	6.4195	2.8193	0.0409		0.5180	0.5180		0.5180	0.5180		8,178.9840	8,178.9840	0.1568	0.1500	8,228.7599
NaturalGas Unmitigated	0.7497	6.4195	2.8193	0.0409		0.5180	0.5180		0.5180	0.5180		8,178.9840	8,178.9840	0.1568	0.1500	8,228.7599

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					
Elementary School	1278.1	0.0138	0.1253	0.1053	7.5000e-004		9.5200e-003	9.5200e-003		9.5200e-003	9.5200e-003		150.3648	150.3648	2.8800e-003	2.7600e-003	151.2799
Strip Mall	876.474	9.4500e-003	0.0859	0.0722	5.2000e-004		6.5300e-003	6.5300e-003		6.5300e-003	6.5300e-003		103.1146	103.1146	1.9800e-003	1.8900e-003	103.7421
Apartments Mid Rise	67366.8	0.7265	6.2083	2.6418	0.0396		0.5020	0.5020		0.5020	0.5020		7,925.5046	7,925.5046	0.1519	0.1453	7,973.7379
City Park	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		**0.7497**	**6.4195**	**2.8193**	**0.0409**		**0.5180**	**0.5180**		**0.5180**	**0.5180**		**8,178.9840**	**8,178.9840**	**0.1568**	**0.1500**	**8,228.7599**

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					
Elementary School	1.2781	0.0138	0.1253	0.1053	7.5000e-004		9.5200e-003	9.5200e-003		9.5200e-003	9.5200e-003		150.3648	150.3648	2.8800e-003	2.7600e-003	151.2799
Strip Mall	0.876474	9.4500e-003	0.0859	0.0722	5.2000e-004		6.5300e-003	6.5300e-003		6.5300e-003	6.5300e-003		103.1146	103.1146	1.9800e-003	1.8900e-003	103.7421
Apartments Mid Rise	67.3668	0.7265	6.2083	2.6418	0.0396		0.5020	0.5020		0.5020	0.5020		7,925.5046	7,925.5046	0.1519	0.1453	7,973.7379
City Park	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		**0.7497**	**6.4195**	**2.8193**	**0.0409**		**0.5180**	**0.5180**		**0.5180**	**0.5180**		**8,178.9840**	**8,178.9840**	**0.1568**	**0.1500**	**8,228.7599**

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	7,034.4028	97.4185	8,826.8475	3.3223		1,189.9869	1,189.9869		1,189.9521	1,189.9521	124,556.2123	52,903.5471	177,459.7594	115.5950	9.7973	182,924.4132
Unmitigated	7,034.4028	97.4185	8,826.8475	3.3223		1,189.9869	1,189.9869		1,189.9521	1,189.9521	124,556.2123	52,903.5471	177,459.7594	115.5950	9.7973	182,924.4132

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	43.6794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	115.5869					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	6,863.8214	93.1237	8,455.4908	3.3027		1,187.9452	1,187.9452		1,187.9104	1,187.9104	124,556.2123	52,237.0588	176,793.2712	114.9447	9.7973	182,244.2689
Landscaping	11.3151	4.2948	371.3567	0.0196		2.0418	2.0418		2.0418	2.0418		666.4883	666.4883	0.6503		680.1443
Total	**7,034.4028**	**97.4185**	**8,826.8475**	**3.3223**		**1,189.9869**	**1,189.9869**		**1,189.9521**	**1,189.9521**	**124,556.2123**	**52,903.5471**	**177,459.7595**	**115.5950**	**9.7973**	**182,924.4132**

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	43.6794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	115.5869					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	6,863.8214	93.1237	8,455.4908	3.3027		1,187.9452	1,187.9452		1,187.9104	1,187.9104	124,556.2123	52,237.0588	176,793.2712	114.9447	9.7973	182,244.2689
Landscaping	11.3151	4.2948	371.3567	0.0196		2.0418	2.0418		2.0418	2.0418		666.4883	666.4883	0.6503		680.1443
Total	**7,034.4028**	**97.4185**	**8,826.8475**	**3.3223**		**1,189.9869**	**1,189.9869**		**1,189.9521**	**1,189.9521**	**124,556.2123**	**52,903.5471**	**177,459.7595**	**115.5950**	**9.7973**	**182,924.4132**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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 Vegetation

Central Village Specific Plan (Proposed Specific Plan)

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	900.00	Student	13.10	75,243.03	0
City Park	16.10	Acre	16.10	701,316.00	0
Apartments Mid Rise	4,485.00	Dwelling Unit	150.00	4,485,000.00	12827
Strip Mall	139.70	1000sqft	50.00	139,700.00	0

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)	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 - Project Size

Construction Phase -

Off-road Equipment -

Grading - 229.2 acre site

Architectural Coating - 150 g/l

Vehicle Trips - Adjusted to meet Otay Community Plan Assumptions

Area Coating - 150 g/l

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	250
tblGrading	AcresOfGrading	1,162.50	229.20
tblGrading	AcresOfGrading	0.00	229.20
tblLandUse	LotAcreage	1.73	13.10
tblLandUse	LotAcreage	118.03	150.00
tblLandUse	LotAcreage	3.21	50.00
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	8.00
tblVehicleTrips	ST_TR	1.59	45.24
tblVehicleTrips	ST_TR	42.04	67.06
tblVehicleTrips	SU_TR	6.07	8.00
tblVehicleTrips	SU_TR	1.59	45.24
tblVehicleTrips	SU_TR	20.43	67.06
tblVehicleTrips	WD_TR	6.59	8.00
tblVehicleTrips	WD_TR	1.59	45.24
tblVehicleTrips	WD_TR	1.29	1.98
tblVehicleTrips	WD_TR	44.32	67.06

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					
2017	6.1663	69.6757	47.5874	0.0637	19.5645	3.3184	22.3198	10.1157	3.0529	12.6506	0.0000	6,470.1987	6,470.1987	1.9425	0.0000	6,510.9902
2018	5.3506	59.6101	43.0133	0.0637	6.7091	2.7892	9.4983	3.4103	2.5661	5.9763	0.0000	6,363.7433	6,363.7433	1.9416	0.0000	6,404.5174
2019	18.6172	78.5649	215.7464	0.5267	33.7539	2.5061	35.9317	9.0368	2.3056	11.0678	0.0000	42,929.6981	42,929.6981	2.0041	0.0000	42,971.7835
2020	17.4847	69.1794	205.0337	0.5265	33.7537	1.9348	35.6885	9.0367	1.8042	10.8409	0.0000	41,511.9639	41,511.9639	1.9300	0.0000	41,552.4938
2021	16.4538	59.8299	196.0069	0.5267	33.7538	1.7189	35.4727	9.0368	1.6024	10.6391	0.0000	41,070.2165	41,070.2165	1.8774	0.0000	41,109.6417
2022	15.6075	53.5963	186.9293	0.5265	33.7540	1.5624	35.3163	9.0368	1.4559	10.4927	0.0000	40,645.0787	40,645.0787	1.8284	0.0000	40,683.4741
2023	14.7559	48.2430	178.5877	0.5261	33.7542	1.4417	35.1959	9.0369	1.3427	10.3796	0.0000	40,247.4534	40,247.4534	1.7772	0.0000	40,284.7747
2024	13.9993	46.4899	170.1901	0.5260	33.7543	1.3591	35.1134	9.0369	1.2648	10.3017	0.0000	39,920.4368	39,920.4368	1.7384	0.0000	39,956.9424
2025	13.4569	44.8771	164.6649	0.5260	33.7545	1.2773	35.0319	9.0370	1.1878	10.2248	0.0000	39,638.4765	39,638.4765	1.7058	0.0000	39,674.2983
2026	13.0953	44.1920	160.6136	0.5259	33.7549	1.2739	35.0288	9.0372	1.1846	10.2218	0.0000	39,394.7789	39,394.7789	1.6818	0.0000	39,430.0965
2027	12.7499	43.6937	156.3217	0.5259	33.7553	1.2766	35.0319	9.0373	1.1871	10.2245	0.0000	39,185.5918	39,185.5918	1.6615	0.0000	39,220.4825
2028	12.4772	43.2457	153.6158	0.5259	33.7557	1.2776	35.0332	9.0375	1.1880	10.2255	0.0000	39,008.0237	39,008.0237	1.6424	0.0000	39,042.5134
2029	12.1832	42.8428	150.5434	0.5259	33.7560	1.2789	35.0349	9.0376	1.1893	10.2269	0.0000	38,856.4786	38,856.4786	1.6242	0.0000	38,890.5858
2030	11.8681	38.0084	148.3061	0.5299	33.7563	0.9027	34.6590	9.0378	0.8440	9.8818	0.0000	39,067.0071	39,067.0071	1.1257	0.0000	39,090.6471
2031	11.6484	37.7225	146.5318	0.5299	33.7560	0.9034	34.6595	9.0376	0.8448	9.8824	0.0000	38,957.1260	38,957.1260	1.1117	0.0000	38,980.4707
2032	11.4457	37.4843	144.9836	0.5299	33.7557	0.9039	34.6596	9.0375	0.8452	9.8827	0.0000	38,865.4279	38,865.4279	1.0993	0.0000	38,888.5126
2033	11.2304	37.2398	143.6234	0.5299	33.7553	0.9040	34.6593	9.0373	0.8453	9.8826	0.0000	38,788.3008	38,788.3008	1.0877	0.0000	38,811.1415

	ROG	NOx	CO	SO2	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					
2034	11.0256	37.0514	142.2682	0.5299	33.7549	0.9039	34.6588	9.0372	0.8451	9.8823	0.0000	38,723.3476	38,723.3476	1.0766	0.0000	38,745.9566
2035	10.7571	36.1363	141.1526	0.5298	33.7545	0.8461	34.6006	9.0370	0.7874	9.8244	0.0000	38,669.7402	38,669.7402	1.0587	0.0000	38,691.9725
2036	1.2123	7.1510	16.0922	0.0308	28.7421	0.0901	28.8321	7.0549	0.0901	7.1449	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2037	1.2123	7.1510	16.0922	0.0308	28.7421	0.1832	28.8321	7.0549	0.1832	7.1449	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2038	293.8509	4.7892	15.4905	0.0275	5.1404	0.1832	5.1503	1.2617	0.1832	1.2716	0.0000	2,599.9866	2,599.9866	0.1001	0.0000	2,602.0881
2039	293.8509	0.7577	1.7943	2.9700e-003	5.1404	9.9000e-003	5.1503	1.2617	9.9000e-003	1.2716	0.0000	281.4481	281.4481	0.0104	0.0000	281.6665
Total	**830.4990**	**947.5319**	**2,945.1890**	**9.1868**	**667.8714**	**28.8453**	**695.5588**	**183.7911**	**26.8095**	**209.5415**	**0.0000**	**696,964.1829**	**696,964.1829**	**30.2401**	**0.0000**	**697,599.2254**

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					
2017	6.1663	69.6757	47.5874	0.0637	19.5645	3.3184	22.3198	10.1157	3.0529	12.6506	0.0000	6,470.1986	6,470.1986	1.9425	0.0000	6,510.9902
2018	5.3506	59.6101	43.0133	0.0637	6.7091	2.7892	9.4983	3.4103	2.5661	5.9763	0.0000	6,363.7433	6,363.7433	1.9416	0.0000	6,404.5174
2019	18.6172	78.5649	215.7464	0.5267	33.7539	2.5061	35.9317	9.0368	2.3056	11.0678	0.0000	42,929.6981	42,929.6981	2.0041	0.0000	42,971.7835
2020	17.4847	69.1794	205.0337	0.5265	33.7537	1.9348	35.6885	9.0367	1.8042	10.8409	0.0000	41,511.9639	41,511.9639	1.9300	0.0000	41,552.4938
2021	16.4538	59.8299	196.0069	0.5267	33.7538	1.7189	35.4727	9.0368	1.6024	10.6391	0.0000	41,070.2165	41,070.2165	1.8774	0.0000	41,109.6417
2022	15.6075	53.5963	186.9293	0.5265	33.7540	1.5624	35.3163	9.0368	1.4559	10.4927	0.0000	40,645.0787	40,645.0787	1.8284	0.0000	40,683.4741

	ROG	NOx	CO	SO2	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					
2023	14.7559	48.2430	178.5877	0.5261	33.7542	1.4417	35.1959	9.0369	1.3427	10.3796	0.0000	40,247.4534	40,247.4534	1.7772	0.0000	40,284.7746
2024	13.9993	46.4899	170.1901	0.5260	33.7543	1.3591	35.1134	9.0369	1.2648	10.3017	0.0000	39,920.4368	39,920.4368	1.7384	0.0000	39,956.9424
2025	13.4569	44.8771	164.6649	0.5260	33.7545	1.2773	35.0319	9.0370	1.1878	10.2248	0.0000	39,638.4765	39,638.4765	1.7058	0.0000	39,674.2983
2026	13.0953	44.1920	160.6136	0.5259	33.7549	1.2739	35.0288	9.0372	1.1846	10.2218	0.0000	39,394.7789	39,394.7789	1.6818	0.0000	39,430.0965
2027	12.7499	43.6937	156.3217	0.5259	33.7553	1.2766	35.0319	9.0373	1.1871	10.2245	0.0000	39,185.5918	39,185.5918	1.6615	0.0000	39,220.4825
2028	12.4772	43.2457	153.6158	0.5259	33.7557	1.2776	35.0332	9.0375	1.1880	10.2255	0.0000	39,008.0237	39,008.0237	1.6424	0.0000	39,042.5134
2029	12.1832	42.8428	150.5434	0.5259	33.7560	1.2789	35.0349	9.0376	1.1893	10.2269	0.0000	38,856.4786	38,856.4786	1.6242	0.0000	38,890.5858
2030	11.8681	38.0084	148.3061	0.5299	33.7563	0.9027	34.6590	9.0378	0.8440	9.8818	0.0000	39,067.0071	39,067.0071	1.1257	0.0000	39,090.6471
2031	11.6484	37.7225	146.5318	0.5299	33.7560	0.9034	34.6595	9.0376	0.8448	9.8824	0.0000	38,957.1260	38,957.1260	1.1117	0.0000	38,980.4707
2032	11.4457	37.4843	144.9836	0.5299	33.7557	0.9039	34.6596	9.0375	0.8452	9.8827	0.0000	38,865.4279	38,865.4279	1.0993	0.0000	38,888.5126
2033	11.2304	37.2398	143.6234	0.5299	33.7553	0.9040	34.6593	9.0373	0.8453	9.8826	0.0000	38,788.3008	38,788.3008	1.0877	0.0000	38,811.1414
2034	11.0256	37.0514	142.2682	0.5299	33.7549	0.9039	34.6588	9.0372	0.8451	9.8823	0.0000	38,723.3475	38,723.3475	1.0766	0.0000	38,745.9566
2035	10.7571	36.1363	141.1526	0.5298	33.7545	0.8461	34.6006	9.0370	0.7874	9.8244	0.0000	38,669.7402	38,669.7402	1.0587	0.0000	38,691.9725
2036	1.2123	7.1510	16.0922	0.0308	28.7421	0.0901	28.8321	7.0549	0.0901	7.1449	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2037	1.2123	7.1510	16.0922	0.0308	28.7421	0.1832	28.8321	7.0549	0.1832	7.1449	0.0000	2,884.8300	2,884.8300	0.1075	0.0000	2,887.0878
2038	293.8509	4.7892	15.4905	0.0275	5.1404	0.1832	5.1503	1.2617	0.1832	1.2716	0.0000	2,599.9866	2,599.9866	0.1001	0.0000	2,602.0881
2039	293.8509	0.7577	1.7943	2.9700e-003	5.1404	9.9000e-003	5.1503	1.2617	9.9000e-003	1.2716	0.0000	281.4481	281.4481	0.0104	0.0000	281.6665
Total	**830.4990**	**947.5319**	**2,945.1890**	**9.1868**	**667.8714**	**28.8453**	**695.5588**	**183.7911**	**26.8095**	**209.5415**	**0.0000**	**696,964.1829**	**696,964.1829**	**30.2401**	**0.0000**	**697,599.2254**

	ROG	NOx	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	7,034.4028	97.4185	8,826.8475	3.3223		1,189.9869	1,189.9869		1,189.9521	1,189.9521	124,556.2123	52,903.5471	177,459.7594	115.5950	9.7973	182,924.4132
Energy	0.7497	6.4195	2.8193	0.0409		0.5180	0.5180		0.5180	0.5180		8,178.9840	8,178.9840	0.1568	0.1500	8,228.7599
Mobile	147.1311	290.7524	1,418.1528	3.6571	258.8907	4.2613	263.1520	69.1066	3.9320	73.0386		279,846.9217	279,846.9217	10.9801		280,077.5035
Total	**7,182.2837**	**394.5905**	**10,247.8195**	**7.0203**	**258.8907**	**1,194.7662**	**1,453.6569**	**69.1066**	**1,194.4021**	**1,263.5087**	**124,556.2123**	**340,929.4527**	**465,485.6651**	**126.7318**	**9.9472**	**471,230.6765**

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	7,034.4028	97.4185	8,826.8475	3.3223		1,189.9869	1,189.9869		1,189.9521	1,189.9521	124,556.2123	52,903.5471	177,459.7594	115.5950	9.7973	182,924.4132
Energy	0.7497	6.4195	2.8193	0.0409		0.5180	0.5180		0.5180	0.5180		8,178.9840	8,178.9840	0.1568	0.1500	8,228.7599
Mobile	147.1311	290.7524	1,418.1528	3.6571	258.8907	4.2613	263.1520	69.1066	3.9320	73.0386		279,846.9217	279,846.9217	10.9801		280,077.5035
Total	**7,182.2837**	**394.5905**	**10,247.8195**	**7.0203**	**258.8907**	**1,194.7662**	**1,453.6569**	**69.1066**	**1,194.4021**	**1,263.5087**	**124,556.2123**	**340,929.4527**	**465,485.6651**	**126.7318**	**9.9472**	**471,230.6765**

	ROG	NOx	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	Site Preparation	Site Preparation	1/1/2017	9/8/2017	5	180	
2	Grading	Grading	9/9/2017	6/21/2019	5	465	
3	Building Construction	Building Construction	6/22/2019	4/17/2037	5	4650	
4	Paving	Paving	4/18/2037	7/23/2038	5	330	
5	Architectural Coating	Architectural Coating	7/24/2038	10/28/2039	5	330	

Acres of Grading (Site Preparation Phase): 229.2

Acres of Grading (Grading Phase): 229.2

Acres of Paving: 0

Residential Indoor: 9,082,125; Residential Outdoor: 3,027,375; Non-Residential Indoor: 1,374,389; Non-Residential Outdoor: 458,130 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
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
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	3,600.00	630.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	720.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

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					19.4166	0.0000	19.4166	10.0765	0.0000	10.0765			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**19.4166**	**2.7542**	**22.1709**	**10.0765**	**2.5339**	**12.6104**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

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	0.0604	0.0753	0.7041	1.7600e-003	0.1479	1.0800e-003	0.1489	0.0392	9.9000e-004	0.0402		141.1467	141.1467	7.2500e-003		141.2989
Total	**0.0604**	**0.0753**	**0.7041**	**1.7600e-003**	**0.1479**	**1.0800e-003**	**0.1489**	**0.0392**	**9.9000e-004**	**0.0402**		**141.1467**	**141.1467**	**7.2500e-003**		**141.2989**

3.2 Site Preparation - 2017

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					19.4166	0.0000	19.4166	10.0765	0.0000	10.0765			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**19.4166**	**2.7542**	**22.1709**	**10.0765**	**2.5339**	**12.6104**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

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	0.0604	0.0753	0.7041	1.7600e-003	0.1479	1.0800e-003	0.1489	0.0392	9.9000e-004	0.0402		141.1467	141.1467	7.2500e-003		141.2989
Total	**0.0604**	**0.0753**	**0.7041**	**1.7600e-003**	**0.1479**	**1.0800e-003**	**0.1489**	**0.0392**	**9.9000e-004**	**0.0402**		**141.1467**	**141.1467**	**7.2500e-003**		**141.2989**

3.3 Grading - 2017

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**6.5448**	**3.3172**	**9.8620**	**3.3667**	**3.0518**	**6.4185**		**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

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	0.0671	0.0837	0.7823	1.9500e-003	0.1643	1.1900e-003	0.1655	0.0436	1.1000e-003	0.0447		156.8296	156.8296	8.0500e-003		156.9987
Total	**0.0671**	**0.0837**	**0.7823**	**1.9500e-003**	**0.1643**	**1.1900e-003**	**0.1655**	**0.0436**	**1.1000e-003**	**0.0447**		**156.8296**	**156.8296**	**8.0500e-003**		**156.9987**

3.3 Grading - 2017

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518	0.0000	6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**6.5448**	**3.3172**	**9.8620**	**3.3667**	**3.0518**	**6.4185**	**0.0000**	**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

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	0.0671	0.0837	0.7823	1.9500e-003	0.1643	1.1900e-003	0.1655	0.0436	1.1000e-003	0.0447		156.8296	156.8296	8.0500e-003		156.9987
Total	**0.0671**	**0.0837**	**0.7823**	**1.9500e-003**	**0.1643**	**1.1900e-003**	**0.1655**	**0.0436**	**1.1000e-003**	**0.0447**		**156.8296**	**156.8296**	**8.0500e-003**		**156.9987**

3.3 Grading - 2018

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	5.2895	59.5338	42.3068	0.0617		2.7880	2.7880		2.5650	2.5650		6,212.8042	6,212.8042	1.9341		6,253.4209
Total	**5.2895**	**59.5338**	**42.3068**	**0.0617**	**6.5448**	**2.7880**	**9.3328**	**3.3667**	**2.5650**	**5.9317**		**6,212.8042**	**6,212.8042**	**1.9341**		**6,253.4209**

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	0.0610	0.0763	0.7065	1.9500e-003	0.1643	1.1700e-003	0.1655	0.0436	1.0800e-003	0.0447		150.9392	150.9392	7.4900e-003		151.0965
Total	**0.0610**	**0.0763**	**0.7065**	**1.9500e-003**	**0.1643**	**1.1700e-003**	**0.1655**	**0.0436**	**1.0800e-003**	**0.0447**		**150.9392**	**150.9392**	**7.4900e-003**		**151.0965**

3.3 Grading - 2018

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	5.2895	59.5338	42.3068	0.0617		2.7880	2.7880		2.5650	2.5650	0.0000	6,212.8041	6,212.8041	1.9341		6,253.4209
Total	**5.2895**	**59.5338**	**42.3068**	**0.0617**	**6.5448**	**2.7880**	**9.3328**	**3.3667**	**2.5650**	**5.9317**	**0.0000**	**6,212.8041**	**6,212.8041**	**1.9341**		**6,253.4209**

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	0.0610	0.0763	0.7065	1.9500e-003	0.1643	1.1700e-003	0.1655	0.0436	1.0800e-003	0.0447		150.9392	150.9392	7.4900e-003		151.0965
Total	**0.0610**	**0.0763**	**0.7065**	**1.9500e-003**	**0.1643**	**1.1700e-003**	**0.1655**	**0.0436**	**1.0800e-003**	**0.0447**		**150.9392**	**150.9392**	**7.4900e-003**		**151.0965**

3.3 Grading - 2019

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045		6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**6.5448**	**2.5049**	**9.0497**	**3.3667**	**2.3045**	**5.6712**		**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

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	0.0566	0.0705	0.6492	1.9500e-003	0.1643	1.1600e-003	0.1655	0.0436	1.0800e-003	0.0447		145.4776	145.4776	7.0400e-003		145.6256
Total	**0.0566**	**0.0705**	**0.6492**	**1.9500e-003**	**0.1643**	**1.1600e-003**	**0.1655**	**0.0436**	**1.0800e-003**	**0.0447**		**145.4776**	**145.4776**	**7.0400e-003**		**145.6256**

3.3 Grading - 2019

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					6.5448	0.0000	6.5448	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045	0.0000	6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**6.5448**	**2.5049**	**9.0497**	**3.3667**	**2.3045**	**5.6712**	**0.0000**	**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

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	0.0566	0.0705	0.6492	1.9500e-003	0.1643	1.1600e-003	0.1655	0.0436	1.0800e-003	0.0447		145.4776	145.4776	7.0400e-003		145.6256
Total	**0.0566**	**0.0705**	**0.6492**	**1.9500e-003**	**0.1643**	**1.1600e-003**	**0.1655**	**0.0436**	**1.0800e-003**	**0.0447**		**145.4776**	**145.4776**	**7.0400e-003**		**145.6256**

3.4 Building Construction - 2019

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

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	6.0729	44.9019	81.7780	0.1484	4.1808	0.6832	4.8640	1.1926	0.6285	1.8211		14,162.9662	14,162.9662	0.1081		14,165.2354
Worker	10.1926	12.6980	116.8481	0.3515	29.5731	0.2095	29.7826	7.8442	0.1942	8.0384		26,185.9702	26,185.9702	1.2681		26,212.6002
Total	**16.2655**	**57.5999**	**198.6261**	**0.4999**	**33.7539**	**0.8927**	**34.6466**	**9.0368**	**0.8227**	**9.8595**		**40,348.9363**	**40,348.9363**	**1.3762**		**40,377.8356**

3.4 Building Construction - 2019

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

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	6.0729	44.9019	81.7780	0.1484	4.1808	0.6832	4.8640	1.1926	0.6285	1.8211		14,162.9662	14,162.9662	0.1081		14,165.2354
Worker	10.1926	12.6980	116.8481	0.3515	29.5731	0.2095	29.7826	7.8442	0.1942	8.0384		26,185.9702	26,185.9702	1.2681		26,212.6002
Total	**16.2655**	**57.5999**	**198.6261**	**0.4999**	**33.7539**	**0.8927**	**34.6466**	**9.0368**	**0.8227**	**9.8595**		**40,348.9363**	**40,348.9363**	**1.3762**		**40,377.8356**

3.4 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	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

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	5.7349	38.2330	79.0834	0.1481	4.1805	0.6122	4.7927	1.1925	0.5632	1.7557		13,838.8979	13,838.8979	0.1047		13,841.0966
Worker	9.6385	11.8624	109.1419	0.3515	29.5731	0.2098	29.7829	7.8442	0.1946	8.0387		25,130.5861	25,130.5861	1.2059		25,155.9092
Total	**15.3734**	**50.0954**	**188.2252**	**0.4997**	**33.7537**	**0.8220**	**34.5757**	**9.0367**	**0.7577**	**9.7944**		**38,969.4840**	**38,969.4840**	**1.3106**		**38,997.0058**

3.4 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	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

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	5.7349	38.2330	79.0834	0.1481	4.1805	0.6122	4.7927	1.1925	0.5632	1.7557		13,838.8979	13,838.8979	0.1047		13,841.0966
Worker	9.6385	11.8624	109.1419	0.3515	29.5731	0.2098	29.7829	7.8442	0.1946	8.0387		25,130.5861	25,130.5861	1.2059		25,155.9092
Total	**15.3734**	**50.0954**	**188.2252**	**0.4997**	**33.7537**	**0.8220**	**34.5757**	**9.0367**	**0.7577**	**9.7944**		**38,969.4840**	**38,969.4840**	**1.3106**		**38,997.0058**

3.4 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	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**		**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

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	5.3864	31.3546	76.0759	0.1478	4.1806	0.5509	4.7316	1.1926	0.5069	1.6995		13,816.7053	13,816.7053	0.1044		13,818.8984
Worker	9.1743	11.1350	103.3933	0.3521	29.5731	0.2131	29.7862	7.8442	0.1976	8.0418		24,710.7295	24,710.7295	1.1604		24,735.0971
Total	**14.5607**	**42.4896**	**179.4692**	**0.4999**	**33.7538**	**0.7640**	**34.5178**	**9.0368**	**0.7045**	**9.7413**		**38,527.4347**	**38,527.4347**	**1.2648**		**38,553.9955**

3.4 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	lb/day										lb/day					
Off-Road	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**	**0.0000**	**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

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	5.3864	31.3546	76.0759	0.1478	4.1806	0.5509	4.7316	1.1926	0.5069	1.6995		13,816.7053	13,816.7053	0.1044		13,818.8984
Worker	9.1743	11.1350	103.3933	0.3521	29.5731	0.2131	29.7862	7.8442	0.1976	8.0418		24,710.7295	24,710.7295	1.1604		24,735.0971
Total	**14.5607**	**42.4896**	**179.4692**	**0.4999**	**33.7538**	**0.7640**	**34.5178**	**9.0368**	**0.7045**	**9.7413**		**38,527.4347**	**38,527.4347**	**1.2648**		**38,553.9955**

3.4 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	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**		**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

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	5.1655	27.5433	73.0785	0.1476	4.1808	0.5421	4.7229	1.1926	0.4987	1.6914		13,802.3975	13,802.3975	0.1066		13,804.6367
Worker	8.7428	10.5166	97.5232	0.3521	29.5731	0.2146	29.7877	7.8442	0.1990	8.0432		24,298.9316	24,298.9316	1.1132		24,322.3088
Total	**13.9083**	**38.0599**	**170.6017**	**0.4997**	**33.7540**	**0.7566**	**34.5106**	**9.0368**	**0.6977**	**9.7346**		**38,101.3290**	**38,101.3290**	**1.2198**		**38,126.9455**

3.4 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	lb/day										lb/day					
Off-Road	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**	**0.0000**	**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

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	5.1655	27.5433	73.0785	0.1476	4.1808	0.5421	4.7229	1.1926	0.4987	1.6914		13,802.3975	13,802.3975	0.1066		13,804.6367
Worker	8.7428	10.5166	97.5232	0.3521	29.5731	0.2146	29.7877	7.8442	0.1990	8.0432		24,298.9316	24,298.9316	1.1132		24,322.3088
Total	**13.9083**	**38.0599**	**170.6017**	**0.4997**	**33.7540**	**0.7566**	**34.5106**	**9.0368**	**0.6977**	**9.7346**		**38,101.3290**	**38,101.3290**	**1.2198**		**38,126.9455**

3.4 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	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557		2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**		**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

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	4.8422	23.9593	70.1184	0.1473	4.1811	0.5289	4.7099	1.1927	0.4866	1.6793		13,771.3256	13,771.3256	0.1003		13,773.4308
Worker	8.3476	9.9711	92.2600	0.3520	29.5731	0.2161	29.7893	7.8442	0.2005	8.0447		23,931.5016	23,931.5016	1.0725		23,954.0247
Total	**13.1898**	**33.9304**	**162.3784**	**0.4993**	**33.7542**	**0.7450**	**34.4992**	**9.0369**	**0.6871**	**9.7240**		**37,702.8272**	**37,702.8272**	**1.1728**		**37,727.4556**

3.4 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	lb/day										lb/day					
Off-Road	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557	0.0000	2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**	**0.0000**	**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

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	4.8422	23.9593	70.1184	0.1473	4.1811	0.5289	4.7099	1.1927	0.4866	1.6793		13,771.3256	13,771.3256	0.1003		13,773.4308
Worker	8.3476	9.9711	92.2600	0.3520	29.5731	0.2161	29.7893	7.8442	0.2005	8.0447		23,931.5016	23,931.5016	1.0725		23,954.0247
Total	**13.1898**	**33.9304**	**162.3784**	**0.4993**	**33.7542**	**0.7450**	**34.4992**	**9.0369**	**0.6871**	**9.7240**		**37,702.8272**	**37,702.8272**	**1.1728**		**37,727.4556**

3.4 Building Construction - 2024

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	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744		2,545.1154	2,545.1154	0.6009		2,557.7349
Total	**1.4653**	**13.3774**	**16.1332**	**0.0268**		**0.6106**	**0.6106**		**0.5744**	**0.5744**		**2,545.1154**	**2,545.1154**	**0.6009**		**2,557.7349**

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	4.5493	23.6190	66.2309	0.1472	4.1811	0.5308	4.7119	1.1928	0.4883	1.6811		13,770.4313	13,770.4313	0.1006		13,772.5431
Worker	7.9848	9.4935	87.8260	0.3520	29.5731	0.2178	29.7910	7.8442	0.2021	8.0463		23,604.8901	23,604.8901	1.0369		23,626.6645
Total	**12.5341**	**33.1125**	**154.0569**	**0.4992**	**33.7543**	**0.7486**	**34.5029**	**9.0369**	**0.6904**	**9.7273**		**37,375.3213**	**37,375.3213**	**1.1374**		**37,399.2075**

3.4 Building Construction - 2024

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	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744	0.0000	2,545.1154	2,545.1154	0.6009		2,557.7349
Total	**1.4653**	**13.3774**	**16.1332**	**0.0268**		**0.6106**	**0.6106**		**0.5744**	**0.5744**	**0.0000**	**2,545.1154**	**2,545.1154**	**0.6009**		**2,557.7349**

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	4.5493	23.6190	66.2309	0.1472	4.1811	0.5308	4.7119	1.1928	0.4883	1.6811		13,770.4313	13,770.4313	0.1006		13,772.5431
Worker	7.9848	9.4935	87.8260	0.3520	29.5731	0.2178	29.7910	7.8442	0.2021	8.0463		23,604.8901	23,604.8901	1.0369		23,626.6645
Total	**12.5341**	**33.1125**	**154.0569**	**0.4992**	**33.7543**	**0.7486**	**34.5029**	**9.0369**	**0.6904**	**9.7273**		**37,375.3213**	**37,375.3213**	**1.1374**		**37,399.2075**

3.4 Building Construction - 2025

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	4.4185	23.3691	64.4555	0.1472	4.1814	0.5325	4.7139	1.1929	0.4899	1.6828		13,771.6021	13,771.6021	0.1008		13,773.7198
Worker	7.6769	9.0983	84.1576	0.3520	29.5731	0.2199	29.7930	7.8442	0.2040	8.0482		23,320.9838	23,320.9838	1.0074		23,342.1399
Total	**12.0954**	**32.4674**	**148.6131**	**0.4991**	**33.7545**	**0.7523**	**34.5068**	**9.0370**	**0.6939**	**9.7309**		**37,092.5859**	**37,092.5859**	**1.1083**		**37,115.8597**

3.4 Building Construction - 2025

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	4.4185	23.3691	64.4555	0.1472	4.1814	0.5325	4.7139	1.1929	0.4899	1.6828		13,771.6021	13,771.6021	0.1008		13,773.7198
Worker	7.6769	9.0983	84.1576	0.3520	29.5731	0.2199	29.7930	7.8442	0.2040	8.0482		23,320.9838	23,320.9838	1.0074		23,342.1399
Total	**12.0954**	**32.4674**	**148.6131**	**0.4991**	**33.7545**	**0.7523**	**34.5068**	**9.0370**	**0.6939**	**9.7309**		**37,092.5859**	**37,092.5859**	**1.1083**		**37,115.8597**

3.4 Building Construction - 2026

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	4.3112	22.9928	63.2261	0.1471	4.1817	0.5266	4.7083	1.1930	0.4845	1.6775		13,772.7742	13,772.7742	0.1001		13,774.8762
Worker	7.4227	8.7895	81.3357	0.3520	29.5731	0.2223	29.7954	7.8442	0.2062	8.0504		23,076.1141	23,076.1141	0.9842		23,096.7817
Total	**11.7338**	**31.7823**	**144.5618**	**0.4991**	**33.7549**	**0.7489**	**34.5038**	**9.0372**	**0.6907**	**9.7279**		**36,848.8884**	**36,848.8884**	**1.0843**		**36,871.6579**

3.4 Building Construction - 2026

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	4.3112	22.9928	63.2261	0.1471	4.1817	0.5266	4.7083	1.1930	0.4845	1.6775		13,772.7742	13,772.7742	0.1001		13,774.8762
Worker	7.4227	8.7895	81.3357	0.3520	29.5731	0.2223	29.7954	7.8442	0.2062	8.0504		23,076.1141	23,076.1141	0.9842		23,096.7817
Total	**11.7338**	**31.7823**	**144.5618**	**0.4991**	**33.7549**	**0.7489**	**34.5038**	**9.0372**	**0.6907**	**9.7279**		**36,848.8884**	**36,848.8884**	**1.0843**		**36,871.6579**

3.4 Building Construction - 2027

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	4.2010	22.7594	61.4224	0.1471	4.1821	0.5273	4.7094	1.1932	0.4851	1.6783		13,774.4447	13,774.4447	0.1003		13,776.5501
Worker	7.1874	8.5247	78.8475	0.3519	29.5731	0.2243	29.7975	7.8442	0.2081	8.0523		22,865.2565	22,865.2565	0.9637		22,885.4939
Total	**11.3884**	**31.2840**	**140.2699**	**0.4991**	**33.7553**	**0.7516**	**34.5069**	**9.0373**	**0.6932**	**9.7306**		**36,639.7012**	**36,639.7012**	**1.0639**		**36,662.0440**

3.4 Building Construction - 2027

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	4.2010	22.7594	61.4224	0.1471	4.1821	0.5273	4.7094	1.1932	0.4851	1.6783		13,774.4447	13,774.4447	0.1003		13,776.5501
Worker	7.1874	8.5247	78.8475	0.3519	29.5731	0.2243	29.7975	7.8442	0.2081	8.0523		22,865.2565	22,865.2565	0.9637		22,885.4939
Total	**11.3884**	**31.2840**	**140.2699**	**0.4991**	**33.7553**	**0.7516**	**34.5069**	**9.0373**	**0.6932**	**9.7306**		**36,639.7012**	**36,639.7012**	**1.0639**		**36,662.0440**

3.4 Building Construction - 2028

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	4.1568	22.5679	60.9696	0.1471	4.1825	0.5264	4.7089	1.1933	0.4843	1.6776		13,776.4096	13,776.4096	0.1002		13,778.5138
Worker	6.9589	8.2681	76.5945	0.3519	29.5731	0.2262	29.7993	7.8442	0.2098	8.0540		22,685.7235	22,685.7235	0.9447		22,705.5611
Total	**11.1157**	**30.8360**	**137.5640**	**0.4991**	**33.7557**	**0.7526**	**34.5082**	**9.0375**	**0.6941**	**9.7316**		**36,462.1331**	**36,462.1331**	**1.0449**		**36,484.0749**

3.4 Building Construction - 2028

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	4.1568	22.5679	60.9696	0.1471	4.1825	0.5264	4.7089	1.1933	0.4843	1.6776		13,776.4096	13,776.4096	0.1002		13,778.5138
Worker	6.9589	8.2681	76.5945	0.3519	29.5731	0.2262	29.7993	7.8442	0.2098	8.0540		22,685.7235	22,685.7235	0.9447		22,705.5611
Total	**11.1157**	**30.8360**	**137.5640**	**0.4991**	**33.7557**	**0.7526**	**34.5082**	**9.0375**	**0.6941**	**9.7316**		**36,462.1331**	**36,462.1331**	**1.0449**		**36,484.0749**

3.4 Building Construction - 2029

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	4.0874	22.4168	60.0600	0.1471	4.1829	0.5263	4.7092	1.1935	0.4842	1.6777		13,777.9340	13,777.9340	0.1003		13,780.0391
Worker	6.7343	8.0163	74.4316	0.3519	29.5731	0.2276	29.8008	7.8442	0.2112	8.0554		22,532.6541	22,532.6541	0.9264		22,552.1081
Total	**10.8217**	**30.4331**	**134.4916**	**0.4991**	**33.7560**	**0.7539**	**34.5099**	**9.0376**	**0.6954**	**9.7330**		**36,310.5881**	**36,310.5881**	**1.0266**		**36,332.1473**

3.4 Building Construction - 2029

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	4.0874	22.4168	60.0600	0.1471	4.1829	0.5263	4.7092	1.1935	0.4842	1.6777		13,777.9340	13,777.9340	0.1003		13,780.0391
Worker	6.7343	8.0163	74.4316	0.3519	29.5731	0.2276	29.8008	7.8442	0.2112	8.0554		22,532.6541	22,532.6541	0.9264		22,552.1081
Total	**10.8217**	**30.4331**	**134.4916**	**0.4991**	**33.7560**	**0.7539**	**34.5099**	**9.0376**	**0.6954**	**9.7330**		**36,310.5881**	**36,310.5881**	**1.0266**		**36,332.1473**

3.4 Building Construction - 2030

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	4.0406	22.2982	59.6701	0.1471	4.1832	0.5264	4.7096	1.1936	0.4843	1.6779		13,779.5105	13,779.5105	0.1003		13,781.6167
Worker	6.5234	7.7923	72.5046	0.3519	29.5731	0.2286	29.8018	7.8442	0.2121	8.0563		22,402.6667	22,402.6667	0.9096		22,421.7688
Total	**10.5640**	**30.0905**	**132.1747**	**0.4991**	**33.7563**	**0.7551**	**34.5114**	**9.0378**	**0.6964**	**9.7342**		**36,182.1772**	**36,182.1772**	**1.0099**		**36,203.3854**

3.4 Building Construction - 2030

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	4.0406	22.2982	59.6701	0.1471	4.1832	0.5264	4.7096	1.1936	0.4843	1.6779		13,779.5105	13,779.5105	0.1003		13,781.6167
Worker	6.5234	7.7923	72.5046	0.3519	29.5731	0.2286	29.8018	7.8442	0.2121	8.0563		22,402.6667	22,402.6667	0.9096		22,421.7688
Total	**10.5640**	**30.0905**	**132.1747**	**0.4991**	**33.7563**	**0.7551**	**34.5114**	**9.0378**	**0.6964**	**9.7342**		**36,182.1772**	**36,182.1772**	**1.0099**		**36,203.3854**

3.4 Building Construction - 2031

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	4.0027	22.2079	59.4305	0.1471	4.1829	0.5266	4.7094	1.1934	0.4845	1.6779		13,778.7682	13,778.7682	0.1003		13,780.8754
Worker	6.3416	7.5968	70.9700	0.3519	29.5731	0.2293	29.8024	7.8442	0.2127	8.0569		22,293.5278	22,293.5278	0.8955		22,312.3336
Total	**10.3443**	**29.8047**	**130.4005**	**0.4991**	**33.7560**	**0.7558**	**34.5118**	**9.0376**	**0.6972**	**9.7348**		**36,072.2961**	**36,072.2961**	**0.9959**		**36,093.2090**

3.4 Building Construction - 2031

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	4.0027	22.2079	59.4305	0.1471	4.1829	0.5266	4.7094	1.1934	0.4845	1.6779		13,778.7682	13,778.7682	0.1003		13,780.8754
Worker	6.3416	7.5968	70.9700	0.3519	29.5731	0.2293	29.8024	7.8442	0.2127	8.0569		22,293.5278	22,293.5278	0.8955		22,312.3336
Total	**10.3443**	**29.8047**	**130.4005**	**0.4991**	**33.7560**	**0.7558**	**34.5118**	**9.0376**	**0.6972**	**9.7348**		**36,072.2961**	**36,072.2961**	**0.9959**		**36,093.2090**

3.4 Building Construction - 2032

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	3.9661	22.1337	59.2408	0.1471	4.1826	0.5267	4.7092	1.1933	0.4845	1.6778		13,778.1579	13,778.1579	0.1004		13,780.2659
Worker	6.1755	7.4327	69.6115	0.3519	29.5731	0.2297	29.8028	7.8442	0.2131	8.0573		22,202.4400	22,202.4400	0.8831		22,220.9850
Total	**10.1416**	**29.5664**	**128.8523**	**0.4991**	**33.7557**	**0.7563**	**34.5120**	**9.0375**	**0.6976**	**9.7351**		**35,980.5979**	**35,980.5979**	**0.9835**		**36,001.2509**

3.4 Building Construction - 2032

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	3.9661	22.1337	59.2408	0.1471	4.1826	0.5267	4.7092	1.1933	0.4845	1.6778		13,778.1579	13,778.1579	0.1004		13,780.2659
Worker	6.1755	7.4327	69.6115	0.3519	29.5731	0.2297	29.8028	7.8442	0.2131	8.0573		22,202.4400	22,202.4400	0.8831		22,220.9850
Total	**10.1416**	**29.5664**	**128.8523**	**0.4991**	**33.7557**	**0.7563**	**34.5120**	**9.0375**	**0.6976**	**9.7351**		**35,980.5979**	**35,980.5979**	**0.9835**		**36,001.2509**

3.4 Building Construction - 2033

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	3.9203	22.0439	59.0846	0.1471	4.1822	0.5265	4.7087	1.1931	0.4844	1.6776		13,776.6704	13,776.6704	0.1004		13,778.7784
Worker	6.0059	7.2780	68.4075	0.3519	29.5731	0.2299	29.8030	7.8442	0.2133	8.0575		22,126.8005	22,126.8005	0.8715		22,145.1014
Total	**9.9263**	**29.3219**	**127.4921**	**0.4990**	**33.7553**	**0.7564**	**34.5117**	**9.0373**	**0.6977**	**9.7350**		**35,903.4708**	**35,903.4708**	**0.9719**		**35,923.8797**

3.4 Building Construction - 2033

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	3.9203	22.0439	59.0846	0.1471	4.1822	0.5265	4.7087	1.1931	0.4844	1.6776		13,776.6704	13,776.6704	0.1004		13,778.7784
Worker	6.0059	7.2780	68.4075	0.3519	29.5731	0.2299	29.8030	7.8442	0.2133	8.0575		22,126.8005	22,126.8005	0.8715		22,145.1014
Total	**9.9263**	**29.3219**	**127.4921**	**0.4990**	**33.7553**	**0.7564**	**34.5117**	**9.0373**	**0.6977**	**9.7350**		**35,903.4708**	**35,903.4708**	**0.9719**		**35,923.8797**

3.4 Building Construction - 2034

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	3.8843	21.9831	58.9552	0.1471	4.1818	0.5264	4.7082	1.1930	0.4843	1.6773		13,775.4727	13,775.4727	0.1004		13,777.5806
Worker	5.8372	7.1505	67.1817	0.3519	29.5731	0.2299	29.8030	7.8442	0.2133	8.0574		22,063.0449	22,063.0449	0.8605		22,081.1144
Total	**9.7215**	**29.1336**	**126.1369**	**0.4990**	**33.7549**	**0.7562**	**34.5112**	**9.0372**	**0.6975**	**9.7347**		**35,838.5176**	**35,838.5176**	**0.9608**		**35,858.6949**

3.4 Building Construction - 2034

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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	3.8843	21.9831	58.9552	0.1471	4.1818	0.5264	4.7082	1.1930	0.4843	1.6773		13,775.4727	13,775.4727	0.1004		13,777.5806
Worker	5.8372	7.1505	67.1817	0.3519	29.5731	0.2299	29.8030	7.8442	0.2133	8.0574		22,063.0449	22,063.0449	0.8605		22,081.1144
Total	**9.7215**	**29.1336**	**126.1369**	**0.4990**	**33.7549**	**0.7562**	**34.5112**	**9.0372**	**0.6975**	**9.7347**		**35,838.5176**	**35,838.5176**	**0.9608**		**35,858.6949**

3.4 Building Construction - 2035

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**		**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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	3.8576	21.9387	58.8575	0.1471	4.1814	0.5263	4.7076	1.1928	0.4842	1.6770		13,774.3853	13,774.3853	0.1004		13,776.4930
Worker	5.6872	7.0467	66.2029	0.3519	29.5731	0.2298	29.8029	7.8442	0.2132	8.0574		22,010.5249	22,010.5249	0.8508		22,028.3916
Total	**9.5448**	**28.9854**	**125.0604**	**0.4990**	**33.7545**	**0.7561**	**34.5106**	**9.0370**	**0.6974**	**9.7343**		**35,784.9103**	**35,784.9103**	**0.9512**		**35,804.8846**

3.4 Building Construction - 2035

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901	0.0000	2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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	3.8576	21.9387	58.8575	0.1471	4.1814	0.5263	4.7076	1.1928	0.4842	1.6770		13,774.3853	13,774.3853	0.1004		13,776.4930
Worker	5.6872	7.0467	66.2029	0.3519	29.5731	0.2298	29.8029	7.8442	0.2132	8.0574		22,010.5249	22,010.5249	0.8508		22,028.3916
Total	**9.5448**	**28.9854**	**125.0604**	**0.4990**	**33.7545**	**0.7561**	**34.5106**	**9.0370**	**0.6974**	**9.7343**		**35,784.9103**	**35,784.9103**	**0.9512**		**35,804.8846**

3.4 Building Construction - 2036

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**		**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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
Vendor					3.0402	0.0000	3.0402	0.7462	0.0000	0.7462			0.0000			0.0000
Worker					25.7019	0.0000	25.7019	6.3086	0.0000	6.3086			0.0000			0.0000
Total					**28.7421**	**0.0000**	**28.7421**	**7.0549**	**0.0000**	**7.0549**			**0.0000**			**0.0000**

3.4 Building Construction - 2036

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901	0.0000	2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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
Vendor					3.0402	0.0000	3.0402	0.7462	0.0000	0.7462			0.0000			0.0000
Worker					25.7019	0.0000	25.7019	6.3086	0.0000	6.3086			0.0000			0.0000
Total					**28.7421**	**0.0000**	**28.7421**	**7.0549**	**0.0000**	**7.0549**			**0.0000**			**0.0000**

3.4 Building Construction - 2037

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901		2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**		**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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
Vendor					3.0402	0.0000	3.0402	0.7462	0.0000	0.7462			0.0000			0.0000
Worker					25.7019	0.0000	25.7019	6.3086	0.0000	6.3086			0.0000			0.0000
Total					**28.7421**	**0.0000**	**28.7421**	**7.0549**	**0.0000**	**7.0549**			**0.0000**			**0.0000**

3.4 Building Construction - 2037

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	1.2123	7.1510	16.0922	0.0308		0.0901	0.0901		0.0901	0.0901	0.0000	2,884.8300	2,884.8300	0.1075		2,887.0878
Total	**1.2123**	**7.1510**	**16.0922**	**0.0308**		**0.0901**	**0.0901**		**0.0901**	**0.0901**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1075**		**2,887.0878**

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
Vendor					3.0402	0.0000	3.0402	0.7462	0.0000	0.7462			0.0000			0.0000
Worker					25.7019	0.0000	25.7019	6.3086	0.0000	6.3086			0.0000			0.0000
Total					**28.7421**	**0.0000**	**28.7421**	**7.0549**	**0.0000**	**7.0549**			**0.0000**			**0.0000**

3.5 Paving - 2037

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	1.1165	4.7892	15.4905	0.0275		0.1832	0.1832		0.1832	0.1832		2,599.9866	2,599.9866	0.1001		2,602.0881
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1165**	**4.7892**	**15.4905**	**0.0275**		**0.1832**	**0.1832**		**0.1832**	**0.1832**		**2,599.9866**	**2,599.9866**	**0.1001**		**2,602.0881**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1071	0.0000	0.1071	0.0263	0.0000	0.0263			0.0000			0.0000
Total					**0.1071**	**0.0000**	**0.1071**	**0.0263**	**0.0000**	**0.0263**			**0.0000**			**0.0000**

3.5 Paving - 2037

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	1.1165	4.7892	15.4905	0.0275		0.1832	0.1832		0.1832	0.1832	0.0000	2,599.9866	2,599.9866	0.1001		2,602.0881
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1165**	**4.7892**	**15.4905**	**0.0275**		**0.1832**	**0.1832**		**0.1832**	**0.1832**	**0.0000**	**2,599.9866**	**2,599.9866**	**0.1001**		**2,602.0881**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1071	0.0000	0.1071	0.0263	0.0000	0.0263			0.0000			0.0000
Total					**0.1071**	**0.0000**	**0.1071**	**0.0263**	**0.0000**	**0.0263**			**0.0000**			**0.0000**

3.5 Paving - 2038

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	1.1165	4.7892	15.4905	0.0275		0.1832	0.1832		0.1832	0.1832		2,599.9866	2,599.9866	0.1001		2,602.0881
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1165**	**4.7892**	**15.4905**	**0.0275**		**0.1832**	**0.1832**		**0.1832**	**0.1832**		**2,599.9866**	**2,599.9866**	**0.1001**		**2,602.0881**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1071	0.0000	0.1071	0.0263	0.0000	0.0263			0.0000			0.0000
Total					**0.1071**	**0.0000**	**0.1071**	**0.0263**	**0.0000**	**0.0263**			**0.0000**			**0.0000**

3.5 Paving - 2038

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	1.1165	4.7892	15.4905	0.0275		0.1832	0.1832		0.1832	0.1832	0.0000	2,599.9866	2,599.9866	0.1001		2,602.0881
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1165**	**4.7892**	**15.4905**	**0.0275**		**0.1832**	**0.1832**		**0.1832**	**0.1832**	**0.0000**	**2,599.9866**	**2,599.9866**	**0.1001**		**2,602.0881**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.1071	0.0000	0.1071	0.0263	0.0000	0.0263			0.0000			0.0000
Total					**0.1071**	**0.0000**	**0.1071**	**0.0263**	**0.0000**	**0.0263**			**0.0000**			**0.0000**

3.6 Architectural Coating - 2038

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	293.7330					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003		281.4481	281.4481	0.0104		281.6665
Total	**293.8509**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**		**281.4481**	**281.4481**	**0.0104**		**281.6665**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					5.1404	0.0000	5.1404	1.2617	0.0000	1.2617			0.0000			0.0000
Total					**5.1404**	**0.0000**	**5.1404**	**1.2617**	**0.0000**	**1.2617**			**0.0000**			**0.0000**

3.6 Architectural Coating - 2038

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	293.7330					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003	0.0000	281.4481	281.4481	0.0104		281.6665
Total	**293.8509**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0104**		**281.6665**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					5.1404	0.0000	5.1404	1.2617	0.0000	1.2617			0.0000			0.0000
Total					**5.1404**	**0.0000**	**5.1404**	**1.2617**	**0.0000**	**1.2617**			**0.0000**			**0.0000**

3.6 Architectural Coating - 2039

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	293.7330					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003		281.4481	281.4481	0.0104		281.6665
Total	**293.8509**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**		**281.4481**	**281.4481**	**0.0104**		**281.6665**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					5.1404	0.0000	5.1404	1.2617	0.0000	1.2617			0.0000			0.0000
Total					**5.1404**	**0.0000**	**5.1404**	**1.2617**	**0.0000**	**1.2617**			**0.0000**			**0.0000**

3.6 Architectural Coating - 2039

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	293.7330					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003	0.0000	281.4481	281.4481	0.0104		281.6665
Total	**293.8509**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0104**		**281.6665**

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					5.1404	0.0000	5.1404	1.2617	0.0000	1.2617			0.0000			0.0000
Total					**5.1404**	**0.0000**	**5.1404**	**1.2617**	**0.0000**	**1.2617**			**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	147.1311	290.7524	1,418.1528	3.6571	258.8907	4.2613	263.1520	69.1066	3.9320	73.0386		279,846.9217	279,846.9217	10.9801		280,077.5035
Unmitigated	147.1311	290.7524	1,418.1528	3.6571	258.8907	4.2613	263.1520	69.1066	3.9320	73.0386		279,846.9217	279,846.9217	10.9801		280,077.5035

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	35,880.00	35,880.00	35880.00	102,448,285	102,448,285
City Park	728.36	728.36	728.36	1,554,950	1,554,950
Elementary School	1,782.00	0.00	0.00	2,806,572	2,806,572
Strip Mall	9,368.28	9,368.28	9368.28	14,427,464	14,427,464
Total	47,758.65	45,976.65	45,976.65	121,237,271	121,237,271

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513300	0.073549	0.191092	0.130830	0.036094	0.005140	0.012550	0.022916	0.001871	0.002062	0.006564	0.000586	0.003446

5.0 Energy Detail

4.4 Fleet Mix

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	0.7497	6.4195	2.8193	0.0409		0.5180	0.5180		0.5180	0.5180		8,178.9840	8,178.9840	0.1568	0.1500	8,228.7599
NaturalGas Unmitigated	0.7497	6.4195	2.8193	0.0409		0.5180	0.5180		0.5180	0.5180		8,178.9840	8,178.9840	0.1568	0.1500	8,228.7599

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					
Elementary School	1278.1	0.0138	0.1253	0.1053	7.5000e-004		9.5200e-003	9.5200e-003		9.5200e-003	9.5200e-003		150.3648	150.3648	2.8800e-003	2.7600e-003	151.2799
Strip Mall	876.474	9.4500e-003	0.0859	0.0722	5.2000e-004		6.5300e-003	6.5300e-003		6.5300e-003	6.5300e-003		103.1146	103.1146	1.9800e-003	1.8900e-003	103.7421
Apartments Mid Rise	67366.8	0.7265	6.2083	2.6418	0.0396		0.5020	0.5020		0.5020	0.5020		7,925.5046	7,925.5046	0.1519	0.1453	7,973.7379
City Park	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		**0.7497**	**6.4195**	**2.8193**	**0.0409**		**0.5180**	**0.5180**		**0.5180**	**0.5180**		**8,178.9840**	**8,178.9840**	**0.1568**	**0.1500**	**8,228.7599**

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					
Elementary School	1.2781	0.0138	0.1253	0.1053	7.5000e-004		9.5200e-003	9.5200e-003		9.5200e-003	9.5200e-003		150.3648	150.3648	2.8800e-003	2.7600e-003	151.2799
Strip Mall	0.876474	9.4500e-003	0.0859	0.0722	5.2000e-004		6.5300e-003	6.5300e-003		6.5300e-003	6.5300e-003		103.1146	103.1146	1.9800e-003	1.8900e-003	103.7421
Apartments Mid Rise	67.3668	0.7265	6.2083	2.6418	0.0396		0.5020	0.5020		0.5020	0.5020		7,925.5046	7,925.5046	0.1519	0.1453	7,973.7379
City Park	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		**0.7497**	**6.4195**	**2.8193**	**0.0409**		**0.5180**	**0.5180**		**0.5180**	**0.5180**		**8,178.9840**	**8,178.9840**	**0.1568**	**0.1500**	**8,228.7599**

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	7,034.4028	97.4185	8,826.8475	3.3223		1,189.9869	1,189.9869		1,189.9521	1,189.9521	124,556.2123	52,903.5471	177,459.7594	115.5950	9.7973	182,924.4132
Unmitigated	7,034.4028	97.4185	8,826.8475	3.3223		1,189.9869	1,189.9869		1,189.9521	1,189.9521	124,556.2123	52,903.5471	177,459.7594	115.5950	9.7973	182,924.4132

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	43.6794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	115.5869					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	6,863.8214	93.1237	8,455.4908	3.3027		1,187.9452	1,187.9452		1,187.9104	1,187.9104	124,556.2123	52,237.0588	176,793.2712	114.9447	9.7973	182,244.2689
Landscaping	11.3151	4.2948	371.3567	0.0196		2.0418	2.0418		2.0418	2.0418		666.4883	666.4883	0.6503		680.1443
Total	**7,034.4028**	**97.4185**	**8,826.8475**	**3.3223**		**1,189.9869**	**1,189.9869**		**1,189.9521**	**1,189.9521**	**124,556.2123**	**52,903.5471**	**177,459.7595**	**115.5950**	**9.7973**	**182,924.4132**

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	43.6794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	115.5869					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	6,863.8214	93.1237	8,455.4908	3.3027		1,187.9452	1,187.9452		1,187.9104	1,187.9104	124,556.2123	52,237.0588	176,793.2712	114.9447	9.7973	182,244.2689
Landscaping	11.3151	4.2948	371.3567	0.0196		2.0418	2.0418		2.0418	2.0418		666.4883	666.4883	0.6503		680.1443
Total	**7,034.4028**	**97.4185**	**8,826.8475**	**3.3223**		**1,189.9869**	**1,189.9869**		**1,189.9521**	**1,189.9521**	**124,556.2123**	**52,903.5471**	**177,459.7595**	**115.5950**	**9.7973**	**182,924.4132**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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 Vegetation

ATTACHMENT C

AERMOD OUTPUT FILE

BREEZE AERMOD
Sensitive Receptor Results

Pollutant: PM10, Type: CONC (ug/m**3) 1 YEAR AVG., Group: ALL

Sen. Rcpt. #	Dsc. Rcpt. #	Description	UTM		Conc.	
			East(m)	North(m)		
1	37	R1	501136.00	3602621.40	0.0095609068275100	
2	38	R2	501472.80	3602628.60	0.0095261598187347	
3	39	R3	500931.80	3602786.80	0.0169063393660758	
4	40	R4	501037.00	3602470.30	0.0066211296322974	
5	41	R5	501050.20	3602347.90	0.0046950022498922	
6	42	R6	500735.90	3602266.20	0.0038229566714486	
7	43	R7	501042.10	3602138.60	0.0029800909590818	
8	44	R8	500399.00	3602416.20	0.0053175253692231	
9	45	R9	500647.10	3602490.80	0.0065489924039176	
10	46	R10	501297.20	3602778.60	0.0174700496562683	
11	47	R11	501150.90	3602953.10	0.0478483363171242	
12	48	R12	501455.30	3602918.00	0.0464332202546082	
13	49	R13	500121.00	3602426.40	0.0052791191789079	
14	50	R14	500220.80	3602415.80	0.0051781395075769	

Pollutant: PM10, Type: CONC (ug/m**3) 1ST HIGH 1-HR AVG., Group: ALL

Sen. Rcpt. #	Dsc. Rcpt. #	Description	UTM		Conc.	Date
			East(m)	North(m)		YYMMDDHH
1	37	R1	501136.00	3602621.40	0.08976	12110620
2	38	R2	501472.80	3602628.60	0.06973	12102922
3	39	R3	500931.80	3602786.80	0.13707	12102922
4	40	R4	501037.00	3602470.30	0.06021	12091420
5	41	R5	501050.20	3602347.90	0.03155	12112920
6	42	R6	500735.90	3602266.20	0.03760	12112920
7	43	R7	501042.10	3602138.60	0.03712	12112920
8	44	R8	500399.00	3602416.20	0.04331	12081906
9	45	R9	500647.10	3602490.80	0.05775	12112920
10	46	R10	501297.20	3602778.60	0.07782	12120323
11	47	R11	501150.90	3602953.10	0.17492	12042005
12	48	R12	501455.30	3602918.00	0.15491	12010418
13	49	R13	500121.00	3602426.40	0.03629	12121023
14	50	R14	500220.80	3602415.80	0.03865	12120222

http://www.breeze-software.com/

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** AERMAP - VERSION 11103                                          06/20/16
**                                                                  08:52:55

** BREEZE AERMOD
** Trinity Consultants
** VERSION  7.10

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SO LOCATION  EHIRX0CS  VOLUME    501540.6  3602578.6
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0CT  VOLUME    501530.6  3602578.6
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0CU  VOLUME    501520.6  3602578.7
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0CV  VOLUME    501510.6  3602578.7
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0CW  VOLUME    501500.6  3602578.7
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0CX  VOLUME    501490.6  3602578.8
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0CY  VOLUME    501480.6  3602578.8
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0CZ  VOLUME    501470.6  3602578.8
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0D0  VOLUME    501460.6  3602578.8
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0D1  VOLUME    501450.6  3602578.9
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0D2  VOLUME    501440.6  3602578.9
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0D3  VOLUME    501430.6  3602578.9
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0D4  VOLUME    501420.6  3602579
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0D5  VOLUME    501410.6  3602579
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0D6  VOLUME    501400.6  3602579
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0D7  VOLUME    501390.6  3602579
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0D8  VOLUME    501380.6  3602579.1
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0D9  VOLUME    501370.6  3602579.1
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DA  VOLUME    501360.6  3602579.1
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DB  VOLUME    501350.6  3602579.2
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DC  VOLUME    501340.6  3602579.2
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DD  VOLUME    501330.6  3602579.2
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DE  VOLUME    501320.6  3602579.2
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DF  VOLUME    501310.6  3602579.3
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DG  VOLUME    501300.6  3602579.3
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DH  VOLUME    501290.6  3602579.3
** SRCDESCR  Airway Cactus to Britanna
```

```
SO LOCATION  EHIRX0DI  VOLUME    501280.6  3602579.4
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DJ  VOLUME    501270.6  3602579.4
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DK  VOLUME    501260.6  3602579.4
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DL  VOLUME    501250.6  3602579.4
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DM  VOLUME    501240.6  3602579.5
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DN  VOLUME    501230.6  3602579.5
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DO  VOLUME    501220.6  3602579.5
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DP  VOLUME    501210.6  3602579.6
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DQ  VOLUME    501200.6  3602579.6
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DR  VOLUME    501190.6  3602579.6
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DS  VOLUME    501180.6  3602579.6
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DT  VOLUME    501170.6  3602579.7
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DU  VOLUME    501160.6  3602579.7
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DV  VOLUME    501150.6  3602579.7
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DW  VOLUME    501140.6  3602579.8
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DX  VOLUME    501130.6  3602579.8
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DY  VOLUME    501120.6  3602579.8
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0DZ  VOLUME    501110.6  3602579.8
** SRCDESCR  Airway Cactus to Britanna
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** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0E1  VOLUME    501090.6  3602579.9
** SRCDESCR  Airway Cactus to Britanna
SO LOCATION  EHIRX0E4  VOLUME    500277.8  3602459.6
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0E5  VOLUME    500267.8  3602460.1
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0E6  VOLUME    500257.8  3602460.6
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0E7  VOLUME    500247.8  3602461
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0E8  VOLUME    500237.8  3602461.5
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0E9  VOLUME    500227.9  3602461.9
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EA  VOLUME    500217.9  3602462.4
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EB  VOLUME    500207.9  3602462.9
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EC  VOLUME    500197.9  3602463.3
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0ED  VOLUME    500187.9  3602463.8
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EE  VOLUME    500177.9  3602464.2
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EF  VOLUME    500167.9  3602464.7
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EG  VOLUME    500157.9  3602465.2
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EH  VOLUME    500148  3602466.3
```

```
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EI  VOLUME    500138.1  3602467.7
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EJ  VOLUME    500128.2  3602469.1
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EK  VOLUME    500118.3  3602470.5
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EL  VOLUME    500108.4  3602471.8
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EM  VOLUME    500098.5  3602473.2
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EN  VOLUME    500088.6  3602474.6
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EO  VOLUME    500078.7  3602476
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EP  VOLUME    500068.8  3602477.6
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EQ  VOLUME    500059.3  3602480.6
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0ER  VOLUME    500049.7  3602483.5
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0ES  VOLUME    500040.2  3602486.5
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0ET  VOLUME    500030.6  3602489.4
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EU  VOLUME    500021.1  3602492.4
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EV  VOLUME    500011.5  3602495.3
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EW  VOLUME    500002  3602498.3
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EX  VOLUME    499992.4  3602501.2
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EY  VOLUME    499982.8  3602504.2
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0EZ  VOLUME    499973.3  3602507.1
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0F0  VOLUME    499963.7  3602510.1
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0F1  VOLUME    499954.2  3602513.1
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0F2  VOLUME    499944.6  3602516
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0F3  VOLUME    499935.2  3602519.3
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0F4  VOLUME    499926.5  3602524.1
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0F5  VOLUME    499917.7  3602529
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0F6  VOLUME    499909  3602533.8
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0F7  VOLUME    499900.2  3602538.7
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0F8  VOLUME    499891.5  3602543.5
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0F9  VOLUME    499882.7  3602548.3
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FA  VOLUME    499874  3602553.2
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FB  VOLUME    499865.2  3602558
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FC  VOLUME    499856.5  3602562.9
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FD  VOLUME    499847.7  3602567.7
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FE  VOLUME    499839  3602572.6
** SRCDESCR  Airway Caliente to Heritage
```

```
SO LOCATION  EHIRX0FF  VOLUME    499830.2  3602577.4
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FG  VOLUME    499821.5  3602582.3
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FH  VOLUME    499812.7  3602587.1
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FI  VOLUME    499804  3602592
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FJ  VOLUME    499795.2  3602596.8
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FK  VOLUME    499786.5  3602601.6
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FL  VOLUME    499777.8  3602606.5
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FM  VOLUME    499769  3602611.3
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FN  VOLUME    499760.3  3602616.2
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FO  VOLUME    499751.5  3602621
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FP  VOLUME    499742.8  3602625.9
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FQ  VOLUME    499734  3602630.7
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FR  VOLUME    499725.3  3602635.6
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FS  VOLUME    499716.5  3602640.4
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FT  VOLUME    499707.8  3602645.3
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FU  VOLUME    499699  3602650.1
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FV  VOLUME    499690.3  3602655
** SRCDESCR  Airway Caliente to Heritage
SO LOCATION  EHIRX0FW  VOLUME    499681.5  3602659.8
** SRCDESCR  Airway Caliente to Heritage
SO FINISHED

RE STARTING
RE ELEVUNIT  METERS
RE GRIDCART L4EGZ004 STA
RE GRIDCART L4EGZ004 XYINC  499640.6  6  525  3603630.4  6  -450
RE GRIDCART L4EGZ004 FLAG  1  1.5  1.5  1.5  1.5  1.5  1.5
RE GRIDCART L4EGZ004 FLAG  2  1.5  1.5  1.5  1.5  1.5  1.5
RE GRIDCART L4EGZ004 FLAG  3  1.5  1.5  1.5  1.5  1.5  1.5
RE GRIDCART L4EGZ004 FLAG  4  1.5  1.5  1.5  1.5  1.5  1.5
RE GRIDCART L4EGZ004 FLAG  5  1.5  1.5  1.5  1.5  1.5  1.5
RE GRIDCART L4EGZ004 FLAG  6  1.5  1.5  1.5  1.5  1.5  1.5
RE GRIDCART L4EGZ004 END
RE DISCCART  501136  3602621.4  155.12  1.5
** SENSITIV
** RCPDESCR  PA 24 REC3
RE DISCCART  501472.8  3602628.6  156  1.5
** SENSITIV
** RCPDESCR  PA 27 REC4
RE DISCCART  500931.8  3602786.8  152.36  1.5
** SENSITIV
** RCPDESCR  PA16 REC5
RE DISCCART  501037  3602470.3  156.75  1.5
** SENSITIV
** RCPDESCR  PA22 REC6
RE DISCCART  501050.2  3602347.9  155.67  1.5
** SENSITIV
** RCPDESCR  PA17 REC7
RE DISCCART  500735.9  3602266.2  151.17  1.5
** SENSITIV
** RCPDESCR  PA13 SC REC8
```

```
RE DISCCART  501042.1  3602138.6  153.32  1.5
** SENSITIV
** RCPDESCR  PA21 REC9
RE DISCCART  500399  3602416.2  150.82  1.5
** SENSITIV
** RCPDESCR  PA4 REC10
RE DISCCART  500647.1  3602490.8  152.47  1.5
** SENSITIV
** RCPDESCR  PA14 REC11
RE DISCCART  501297.2  3602778.6  155.14  1.5
** SENSITIV
** RCPDESCR  PA28 REC13
RE DISCCART  501150.9  3602953.1  152.13  1.5
** SENSITIV
** RCPDESCR  PA25 REC1
RE DISCCART  501455.3  3602918  154.65  1.5
** SENSITIV
** RCPDESCR  PA26 Rec2
RE DISCCART  500121  3602426.4  151.81  1.5
** SENSITIV
** RCPDESCR  PA1 REC12
RE DISCCART  500220.8  3602415.8  147.23  1.5
** SENSITIV
** RCPDESCR  PA3 REC13
RE FINISHED

OU STARTING
OU RECEPTOR  AERMAP.APR
OU SOURCLOC  AERMAP.APS
OU FINISHED

 Exiting NEDCHK

 Finished Reading Input NED Data

 Exiting CHKADJ
 Exiting RECCNV
 Exiting SRCCNV
 Exiting DEMREC
 Exiting DEMSRC
 *** AERMAP - VERSION 11103 ***    ***  NO TITLE SPECIFIED                                                    ***
   06/20/16
                                    ***                                                                      ***
  08:52:55


  *** Message Summary For AERMAP Setup ***

 --------- Summary of Total Messages --------

 A Total of          0 Fatal Error Message(s)
 A Total of         16 Warning Message(s)
 A Total of          0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 RE W229     985 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
 RE W229     988 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
 RE W229     991 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
 RE W229     994 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
 RE W229     997 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
 RE W229    1000 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
 RE W229    1003 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
```

```
 RE W229    1006 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
 RE W229    1009 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
 RE W229    1012 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
 RE W229    1015 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
 RE W229    1018 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
 RE W229    1021 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
 RE W229    1024 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
 OU W450    1032 NEDCHK:Parameter not found in TIFF file.  TiffTag:                 274
 OU W473    1032 NEDCHK:Default elevation units of METERS used; NED file:             1

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

 *** AERMAP - VERSION 11103 ***    ***  NO TITLE SPECIFIED                                                   ***
   06/20/16
                                  ***                                                                      ***
  08:52:55


                                           ***     AERMAP SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - -


 **This Run Includes:       1  NED File(s)

 **This Run Includes:      50  Receptor(s); and      477  Source(s)

 **The Input Receptors and Sources Were Assigned a NADA Value of  3:  World Geodetic System of 1984

 **The Input Receptors and Sources Are Offset:        0.00 meters East;         0.00 meters North
      from the User-specified Anchor Point at:        0.00 meters East;         0.00 meters North;  Zone  11

 **Terrain heights were EXTRACTed from NED data

 **The Following Debug Output Files Have Been Automatically Generated:

   DOMDETAIL.OUT - Details of User-specified Domain and Relation to NED Files
   MAPDETAIL.OUT - Details Regarding Input NED Files
   MAPPARAMS.OUT - Summary of NED File Parameters and NED File Adjacency
 *** AERMAP - VERSION 11103 ***    ***  NO TITLE SPECIFIED                                                   ***
   06/20/16
                                  ***                                                                      ***
  08:52:55

 *** Message Summary For AERMAP Execution ***

 --------- Summary of Total Messages --------

 A Total of          0 Fatal Error Message(s)
 A Total of         16 Warning Message(s)
 A Total of          0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 RE W229     985 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
 RE W229     988 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
 RE W229     991 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
 RE W229     994 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
 RE W229     997 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
 RE W229    1000 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
 RE W229    1003 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
```

```
                                                    output.txt
RE W229    1006 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
RE W229    1009 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
RE W229    1012 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
RE W229    1015 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
RE W229    1018 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
RE W229    1021 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
RE W229    1024 DISCAR:Too Many Parameters - Inputs Ignored on Keyword        DISCCART
OU W450    1032 NEDCHK:Parameter not found in TIFF file.  TiffTag:                274
OU W473    1032 NEDCHK:Default elevation units of METERS used; NED file:            1

   ************************************
   *** AERMAP Finishes Successfully ***
   ************************************
```

ATTACHMENT D

AERMOD EMISSION INPUTS

Attachment D

FREEWAY

EMFAC BURDEN Used of SR 905 (2020)

Caliente to Heritage

EMFAC BURDEN RESULTS DIESEL (City Wide)	VMT/1000 (City Wide)	PM10 Tons/Day (City Wide)	PM10 Grams/Day (City Wide)	VMT (City Wide)	PM10 (Grams/Vehicle Mile Traveld)	VMT (Normilization Per Vehicle Type)	ADT per Vehicle Type within Modeled Section	Miles Traveled Within Modeled Section	VMT within modeled Section per Day	Grams per Day within Modeled Section	Grams per Second within Modeled Section
PC	204	0	0	204000	0	0.0023	381.7	0.530	202.3	0.00000	**0.00000**
LDT DSL ONLY	16	0	0	16000	0	0.0002	29.9	0.530	15.9	0.00000	**0.00000**
MDT DSL ONLY	1426	0.06	54431.1	1426000	0.038	0.0163	2668.1	0.530	1,414.1	53.97681	**0.00062**
HDT DSL ONLY	43	0.01	9071.85	43000	0.211	0.0005	80.5	0.530	42.6	8.99613	**0.00010**
Total Veicles (All Types All Vehicles City Wide)	87705	0.35	317514.75	87705000	0.003620258	1.0000	164100.0	0.530	86,973.0	314.864721	0.003644268

Diesel Grams / Second for AERMOD modeled section **0.00073** **g/s**

EMFAC BURDEN Used of SR 905 (2020)

Heritage to Britania

EMFAC BURDEN RESULTS DIESEL (City Wide)	VMT/1000 (City Wide)	PM10 Tons/Day (City Wide)	PM10 Grams/Day (City Wide)	VMT (City Wide)	PM10 (Grams/Vehicle Mile Traveld)	VMT (Normilization Per Vehicle Type)	ADT per Vehicle Type within Modeled Section	Miles Traveled Within Modeled Section	VMT within modeled Section per Day	Grams per Day within Modeled Section	Grams per Second within Modeled Section
PC	204	0	0	204000	0	0.0023	364.0	1.010	367.7	0.00000	**0.00000**
LDT DSL ONLY	16	0	0	16000	0	0.0002	28.6	1.010	28.8	0.00000	**0.00000**
MDT DSL ONLY	1426	0.06	54431.1	1426000	0.038	0.0163	2544.5	1.010	2,570.0	98.09762	**0.00114**
HDT DSL ONLY	43	0.01	9071.85	43000	0.211	0.0005	76.7	1.010	77.5	16.34960	**0.00019**
Total Veicles (All Types All Vehicles City Wide)	87705	0.35	317514.75	87705000	0.003620258	1.0000	156500.0	1.010	158,065.0	572.2361206	0.006623103

Diesel Grams / Second for AERMOD modeled section **0.00132** **g/s**

EMFAC BURDEN Used of SR 905 (2020)

Britannia to La Media Road

EMFAC BURDEN RESULTS DIESEL (City Wide)	VMT/1000 (City Wide)	PM10 Tons/Day (City Wide)	PM10 Grams/Day (City Wide)	VMT (City Wide)	PM10 (Grams/Vehicle Mile Traveld)	VMT (Normilization Per Vehicle Type)	ADT per Vehicle Type within Modeled Section	Miles Traveled Within Modeled Section	VMT within modeled Section per Day	Grams per Day within Modeled Section	Grams per Second within Modeled Section
PC	204	0	0	204000	0	0.0023	310.5	0.350	108.7	0.00000	**0.00000**
LDT DSL ONLY	16	0	0	16000	0	0.0002	24.4	0.350	8.5	0.00000	**0.00000**
MDT DSL ONLY	1426	0.06	54431.1	1426000	0.038	0.0163	2170.6	0.350	759.7	28.99827	**0.00034**
HDT DSL ONLY	43	0.01	9071.85	43000	0.211	0.0005	65.5	0.350	22.9	4.83304	**0.00006**
Total Veicles (All Types All Vehicles City Wide)	87705	0.35	317514.75	87705000	0.003620258	1.0000	133500.0	0.350	46,725.0	169.1565668	0.001957831

Diesel Grams / Second for AERMOD modeled section **0.00039** **g/s**

Attachment D

Roadways

EMFAC Area Fleet Averages for Roadways (San Diego 2020)		g/mile	**Heritage Road**			**Camino Maquiladora to Gateway**			
EMFAC BURDEN RESULTS DIESEL (City Wide)	Grams/Mile (30MPH)	% Vehicles	Segement Vehicle ADT	% Diesel Only from BURDEN	Diesel Vehicles	Miles Traveled Within Modeled Section	Diesel Miles per Day	Grams per Day (30 MPH)	**Grams/Second (30 MPH)**
Non Diesel Vehicles	0	0.40%	11.2	0%	0	0.320	0	0	
LDA	0.002	69%	1932	0.47%	9	0.320	2.88	0.00576	**0.00000007**
LDT	0.002	19.40%	543.2	0.07%	1	0.320	0.32	0.00064	**0.00000001**
MDT	0.005	6.40%	179.2	8.67%	16	0.320	5.12	0.0256	**0.00000030**
HDT	0.010	4.80%	134.4	11.47%	16	0.320	5.12	0.0512	**0.00000059**
Total		**100%**	**2800**		**42**	**0.320**	**13.44**	**0.0832**	**0.00000096**

EMFAC Area Fleet Averages for Roadways (San Diego 2020)		g/mile	**Heritage Road**			**Gateway to southern terminus**			
EMFAC BURDEN RESULTS DIESEL (City Wide)	Grams/Mile (30MPH)	% Vehicles	Segement Vehicle ADT	% Diesel Only from BURDEN	Diesel Vehicles	Miles Traveled Within Modeled Section	Diesel Miles per Day	Grams per Day (30 MPH)	**Grams/Second (30 MPH)**
Non Diesel Vehicles	0	0.40%	0.004	0%	0	0.260	0	0	
LDA (Assumed Diesel)	0.002	69%	0.69	0.47%	1	0.260	0.26	0.00052	**0.00000001**
LDT (Assumed Diesel)	0.002	19.40%	0.194	0.07%	1	0.260	0.26	0.00052	**0.00000001**
MDT (Assumed Diesel)	0.005	6.40%	0.064	8.67%	1	0.260	0.26	0.0013	**0.00000002**
HDT (Assumed Diesel)	0.010	4.80%	0.048	11.47%	1	0.260	0.26	0.0026	**0.00000003**
Total		**100%**	**1**		**4**	**0.260**	**1.04**	**0.00494**	**0.00000006**

EMFAC Area Fleet Averages for Roadways (San Diego 2020)		g/mile	**Airway**			**Heritage and Cactus**			
EMFAC BURDEN RESULTS DIESEL (City Wide)	Grams/Mile (30MPH)	% Vehicles	Segement Vehicle ADT	% Diesel Only from BURDEN	Diesel Vehicles	Miles Traveled Within Modeled Section	Diesel Miles per Day	Grams per Day (30 MPH)	**Grams/Second (30 MPH)**
Non Diesel Vehicles	0	0.40%	0.476	0%	0	1.010	0	0	
LDA (Assumed Diesel)	0.002	69%	82.11	0.47%	1	1.010	1.01	0.00202	**0.00000002**
LDT (Assumed Diesel)	0.002	19.40%	23.086	0.07%	1	1.010	1.01	0.00202	**0.00000002**
MDT (Assumed Diesel)	0.005	6.40%	7.616	8.67%	1	1.010	1.01	0.00505	**0.00000006**
HDT (Assumed Diesel)	0.010	4.80%	5.712	11.47%	1	1.010	1.01	0.0101	**0.00000012**
Total		**100%**	**119**		**4**	**1.010**	**4.04**	**0.01919**	**0.00000022**

EMFAC Area Fleet Averages for Roadways (San Diego 2020)		g/mile	**Airway**			**Cactus to Britannia**			
EMFAC BURDEN RESULTS DIESEL (City Wide)	Grams/Mile (30MPH)	% Vehicles	Segement Vehicle ADT	% Diesel Only from BURDEN	Diesel Vehicles	Miles Traveled Within Modeled Section	Diesel Miles per Day	Grams per Day (30 MPH)	**Grams/Second (30 MPH)**
Non Diesel Vehicles	0	0.40%	1.568	0%	0	0.500	0	0	
LDA (Assumed Diesel)	0.002	69%	270.48	0.47%	2	0.500	1	0.002	**0.00000002**
LDT (Assumed Diesel)	0.002	19.40%	76.048	0.07%	1	0.500	0.5	0.001	**0.00000001**
MDT (Assumed Diesel)	0.005	6.40%	25.088	8.67%	3	0.500	1.5	0.0075	**0.00000009**
HDT (Assumed Diesel)	0.010	4.80%	18.816	11.47%	3	0.500	1.5	0.015	**0.00000017**
Total		**100%**	**392**		**9**	**0.500**	**4.5**	**0.0255**	**0.00000030**

EMFAC Area Fleet Averages for Roadways (San Diego 2020)		g/mile	**Airway**			**Caliente to Heritage**			
EMFAC BURDEN RESULTS DIESEL (City Wide)	Grams/Mile (30MPH)	% Vehicles	Segement Vehicle ADT	% Diesel Only from BURDEN	Diesel Vehicles	Miles Traveled Within Modeled Section	Diesel Miles per Day	Grams per Day (30 MPH)	**Grams/Second (30 MPH)**
Non Diesel Vehicles	0	0.40%	1.276	0%	0	0.520	0	0	
LDA (Assumed Diesel)	0.002	69%	220.11	0.47%	2	0.520	1.04	0.00208	**0.00000002**
LDT (Assumed Diesel)	0.002	19.40%	61.886	0.07%	1	0.520	0.52	0.00104	**0.00000001**
MDT (Assumed Diesel)	0.005	6.40%	20.416	8.67%	2	0.520	1.04	0.0052	**0.00000006**
HDT (Assumed Diesel)	0.010	4.80%	15.312	11.47%	2	0.520	1.04	0.0104	**0.00000012**
Total		**100%**	**319**		**7**	**0.520**	**3.64**	**0.01872**	**0.00000022**

ATTACHMENT E

EMFAC BURDEN MODEL 2020

Attachment E

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                                        Emfac Burden 2020 San Diego Day.bur
Title    : San Diego 2020
Version  : Emfac2011-LDV V2.50.58.094 Sp: Trip Assign Santa Clara County
Run Date : 2016/06/11 22:21:32
Scen Year: 2020 -- All model years in the range 1976 to 2020 selected
Season   : Annual
Area     : San Diego County
I/M Stat : Enhanced Interim (2005)
Emissions: Tons Per Day
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            - - - -  H e a v y  D u t y  T r u c k s  - - -
          - - - Light Duty Passenger Cars - - -   - - - - - Light Duty Trucks - - - - -   - - - - - Medium Duty
Trucks - - - -   ----- Gasoline Trucks ------    Diesel  Total HD     Urban    Motor-     All
          Non-cat       Cat    Diesel     Total   Non-cat       Cat    Diesel     Total   Non-cat       Cat
Diesel     Total   Non-cat       Cat     Total    Trucks    Trucks     Buses    cycles  Vehicles

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 Vehicles      258.  1261180.     5897.  1267340.       86.   636231.      425.   636741.      355.   378701.
35971.   415027.       37.    26606.    26644.     3452.    30095.     1376.    66138.  2416710.
 VMT/1000        4.    46432.      204.    46640.        2.    24029.       16.    24046.        7.    14201.
1426.    15634.        0.      557.      558.       43.      601.      187.      596.    87705.
 Trips         983.  7970060.    36279.  8007320.      330.  3966910.     2536.  3969780.     1519.  2850760.
450171.  3302450.      313.   142817.   143130.      345.   143475.     5502.   132262. 15560800.

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                                                                                  Total Organic Gas Emissions
 Run Exh       0.01      1.85      0.01      1.87      0.00      0.99      0.00      1.00      0.07      1.18
0.32      1.57      0.00      0.11      0.11      0.01      0.13      0.14      2.12      6.81
 Idle Exh      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.04
0.00      0.04      0.00      0.01      0.01      0.00      0.01      0.00      0.00      0.05
 Start Ex      0.00      1.43      0.00      1.43      0.00      0.85      0.00      0.85      0.01      1.27
0.00      1.28      0.00      0.14      0.15      0.00      0.15      0.00      0.33      4.04
            -------   -------   -------   -------   -------   -------   -------   -------   -------   -------
-------   -------   -------   -------   -------   -------   -------   -------   -------   -------
 Total Ex      0.01      3.28      0.01      3.30      0.00      1.84      0.00      1.85      0.08      2.49
0.33      2.89      0.01      0.27      0.27      0.01      0.28      0.14      2.45     10.91

 Diurnal       0.00      0.29      0.00      0.29      0.00      0.26      0.00      0.26      0.00      0.15
0.00      0.15      0.00      0.00      0.00      0.00      0.00      0.00      0.10      0.81
 Hot Soak      0.00      0.83      0.00      0.83      0.00      0.70      0.00      0.70      0.00      0.53
0.00      0.53      0.00      0.01      0.01      0.00      0.01      0.00      0.06      2.13
 Running       0.01      1.99      0.00      2.00      0.00      2.25      0.00      2.25      0.00      1.96
0.00      1.97      0.00      0.07      0.07      0.00      0.07      0.00      0.18      6.47
 Resting       0.00      0.33      0.00      0.33      0.00      0.32      0.00      0.32      0.00      0.20
0.00      0.20      0.00      0.00      0.00      0.00      0.00      0.00      0.08      0.93
            -------   -------   -------   -------   -------   -------   -------   -------   -------   -------
-------   -------   -------   -------   -------   -------   -------   -------   -------   -------
 Total         0.03      6.72      0.01      6.76      0.01      5.36      0.00      5.37      0.08      5.33
0.33      5.74      0.01      0.35      0.36      0.01      0.37      0.14      2.87     21.24

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                                                                                  Carbon Monoxide Emissions
 Run Exh       0.15     42.14      0.03     42.31      0.09     29.21      0.00     29.30      1.36     24.97
1.65     27.98      0.08      2.32      2.40      0.03      2.43      0.63     18.53    121.19
 Idle Exh      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.21
0.04      0.24      0.00      0.09      0.09      0.00      0.09      0.00      0.00      0.33
 Start Ex      0.01     17.50      0.00     17.51      0.01     11.50      0.00     11.51      0.11     14.16
0.00     14.26      0.02      2.43      2.46      0.00      2.46      0.03      1.50     47.28
            -------   -------   -------   -------   -------   -------   -------   -------   -------   -------
-------   -------   -------   -------   -------   -------   -------   -------   -------   -------
 Total Ex      0.16     59.64      0.03     59.83      0.10     40.71      0.00     40.82      1.47     39.34
1.69     42.49      0.11      4.84      4.95      0.03      4.98      0.66     20.03    168.80
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Emfac Burden 2020 San Diego Day.bur

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                                                                                    Oxides of Nitrogen Emissions
 Run Exh       0.01      4.93      0.09      5.03      0.00      3.44      0.01      3.45      0.07      3.76
4.53      8.36      0.00      0.54      0.54      0.32      0.86      2.28      0.81     20.80
 Idle Exh      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
0.10      0.10      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.10
 Start Ex      0.00      0.96      0.00      0.96      0.00      0.86      0.00      0.86      0.00      2.43
0.00      2.44      0.00      0.27      0.27      0.00      0.27      0.01      0.05      4.58
            -------   -------   -------   -------   -------   -------   -------   -------   -------   -------
-------   -------   -------   -------   -------   -------   -------   -------   -------   -------
 Total Ex      0.01      5.89      0.09      6.00      0.01      4.29      0.01      4.31      0.08      6.20
4.63     10.91      0.00      0.81      0.82      0.32      1.13      2.29      0.86     25.49

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                                                                                   Carbon Dioxide Emissions (000)
 Run Exh       0.00     18.19      0.09     18.27      0.00     12.28      0.01     12.29      0.01     10.57
0.82     11.39      0.00      0.42      0.42      0.06      0.48      0.45      0.11     43.00
 Idle Exh      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01
0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.02
 Start Ex      0.00      0.65      0.00      0.65      0.00      0.42      0.00      0.42      0.00      0.33
0.00      0.33      0.00      0.01      0.01      0.00      0.01      0.00      0.01      1.42
            -------   -------   -------   -------   -------   -------   -------   -------   -------   -------
-------   -------   -------   -------   -------   -------   -------   -------   -------   -------
 Total Ex      0.00     18.83      0.09     18.92      0.00     12.70      0.01     12.71      0.01     10.91
0.82     11.74      0.00      0.43      0.43      0.06      0.49      0.45      0.12     44.43

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                                                                                          PM10 Emissions
 Run Exh       0.00      0.09      0.00      0.09      0.00      0.05      0.00      0.06      0.00      0.03
0.06      0.10      0.00      0.00      0.00      0.01      0.01      0.04      0.00      0.29
 Idle Exh      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
 Start Ex      0.00      0.03      0.00      0.03      0.00      0.02      0.00      0.02      0.00      0.01
0.00      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.06
            -------   -------   -------   -------   -------   -------   -------   -------   -------   -------
-------   -------   -------   -------   -------   -------   -------   -------   -------   -------
 Total Ex      0.00      0.12      0.00      0.12      0.00      0.07      0.00      0.07      0.00      0.04
0.06      0.11      0.00      0.00      0.00      0.01      0.01      0.04      0.00      0.35

 TireWear      0.00      0.41      0.00      0.41      0.00      0.21      0.00      0.21      0.00      0.13
0.02      0.14      0.00      0.00      0.00      0.00      0.01      0.00      0.01      0.78
 BrakeWr       0.00      1.88      0.01      1.89      0.00      0.97      0.00      0.97      0.00      0.58
0.12      0.70      0.00      0.02      0.02      0.01      0.03      0.15      0.02      3.76
            -------   -------   -------   -------   -------   -------   -------   -------   -------   -------
-------   -------   -------   -------   -------   -------   -------   -------   -------   -------
 Total         0.00      2.41      0.01      2.42      0.00      1.26      0.00      1.26      0.00      0.74
0.21      0.95      0.00      0.03      0.03      0.01      0.04      0.19      0.03      4.89

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 Lead          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
 SOx           0.00      0.19      0.00      0.19      0.00      0.13      0.00      0.13      0.00      0.11
0.01      0.12      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.45

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                                                                                   Fuel Consumption (000 gallons)
 Gasoline      0.31   2016.32      0.00   2016.63      0.12   1359.53      0.00   1359.66      0.98   1168.81
0.00   1169.79      0.07     46.55     46.62      0.00     46.62      2.85     16.97   4612.51
 Diesel        0.00      0.00      7.68      7.68      0.00      0.00      0.59      0.59      0.00      0.00
74.07     74.07      0.00      0.00      0.00      5.13      5.13     38.58      0.00    126.06

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Emfac Burden 2020 EMFAC.rts

Title : San Diego 2020
Version : Emfac2011-LDV V2.50.58.094 Sp: Trip Assign Santa Clara County
Run Date : 2016/06/12 10:00:56
Scen Year: 2020 -- All model years in the range 1976 to 2020 selected
Season : Annual
Area : San Diego

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Year: 2020 -- Model Years 1976 to 2020 Inclusive -- Annual
Emfac2011-LDV Emission Factors: V2.50.58.094 Sp: Trip Assign Santa Clara County

County Average San Diego County Average

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Total Organic Gases Temperature: 55F Relative Humidity: 55%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
15	0.078	0.080	0.160	0.400	1.051	3.243	0.119
30	0.035	0.037	0.075	0.163	0.526	2.244	0.059
55	0.026	0.027	0.052	0.087	0.346	3.230	0.054

Pollutant Name: Carbon Monoxide Temperature: 55F Relative Humidity: 55%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
15	1.230	1.664	2.334	6.473	4.947	19.516	1.714
30	0.943	1.263	1.650	3.134	2.202	16.651	1.281
55	0.672	0.904	1.238	2.796	1.841	30.730	1.058

Pollutant Name: Oxides of Nitrogen Temperature: 55F Relative Humidity: 55%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
15	0.137	0.182	0.575	1.342	13.273	1.212	0.271
30	0.107	0.140	0.466	1.281	9.455	1.197	0.215
55	0.099	0.132	0.548	1.400	14.136	1.374	0.235

Pollutant Name: Carbon Dioxide Temperature: 55F Relative Humidity: 55%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
15	547.573	715.625	946.872	1206.562	2274.999	189.093	670.594
30	330.542	431.625	568.750	612.545	2171.804	142.794	405.307
55	299.950	391.074	518.711	544.841	2161.541	166.023	368.674

Pollutant Name: Sulfur Dioxide Temperature: 55F Relative Humidity: 55%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
15	0.006	0.007	0.010	0.012	0.022	0.002	0.007
30	0.003	0.004	0.006	0.006	0.021	0.002	0.004
55	0.003	0.004	0.005	0.006	0.021	0.002	0.004

Emfac Burden 2020 EMFAC.rts

Pollutant Name: PM10 Temperature: 55F Relative Humidity: 55%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
15	0.004	0.005	0.009	0.018	0.299	0.000	0.006
30	0.002	0.002	0.005	0.010	0.157	0.000	0.003
55	0.001	0.002	0.003	0.012	0.107	0.000	0.002

Pollutant Name: PM10 - Tire Wear Temperature: 55F Relative Humidity: 55%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
15	0.008	0.008	0.008	0.008	0.008	0.008	0.008
30	0.008	0.008	0.008	0.008	0.008	0.008	0.008
55	0.008	0.008	0.008	0.008	0.008	0.008	0.008

Pollutant Name: PM10 - Brake Wear Temperature: 55F Relative Humidity: 55%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
15	0.037	0.037	0.041	0.043	0.705	0.037	0.039
30	0.037	0.037	0.041	0.043	0.705	0.037	0.039
55	0.037	0.037	0.041	0.043	0.705	0.037	0.039

Pollutant Name: Gasoline - mi/gal Temperature: 55F Relative Humidity: 55%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
15	15.280	11.765	8.515	7.087	7.049	36.708	13.269
30	25.315	19.491	14.591	14.671	14.597	47.925	21.994
55	27.974	21.539	16.159	16.424	16.353	37.569	24.205

Pollutant Name: Diesel - mi/gal Temperature: 55F Relative Humidity: 55%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
15	28.453	28.318	19.422	6.254	4.032	0.000	18.892
30	35.289	34.834	19.486	8.437	4.032	0.000	19.802
55	26.669	26.599	19.406	9.766	4.032	0.000	18.749

Title : San Diego 2020
Version : Emfac2011-LDV V2.50.58.094 Sp: Trip Assign Santa Clara County
Run Date : 2016/06/12 10:00:56
Scen Year: 2020 -- All model years in the range 1976 to 2020 selected
Season : Annual
Area : San Diego

Emfac Burden 2020 EMFAC.rts

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Year: 2020 -- Model Years 1976 to 2020 Inclusive -- Annual
Emfac2011-LDV Emission Factors: V2.50.58.094 Sp: Trip Assign Santa Clara County

County Average San Diego County Average

Table 2: Starting Emissions (grams/trip)

Pollutant Name: Total Organic Gases Temperature: 55F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.025	0.028	0.077	0.406	0.099	1.234	0.050
10	0.048	0.054	0.148	0.764	0.194	1.438	0.090
20	0.093	0.104	0.282	1.423	0.368	1.839	0.163
30	0.133	0.150	0.405	2.007	0.521	2.230	0.231
40	0.170	0.193	0.518	2.516	0.654	2.611	0.292
50	0.202	0.231	0.619	2.948	0.767	2.983	0.347
60	0.231	0.265	0.710	3.302	0.860	3.242	0.395
120	0.315	0.367	0.912	2.750	0.731	3.015	0.501
180	0.215	0.259	0.743	2.918	0.776	2.659	0.384
240	0.228	0.275	0.788	3.081	0.819	2.833	0.407
300	0.241	0.291	0.832	3.240	0.861	3.005	0.430
360	0.253	0.306	0.876	3.392	0.901	3.173	0.453
420	0.265	0.321	0.919	3.540	0.940	3.339	0.475
480	0.277	0.336	0.961	3.682	0.978	3.501	0.496
540	0.289	0.351	1.003	3.819	1.014	3.661	0.518
600	0.300	0.365	1.044	3.951	1.049	3.818	0.538
660	0.312	0.380	1.084	4.077	1.082	3.971	0.559
720	0.323	0.394	1.124	4.198	1.114	4.122	0.579

Pollutant Name: Carbon Monoxide Temperature: 55F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.300	0.386	0.912	7.106	1.108	3.920	0.546
10	0.589	0.759	1.770	13.754	2.171	4.945	1.042
20	1.140	1.471	3.403	26.206	4.163	6.897	1.986
30	1.653	2.138	4.926	37.535	5.974	8.718	2.864
40	2.130	2.761	6.341	47.740	7.605	10.408	3.677
50	2.570	3.339	7.645	56.822	9.056	11.966	4.426
60	2.974	3.872	8.840	64.780	10.327	13.392	5.109
120	4.313	5.488	10.866	44.717	7.148	17.105	6.486
180	2.701	3.597	7.666	46.094	7.357	11.924	4.464
240	2.881	3.855	8.185	47.506	7.573	13.234	4.756
300	3.044	4.086	8.655	48.953	7.795	14.427	5.023
360	3.190	4.292	9.074	50.436	8.025	15.503	5.262
420	3.319	4.470	9.444	51.953	8.262	16.463	5.474
480	3.430	4.623	9.763	53.506	8.505	17.305	5.660
540	3.524	4.748	10.033	55.094	8.755	18.031	5.819
600	3.601	4.848	10.253	56.717	9.012	18.640	5.950
660	3.661	4.920	10.423	58.375	9.276	19.132	6.055
720	3.704	4.967	10.544	60.069	9.547	19.507	6.134

Pollutant Name: Oxides of Nitrogen Temperature: 55F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.082	0.154	0.569	1.043	0.319	0.183	0.213
10	0.090	0.167	0.632	1.571	0.481	0.223	0.240

20	0.105	0.190	0.746	2.498	0.765	0.295	0.287
30	0.117	0.209	0.841	3.253	0.996	0.355	0.325
40	0.127	0.225	0.917	3.837	1.175	0.402	0.357
50	0.134	0.237	0.974	4.249	1.302	0.437	0.380
60	0.140	0.246	1.013	4.489	1.375	0.460	0.395
120	0.149	0.265	1.082	4.574	1.401	0.468	0.421
180	0.158	0.280	1.103	4.557	1.396	0.465	0.433
240	0.156	0.277	1.095	4.531	1.388	0.457	0.430
300	0.155	0.274	1.082	4.497	1.378	0.447	0.425
360	0.152	0.270	1.066	4.453	1.364	0.434	0.419
420	0.149	0.264	1.045	4.401	1.348	0.420	0.410
480	0.145	0.257	1.019	4.339	1.330	0.403	0.401
540	0.141	0.249	0.989	4.269	1.308	0.384	0.389
600	0.136	0.239	0.955	4.190	1.284	0.363	0.376
660	0.130	0.229	0.916	4.102	1.257	0.340	0.361
720	0.124	0.217	0.873	4.005	1.227	0.314	0.344

Pollutant Name: Carbon Dioxide Temperature: 55F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	12.475	16.062	18.469	9.875	1.621	15.524	14.660
10	14.068	18.215	21.517	19.356	3.234	17.803	16.783
20	17.761	23.165	28.313	38.158	6.431	22.270	21.601
30	22.128	28.976	36.043	56.748	9.593	26.617	27.181
40	27.171	35.647	44.709	75.125	12.719	30.843	33.523
50	32.887	43.179	54.309	93.289	15.809	34.949	40.628
60	39.279	51.572	64.844	111.241	18.863	38.934	48.494
120	90.963	118.618	144.362	188.963	32.083	56.942	109.944
180	103.313	134.831	164.663	223.077	37.904	60.748	125.093
240	115.629	150.975	184.746	255.178	43.381	64.331	140.140
300	127.910	167.050	204.612	285.265	48.515	67.691	155.084
360	140.156	183.056	224.259	313.340	53.305	70.828	169.926
420	152.367	198.992	243.688	339.400	57.751	73.742	184.665
480	164.543	214.860	262.899	363.447	61.854	76.433	199.302
540	176.684	230.658	281.892	385.481	65.613	78.901	213.837
600	188.791	246.388	300.666	405.501	69.029	81.146	228.269
660	200.862	262.048	319.223	423.508	72.102	83.169	242.598
720	212.899	277.639	337.562	439.501	74.830	84.968	256.825

Pollutant Name: Sulfur Dioxide Temperature: 55F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.001	0.000	0.000	0.000
30	0.000	0.000	0.000	0.001	0.000	0.000	0.000
40	0.000	0.000	0.001	0.002	0.000	0.001	0.000
50	0.000	0.000	0.001	0.002	0.000	0.001	0.000
60	0.000	0.001	0.001	0.002	0.000	0.001	0.001
120	0.001	0.001	0.002	0.003	0.000	0.001	0.001
180	0.001	0.001	0.002	0.003	0.001	0.001	0.001
240	0.001	0.002	0.002	0.003	0.001	0.001	0.002
300	0.001	0.002	0.002	0.004	0.001	0.001	0.002
360	0.001	0.002	0.002	0.004	0.001	0.001	0.002
420	0.002	0.002	0.003	0.004	0.001	0.001	0.002
480	0.002	0.002	0.003	0.005	0.001	0.001	0.002
540	0.002	0.002	0.003	0.005	0.001	0.001	0.002
600	0.002	0.003	0.003	0.005	0.001	0.001	0.002
660	0.002	0.003	0.003	0.005	0.001	0.001	0.003

720	0.002	0.003	0.004	0.006	0.001	0.001	0.003

Pollutant Name: PM10 Temperature: 55F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.001	0.000	0.000	0.000
20	0.001	0.001	0.001	0.001	0.000	0.000	0.001
30	0.001	0.001	0.001	0.002	0.000	0.000	0.001
40	0.001	0.001	0.001	0.002	0.000	0.000	0.001
50	0.001	0.002	0.002	0.003	0.000	0.000	0.001
60	0.001	0.002	0.002	0.003	0.000	0.000	0.002
120	0.002	0.003	0.003	0.004	0.000	0.001	0.003
180	0.002	0.003	0.003	0.004	0.000	0.001	0.003
240	0.003	0.003	0.003	0.004	0.000	0.001	0.003
300	0.003	0.004	0.004	0.005	0.000	0.001	0.003
360	0.003	0.004	0.004	0.005	0.000	0.001	0.003
420	0.003	0.004	0.004	0.005	0.000	0.001	0.004
480	0.003	0.004	0.004	0.005	0.000	0.001	0.004
540	0.003	0.004	0.004	0.005	0.000	0.001	0.004
600	0.003	0.004	0.004	0.005	0.000	0.001	0.004
660	0.003	0.004	0.004	0.006	0.000	0.001	0.004
720	0.003	0.004	0.004	0.006	0.000	0.001	0.004

Title : San Diego 2020
Version : Emfac2011-LDV V2.50.58.094 Sp: Trip Assign Santa Clara County
Run Date : 2016/06/12 10:00:56
Scen Year: 2020 -- All model years in the range 1976 to 2020 selected
Season : Annual
Area : San Diego
****

Year: 2020 -- Model Years 1976 to 2020 Inclusive -- Annual
Emfac2011-LDV Emission Factors: V2.50.58.094 Sp: Trip Assign Santa Clara County

County Average San Diego County Average

Table 4: Hot Soak Emissions (grams/trip)

Pollutant Name: Total Organic Gases Temperature: 55F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.022	0.038	0.037	0.019	0.012	0.076	0.030
10	0.041	0.070	0.069	0.035	0.023	0.140	0.055
20	0.057	0.097	0.095	0.049	0.031	0.195	0.076
30	0.070	0.119	0.117	0.060	0.039	0.240	0.094
40	0.081	0.138	0.135	0.070	0.045	0.278	0.109

Hot soak results are scaled to reflect zero emissions for trip lengths of less than 5 minutes (about 25% of in-use trips).

Emfac Burden 2020 EMFAC.rts

Title : San Diego 2020
Version : Emfac2011-LDV V2.50.58.094 Sp: Trip Assign Santa Clara County
Run Date : 2016/06/12 10:00:56
Scen Year: 2020 -- All model years in the range 1976 to 2020 selected
Season : Annual
Area : San Diego
****
Year: 2020 -- Model Years 1976 to 2020 Inclusive -- Annual
Emfac2011-LDV Emission Factors: V2.50.58.094 Sp: Trip Assign Santa Clara County

County Average San Diego County Average

Table 5a: Partial Day Diurnal Loss Emissions (grams/hour)

Pollutant Name: Total Organic Gases Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
55	0.010	0.019	0.019	0.002	0.000	0.021	0.014

Title : San Diego 2020
Version : Emfac2011-LDV V2.50.58.094 Sp: Trip Assign Santa Clara County
Run Date : 2016/06/12 10:00:56
Scen Year: 2020 -- All model years in the range 1976 to 2020 selected
Season : Annual
Area : San Diego
****
Year: 2020 -- Model Years 1976 to 2020 Inclusive -- Annual
Emfac2011-LDV Emission Factors: V2.50.58.094 Sp: Trip Assign Santa Clara County

County Average San Diego County Average

Table 5b: Multi-Day Diurnal Loss Emissions (grams/hour)

Pollutant Name: Total Organic Gases Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
55	0.001	0.001	0.001	0.000	0.000	0.002	0.001

Title : San Diego 2020
Version : Emfac2011-LDV V2.50.58.094 Sp: Trip Assign Santa Clara County
Run Date : 2016/06/12 10:00:56
Scen Year: 2020 -- All model years in the range 1976 to 2020 selected
Season : Annual
Area : San Diego
****
Year: 2020 -- Model Years 1976 to 2020 Inclusive -- Annual
Emfac2011-LDV Emission Factors: V2.50.58.094 Sp: Trip Assign Santa Clara County

County Average San Diego County Average

Emfac Burden 2020 EMFAC.rts

Table 6a: Partial Day Resting Loss Emissions (grams/hour)

Pollutant Name: Total Organic Gases Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
55	0.008	0.015	0.015	0.001	0.000	0.017	0.011

Title : San Diego 2020
Version : Emfac2011-LDV V2.50.58.094 Sp: Trip Assign Santa Clara County
Run Date : 2016/06/12 10:00:56
Scen Year: 2020 -- All model years in the range 1976 to 2020 selected
Season : Annual
Area : San Diego
****
Year: 2020 -- Model Years 1976 to 2020 Inclusive -- Annual
Emfac2011-LDV Emission Factors: V2.50.58.094 Sp: Trip Assign Santa Clara County

County Average San Diego County Average

Table 6b: Multi-Day Resting Loss Emissions (grams/hour)

Pollutant Name: Total Organic Gases Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
55	0.001	0.001	0.001	0.000	0.000	0.002	0.001

Title : San Diego 2020
Version : Emfac2011-LDV V2.50.58.094 Sp: Trip Assign Santa Clara County
Run Date : 2016/06/12 10:00:56
Scen Year: 2020 -- All model years in the range 1976 to 2020 selected
Season : Annual
Area : San Diego
****
Year: 2020 -- Model Years 1976 to 2020 Inclusive -- Annual
Emfac2011-LDV Emission Factors: V2.50.58.094 Sp: Trip Assign Santa Clara County

County Average San Diego County Average

Table 7: Estimated Travel Fractions

Pollutant Name: Temperature: ALL Relative Humidity: ALL

	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
%VMT	0.532	0.274	0.178	0.007	0.002	0.007	1.000
%TRIP	0.515	0.255	0.212	0.009	0.000	0.008	1.000
%VEH	0.524	0.263	0.172	0.012	0.001	0.027	1.000

Emfac Burden 2020 EMFAC.rts

Title : San Diego 2020
Version : Emfac2011-LDV V2.50.58.094 Sp: Trip Assign Santa Clara County
Run Date : 2016/06/12 10:00:56
Scen Year: 2020 -- All model years in the range 1976 to 2020 selected
Season : Annual
Area : San Diego
****

Year: 2020 -- Model Years 1976 to 2020 Inclusive -- Annual
Emfac2011-LDV Emission Factors: V2.50.58.094 Sp: Trip Assign Santa Clara County

County Average San Diego County Average

Table 8: Evaporative Running Loss Emissions (grams/minute)

Pollutant Name: Total Organic Gases Temperature: 55F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
1	0.007	0.234	0.275	0.965	0.172	0.010	0.124
2	0.007	0.120	0.141	0.496	0.088	0.043	0.066
3	0.009	0.084	0.099	0.342	0.060	0.060	0.048
4	0.011	0.067	0.080	0.267	0.047	0.070	0.041
5	0.012	0.057	0.069	0.222	0.039	0.076	0.037
10	0.016	0.039	0.047	0.135	0.023	0.089	0.029
15	0.017	0.034	0.040	0.108	0.019	0.093	0.027
20	0.017	0.032	0.038	0.096	0.017	0.095	0.026
25	0.018	0.032	0.037	0.090	0.017	0.096	0.026
30	0.018	0.032	0.037	0.089	0.016	0.095	0.026
35	0.018	0.032	0.037	0.089	0.016	0.095	0.026
40	0.017	0.032	0.037	0.089	0.016	0.094	0.026
45	0.017	0.031	0.037	0.088	0.016	0.094	0.026
50	0.017	0.031	0.037	0.088	0.016	0.093	0.026
55	0.017	0.031	0.036	0.088	0.016	0.092	0.025
60	0.017	0.031	0.036	0.087	0.016	0.091	0.025

ATTACHMENT F

DETAILED CANCER RISK CALCULATIONS AT EACH RECEPTOR

Attachment F

Air Quality Health Risk Calculations (Summary)

Risk Assessment Guidelines - Based on Receptor Location relative to Freeways and Roads

AERMOD Modeling Results Cancer Risk per one million exposed

Receptor	Emission Concentration (ug/m^3)	9 Years	30 Years	70 Years
R1	0.009560907	4.7	7.5	11.7
R2	0.00952616	4.6	7.5	11.7
R3	0.016906339	8.2	13.3	20.8
R4	0.00662113	3.2	5.2	8.1
R5	0.004695002	2.3	3.7	5.8
R6	0.003822957	1.9	3.0	4.7
R7	0.002980091	1.5	2.3	3.7
R8	0.005317525	2.6	4.2	6.5
R9	0.006548992	3.2	5.1	8.0
R10	0.01747005	8.5	13.7	21.5
R11	0.047848336	23.3	37.6	58.8
R12	0.04643322	22.6	36.5	57.0
R13	0.005279119	2.6	4.1	6.5
R14	0.00517814	2.5	4.1	6.4

Attachment F

Receptor Location R1	**Emission Concentration (ug/m^3) 0.009560907**					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.009560907	0.009560907	0.009560907	0.009560907	0.009560907	0.009560907
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	335
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	3.313E-06	1.000E-05	7.903E-06	6.838E-06	3.075E-06	3.075E-06
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	3	3
ED	0.25	2	7	14	14	54
AT	70	70	70	70	70	70
FAH (USE 1 if School for 3rd and 2-9) Page 8-5	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	1.106E-07	2.673E-06	1.878E-06	3.249E-06	1.481E-06	5.714E-06
Risk Contribution Per Million	0.111	2.673	1.878	3.249	1.481	5.714
Cancer Risk Per Million (9 Years)	4.7					
Cancer Risk Per Million (30Years)	7.5					
Cancer Risk Per Million (70 Years)	11.7					

Attachment F

Receptor Location	**Emission Concentration (ug/m^3)**					
R2	**0.00952616**					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.00952616	0.00952616	0.00952616	0.00952616	0.00952616	0.00952616
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	335
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	3.301E-06	9.968E-06	7.874E-06	6.813E-06	3.064E-06	3.064E-06
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	3	3
ED	0.25	2	7	14	14	54
AT	70	70	70	70	70	70
FAH (USE 1 if School for 3rd and 2-9) Page 8-5	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	1.102E-07	2.663E-06	1.871E-06	3.238E-06	1.476E-06	5.693E-06
Risk Contribution Per Million	0.110	2.663	1.871	3.238	1.476	5.693
Cancer Risk Per Million (9 Years)	4.6					
Cancer Risk Per Million (30Years)	7.5					
Cancer Risk Per Million (70 Years)	11.7					

Attachment F

Receptor Location	**Emission Concentration (ug/m^3)**					
R3	**0.016906339**					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.016906339	0.016906339	0.016906339	0.016906339	0.016906339	0.016906339
Breathing Rate per agegroup						
BR/BW (Page 5-25)	361	1090	861	745	335	335
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	5.859E-06	1.769E-05	1.397E-05	1.209E-05	5.437E-06	5.437E-06
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	3	3
ED	0.25	2	7	14	14	54
AT	70	70	70	70	70	70
FAH (USE 1 if School for 3rd and 2-9) Page 8-5	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	1.957E-07	4.726E-06	3.320E-06	5.746E-06	2.620E-06	1.010E-05
Risk Contribution Per Million	0.196	4.726	3.320	5.746	2.620	10.104
Cancer Risk Per Million (9 Years)	8.2					
Cancer Risk Per Million (30Years)	13.3					
Cancer Risk Per Million (70 Years)	20.8					

Attachment F

Receptor Location	Emission Concentration (ug/m^3)					
R4	**0.00662113**					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.00662113	0.00662113	0.00662113	0.00662113	0.00662113	0.00662113
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	335
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	2.295E-06	6.928E-06	5.473E-06	4.735E-06	2.129E-06	2.129E-06
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	3	3
ED	0.25	2	7	14	14	54
AT	70	70	70	70	70	70
FAH (USE 1 if School for 3rd and 2-9) Page 8-5	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	7.662E-08	1.851E-06	1.300E-06	2.250E-06	1.026E-06	3.957E-06
Risk Contribution Per Million	0.077	1.851	1.300	2.250	1.026	3.957
Cancer Risk Per Million (9 Years)	3.2					
Cancer Risk Per Million (30Years)	5.2					
Cancer Risk Per Million (70 Years)	8.1					

Attachment F

Receptor Location	Emission Concentration (ug/m^3)					
R5	**0.004695002**					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.004695002	0.004695002	0.004695002	0.004695002	0.004695002	0.004695002
Breathing Rate per agegroup						
BR/BW (Page 5-25)	361	1090	861	745	335	335
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	1.627E-06	4.913E-06	3.881E-06	3.358E-06	1.510E-06	1.510E-06
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	3	3
ED	0.25	2	7	14	14	54
AT	70	70	70	70	70	70
FAH (USE 1 if School for 3rd and 2-9) Page 8-5	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	5.433E-08	1.312E-06	9.221E-07	1.596E-06	7.275E-07	2.806E-06
Risk Contribution Per Million	0.054	1.312	0.922	1.596	0.727	2.806
Cancer Risk Per Million (9 Years)	2.3					
Cancer Risk Per Million (30Years)	3.7					
Cancer Risk Per Million (70 Years)	5.8					

Attachment F

Receptor Location	**Emission Concentration (ug/m^3)**					
R6	**0.003822957**					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.003822957	0.003822957	0.003822957	0.003822957	0.003822957	0.003822957
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	335
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	1.325E-06	4.000E-06	3.160E-06	2.734E-06	1.229E-06	1.229E-06
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	3	3
ED	0.25	2	7	14	14	54
AT	70	70	70	70	70	70
FAH (USE 1 if School for 3rd and 2-9) Page 8-5	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	4.42417E-08	1.06866E-06	7.50793E-07	1.29928E-06	5.92355E-07	2.2848E-06
Risk Contribution Per Million	0.044	1.069	0.751	1.299	0.592	2.285
Cancer Risk Per Million (9 Years)	1.9					
Cancer Risk Per Million (30Years)	3.0					
Cancer Risk Per Million (70 Years)	4.7					

Attachment F

Receptor Location	**Emission Concentration (ug/m^3)**					
R7	**0.002980091**					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.002980091	0.002980091	0.002980091	0.002980091	0.002980091	0.002980091
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	335
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	1.033E-06	3.118E-06	2.463E-06	2.131E-06	9.584E-07	9.584E-07
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	3	3
ED	0.25	2	7	14	14	54
AT	70	70	70	70	70	70
FAH (USE 1 if School for 3rd and 2-9) Page 8-5	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	3.44875E-08	8.3305E-07	5.85262E-07	1.01282E-06	4.61756E-07	1.78106E-06
Risk Contribution Per Million	0.034	0.833	0.585	1.013	0.462	1.781
Cancer Risk Per Million (9 Years)	1.5					
Cancer Risk Per Million (30Years)	2.3					
Cancer Risk Per Million (70 Years)	3.7					

Attachment F

Receptor Location	Emission Concentration (ug/m^3)					
R8	**0.005317525**					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.005317525	0.005317525	0.005317525	0.005317525	0.005317525	0.005317525
Breathing Rate per agegroup						
BR/BW (Page 5-25)	361	1090	861	745	335	335
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	1.843E-06	5.564E-06	4.395E-06	3.803E-06	1.710E-06	1.710E-06
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	3	3
ED	0.25	2	7	14	14	54
AT	70	70	70	70	70	70
FAH (USE 1 if School for 3rd and 2-9) Page 8-5	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	6.15377E-08	1.48645E-06	1.04431E-06	1.80723E-06	8.23934E-07	3.17803E-06
Risk Contribution Per Million	0.062	1.486	1.044	1.807	0.824	3.178
Cancer Risk Per Million (9 Years)	2.6					
Cancer Risk Per Million (30Years)	4.2					
Cancer Risk Per Million (70 Years)	6.5					

Attachment F

Receptor Location	Emission Concentration (ug/m^3)					
R9	**0.006548992**					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.006548992	0.006548992	0.006548992	0.006548992	0.006548992	0.006548992
Breathing Rate per agegroup						
BR/BW (Page 5-25)	361	1090	861	745	335	335
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	2.270E-06	6.853E-06	5.413E-06	4.684E-06	2.106E-06	2.106E-06
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	3	3
ED	0.25	2	7	14	14	54
AT	70	70	70	70	70	70
FAH (USE 1 if School for 3rd and 2-9) Page 8-5	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	7.57891E-08	1.83069E-06	1.28616E-06	2.22576E-06	1.01475E-06	3.91402E-06
Risk Contribution Per Million	0.076	1.831	1.286	2.226	1.015	3.914
Cancer Risk Per Million (9 Years)	3.2					
Cancer Risk Per Million (30Years)	5.1					
Cancer Risk Per Million (70 Years)	8.0					

Attachment F

Receptor Location	**Emission Concentration (ug/m^3)**					
R10	**0.01747005**					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.01747005	0.01747005	0.01747005	0.01747005	0.01747005	0.01747005
Breathing Rate per agegroup						
BR/BW (Page 5-25)	361	1090	861	745	335	335
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	6.054E-06	1.828E-05	1.444E-05	1.249E-05	5.618E-06	5.618E-06
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	3	3
ED	0.25	2	7	14	14	54
AT	70	70	70	70	70	70
FAH (USE 1 if School for 3rd and 2-9) Page 8-5	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	2.02174E-07	4.88355E-06	3.43095E-06	5.93742E-06	2.70693E-06	1.0441E-05
Risk Contribution Per Million	0.202	4.884	3.431	5.937	2.707	10.441
Cancer Risk Per Million (9 Years)	8.5					
Cancer Risk Per Million (30Years)	13.7					
Cancer Risk Per Million (70 Years)	21.5					

Attachment F

Receptor Location	**Emission Concentration (ug/m^3)**					
R11	**0.047848336**					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.047848336	0.047848336	0.047848336	0.047848336	0.047848336	0.047848336
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	335
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	1.658E-05	5.007E-05	3.955E-05	3.422E-05	1.539E-05	1.539E-05
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	3	3
ED	0.25	2	7	14	14	54
AT	70	70	70	70	70	70
FAH (USE 1 if School for 3rd and 2-9) Page 8-5	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	5.53731E-07	1.33754E-05	9.39697E-06	1.62619E-05	7.41395E-06	2.85967E-05
Risk Contribution Per Million	0.554	13.375	9.397	16.262	7.414	28.597
Cancer Risk Per Million (9 Years)	23.3					
Cancer Risk Per Million (30Years)	37.6					
Cancer Risk Per Million (70 Years)	58.8					

Attachment F

Receptor Location	**Emission Concentration (ug/m^3)**					
R12	**0.04643322**					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.04643322	0.04643322	0.04643322	0.04643322	0.04643322	0.04643322
Breathing Rate per agegroup						
BR/BW (Page 5-25)	361	1090	861	745	335	335
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	1.609E-05	4.859E-05	3.838E-05	3.321E-05	1.493E-05	1.493E-05
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	3	3
ED	0.25	2	7	14	14	54
AT	70	70	70	70	70	70
FAH (USE 1 if School for 3rd and 2-9) Page 8-5	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	5.37354E-07	1.29799E-05	9.11905E-06	1.57809E-05	7.19468E-06	2.77509E-05
Risk Contribution Per Million	0.537	12.980	9.119	15.781	7.195	27.751
Cancer Risk Per Million (9 Years)	22.6					
Cancer Risk Per Million (30Years)	36.5					
Cancer Risk Per Million (70 Years)	57.0					

Attachment F

Receptor Location	**Emission Concentration (ug/m^3)**					
R13	**0.005279119**					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.005279119	0.005279119	0.005279119	0.005279119	0.005279119	0.005279119
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	335
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	1.830E-06	5.524E-06	4.364E-06	3.776E-06	1.698E-06	1.698E-06
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	3	3
ED	0.25	2	7	14	14	54
AT	70	70	70	70	70	70
FAH (USE 1 if School for 3rd and 2-9) Page 8-5	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	6.10933E-08	1.47572E-06	1.03677E-06	1.79418E-06	8.17983E-07	3.15508E-06
Risk Contribution Per Million	0.061	1.476	1.037	1.794	0.818	3.155
Cancer Risk Per Million (9 Years)	2.6					
Cancer Risk Per Million (30Years)	4.1					
Cancer Risk Per Million (70 Years)	6.5					

Attachment F

Receptor Location	Emission Concentration (ug/m^3)					
R14	**0.00517814**					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.00517814	0.00517814	0.00517814	0.00517814	0.00517814	0.00517814
Breathing Rate per agegroup						
BR/BW (Page 5-25)	361	1090	861	745	335	335
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	1.795E-06	5.418E-06	4.280E-06	3.703E-06	1.665E-06	1.665E-06
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	3	3
ED	0.25	2	7	14	14	54
AT	70	70	70	70	70	70
FAH (USE 1 if School for 3rd and 2-9) Page 8-5	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	5.99247E-08	1.44749E-06	1.01694E-06	1.75986E-06	8.02337E-07	3.09473E-06
Risk Contribution Per Million	0.060	1.447	1.017	1.760	0.802	3.095
Cancer Risk Per Million (9 Years)	2.5					
Cancer Risk Per Million (30Years)	4.1					
Cancer Risk Per Million (70 Years)	6.4					

Biological Resources Report Addendum for the Central Village Specific Plan

January 2017

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Central Village Specific Plan
Biological Resources Report Addendum

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Central Village Specific Plan
Biological Resources Report Addendum

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A	Quino Checkerspot Butterfly Survey Reports
B	Coastal California Gnatcatcher Survey Report
C	Burrowing Owl Survey Reports
D	Sensitive Plant Species Survey Report

1.0 INTRODUCTION

The City of San Diego certified a Final Environmental Impact Report for the Otay Mesa Community Plan Update in 2014 (FEIR; City of San Diego [City] 2014) The Final EIR disclosed biological resource impacts that would result from implementing the Otay Mesa Community Plan Update and presented mitigation measures to reduce those impacts to below levels of significance. The Otay Mesa Community Plan Update requires the City to adopt a Specific Plan for the Central Village portion of the community. The purpose of this report is to evaluate the currently proposed Central Village Specific Plan (CVSP) and determine if the impacts to biological resources associated with its implementation fall within the scope of impacts disclosed in the FEIR and whether any additional mitigation measures beyond those presented in the FEIR are warranted. As such, this report serves as an addendum to the biological resources report prepared for the Otay Mesa Community Plan Update FEIR.

Adoption of the proposed CVSP would develop up to 4,485 multi-family homes, 139,700 square feet (sf) of commercial space, a 13.1-acre combined school/recreation site, 16.1 acres of population-based park land uses, 15.9 acres of open space, and approximately 24.1 acres of major roadways within the 229.2-acre CVSP Area (SPA) (T&B Planning, Inc. 2017). The Project includes the adoption of the CVSP as an amendment to the Otay Mesa Community Plan and a rezoning program to implement the designated land uses. The land uses proposed by the CVSP are generally in conformance with the land uses analyzed in the FEIR for the SPA, which assumed up to 5,246 multi-family homes and up to 32,700 sf of commercial uses arranged as a predominately residential community with core areas of mixed uses and public spaces sited along Airway Road.

This addendum report focuses on the 222.9-acre SPA and compares the biological resources conditions for the SPA as reported in the FEIR with currently known biological resources conditions (as recently assessed by Alden Environmental Inc. [Alden]). This addendum report also compares the impacts to biological resources reported in the FEIR for the SPA with the potential impacts to biological resources that could occur from adoption of the proposed CVSP based on current conditions. Finally, this addendum report presents applicable mitigation measures from the FEIR that would be required to reduce significant impacts to biological resources resulting from approval of the proposed CVSP.

2.0 METHODS

2.1 VEGETATION MAPPING/LAND COVER TYPE MAPPING

Mapping for this addendum report began with a review of the FEIR vegetation community/land cover type mapping.[1] Then, vegetation community/land cover type mapping on properties owned or controlled by Davisson and ColRich (which comprise a majority of the SPA area) was updated in the field by Alden concurrent with other surveys conducted on the ColRich properties in 2014 and 2015. The remainder of the SPA (where Alden had no legal access to conduct surveys) was mapped by Alden using 2012 SanGIS vegetation data. Alden updated the 2012

[1] The FEIR utilized 1995 vegetation data that was updated by interpretation of 2012 aerial photography. FEIR updates to the 1995 vegetation map included areas that were mapped as native vegetation or agricultural but showed as developed on the 2012 aerial photo (RECON Environmental, Inc. 2013).

SanGIS data for use in this report where more recent online aerial imagery showed agricultural land as urban/developed land.

2.2 QUINO CHECKERSPOT BUTTERFLY

Presence/absence of the Quino checkerspot butterfly (*Euphydryas editha quino*; QCB) on the ColRich property was determined when Alden conducted U.S. Fish and Wildlife Service (USFWS) protocol-level surveys (USFWS 2014) for the butterfly in 2015 and 2016 (Alden 2015a, 2016a; Appendix A). A previous survey on the ColRich property was conducted in 2004 by Glenn Lukos Associates. No field survey was conducted by Alden for the QCB on the Davisson property or on any other property in the SPA.

2.3 COASTAL CALIFORNIA GNATCATCHER

Presence/absence of the coastal California gnatcatcher (*Polioptila californica californica*; CAGN) on the Davisson property was determined when Alden conducted a USFWS protocol-level survey (USFWS 1997) for the species in 2015 (Alden 2015b; Appendix B). No field survey for the CAGN was conducted by Alden on the ColRich property or any other property in the SPA.

2.4 BURROWING OWL

Surveys for the burrowing owl (*Athene cunicularia*; BUOW) were conducted by Alden on the ColRich property in 2014 (Alden 2014), 2015 (Alden 2015c), and 2016 (Alden 2016b) and on the Davisson property in 2015 (Alden 2015d). See Appendix C for the burrowing owl survey reports. All of the surveys were conducted according to the methods in the Staff Report on Burrowing Owl Mitigation (California Department of Fish and Wildlife [CDFW] 2012). No field survey for the BUOW was conducted by Alden on other properties in the SPA.

2.5 SENSITIVE PLANT SPECIES

Spring and/or summer surveys for sensitive plant species, particularly Otay tarplant (*Deinandra conjugens*), were conducted by Alden on the ColRich property in 2014 (April and June) and 2016 (July; Appendix D) and on the Davisson property in 2015 (April and May). No field survey for sensitive plant species was conducted by Alden on other properties in the SPA.

3.0 SURVEY RESULTS

3.1 VEGETATION COMMUNITIES/LAND COVER TYPES

The Otay Mesa Community Plan Update FEIR reported that six vegetation communities/land cover types are located in the SPA (Figure 1).[2] Each of these communities is still present in the SPA (Figure 2), although the extent of their current coverage is somewhat different from what was reported in the FEIR. In addition, the current coverage data collected by Alden indicates that

[2] Figure 1 also shows FEIR mapping outside the SPA boundaries to present equal mapping coverage to that shown on Figure 2 where Airway Road construction would occur outside the SPA under the proposed CVSP.

905
Heritage Road
Gateway Park Drive
Spring Canyon
Cactus Road
Airway Road
Cactus Road
Siempre Viva Road
Google

Central Village Specific Plan Boundary
ColRich Property
Davisson Property
FEIR Project Impacts
MHPA

Vegetation Community/Land Cover Type

Diegan Coastal Sage Scrub
Maritime Succulent Scrub
Non-native Grassland
Agriculture
Disturbed Land
Urban/Developed

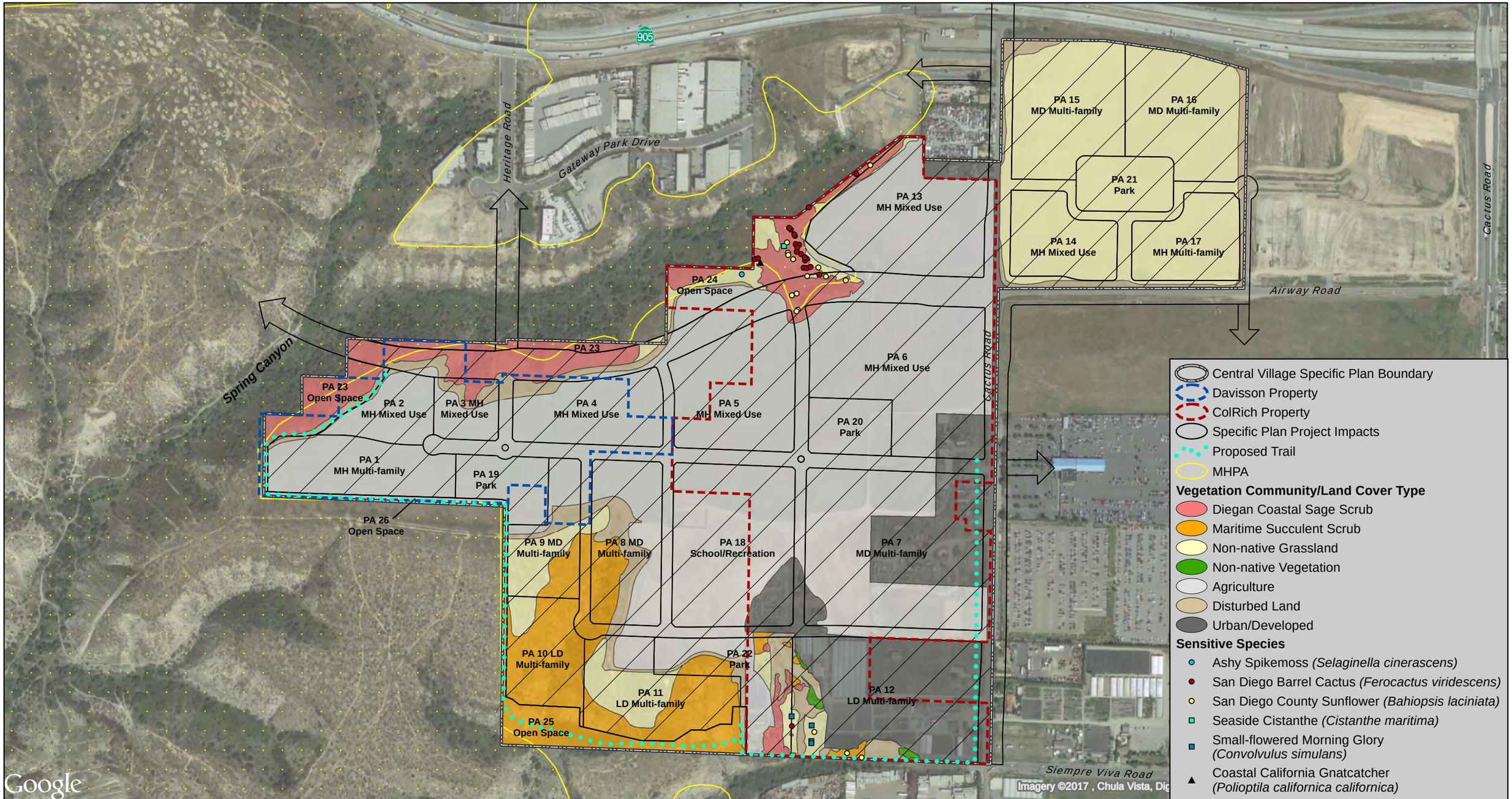
N
W E
S
0 250 500 Feet

ALDEN ENVIRONMENTAL, INC

Figure 1

FEIR Vegetation Communities and Land Cover Types/Impacts

CENTRAL VILLAGE SPECIFIC PLAN PROJECT



N
W E
S

0 250 500 Feet

ALDEN ENVIRONMENTAL, INC

Figure 2

CVSP Vegetation Communities, Land Cover Types, and Sensitive Species/Impacts

CENTRAL VILLAGE SPECIFIC PLAN PROJECT

one additional vegetation community is present (i.e., non-native vegetation). The differences are the result of using more current mapping for this addendum report and changes in the actual field conditions (see Section 2.1 of this addendum report for more information on data collection methods). The greatest change is in the reported amount of maritime succulent scrub (refer to Table 1); the FEIR reported a much greater extent of coverage for this vegetation community than is actually present under existing conditions.

Table 1
Existing Vegetation Communities/
Land Cover Types in the SPA[1]

Vegetation Community/ Land Cover Type	Tier	FEIR Acreage	Current Acreage
Maritime succulent scrub	I	24.4	0.5
Diegan coastal sage scrub	II	24.3	31.4
Non-native grassland	IIIB	37.8	46.0
Non-native vegetation	IV	--	0.3
Agriculture	IV	115.6	111.5
Disturbed land	IV	18.9	11.5
Urban/Developed	NA	8.2	28.0
TOTAL	**--**	**229.2**	**229.2**

[1]Acreage rounded to the nearest tenth.

Based on updated data collected by Alden, the area of maritime succulent scrub (Tier I) mapped in the FEIR (Figure 1) was largely re-mapped as Diegan coastal sage scrub (Tier II) and non-native grassland (Tier IIIB) for SanGIS in 2012 (Figure 2). A comparison of the acreages for each of the vegetation communities/land cover types as reported in the FEIR and as they currently stand in the SPA is provided in Table 1.

3.2 QUINO CHECKERSPOT BUTTERFLY

The FEIR assumed potential presence of QCB. Within the SPA, potential QCB habitat (Diegan coastal sage scrub and maritime succulent scrub) occurs on the ColRich property, the Davisson property, and other properties in the southwestern portion of the SPA. The QCB was not observed during multiple USFWS protocol-level surveys conducted on the ColRich property. The QCB has moderate potential to occur in the SPA in potential QCB habitat.

3.3 COASTAL CALIFORNIA GNATCATCHER

The FEIR assumed potential presence of CAGN. Within the SPA, potential CAGN habitat (Diegan coastal sage scrub and maritime succulent scrub) occurs on the Davisson property, in the northern and southern portions of the ColRich property, and on other properties in the southwestern portion of the SPA. The CAGN was not observed during the 2015 survey on the Davisson property; however, the CAGN was observed in Diegan coastal sage scrub just north of the property in the Multi-Habitat Planning Area (MHPA) outside the SPA. Since the habitat where the birds were observed is contiguous with the SPA, all Diegan coastal sage scrub on the Davisson property (which is also in the MHPA) is considered to be occupied by the CAGN. Similarly, a single CAGN was observed in Diegan coastal sage scrub in the northern portion of

the ColRich property in the MHPA during the QCB survey in 2015 (Figure 2). It is assumed, therefore, that all of the Diegan coastal sage scrub in the SPA, within the MHPA, is occupied by the CAGN.

3.4 BURROWING OWL

The FEIR assumed potential presence of BUOW. Within the SPA, the BUOW was not found on the ColRich property during any of the surveys conducted in 2014, 2015, and 2016. The BUOW also was not found on the Davisson property during a survey conducted in 2015.

According to the FEIR, the BUOW occupies open areas including native and non-native grassland, sparsely vegetated shrubland, agricultural land, and disturbed land. In addition to the ColRich and Davisson properties, these open areas occur throughout most of the remainder of the SPA. The BUOW has moderate potential to occur in these habitats in the SPA.

3.5 SENSITIVE PLANT SPECIES

The FEIR concluded that implementation of the Otay Mesa Community Plan Update would have the potential to impact sensitive plants. Within the SPA, five sensitive plant species were found on the ColRich property during the sensitive plant survey conducted in 2014: ashy spikemoss (*Selaginella cinerascens*), San Diego barrel cactus (*Ferocactus viridescens*), San Diego County sunflower (*Bahiopsis* [*Viguiera*] *laciniata*), seaside cistanthe (*Cistanthe maritima*), and small-flowered morning glory (*Convolvulus simulans*; Figure 2). No sensitive plants were found in 2016 on the ColRich property (i.e., on the two parcels added to the property since 2014; Appendix D). No sensitive plant species were found on the Davisson property during the 2015 survey.

Table 2 includes a list of sensitive plant species (alphabetized by common name) observed or analyzed for potential to occur in the SPA.

Table 2 Sensitive Plant Species Present or with Potential to Occur in the SPA[1]				
Common Name **(Scientific Name)**	**Listing or Sensitivity[2]** **Federal/State** **CNPS** **City**	**Habitat(s)/ Distribution**	**Bloom Period**	**Presence or Potential to Occur**
Ashy spike-moss (*Selaginella cinerascens*)	--/-- 4.1 --	Found on flat mesas in coastal sage scrub and chaparral in Orange and San Diego counties and northwestern Baja California, Mexico.	--	Present
California adolphia (*Adolphia californica*)	--/-- 2B.1 --	Occurs in chaparral, valley grassland, and coastal sage scrub in Los Angeles and San Diego counties.	December to May	Low. A perennial shrub that would have been observed if present.
California Orcutt grass (*Orcuttia californica*)	FT/SE 1B.1 Not Presently Covered[3]	Occurs within and adjacent to vernal pools in Riverside, San Diego, Ventura, and Los Angeles counties, as well as Baja California, Mexico.	April to August	Very low. Potential habitat is not present.
Cliff spurge (*Euphorbia misera*)	--/-- 2B.2 --	Occurs on sea bluffs in maritime sage scrub. Occurs from Corona Del Mar south to Baja California, Mexico.	December to October	Low. A perennial shrub that would have been observed if present.
Decumbent goldenbush (*Isocoma menziesii* var. *decumbens*)	--/-- 1B.2 --	Occurs in chaparral and coastal scrub, often in sandy, disturbed areas. Found in Orange and San Diego counties; Baja California, Mexico; and San Clemente and Santa Catalina islands.	April to November	Low. A perennial shrub that would have been observed if present.
Golden-spined cereus (*Bergerocactus emoryi*)	--/-- 2B.2 --	Occurs in sandy soils and dry bluffs along the coast in association with maritime succulent scrub in coastal San Diego County; Baja California, Mexico; and San Clemente and Catalina islands.	May to June	Low. A perennial stem succulent that would have been observed if present.

Table 2 (cont.) **Sensitive Plant Species Present or with Potential to Occur in the SPA[1]**				
Little mousetail (*Myosurus minimus* ssp. *apus*)	--/-- 3.1 --	Vernal pools and alkaline marshes in Riverside, San Bernardino, San Diego, and additional central California counties; Oregon; and Baja California, Mexico.	March to June	Very low. Potential habitat is not present.
Nuttall's scrub oak (*Quercus dumosa*)	--/-- 1B.1 --	Occurs in coastal southern California from near Point Conception in Santa Barbara County south into northern Baja California, Mexico.	February to August	Low. A perennial shrub that would have been observed if present.
Orcutt's bird's-beak (*Dicranostegia orcuttiana* [*Cordylanthus orcuttianus*])	--/-- 2B.1 Covered	Found in coastal scrub in southwestern San Diego County near Otay, Chula Vista, and Imperial Beach. Also found in Baja California, Mexico.	March to September	Low. Sensitive plant species surveys were conducted during the bloom period for this species, and it was not observed.
Orcutt's brodiaea (*Brodiaea orcuttii*)	--/-- 1B.1 Covered	Occurs in vernal pools and ephemeral streams and seeps, usually associated with clay soils. Found in Riverside and San Bernardino counties south to Baja California, Mexico.	May to July	Very low. Potential habitat is not present.
Otay mesa mint (*Pogogyne nudiuscula*)	FE/SE 1B.1 Not Presently Covered[3]	Occurs within and adjacent to vernal pools on Otay Mesa.	May to July	Very low. Potential habitat is not present.
Otay tarplant (*Deinandra conjugens*)	FT/SE 1B.1 Covered, NE	Occurs in disturbed areas and patches of coastal sage scrub in the Otay Mesa area.	April to June	Low. This species was the primary focus of the sensitive plant species surveys conducted from 2014 through 2016, and it was not observed.

Table 2 (cont.) **Sensitive Plant Species Present or with Potential to Occur in the SPA[1]**				
San Diego ambrosia (*Ambrosia pumila*)	FE/-- 1B.1 Covered, NE	Found in disturbed areas within chaparral, coastal sage scrub, and grasslands. Its range includes San Diego and Riverside counties south to Baja California, Mexico.	April to October	Low. Sensitive plant species surveys were conducted during the bloom period of this species from 2014 through 2016, and it was not observed.
San Diego barrel cactus (*Ferocactus viridescens*)	--/-- 2B.1 Covered	Associated with coastal sage scrub and chaparral habitats in San Diego County and Baja California, Mexico.	May to June	Present
San Diego bur-sage (*Ambrosia chenopodiifolia*)	--/-- 2B.1 --	Generally found in arid, low-growing, fairly open Diegan coastal sage scrub in southwestern San Diego County, Arizona, and Mexico below 600 feet in elevation.	April to June	Low. A perennial shrub that would have been observed if present.
San Diego button-celery (*Eryngium aristulatum* var. *parishii*)	FE/SE 1B.1 Not Presently Covered[3]	Occurs in vernal pools or mima mound areas with vernally moist conditions in San Diego and Riverside counties and Baja California, Mexico.	April to June	Very low. Potential habitat is not present.
San Diego County sunflower (*Bahiopsis* [*Viguiera*] *laciniata*)	--/-- 4.2 --	Found in coastal sage scrub in San Diego and Orange counties and Baja California, Mexico.	February to August	Present
San Diego goldenstar (*Bloomeria* [*Muilla*] *clevelandii*)	--/-- 1B.1 Covered	Found on clay soils in chaparral, coastal scrub, vernal pools, and valley and foothill grassland in Riverside and San Diego counties.	May	Low. Sensitive plant species surveys were conducted during the bloom period of this species from 2014 through 2016, and it was not observed.

Table 2 (cont.) **Sensitive Plant Species Present or with Potential to Occur in the SPA[1]**				
San Diego thornmint (*Acanthomintha ilicifolia*)	FT/SE 1B.1 Covered, NE	Occurs on clay lenses in grassy openings in chaparral or sage scrub. Prefers friable or broken, clay soils. Range limited to coastal areas of San Diego County and Baja California, Mexico.	April to June	Low. Sensitive plant species surveys were conducted during the bloom period of this species from 2014 through 2016, and it was not observed.
Seaside cistanthe (*Cistanthe maritima*)	--/-- 4.2 --	Generally occurs on sandy bluffs near the beach and sandy openings in coastal sage scrub in Santa Barbara County south to Baja California, Mexico. Also found on the Channel Islands.	February to August	Present
Small-flowered morning-glory (*Convolvulus simulans*)	--/-- 4.2 --	Found in clay areas in openings of coastal chaparral, sage scrub, and grasslands at scattered locations from the foothills to the coast in southern California and Baja California, Mexico.	March to July	Present
Small-leaved rose (*Rosa minutifolia*)	--/SE 2B.1 Covered	Habitat includes chaparral and coastal scrub. Presently known in California from only one occurrence on Otay Mesa.	January to June	Low. A perennial shrub that would have been observed if present.
Snake cholla (*Cylindropuntia californica* var. *californica*)	--/-- 1B.1 Covered, NE	Found in open patches in coastal sage scrub, primarily in southern portion of San Diego County and in Florida Canyon.	April to May	Low. A perennial stem succulent that would have been observed if present.
South coast saltscale (*Atriplex pacifica*)	--/-- 1B.2 --	Coastal bluff scrub, coastal dunes, coastal scrub, and playas in California, Arizona, and Baja California and Sonora, Mexico.	March to October	Low. Sensitive plant species surveys were conducted during the bloom period of this species from 2014 through 2016, and it was not observed.

Table 2 (cont.) **Sensitive Plant Species Present or with Potential to Occur in the SPA**[1]				
Spreading navarretia (*Navarretia fossalis*)	FT/-- 1B.1 Not Presently Covered[3]	Occurs in marshes and swamps (assorted freshwater habitats), playas, and vernal pools in western Riverside and southwestern San Diego counties, as well as northwestern Baja California, Mexico.	April to June	Very low. Potential habitat is not present.
Variegated dudleya (*Dudleya variegata*)	--/-- 1B.2 Covered, NE	Occurs on dry hillsides and mesas in chaparral, coastal sage scrub, grasslands, and near vernal pools. Ranges from San Diego County south to Baja California, Mexico.	April to June	Low. Sensitive plant species surveys were conducted during the bloom period of this species from 2014 through 2016, and it was not observed.

[1] List based on Table 3, *Sensitive Plant Species Known or with the Potential to Occur in the CPU Area*, in RECON Environmental, Inc. 2013 and field work for this addendum.

[2] **Federal**
FE – Federally listed endangered
FT – Federally listed threatened

State
SE – State listed endangered

CNPS (California Native Plant Society) Rare Plant Rank
1B – Rare, threatened, or endangered in California and elsewhere
2B – Rare, threatened, or endangered in California but more common elsewhere
3 – More information is needed – a review list
4 – Limited distribution – a watch list
.1 – Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
0.2 – Moderately threatened in California (20 to 80 percent of occurrences threatened/moderate degree and immediacy of threat

City
Covered – Species for which the City has take authorization under its Multiple Species Conservation Program (MSCP) Subarea Plan (City 1997). For species listed as "Not Presently Covered," see footnote 3.
NE - Some native species (primarily plants with restricted geographic distributions, soil affinities, and/or habitats) are referred to as a Narrow Endemic species. The City specifies measures in its MSCP Subarea Plan to ensure that impacts to Narrow Endemics are avoided to the maximum extent practicable.

[3] Based on a 2006 federal district court ruling that the City's MSCP Subarea Plan does not provide adequate protection for Riverside fairy shrimp (*Streptocephalus woottoni*), the City surrendered permit coverage for seven vernal pool species on April 20, 2010 (City 2010). The seven species include San Diego fairy shrimp (*Branchinecta sandiegonensis*), Riverside fairy shrimp, Otay Mesa mint, San Diego mesa mint (*Pogogyne abramsii*), California Orcutt grass, San Diego button-celery, and spreading navarretia. The USFWS subsequently cancelled the permit as it applied to those seven species on May 14, 2010 (USFWS 2011). Development involving take of any of the seven vernal pool species, therefore, requires authorization from the USFWS through the federal incidental take process until the City completes a new Vernal Pool Habitat Conservation Plan and enters into another Implementing Agreement for a new federal Incidental Take Permit for those species.

4.0 IMPACT ANALYSIS

This section compares the potential impacts to biological resources in the SPA reported by the FEIR with potential impacts that would result from adoption of the proposed CVSP based on the current conditions.

4.1 VEGETATION COMMUNITIES/LAND COVER TYPES

The FEIR anticipated physical impacts to 211.6 acres of vegetation communities/land cover types within the SPA (Figure 1). In comparison, adoption of the proposed CVSP would result in 212.6 acres of physical impact. The slight differences in physical disturbance area and 1.0 acre of additional impact are due to proposed changes in the alignment of future Airway Road, a City Mobility Element roadway (which is planned to connect to a future extension of this roadway to the west of the SPA) and the inclusion of a 1.0-acre parcel within Planning Area 2 covered with non-native grassland that was previously identified for open space land uses but is now proposed for development within the Davisson property (Table 3; Figures 1 and 2). As shown in Table 3, adoption of the CVSP would result in a decrease in impacts to Tier I habitats by approximately 19.1 acres as compared to what was disclosed for the SPA by the FEIR, while impacts to Tier II habitats would increase by 5.6 acres. Tier I and II habitat types are the most sensitive habitat types; in total, impacts to Tier I and II habitats would be reduced by 13.5 acres with adoption of the CVSP. Impacts to non-native grassland (Tier IIIB) would increase by 6.6 acres; impacts to non-native vegetation, agriculture, and disturbed land (Tier IV) would decrease 12.2 acres, and impacts to urban/developed (not sensitive and not assigned a tier), would increase by 19.8 acres. Impacts to these vegetation communities/land cover types were previously addressed in the FEIR, and the FEIR presented mitigation measures to reduce impacts to below levels of significance. Although the CVSP's extent of physical disturbance would slightly change and increase by 1.0 acre, its adoption would result in fewer acres of impact to high-sensitivity (i.e., Tier I and II) habitats overall and would not impact any sensitive vegetation community that was not already addressed by the FEIR. Therefore, adoption of the CVSP would not introduce a new impact or more severe impact to vegetation communities/land cover types beyond what was evaluated and disclosed by the FEIR.

Table 3
Anticipated Impacts to Vegetation Communities/Land Cover Types[1]

Vegetation Community/ Land Cover Type	Tier	Acreage Impacted in the FEIR	Proposed Impacted Acreage
Maritime succulent scrub	I	19.6	0.5
Diegan coastal sage scrub	II	14.4	20.0
Non-native grassland	IIIB	37.8	44.4[2]
Non-native vegetation[3]	IV	--	0.3
Agriculture	IV	113.7	108.9
Disturbed land	IV	18.0	10.6[2]
Urban/Developed	NA	8.1	27.9
TOTAL	**--**	**211.6**	**212.6**

[1]Acreage rounded to the nearest tenth.
[2]Includes <0.1 acre of impact outside the SPA to facilitate a connection of Airway Road to the west.
[3]The FEIR did not identify non-native grassland in the SPA, but the FEIR did identify non-native grassland elsewhere in the Otay Mesa Community Plan Update area to be impacted.

4.2 QUINO CHECKERSPOT BUTTERFLY

The FEIR states that implementation of the Otay Mesa Community Plan Update has the potential to impact the QCB. Therefore, adoption of the proposed CVSP with its potential to affect the QCB would not represent a new impact.

4.3 COASTAL CALIFORNIA GNATCATCHER

As explained in Section 3.3 of this addendum report, all Diegan coastal sage scrub on the Davisson property (which is also in the MHPA) is considered to be occupied by the CAGN. It is also assumed that all of the Diegan coastal sage scrub in the northern portion of the ColRich property within the MHPA is occupied by the CAGN. Potential CAGN habitat (Diegan coastal sage scrub and maritime succulent scrub) also occurs in the southern portion of the ColRich property and on other properties in the southwestern portion of the SPA. Direct impacts to CAGN habitat outside of the MHPA would occur under the CVSP; however, none of the direct impacts would be inside the MHPA, although some direct impacts would occur adjacent to the MHPA, which was anticipated by the FEIR.

Consistent with the conclusions reached by the FEIR, direct impacts to CAGN-occupied habitat outside of the MHPA and potential indirect impacts to the CAGN in the MHPA during construction within the SPA's adjacent development areas could occur (Figure 2).

The FEIR states that direct impacts to CAGN-occupied habitat in the MHPA could occur from implementing the Otay Mesa Community Plan Update land use plan. The FEIR also states that indirect impacts (temporary construction noise) may occur to this species if construction occurs during the breeding season. Therefore, adoption of the proposed CVSP with its potential to directly and indirectly affect the CAGN would not represent a new impact.

4.4 BURROWING OWL

The BUOW has moderate potential to occur in open areas of the SPA including non-native grassland, agricultural land, and disturbed land. Consistent with the conclusion reached by the FEIR, the CVSP proposes development in and adjacent to areas that could support BUOW, resulting in potential direct and indirect impacts to BUOW. The FEIR states that impacts to BUOW would include direct impacts to individuals, nests, and suitable nesting habitat, and indirect impacts from 'eradication of host burrowers; changes in vegetation management (i.e., grazing); use of pesticides and rodenticides; destruction, conversion or degradation of nesting, foraging, over-wintering or other habitats; destruction of natural burrows and burrow surrogates; and disturbance which may result in the harassment of owls at occupied burrows' (CDFW 2012 *in* City 2014). The same types of impacts could occur from implementation of the CVSP. Therefore, adoption of the proposed CVSP with its potential to affect the BUOW would not represent a new impact.

4.5 SENSITIVE PLANT SPECIES

The FEIR concluded that implementation of the Otay Mesa Community Plan Update land use plan would have the potential to directly impact sensitive plants. The FEIR assumed potential impacts to 23 different sensitive plant species, of which mapping indicated the potential presence of San Diego barrel cactus and San Diego County sunflower in the SPA.

As stated in the FEIR, however, "due to the fact that portions of the biological resource assessment [used for the FEIR] are based on secondary source information rather than site-specific field surveys, the impacts [disclosed in the FEIR] would be refined for individual projects." As anticipated by this statement in the FEIR, and based on more recent field survey work, five sensitive plant species were found on the ColRich property during a sensitive plant survey conducted in 2014: ashy spikemoss, San Diego barrel cactus, San Diego County sunflower, seaside cistanthe, and small-flowered morning glory (Figure 2). No sensitive plant species were found in 2016 on the ColRich property (i.e., on the two parcels added to the property since 2014; Appendix D). No sensitive plant species were found on the Davisson property during the 2015 survey. No sensitive plant species surveys were conducted on other properties in the SPA.

Ashy spikemoss, seaside cistanthe, and small-flowered morning glory (found on the ColRich property in 2014) were not noted by the FEIR as known or considered to have potential to occur in the Otay Mesa Community Plan Update area. However, ashy spikemoss, seaside cistanthe, and small-flowered morning glory have a California Rare Plant Rank of 4 in the *Inventory of Rare and Endangered Plants* (CNPS 2016), and the FEIR did disclose the potential presence of and impacts to Rare Plant Rank 4 species in the Otay Mesa Community Plan Update area. According to the FEIR, Rare Plant Rank 4 species are considered sensitive plant species because they are considered "noteworthy" species "by local conservation organizations." Further, the CNPS "strongly recommend[s] that California Rare Plant Rank 4 plants be evaluated for impact significance during preparation of environmental documents relating to CEQA" (CNPS 2016).

Assuming that the five sensitive plant species found on the ColRich property in 2014 are present, adoption of the proposed CVSP would result in impacts to known locations of small-flowered morning glory on the ColRich property. No impacts would occur to ashy spikemoss and seaside cistanthe in their 2014 identified locations because planned development in the SPA would avoid those species' identified locations (Figure 2).

Small-flowered morning glory, which would potentially be impacted in its 2014 identified locations, occurs in clay soils and serpentinite seeps in chaparral openings, coastal scrub, and valley and foothill grassland habitats (CNPS 2016). There is potential habitat for the species to also occur in the southwestern portion of the SPA (i.e., in non-native grassland and Diegan coastal sage scrub with gravelly clay loam soils [United States Department of Agriculture Natural Resources Conservation Service {USDA NRCS}2015]).

Ashy spikemoss is a perennial rhizomatous herb that occurs in chaparral and coastal scrub habitats (CNPS 2016). This species was found in non-native grassland on the ColRich property in 2014. However, its more typical habitat, Diegan coastal sage scrub, occurs along the northern border and in the southwestern portion of the SPA within the SPA's impact footprint.

Seaside cistanthe is an annual herb that blooms from February to August and occurs in sandy soils in coastal bluff scrub, coastal scrub, and valley and foothill grassland habitats (CNPS 2016). While there are no sandy soils in the SPA, this species was found in Diegan coastal sage scrub on cobbly loam soil (USDA NRCS 2015). Therefore, there is potential habitat for the species in the western and southwestern portions of the SPA within the SPA's impact footprint (i.e., non-native grassland and Diegan coastal sage scrub with cobbly loam soil [USDA NRCS 2015]).

Even though the FEIR did not specifically call out potential impacts to these three species, the FEIR did identify the loss of San Diego County sunflower (also a Rare Plant Rank 4 species) which was found in the SPA in 2014 on the ColRich property. Because the FEIR acknowledged that additional species beyond those reported in the FEIR could be found during site-specific field work, and mitigation for the loss of sensitive plant species regardless of the species type is provided by the FEIR to reduce impacts to less than significant levels, the potential loss of Rare Plant Rank 4 species in the SPA that were not specifically called out by their common or scientific names in the FEIR does not constitute a new impact. Consistent with the conclusion reached by the FEIR, adoption of the proposed CVSP would have a "substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status" (City 2011). Adoption of the proposed CVSP with its potential to directly affect Rare Plant Rank 4 plant species would not represent a new impact.

5.0 MSCP CONSISTENCY

The FEIR concluded that the Otay Mesa Community Plan Update would be consistent with the MSCP but acknowledged that MHPA adjacency impacts and potential MHPA boundary adjustments would be addressed as part of implementing projects. The proposed CVSP does not propose an MHPA boundary adjustment. Therefore, the analysis below focuses on potential MHPA adjacency impacts associated with the proposed CVSP and other MSCP Subarea Plan policies for which conditionally compatible uses and development proposals at the project level in the SPA must comply.

5.1 COMPATIBLE LAND USES AND GENERAL PLANNING POLICIES AND DESIGN GUIDELINES

Section 1.4.1 of the City's MSCP Subarea Plan states that the following land uses are conditionally compatible with the biological objectives of the MSCP and will be allowed within the MHPA:

- Passive recreation
- Utility lines and roads in compliance with policies in Section 1.4.2 (below)
- Limited water facilities and other essential public facilities
- Limited low density residential uses
- Brush Management (Zone 2)
- Limited agriculture

Consistent with the Otay Mesa Community Plan Update and its evaluation in the FEIR, the proposed CVSP includes a segment of Airway Road, a City Mobility Element Roadway, in the MHPA.

Section 1.4.2 of the City's MSCP Subarea Plan includes general planning policies and design guidelines (listed below) that are applied in the review and approval of development projects within or adjacent to the MHPA.

Roads and Utilities – Construction and Maintenance Policies

This section of the Subarea Plan includes eight guidelines/policies. The only road in the proposed CVSP in the MHPA is a segment of Airway Road. No water or sewer utilities are proposed in or adjacent to the MHPA by the proposed CVSP.

1. All proposed utility lines should be designed to avoid or minimize intrusion into the MHPA.

   The CVSP does not propose any utility lines in the MHPA other than utility lines that would occur beneath Airway Road. Airway Road, a City Mobility Element Roadway, is a permitted use in the MHPA.

2. All new development for utilities and facilities within or crossing the MHPA shall be planned, designed, located, and constructed to minimize environmental impacts. If avoidance is infeasible, mitigation would be required.

   The MHPA would be unavoidably impacted by construction of Airway Road. The segment of Airway Road located in the CVSP and that would occur in the MHPA was planned in this location by the Otay Mesa Community Plan Update and evaluated in the FEIR. As called for by the FEIR, impacts to the MHPA due to the construction of Airway Road would be mitigated in accordance with the methods and ratios provided in the City's Biology Guidelines. See FEIR Mitigation Measure BIO-1, *Mitigation for Impacts to Sensitive Upland Habitats,* which is repeated in Section 6.0 of this addendum report.

3. Temporary construction areas and roads, staging areas, or permanent access roads must not disturb existing habitat unless determined to be unavoidable.

4. Construction and maintenance activities in wildlife corridors must avoid significant disruption of corridor usage.

   One of the objectives of the MHPA in the MSCP is to delineate core corridors targeted for conservation while acknowledging that limited development may occur (City 1997). As disclosed in biological resources report appended to the FEIR, Dennery and Spring canyons, connected by the Otay Mesa Road culvert and State Route 905 wildlife crossing, function as the primary north-south wildlife movement corridor in western Otay Mesa (RECON Environmental, Inc. 2013). Spring Canyon, which is in the MHPA, occurs to the north and west of the SPA and within the SPA along its northern border (Figure 2). Consistent with the conclusion reached by the FEIR, construction of Airway Road is the only feature of the CVSP that would unavoidably impact the MHPA, consisting of a portion of the upper slopes of Spring Canyon; the remainder of the canyon would not be impacted, so Airway Road construction (and maintenance) would avoid significant disruption of corridor usage. Airway Road is "considered conditionally compatible with the biological objectives of the MSCP" (City 1997).

5. Roads in the MHPA will be limited to those identified in Community Plan Circulation Elements, essential collector streets, and necessary maintenance/emergency access roads.

   Airway Road is City Mobility Element Roadway and is an essential public facility in that it has been identified in the Otay Mesa Community Plan Update as a major east-west transportation corridor on Otay Mesa; it is planned to serve as the principal community transportation and activity corridor (City 2015). Airway Road is the only road that will occur in the MHPA within the SPA.

6. Development of roads in canyon bottoms should be avoided whenever feasible. If an alternative location outside the MHPA is not feasible, then the road must be designed to cross the shortest length possible, and if a road crosses the MHPA, it should provide for fully-functional wildlife movement capability.

   Airway Road is the only road that will occur in the MHPA within the SPA. Airway Road would not be constructed in a canyon bottom, and it would not disrupt wildlife movement capability (see number 4 above).

7. Where possible, roads within the MHPA should be narrowed from existing design standards to minimize habitat fragmentation and disruption of wildlife movement and breeding areas. Roads must be located in lower quality habitat or disturbed areas to the extent possible.

   Airway Road is the only road that will occur in the MHPA within the SPA. The segment of this roadway that is planned to pass through the SPA was designed to connect to extensions of Airway Road to the east and to the west. Therefore, Airway Road has a defined alignment because of the potential fixed end points of the roadway and engineering requirements. The placement and design of the road along edge of the MHPA would not result, however, in habitat fragmentation or disruption of wildlife movement (see number 4 above).

8. Existing roads and utility lines are usually considered a compatible use in the MHPA.

   There are no existing roads or utility lines in the MHPA identified in the proposed CVSP.

Fencing, Lighting, and Signage

This section of the City's MSCP Subarea Plan includes three guidelines/policies. Each is summarized below.

1. Fencing or other barriers will be used where it is determined to be the best method to achieve conservation goals and adjacent to land uses incompatible with the MHPA.

   As called for by the Otay Mesa Community Plan Update, the SPA is proposed to be developed as a predominately residential community with core areas of mixed uses and public spaces. There are no incompatible land uses proposed adjacent to the MHPA associated with the proposed CVSP. In addition, the proposed CVSP includes the following design standard to protect the MHPA:

   Design Standard 2.4-6: "Where residential uses [in this case, both multi-family and mixed use areas] abut the San Diego MSCP Sub-Area Plan Multi-Habitat Planning Areas

MHPA, appropriate buffers and/or barriers (walls, fencing, etc.) shall be provided in conjunction with implementing development at the edge between developed areas and natural areas in order to preclude intrusion into these areas by people and domestic animals."

2. Lighting shall be designed to avoid intrusion in the MHPA.

   As called for by the Otay Mesa Community Plan Update, the SPA is proposed to be developed as a predominately residential community with core areas of mixed uses and public spaces. Lighting levels would be typical of these types of uses, which were assumed by the FEIR. The proposed CVSP includes a policy and a design standard that address lighting and would ensure compliance with the MHPA Land Use Adjacency Guidelines (LUAG) for lighting.

   Policy 2.5-4: "To minimize light pollution and reduce energy use, developments should limit the amount of nighttime light that is projected upward and beyond the site and should direct light into high-traffic areas of the development. Arrange lighting in parking areas to prevent direct glare into adjacent dwelling units and onto neighboring uses/properties."

   Design Standard 2.5-11: "All lighting adjacent to natural open space shall comply with Multiple Species Conservation Program (MSCP) adjacency guidelines."

3. Signage will be limited to access, litter control, and educational purposes.

   The CVSP calls out the potential locations of trailheads and specifies policies for trails and associated signage as follows:

   Policy 2.3-15: "Design trails within the Multi-Habitat Planning Area (MHPA) to be consistent with the MSCP and trail standards and design policies of the City's Park and Recreation Department's Consultant's Guide to Park Design and Development."

   Policy 2.3-20: "Design trail amenities to minimize their impact on adjacent environmentally sensitive areas."

   Policy 2.4-24: "Trails may be accommodated in open space areas as part of implementing projects. Such trail development would be subject to any restrictions that may be associated with the Multi-Species Habitat Planning Areas (MHPA) and evaluated pursuant to applicable CEQA requirements in conjunction with the implementing development."

Materials Storage

The City's MSCP Subarea Plan states that storage of materials (e.g., hazardous or toxic chemicals, equipment, etc.) will not be located within the MHPA, and proper storage of such materials is required per applicable regulations in any areas that may impact the MHPA, especially due to potential leakage.

Section 2.6.2.2 “Drainage Design Standards” of the CVSP includes basic design standards that summarily: 1) satisfy the requirements of the City’s Storm Water Standards Manual, 2) comply with the appropriate National Pollutant Discharge Elimination System construction permit, and 3) incorporate Best Management Practices as part of site-specific hydrology and water quality studies. Therefore, the proposed CVSP is consistent with the LUAG for drainage and toxics.

Additionally, avoidable disturbance to the MHPA would be prevented through implementation of Mitigation Measure LU-2 from the FEIR, which is repeated in Section 6.0 of this addendum report.

5.2 LAND USE ADJACENCY GUIDELINES

Section 1.4.3 of the City’s MSCP Subarea Plan includes LUAG for the management of planned or existing land uses adjacent to the MHPA to ensure minimal impacts to the MHPA. The proposed CVSP follows the LUAG as described below. In addition, FEIR Mitigation Measure Framework LU-2 requires compliance with the LUAG and is repeated in Section 6.0 of this addendum report.

Drainage and Toxics

The LUAG require that all new parking lots and developed areas in and adjacent to the MHPA not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials, and other elements that might degrade or harm the natural environment or ecosystems processes.

Section 2.6.2.2 “Drainage Design Standards” of the CVSP includes several design standards that summarily: 1) reduce post-development peak flows, 2) ensure erosion potential is not increased downstream, 3) conform with the City’s “Drainage Design Manual,” 4) satisfy the requirements of the City’s Storm Water Standards Manual, 5) comply with the appropriate National Pollutant Discharge Elimination System construction permit, and 6) require the incorporation of Best Management Practices as part of site-specific hydrology and water quality studies. Therefore, the CVSP is consistent with the LUAG for drainage and toxics.

Lighting

The LUAG require that all developed areas adjacent to the MHPA direct lighting away from the MHPA.

Section 2.5.3.7 of the CVSP includes Design Standard 2.5-11 that requires compliance with the LUAG for lighting as follows:

Design Standard 2.5-11: “All lighting adjacent to natural open space shall comply with Multiple Species Conservation Program (MSCP) adjacency guidelines.”

Noise

The LUAG require that uses in or adjacent to the MHPA be designed to minimize noise impacts that could impact or interfere with wildlife utilization of the MHPA.

Airway Road is an essential public facility and is, therefore, "considered conditionally compatible with the biological objectives of the MSCP and allowed within the City's MHPA" (City 1997). Therefore, roadway noise from this facility is also allowed within the MHPA. According to the traffic study prepared for the CVSP (Chen Ryan 2017), the CVSP would generate less traffic than was assumed to be generated by land uses in the SPA by the FEIR. Therefore, less vehicular noise would occur along Airway Road as a result of the CVSP.

The CVSP includes a 6.0-acre park, Trails Park (PA 22 Park on Figure 2), adjacent to the MHPA in the south-central portion of the SPA. Trails Park would provide recreational uses, such as children play areas, multi-purpose fields that could be programmed for leagues use, and walking tracks. Recreational uses and walking tracks would not create noise at levels that would impact or interfere with wildlife utilization of the MHPA. League uses could create such noise levels; however, the multi-purpose field that would be used (i.e., open field turf area shown on Figure 2.4-5 of the CVSP) is proposed to be located adjacent to multi-family housing—not the MHPA. That is, the housing would be located between the field and the MHPA, so noise impacts to the MHPA caused by activity at the field is expected to be less than significant. Parks and trails, however, will be the subject of specific development plans at the time they are built and will be subject to subsequent CEQA review, which will include preparation of site-specific biology reports to determine how to best implement mitigation related to the LUAG. FEIR Mitigation Measure LU-2, however, repeated in Section 6.0 of this addendum report, is expected to reduce noise to less-than-significant levels.

The CVSP includes another, 3.5-acre park, Vista Park (PA 19 Park on Figure 2), along the western edge of the SPA that is adjacent to the MHPA. Vista Park is planned for recreational activities which may include interpretive signs, shaded areas for sitting and relaxing, multi-purpose fields for pick-up games and sport activities, and exercise courses. The sport activities could have potential to create noise at levels that would impact or interfere with wildlife utilization of the MHPA. As indicated above for Trails Park, Vista Park will be subject to subsequent CEQA review to determine how best to implement mitigation related to the LUAG. FEIR Mitigation Measure LU-2, however, repeated in Section 6.0 of this addendum report, is expected to reduce noise to less-than-significant levels.

Residential and mixed uses planned adjacent to the MHPA and trails planned adjacent to and within the MHPA (as shown on Figure 2.4-1, *Parks and Open Space Plan*, in the CVSP) would not create noise levels in excess of levels assumed by the FEIR. In addition, noise levels from residential and mixed use areas are not expected to create noise levels at levels that would impact or interfere with wildlife utilization of the MHPA. Regardless, residential and mixed-use development in the SPA is subject to this LUAG, and implementation of Mitigation Measure LU-2 from the FEIR (repeated in Section 6.0 of this addendum) is required to reduce noise to less-than-significant levels.

Barriers

The LUAG state that new development adjacent to the MHPA may be required to provide barriers along the MHPA boundaries to direct public access to appropriate locations and to reduce domestic animal predation.

The proposed CVSP includes the following policies and design standard to direct public access and reduce domestic animal predation:

> Policy 2.3-15: "Design trails within the Multi-Habitat Planning Area (MHPA) of the CVSP to be consistent with the MSCP and trail standards and design policies of the City's Park and Recreation Department's Consultant's Guide to Park Design and Development."
>
> Policy 2.3-20: "Design trail amenities to minimize their impact on adjacent environmentally sensitive areas."
>
> Policy 2.4-24: "Trails may be accommodated in open space areas as part of implementing projects. Such trail development would be subject to any restrictions that may be associated with the Multi-Species Habitat Planning Areas (MHPA) and evaluated pursuant to applicable CEQA requirements in conjunction with the implementing development."
>
> Design Standard 2.4-6: "Where residential uses [in this case, both multi-family and mixed use areas] abut the San Diego MSCP Sub-Area Plan Multi-Habitat Planning Areas (MHPA), appropriate buffers and/or barriers (walls, fencing, etc.) shall be provided in conjunction with implementing development at the edge between developed areas and natural areas in order to preclude intrusion into these areas by people and domestic animals."

Invasives

The LUAG require that no invasive, non-native plant species be introduced into areas adjacent to the MHPA.

The proposed CVSP includes the following policies and design standard consistent with the LUAG for invasives:

> Policy 2.5-166: "Landscaping plantings for external slopes should include a combination of hydro-seeding and container planting of native plant species…."
>
> Policy 2.5-168: "Erosion control methods should comply with the City's Landscape Standards (Municipal Code §142.0401 et seq.)."
>
> Design Standard 2.5-2: "Prohibited and invasive plant species shall not be knowingly used within Central Village. Prohibited plants are those which do not satisfy the minimum performance standards for the site area per the City's Municipal Code §142.0403."

Brush Management

The LUAG require that new development located adjacent to and topographically above the MHPA (e.g., along canyon edges) be set back from slope edges to incorporate Zone 1 brush management areas on the development pad and outside the existing MHPA, while Zone 2 is considered "impact neutral" within the MHPA.

According to Section 2.5.3.5 "Brush Management Zones" of the CVSP, brush management zones, where required, would be provided in a manner consistent with the provisions of City Municipal Code §142.0412.

Grading/Land Development

The LUAG require that manufactured slopes associated with development be included within the development footprint within or adjacent to the MHPA.

Engineering requirements necessitate that construction of Airway Road within the SPA extend into the MHPA. However, as stated in Section 5.1 of this addendum report, Airway Road is an essential public facility planned as part of the Otay Mesa Community Plan Update and is, therefore, "considered conditionally compatible with the biological objectives of the MSCP and allowed within the City's MHPA" (City 1997).

As shown on the CVSP Land Use Plan (Figure 2), mixed use and multi-family uses adjacent to the MHPA avoid the MHPA, which is consistent with the LUAG for grading/land development. Analysis of the grading/land development LUAG would also occur at the project level, to further ensure that future development proposals in the SPA are consistent with this LUAG.

5.3 GENERAL MANAGEMENT DIRECTIVES

The City's MSCP Subarea Plan general management directives are summarized for the CVSP below. Future development in the SPA will comply with these directives at the project level.

1. Mitigation shall be performed in accordance with Environmentally Sensitive Lands (ESL) Ordinance and Biology Guidelines.

   Applicable mitigation measures from the FEIR, which are repeated in Section 6.0 of this addendum report, satisfy the requirements of the ESL Ordinance and Biology Guidelines.

2. Restoration or revegetation undertaken in the MHPA shall be performed in a manner acceptable to the City.

   Applicable FEIR mitigation measures repeated in Section 6.0 of this addendum report require that any restoration or revegetation undertaken in the MHPA would satisfy the requirements of the ESL Ordinance and Biology Guidelines and, therefore, be acceptable to the City.

3. Public Access, Trails, and Recreation. This directive includes requirements for trail signage, type, location, design, and use.

   Policy 2.3-15 of the CVSP is to design trails within the MHPA to be consistent with the MSCP and trail standards and design policies of the City of San Diego's Park and Recreation Department's Consultant's Guide to Park Design and Development. This policy would meet this general management directive.

4. Litter/Trash and Materials Storage. This directive includes requirements for trash removal and permanent materials storage in the MHPA.

   Such avoidable disturbance to the MHPA would be prevented through implementation of FEIR Mitigation Measure LU-2, which is repeated in Section 6.0 of this addendum report.

5. Adjacency Management Issues. This directive includes: 1) enforcing, preventing, and removing illegal intrusions into the MHPA at least annually; 2) disseminating educational information to residents about MHPA adjacency issues [particularly illegal intrusion and invasive plants]; and 3) installing barriers and/or signage where necessary to direct public access.

   Design Standard 2.4-6 of the proposed CVSP states that where residential uses [in this case, both multi-family and mixed use areas] abut the MHPA, appropriate buffers and/or barriers (walls, fencing, etc.) shall be provided in conjunction with implementing development at the edge between developed areas and natural areas to prevent intrusion into these areas by people and domestic animals. This design standard would prevent illegal intrusions into the MHPA. Enforcing and removing illegal intrusions would be the responsibility of the City that manages the MHPA.

   Design Standard 2.5-2 of the proposed CVSP prohibits the use of invasive plant species within Central Village. Prohibited plants are those which do not satisfy the minimum performance standards for the site area per City Municipal Code §142.0403.

5.4 AREA SPECIFIC MANAGEMENT DIRECTIVES

Special conditions apply to City MSCP Subarea Plan Covered species that would be potentially impacted within the SPA—including designing the impact footprint to avoid impacts to Covered species in the MHPA where feasible. The extent of the impact footprint of the CVSP is the same as the impact footprint assumed for the SPA by the Otay Mesa Community Plan Update and FEIR, with the exception of 1.0 additional acre which was added to facilitate a connection of Airway Road to the west and would not pose a conflict with the Area Specific Management Directives. Future development in the SPA must incorporate measures (Area Specific Management Directives; ASMDs) at the project level for the protection of Covered species as identified in Appendix A of the City's MSCP Subarea Plan. The following Covered species are present (CAGN and San Diego barrel cactus) or have moderate potential to occur (BUOW) in the SPA.

Coastal California Gnatcatcher

ASMDs for the CAGN must include measures to reduce edge effects and minimize disturbance during the nesting period, fire protection measures to reduce the potential for habitat degradation due to unplanned fire, and management measures to maintain or improve habitat quality including vegetation structure. No cleaning of occupied habitat within the cities' MHPA may occur between March 1 and August 15.

Burrowing Owl

According to FEIR Mitigation Measure BIO-1, during the environmental analysis of future proposed projects implementing the Otay Mesa Community Plan Update and CVSP, BUOW surveys (using appropriate protocols) must be conducted in suitable habitat to determine if this species is present and the location of active burrows. If burrowing owls are detected, the following mitigation measures must be implemented in accordance with the MSCP: within the MHPA, impacts must be avoided; outside of the MHPA, impacts to the species must be avoided to the maximum extent practicable; any impacted individuals must be relocated out of the impact area using passive or active methodologies approved by the wildlife agencies; mitigation for

impacts to occupied habitat (at the Subarea Plan specified ratio) must be through the conservation of occupied burrowing owl habitat or conservation of lands appropriate for restoration, management and enhancement of burrowing owl nesting and foraging requirements.

Management plans/directives for the BUOW must include: enhancement of known, historical and potential burrowing owl habitat and management for ground squirrels (the primary excavator of burrowing owl burrows). Enhancement measures may include creation of artificial burrows and vegetation management to enhance foraging habitat. Management plans must also include: monitoring of burrowing owl nest sites to determine use and nesting success; predator control; and establishing a 300 foot-wide impact avoidance area (within the preserve) around occupied burrows.

San Diego Barrel Cactus

ASMDs for San Diego barrel cactus must include measures to protect this species from edge effects, unauthorized collection, and include appropriate fire management/control practices to protect against a too frequent fire cycle. Impacts to this species in the SPA would be mitigated to less-than-significant levels through FEIR Mitigation Measure BIO-1, which is repeated in Section 6.0 of this addendum report.

6.0 MITIGATION FRAMEWORK

No mitigation measures are required in addition to those presented in the FEIR. In addition to compliance with the MSCP consistency guidelines listed in Section 5.0 of this addendum report, future development projects proposed in the SPA shall implement the following mitigation measures from the FEIR, as applicable, to reduce potentially significant impacts to below a level of significance. The following mitigation measures are presented verbatim from the FEIR, although it is recognized that some of the provisions of these mitigation measures are not applicable to the CVSP or to future projects that would implement the CVSP.

BIO-1: To reduce potentially significant impacts that would cause a reduction in the number of unique, rare, endangered, sensitive, or fully protected species of plants or animals, if present within the Community Plan Update (CPU; [CVSP]) area, all subsequent projects implemented in accordance with the CPU (CVSP) shall be analyzed in accordance with the CEQA Significance Thresholds, which require that site-specific biological resources surveys be conducted in accordance with City Biology Guidelines (2012). The locations of any sensitive plant species, including listed, rare, and narrow endemic species, as well as the potential for occurrence of any listed or rare wildlife species shall be recorded and presented in a biological resources report. Based on available habitat within CPU (CVSP) area, focused presence/absence surveys shall be conducted in accordance with the Biology Guidelines and applicable resource agency survey protocols to determine the potential for impacts resulting from the future projects on these species. Engineering design specifications based on project-level grading and site plans shall be incorporated into the design of future projects to minimize or eliminate direct impacts on sensitive plant and wildlife species consistent with the Federal Endangered Species Act (FESA), Migratory Bird Treaty Act (MBTA), Bald and Golden Eagle Protection Act, California Endangered Species Act, MSCP Subarea Plan, and Environmentally Sensitive Lands (ESL) Regulations.

In addition to the requirements detailed above, specific measures shall be implemented when the biological survey results in the identification of BUOW on the project site. Future projects shall be required to conduct a habitat assessment to determine whether or not protocol surveys are needed. Should BUOW habitat or sign be encountered on or within 150 meters of the project site, breeding season surveys shall be conducted. If occupancy is determined, site-specific avoidance and mitigation measures shall be developed in accordance with the protocol established in the Staff Report on Burrowing Owl Mitigation (CDFW 2012). Measures to avoid and minimize impacts to BUOW shall be included in a Conceptual Burrowing Owl Mitigation Plan which includes take avoidance (preconstruction) surveys, site surveillance, and the use of buffers, screens, or other measures to minimize construction-related impacts.

Mitigation for Impacts to Sensitive Upland Habitats. Future projects implemented in accordance with the CPU (CVSP) resulting in impacts to sensitive upland Tier I, II, IIIA, or IIIB habitats shall implement avoidance and minimization measures consistent with the Biology Guidelines and MSCP Subarea Plan and provide suitable mitigation in accordance with the Biology Guidelines and MSCP Subarea Plan. Future project-level grading and site plans shall incorporate project design features to minimize direct impacts on sensitive vegetation communities including but not limited to riparian habitats, wetlands, oak woodlands, coastal sage scrub, and consistent with Federal, State, and City guidelines. Any required mitigation for impacts on sensitive vegetation communities shall be outlined in a conceptual mitigation plan following the outline provided in the Biology Guidelines.

Mitigation for impacts to sensitive vegetation communities shall be implemented at the time future development projects are proposed. Project-level analysis shall determine whether the impacts are within or outside of the MHPA. Any MHPA boundary adjustments shall be processed by the individual project applicants through the City and Wildlife Agencies during the early project planning stage.

Mitigation for impacts to sensitive upland habitats shall occur in accordance with the MSCP mitigation ratios as specified within the Biology Guidelines. These mitigation ratios are based on Tier level of the vegetation community, the location of the impact and the location of the mitigation site(s). If final engineering requirements for Airway Road impact existing conserved lands, an additional 1:1 ratio shall be added to the City-required mitigation ratio in order to replace the lands that were previously preserved as open space. Mitigation lands purchased to compensate for impacts to areas within conserved lands shall be located in the Otay Mesa area if feasible.

Mitigation for Short-term Impacts to Sensitive Species from Project Construction. Specific measures necessary for reducing potential construction-related noise impacts to the CAGN, least Bell's vireo, BUOW, and the cactus wren are further detailed in BIO-2 and LU-2.

BIO-2: Mitigation for future projects to reduce potentially significant impacts that would interfere with the nesting, foraging, or movement of wildlife species within the CPU (CVSP) area, shall be identified in site-specific biological resources surveys prepared in accordance with the Biology Guidelines as further detailed in BIO-1 during the discretionary review process. The biological resources report shall include results of protocol surveys and recommendations for additional measures to be implemented during construction-related activities; shall identify the limits of any identified local-scale wildlife corridors or habitat linkages and analyze potential impacts in relation to local fauna, and the effects of conversion of vegetation communities (e.g., non-native grassland to riparian or agricultural to developed land) to minimize direct impacts on sensitive wildlife species and to provide for continued wildlife movement through the corridor.

Measures that shall be incorporated into project-level construction documents to minimize direct impacts on wildlife movement, nesting or foraging activities shall be addressed in the biological resources report and shall include recommendations for preconstruction protocol surveys to be conducted during established breeding seasons, construction noise monitoring and implementation of any species specific mitigation plans (such as a Burrowing Owl Mitigation Plan) in order to comply with the FESA, MBTA, Bald and Golden Eagle Protection Act, California Fish and Game Code, and/or the ESL Regulations.

LU-2: All subsequent development projects that are implemented in accordance with the CPU (CVSP) which is adjacent to designated MHPA areas shall comply with the Land Use Adjacency Guidelines of the MSCP in terms of land use, drainage, access, toxic substances in runoff, lighting, noise, invasive plant species, grading, and brush management requirements. Mitigation measures include, but are not limited to: sufficient buffers and design features, barriers (rocks, boulders, signage, fencing, and appropriate vegetation) where necessary, lighting directed away from the MHPA, and berms or walls adjacent to commercial or industrial areas and any other use that may introduce construction noise or noise from future development that could impact or interfere with wildlife utilization of the MHPA. The project biologist for each proposed project would identify specific mitigation measures needed to reduce impacts to below a level of significance. Subsequent environmental review would be required to determine the significance of impacts from land use adjacency and compliance with the Land Use Adjacency Guidelines of the MSCP. Prior to approval of any subsequent development project in an area adjacent to a designated MHPA, the City shall identify specific conditions of approval in order to avoid or to reduce potential impacts to adjacent the MHPA.

Specific requirements shall include:

• Prior to the issuance of occupancy permits, development areas shall be permanently fenced where development is adjacent to the MHPA to deter the intrusion of people and/or pets into the MHPA open space areas. Signage may be installed as an additional deterrent to human intrusion as required by the City.

• The use of structural and nonstructural best management practices (BMPs), including sediment catchment devices, shall be required to reduce the potential indirect impacts associated with construction to drainage and water quality. Drainage shall be directed

away from the MHPA or, if not possible, must not drain directly into the MHPA. Instead, runoff shall flow into sedimentation basins, grassy swales, or mechanical trapping devices prior to draining into the MHPA. Drainage shall be shown on the site plan and reviewed satisfactory to the City Engineer.

• All outdoor lighting adjacent to open space areas shall be shielded to prevent light over-spill off-site. Shielding shall consist of the installation of fixtures that physically direct light away from the outer edges of the road or landscaping, berms, or other barriers at the edge of development that prevent light over-spill.

• The landscape plan for the project shall contain no exotic plant/invasive species and shall include an appropriate mix of native species which shall be used adjacent to the MHPA.

• All manufactured slopes must be included within the development footprint and outside the MHPA.

• All brush management areas shall be shown on the site plan and reviewed and approved by the Environmental Designee. Zone 1 brush management areas shall be included within the development footprint and outside the MHPA. Brush management Zone 2 may be permitted within the MHPA (considered impact neutral) but cannot be used as mitigation. Vegetation clearing shall be done consistent with City standards and shall avoid/minimize impacts to covered species to the maximum extent possible. For all new development, regardless of the ownership, the brush management in the Zone 2 area shall be the responsibility of a homeowners association or other private party.

• Access to the MHPA, if any, shall be directed to minimize impacts and shall be shown on the site plan and reviewed and approved by the Environmental Designee.

• Land uses, such as recreation and agriculture, that use chemicals or generate byproducts such as manure, that are potentially toxic or impactive to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. Such measures shall include drainage/detention basins, swales, or holding areas with non-invasive grasses or wetland-type native vegetation to filter out the toxic materials. Regular maintenance should be provided. Where applicable, this requirement shall be incorporated into leases on publicly owned property as leases come up for renewal.

7.0 CONCLUSION

As demonstrated in this addendum report, no new or more severe impacts to biological resources would occur from adoption of the CVSP as compared to the biological resource impacts disclosed in the FEIR for the SPA. Mitigation Measures LU-2, BIO-1, and BIO-2 from the FEIR are applicable, and no additional mitigation measures are required to reduce impacts to less-than-significant levels.

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Appendix A

Quino Checkerspot
Butterfly Survey Reports

2015 Report
U.S. Fish and Wildlife Service Protocol Level Presence/Absence Surveys for the Quino Checkerspot Butterfly (*Euphydryas editha quino*)

Prepared for:

ColRich

Prepared by:

Alden Environmental, Inc.
3245 University Ave., #1188
San Diego, CA 92104

June 10, 2015

I certify that the information in this survey report and attached exhibits fully and accurately represent my work.

Brian Lohstroh (TE063608-5)

Lee Ripma (TE-221290-3.1)

Garrett Huffman (TE-20168A-0)

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INTRODUCTION

This report documents the results of a focused survey conducted for the federally listed as endangered quino checkerspot butterfly (QCB; *Euphydryas editha quino*) on the Otay Canyon Ranch project site. The site consists of 6 parcels located south of State Route (SR) 905, west of Cactus Road, between Airway Road and Siempre Viva Road in the City of San Diego's (City's) Otay Mesa Community (Figures 1 and 2).

Surrounding land uses include industrial, agricultural and automobile salvage yards. Cactus Road borders the site to the east. Elevation on site ranges from 425 to 510 feet above mean sea level. Soil on site consists of Stockpen gravelly clay loam (0 to 2 percent slopes and 2 to 5 percent slopes) and Olivenhain cobbly loam (30 to 50 percent slopes; Bowman 1973). A small portion of the City MSCP's Multi-habitat Planning Area (MHPA) occurs at the northwest corner of the property, within the northern canyon.

METHODS

The surveys were performed in accordance with the Year 2014 Survey Protocol Information (USFWS 2014a) and Survey Guidelines (USFWS 2014b) by USFWS permitted biologists Lee Ripma (TE221290-3.1), Garrett Huffman (TE20168A-0), and Brian Lohstroh (TE063608-5). A total of 12 protocol survey visits were conducted on site. All surveys were conducted between February 20 and May 5, 2015. Dates, times, and weather conditions at the start and end of each survey are presented in Appendix A. The surveys were conducted by slowly walking (approximately 10 -12 acres per hour) transects across the site and noting butterflies and/or potential QCB resources present. The entire Project site was surveyed, and no areas were excluded. Copies of field notes from each survey are presented in Appendix B. Lists of butterflies observed during each survey are presented in Appendix C.

RESULTS

No QCB were observed. The site is predominantly an active agricultural site with several structures and out buildings. Overall, the habitat quality for the QCB is low, with the only suitable habitat occurring at the northern and southern ends of the site, outside of the active agricultural and developed areas (Figures 3 and 4). The suitable QCB habitat components occur within and adjacent to the canyons on the north and south ends of the site. The only host plant observed was a single patch dot-seed plantain (*Plantago erecta*) at the northern end (Figures 3 and 4). Based on this and previous surveys, the QCB is not anticipated to occur on site.

REFERENCES

Bowman, R. 1973. Soil Survey of the San Diego Area. USDA in cooperation with USDI, UC Agricultural Experiment Station, Bureau of Indian Affairs, Department of the Navy, and the U.S. Marine Corps.

U.S. Fish and Wildlife Service (USFWS). 2014a. Quino Checkerspot Butterfly (*Euphydryas editha quino*) 2014 Survey Protocol Information. February.

2014b. Quino Checkerspot Butterfly 2014 Survey Recommendations. February.

Figure 1

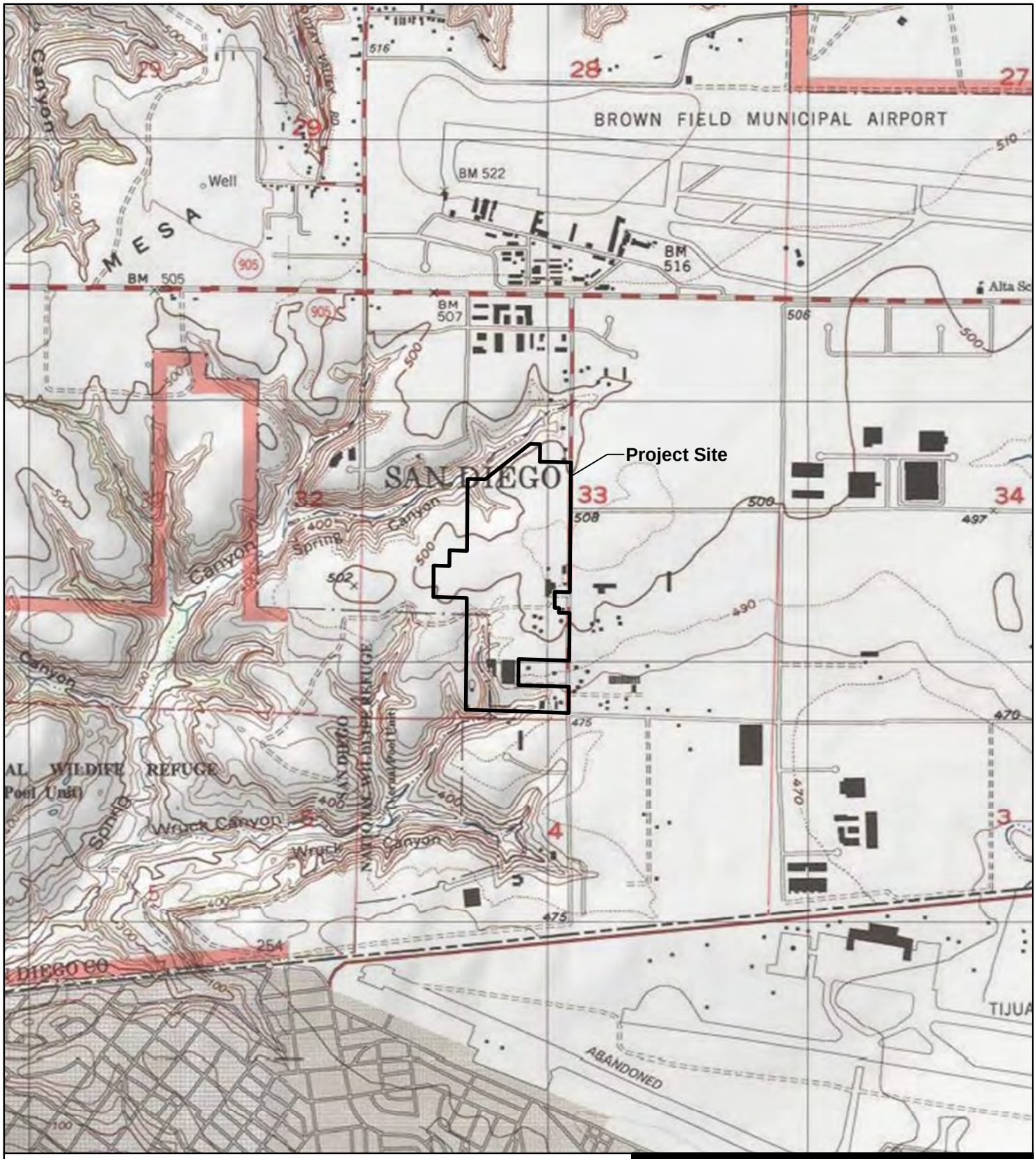
Regional Location

OTAY CANYON RANCH
QUINO CHECKERSPOT BUTTERFLY SURVEY

N
W E
S

0 2 4 Miles

ALDEN ENVIRONMENTAL, INC



Source: USGS Quadrangles (Otay Mesa, Imperial Beach);
Copyright:© 2013 National Geographic Society, i-cubed

Figure 2

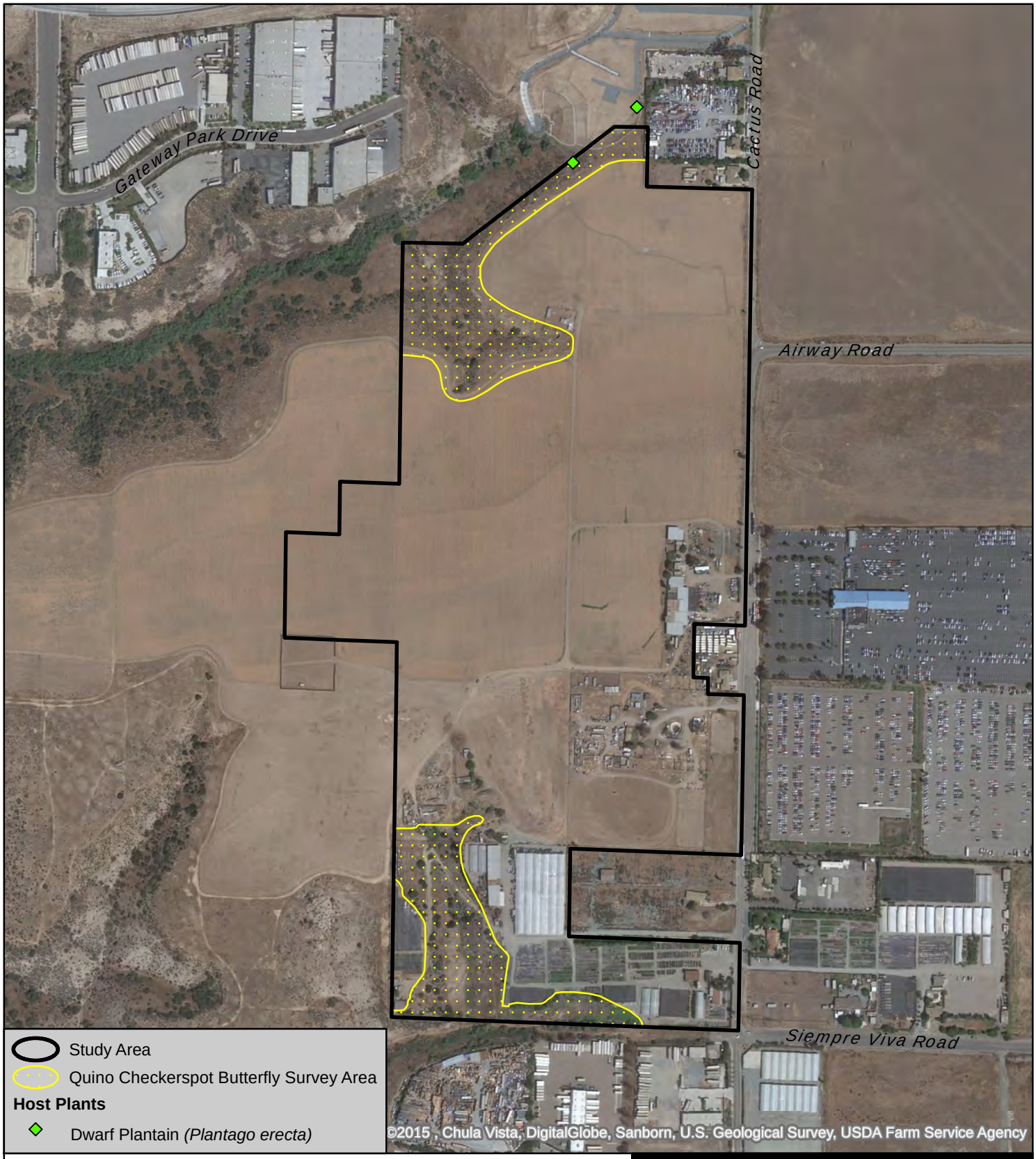
Project Location

OTAY CANYON RANCH
QUINO CHECKERSPOT BUTTERFLY SURVEY

N
W E
S

0 1,000 2,000 Feet

ALDEN ENVIRONMENTAL, INC



Source: Google

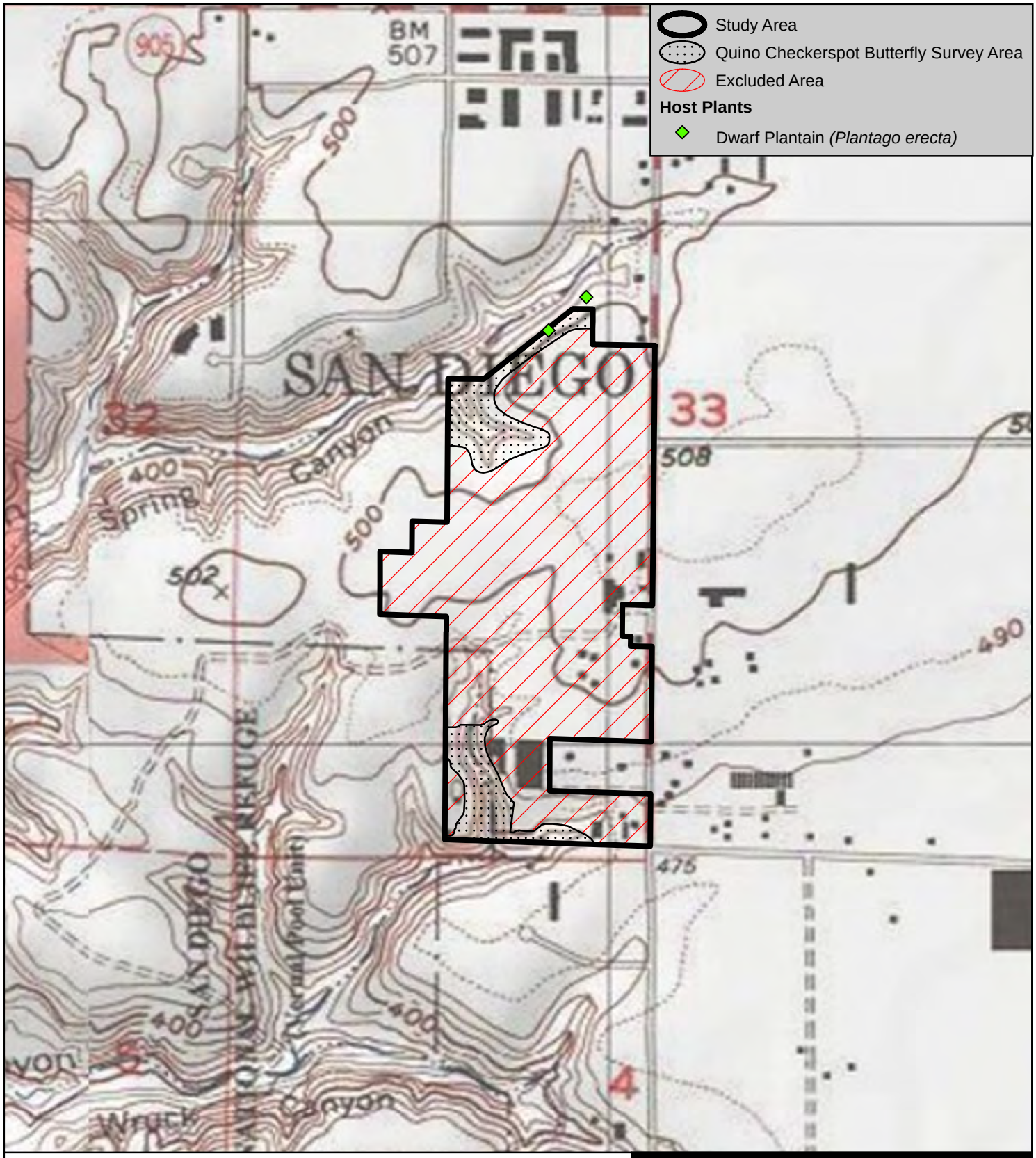
N
W E
S
0 250 500 Feet

ALDEN ENVIRONMENTAL, INC

Figure 3

Survey Area

OTAY CANYON RANCH
QUINO CHECKERSPOT BUTTERFLY SURVEY



Source: USGS Quadrangles (Otay Mesa, Imperial Beach);
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N
W E
S

0 500 1,000 Feet

ALDEN ENVIRONMENTAL, INC

Figure 4

QCB Site Assessment

OTAY CANYON RANCH
QUINO CHECKERSPOT BUTTERFLY SURVEY

SUMMARY OF FIELD SURVEY CONDITIONS

Survey	Date	Biologist	Survey Times (start/stop)	Weather Conditions (start/stop)[1]
1	2/17/15	Lee Ripma	955/1150	0%, 68.2°F, wind 0-2 mph/ 0%, 76.3°F, wind 1-3 mph
2	2/24/15	Lee Ripma	1050/1230	0%, 71.9°F, wind 3-7 mph/ 0%, 77.1°F, wind 2-5(8) mph
3	3/3/15	Garrett Huffman	1100/1330	40%, 65°F, wind 1-3 mph/ 30%, 68°F, wind 2-5 mph
4	3/11/15	Brian Lohstroh	1045/1315	70%, 72°F, wind 0-2 mph/ 80%, 75°F, wind 1-4 mph
5	3/19/15	Garrett Huffman	1150/1350	55%, 82°F, wind 0-2 mph/ 10%, 83°F, wind 2-6 mph
6	3/28/15	Garrett Huffman	1445/1645	20%, 82°F, wind 3-5 mph/ 10%, 78°F, wind 3-7 mph
7	4/4/15	Garrett Huffman	1115/1315	30%, 88°F, wind 3-4 mph/ 30%, 92°F, wind 2-5 mph
8	4/12/15	Garrett Huffman	0945/1115	0%, 70°F, wind 2-3 mph/ 0%, 72°F, wind 2-4 mph
9	4/16/15	Garrett Huffman	0830/1015	0%, 73°F, wind 0 mph/ 0%, 79°F, wind 0 mph
10	4/26/15	Garrett Huffman	1600/1730	20%,77°F, wind 3-8 mph/ 5%, 72°F, wind 4-10 mph
11	5/1/15	Garrett Huffman	1300/1430	5%, 91°F, wind 3-9 mph/ 0%, 90°F, wind 4-8 mph
12	5/5/15	Garrett Huffman	1430/1600	40%, 68°F, wind 5-9 mph/ 30%, 67°F, wind 3-6 mph

[1]Temperature was taken on the ground in the shade. Percentages indicate cloud cover.

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BIOLOGICAL CONSULTING

Project: Otay Parcel Grey Mesa Spring Valley Ranch

Surveyor Name: Lee Ripma

Date: 2/17/15 Survey #: 1

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	9:55	68.2	0%	0-2
End	11:50	76.3	0%	1-3

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
	Vanessa annabella (West Coast Lady)
✓	*Vanessa cardui* (Painted Lady) ~~IIII~~ ~~IIII~~ II
	Vanessa virginiensis (American Lady)
	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
✓	*Pyrgus albescens* (White Checkered-Skipper) II
	Erynnis funeralis (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

~~✓ white checkered skipper? check~~ correct, ✓

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
	Strymon melinus (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
✓	*Brephidium exilis* (Western Pygmy-Blue) II
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
	Anthocharis sara (Sara's Orangetip)
	Pieris rapae (Cabbage White)
	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	

List nectar sources and plant communities observed

Lathsenia cal.
Glebionis (NN)
Dichlostima cap.
Acmispon glaber
Plagio collinus
Allium ~~tracanticlatum~~ parvum

NNG NSS-D
DCSS
Ag

Gilia
Miralhalii laevis
Red maids
Encelia cal.
Shooting star ~~perm primulaceae~~

(painted ladies very fresh & neat on Allium)

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)*
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

Northern portion of parcel one 8 ft. diameter Planerecta patch w/ medium density. No QCB caterpillars observed in patch. Several woolly bear moth caterpillars in area, some eating Plantago.

No Planerecta patches on southern portion of site, very dry NNG slopes.

ROCKS
BIOLOGICAL CONSULTING

Project Spring Canon Ranch Otay Parcel for Greg

Surveyor Name: Lee Ripma

Date 2/24/15 Survey # 2

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	1050	71.9	0	3-7
End	1230	77.1	0	2-5(8)

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
	Vanessa annabella (West Coast Lady)
✓	*Vanessa cardui* (Painted Lady) ~~IIII~~ ~~IIII~~ I
	Vanessa virginiensis (American Lady)
	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
	Pyrgus albescens (White Checkered-Skipper)
	Erynnis funeralis (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
	Strymon melinus (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
	Brephidium exilis (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
	Anthocharis sara (Sara's Orangetip)
	Pieris rapae (Cabbage White)
	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	

List nectar sources and plant communities observed

Blue dicks
Allium praecox
Isomeris
Gilia
Dodantheon
Lastrenia
Encelia cal

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)*
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

A bit windy @ times during survey but many painted ladies observed did not appear to be battling wind. Protocol conditions for duration of survey

ROCKS
BIOLOGICAL CONSULTING

SPRING CANYON

SDG&E Natural Gas System Potential Upgrades

Surveyor Name: GARRETT HUFFMAN

Date 3/3/15 Survey # 3

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	1100	65	40	1-3
End	1330	67	30	2-5

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
II	*Vanessa annabella* (West Coast Lady)
~~IIII~~ II	*Vanessa cardui* (Painted Lady)
	Vanessa virginiensis (American Lady)
I	*Vanessa atalanta* (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
	Pyrgus albescens (White Checkered-Skipper)
I	*Erynnis funeralis* (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
	Strymon melinus (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
	Brephidium exilis (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
	Anthocharis sara (Sara's Orangetip)
	Pieris rapae (Cabbage White)
	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
I	*Eurema nicippe* (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	

List nectar sources and plant communities observed

CSS; NON-NATIVE GRASSLAND
ENCELIA CALIFORNICA, RIBES SPECIOSUM,
GLEBIONIS CORONARIA, ALLIUM SP.,
OXALIS CALIFORNICA, RAPHANUS SATIVUS,
SIDALCEA MALVIFLORA.

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)*
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

PLANTAGO_ERECTA_10ft_MEDIUM

AVIAN SPECIES OBSERVED:
ANHU, CAKI, HOFI, SAPH,
OCWA, BGGN, BUSH, CATO,
RODO, HOLA, WCSP, NOMO,

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SCR QCB
~~SDG&E Natural Gas System Potential Upgrades~~

Surveyor Name: B. Lokstroh

Date 3/11/15 Survey #

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	1045	72	70%	0-2
End	1315	75	80% (thin)	1-4

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
~~IIII~~ ~~IIII~~	Vanessa annabella (West Coast Lady)
IIII	Vanessa cardui (Painted Lady)
	Vanessa virginiensis (American Lady)
II	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
	Pyrgus albescens (White Checkered-Skipper)
IIII	Erynnis funeralis (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
I	Strymon melinus (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
~~IIII~~	Brephidium exilis (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
	Anthocharis sara (Sara's Orangetip)
	Pieris rapae (Cabbage White)
	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
I	Coenonympha californica (Common California Ringlet)
Others	

List nectar sources and plant communities observed Layia Plat, Glebionus cor, Lasthenia, Dich cap, erodium, silene gall, pectocarpia, Isc. orb, Allium p., gilia, Ribes spec, medicago poly, Zig., Sonchus, Mirab. laevis, Rah. vis, Raph. sat., Hypoc. glab., sidalcea malv, Eucrypta, cal. mac. Nic glau, claytonia, foe vul., Hir inc, sanicula arg. oxalis p-c, Sysimb. irio, malva parv., Emm. pend. Mam. dio., Lepidium, calen. cil, Rhus Int.

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

Belding's orangethroat whiptail.
Asbeldingi: 32.56147, -116.99187

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SDG&E Natural Gas System Potential Upgrades

Surveyor Name: GARRET HUFFMAN SHANNON WALSH

Date 3/19/15 Survey # 5

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	1150	83	0-2 ↔	55
End	1350	82	2-6 ↔	10

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
11	*Vanessa annabella* (West Coast Lady)
7	*Vanessa cardui* (Painted Lady)
	Vanessa virginiensis (American Lady)
	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
2	*Heliopetes ericetorum* (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
	Pyrgus albescens (White Checkered-Skipper)
6	*Erynnis funeralis* (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
	Strymon melinus (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
1	*Brephidium exilis* (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
3	*Anthocharis sara* (Sara's Orangetip)
	Pieris rapae (Cabbage White)
	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	

List nectar sources and plant communities observed CSS

Peritoma arborea, Dicholostemma capitatum, Acmispon glaber, Encelia californica, Ribes speciosum, Raphanus sativus, Glebionis coronaria.

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)*
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

AVIAN LIST: BLPH, WCSP, NRWS, RTHA, CORA, HOFI, NOMO, HOSP, BUSH, SOSP, LEGO, VRWA, TUVU, NOMO, HOLA, BEWR, ANHU, CATO, EUCD, CAKI, KILL.

ROCKS
BIOLOGICAL CONSULTING

SPRING CANYON

~~SDG&E Natural Gas System Potential Upgrades~~

Surveyor Name: GARRETT HUFFMAN

Date 03/23/15 Survey # 6

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	1005	82	20	3-5
End	1045	78	10	3-7

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Chanchyas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
1	*Vanessa annabella* (West Coast Lady)
3	*Vanessa cardui* (Painted Lady)
	Vanessa virginiensis (American Lady)
	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
4	*Pyrgus albescens* (White Checkered-Skipper)
	Erynnis funeralis (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
1	*Strymon melinus* (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
9	*Brephidium exilis* (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
2	*Anthocharis sara* (Sara's Orangetip)
	Pieris rapae (Cabbage White)
4	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	

List nectar sources and plant communities observed CSS

BAHIOPSIS LACINIATA, PERITOMA ARBOREA, DICHOLOSTEMMA CAPITATUM, ARTEMISIA CALIFORNICA, ENCELIA CALIFORNICA, RIBES SPECIOSUM, RAPHENUS SATIVUS

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla*)
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

AVIAN LIST: HUFI, BUSH, LEGO, CATO, CATH, SOSP, CORA, HOLA, RTHA, NOMO, WTSW, BLPH, KILL, ANHU, MODO, RODO, AMCR, WESP, EUCD

ROCKS
BIOLOGICAL CONSULTING

SPRING CANYON

~~SDG&E Natural Gas System Potential Upgrades~~

Surveyor Name: GARRETT HUFFMAN WENDY ROGERS

Date 4/4/15 Survey # 7

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	1115	88	30	3-4
End	1315	92	30	2-5

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
1	*Basilarchia lorquini* (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
2	*Vanessa annabella* (West Coast Lady)
	Vanessa cardui (Painted Lady)
	Vanessa virginiensis (American Lady)
	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
2	*Pyrgus albescens* (White Checkered-Skipper)
2	*Erynnis funeralis* (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
11	*Strymon melinus* (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
7	*Brephidium exilis* (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
3	*Anthocharis sara* (Sara's Orangetip)
	Pieris rapae (Cabbage White)
1	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
1	*Coenonympha californica* (Common California Ringlet)
Others	

List nectar sources and plant communities observed CSS

BAHIOPSIS, DICHOLOSTEMMA, ACMISPON, ENCELIA, RIBES CRYPTANTHA

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)*
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

AVIAN LIST: LAGN, WCSP, ANHU, CATH, CATO, WREN, SOSP, BUSH, LEGO, NOMO, MODO, HOFI, RTHA,

ROCKS
BIOLOGICAL CONSULTING

SDG&E Natural Gas System Potential Upgrades

Surveyor Name: GARRETT HUFFMAN

Date 4/12/15 Survey # 8

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0945	70	Ø	2-3
End	1115	72	Ø	2-4

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
2	*Vanessa annabella* (West Coast Lady)
	Vanessa cardui (Painted Lady)
	Vanessa virginiensis (American Lady)
	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
5	*Pyrgus albescens* (White Checkered-Skipper)
	Erynnis funeralis (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
7	*Strymon melinus* (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
13	*Brephidium exilis* (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
	Anthocharis sara (Sara's Orangetip)
1	*Pieris rapae* (Cabbage White)
5	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	

List nectar sources and plant communities observed CSS

DEINANDRA, BAHIOPSIS, GLEBIONIS, CALOCHORTUS MARRUBIUM

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)*
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

AVIAN SPECIES: BEWR, HOFI, CATH, CATO, CLSW, MOUO, WCSP, BUSH, SOSP, EULO, NOMO, SAPH

ROCKS
BIOLOGICAL CONSULTING

SDG&E Natural Gas System Potential Upgrades

Surveyor Name: GARRETT HUFFMAN

Date 4/16/15 Survey # 9

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0830	73	Ø	6-13
End	1015	79	Ø	2-6

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
	Vanessa annabella (West Coast Lady)
	Vanessa cardui (Painted Lady)
	Vanessa virginiensis (American Lady)
	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
1	*Pyrgus albescens* (White Checkered-Skipper)
	Erynnis funeralis (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
4	*Strymon melinus* (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
16	*Brephidium exilis* (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
	Anthocharis sara (Sara's Orangetip)
4	*Pieris rapae* (Cabbage White)
4	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	

List nectar sources and plant communities observed CSS

DEINANDRA, ERIOGONUM, CALOCHORTUS, BAHIOPSIS GLEBIONIS

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
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GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)*
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

AVIAN LIST:

HOFI, TUVU, SAPH, NOMO, LEGO, ANHU, CATH, CORA, BUSH, SOSP, CATO, BEWR, EUST, GRRO

ROCKS
BIOLOGICAL CONSULTING

SPRING CANYON

SDG&E Natural ~~Gas System~~ Potential Upgrades

Surveyor Name: GARRETT HUFFMAN

Date 04/26/15 Survey # 10

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	1600	77	20	3-8
End	1730	72	5	4-10

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkerspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
	Vanessa annabella (West Coast Lady)
	Vanessa cardui (Painted Lady)
	Vanessa virginiensis (American Lady)
	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
3	*Heliopetes ericetorum* (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
	Pyrgus albescens (White Checkered-Skipper)
	Erynnis funeralis (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Allides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
	Strymon melinus (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icaricia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
3	*Brephidium exilis* (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
	Anthocharis sara (Sara's Orangetip)
	Pieris rapae (Cabbage White)
L	*Pontia protodice* (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	

List nectar sources and plant communities observed CSS, ~~[illegible]~~ BAHIOPSIS, ENCELIA, GLEBIONIS

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla*)
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

AVIAN SPECIES:
CORA, MOBU, RTHA, HOLA, NOMO, SOSP, HAFI, CAQU

ROCKS
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SDG&E Natural Gas System Potential Upgrades

Surveyor Name: GARRETT HUFFMAN

Date 5/1/15 Survey # 11

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	1300	91	5	3-9
End	1430	90	Ø	4-8

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
	Vanessa annabella (West Coast Lady)
	Vanessa cardui (Painted Lady)
	Vanessa virginiensis (American Lady)
	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
	Pyrgus albescens (White Checkered-Skipper)
	Erynnis funeralis (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
3	*Strymon melinus* (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icaricia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
6	*Brephidium exilis* (Western Pygmy-Blue)
Riodiniclae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
	Anthocharis sara (Sara's Orangetip)
	Pieris rapae (Cabbage White)
3	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	

List nectar sources and plant communities observed CSS

DRINANDRA, BAHIOPSIS

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)*
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

AVIAN LIST: NOMO, RTHA, HOLA, CLSW, LECO, RODO

ROCKS
BIOLOGICAL CONSULTING

SPRING CANYON

~~SDG&E Natural Gas System Potential Upgrades~~

Surveyor Name: GARRETT HUFFMAN

Date 5/5/12 Survey # 12

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	1430	60	40	5-9
End	1600	67	30	3-6

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
1	*Vanessa annabella* (West Coast Lady)
	Vanessa cardui (Painted Lady)
	Vanessa virginiensis (American Lady)
	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
	Pyrgus albescens (White Checkered-Skipper)
	Erynnis funeralis (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
1	*Strymon melinus* (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
3	*Brephidium exilis* (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
	Anthocharis sara (Sara's Orangetip)
1	*Pieris rapae* (Cabbage White)
3	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	

List nectar sources and plant communities observed

CSS

DRIMANORA, BATHIOPSIS

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)*
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

AVIAN SPECIES:
CLSW, HOLA, WREN, NUMO, ANHU, ROOO, BLPH

LISTS OF BUTTERFLIES OBSERVED DURING EACH SURVEY

Survey Number	Date	Species	Number Observed
1	**February 17, 2015**	Painted lady (*Vanessa cardui*)	12
		White checkered-skipper (*Pyrgus albescens)*	2
		Western pygmy-blue (*Brephidium exilis)*	2
2	**February 4, 2015**	Painted lady (*Vanessa cardui*)	11
3	**March 3, 2015**	West coast lady (*Vanessa annabella*)	2
		Painted lady (*Vanessa cardui*)	7
		Red admiral (*Vanessa atalanta)*	1
		Funereal duskywing *(Erynnis funeralis)*	1
		Sleepy orange (*Eurema niciope)*	1
4	**March 11, 2015**	West coast lady (*Vanessa annabella*)	10
		Painted lady (*Vanessa cardui*)	4
		Red admiral (*Vanessa atalanta)*	2
		Funereal duskywing *(Erynnis funeralis)*	5
		Gray hairstreak (*Strymon melinus)*	1
		Western pygmy-blue (*Brephidium exilis)*	6
		Common california ringlet (*Coenonymphia california)*	1
5	**March 19, 2015**	West coast lady (*Vanessa annabella*)	11
		Painted lady (*Vanessa cardui*)	7
		Northern white-skipper (*Heliopetes ericetorum)*	2
		Funereal duskywing *(Erynnis funeralis)*	6
		Western pygmy-blue (*Brephidium exilis)*	1
		Sara's orangetip (*Anthocharis sara*)	3
6	**March 28, 2015**	West coast lady (*Vanessa annabella*)	1
		Painted lady (*Vanessa cardui*)	3
		White checkered-skipper (*Pyrgus albescens)*	4
		Gray hairstreak (*Strymon melinus)*	1
		Western pygmy-blue (*Brephidium exilis)*	9
		Sara's orangetip (*Anthocharis sara*)	2
		Checkered white (*Pontia protodice)*	4

Survey Number	Date	Species	Number Observed
7	**April 4, 2015**	Lorquin's admiral (*Basilarchia torquini)*	1
		West coast lady (*Vanessa annabella*)	2
		White checkered-skipper (*Pyrgus albescens)*	2
		Funereal duskywing (*Erynnis funeralis*)	2
		Gray hairstreak (*Strymon melinus)*	11
		Western pygmy-blue (*Brephidium exilis)*	7
		Sara's orangetip (*Anthocharis sara*)	3
		Checkered white (*Pontia protodice)*	1
		Common california ringlet (*Coenonymphia california)*	1
8	**April 12, 2015**	West coast lady (*Vanessa annabella*)	2
		White checkered-skipper (*Pyrgus albescens)*	5
		Gray hairstreak (*Strymon melinus)*	7
		Western pygmy-blue (*Brephidium exilis)*	13
		Cabbage white (*Pieris rapae)*	1
		Checkered white (*Pontia protodice)*	5
9	**April 16, 2015**	White checkered-skipper (*Pyrgus albescens)*	1
		Gray hairstreak (*Strymon melinus)*	4
		Western pygmy-blue (*Brephidium exilis)*	16
		Cabbage white (*Pieris rapae)*	4
		Checkered white (*Pontia protodice)*	4
10	**April 26, 2015**	Northern white-skipper (*Heliopates ericetorum)*	3
		Western pygmy-blue (*Brephidium exilis)*	3
		Checkered white (*Pontia protodice)*	1
11	**May 1, 2015**	Gray hairstreak (*Strymon melinus)*	3
		Western pygmy-blue (*Brephidium exilis)*	6
		Checkered white (*Pontia protodice)*	3
12	**May 5, 2015**	West coast lady (*Vanessa annabella*)	1
		Gray hairstreak (*Strymon melinus)*	1
		Western pygmy-blue (*Brephidium exilis)*	3
		Cabbage white (*Pieris rapae)*	1
		Checkered white (*Pontia protodice)*	3

2016 Report
U.S. Fish and Wildlife Service Protocol Level Presence/Absence Surveys for the Quino Checkerspot Butterfly (*Euphydryas editha quino*)

Prepared for:

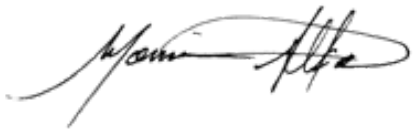
ColRich

Prepared by:

Alden Environmental, Inc.
3245 University Ave., #1188
San Diego, CA 92104

June 23, 2016

I certify that the information in this survey report and attached exhibits fully and accurately represent my work.



Monica Alfaro (TE-05124-2)

Garrett Huffman (TE-20168A-0)

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B	Copies of Field Notes
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INTRODUCTION

This report documents the results of a focused survey conducted for the federally listed as endangered quino checkerspot butterfly (QCB; *Euphydryas editha quino*) on the Otay Canyon Ranch project site. The site consists of 8 parcels located south of State Route (SR) 905, west of Cactus Road, between Airway Road and Siempre Viva Road in the City of San Diego's (City's) Otay Mesa Community (Figures 1 and 2).

Surrounding land uses include industrial, agricultural and automobile salvage yards. Cactus Road borders the site to the east. Elevation on site ranges from 425 to 510 feet above mean sea level. Soil on site consists of Stockpen gravelly clay loam (0 to 2 percent slopes and 2 to 5 percent slopes) and Olivenhain cobbly loam (30 to 50 percent slopes; Bowman 1973). A small portion of the City MSCP's Multi-habitat Planning Area (MHPA) occurs at the northwest corner of the property, within the northern canyon.

METHODS

The surveys were performed in accordance with the Year 2014 Survey Guidelines (USFWS 2014b) by USFWS permitted biologists Monica Alfaro (TE-05124-2) and Garrett Huffman (TE20168A-0). A total of 13 protocol survey visits were conducted on site. All surveys were conducted between February 19 and May 9, 2016. Dates, times, and weather conditions at the start and end of each survey are presented in Appendix A. The surveys were conducted by slowly walking (approximately 5 - 10 acres per hour) transects across the site and noting butterflies and/or potential QCB resources present. The entire Project site was surveyed, and no areas were excluded. Copies of field notes from each survey are presented in Appendix B. Lists of butterflies observed during each survey are presented in Appendix C.

RESULTS

No QCB were observed. The site is predominantly an active agricultural site with several structures and out buildings. Overall, the habitat quality for the QCB is low, with the only suitable habitat occurring at the northern and southern ends of the site, outside of the active agricultural and developed areas (Figures 3 and 4). The suitable QCB habitat components occur within and adjacent to the canyons on the north and south ends of the site. The only host plant observed was a single patch dot-seed plantain (*Plantago erecta*) at the northern end (Figures 3 and 4). Based on this and previous surveys, the QCB is not anticipated to occur on site.

REFERENCES

Bowman, R. 1973. Soil Survey of the San Diego Area. USDA in cooperation with USDI, UC Agricultural Experiment Station, Bureau of Indian Affairs, Department of the Navy, and the U.S. Marine Corps.

U.S. Fish and Wildlife Service (USFWS). 2014. Quino Checkerspot Butterfly (*Euphydryas editha quino*) 2014 Survey Guidelines. December.

Figure 1

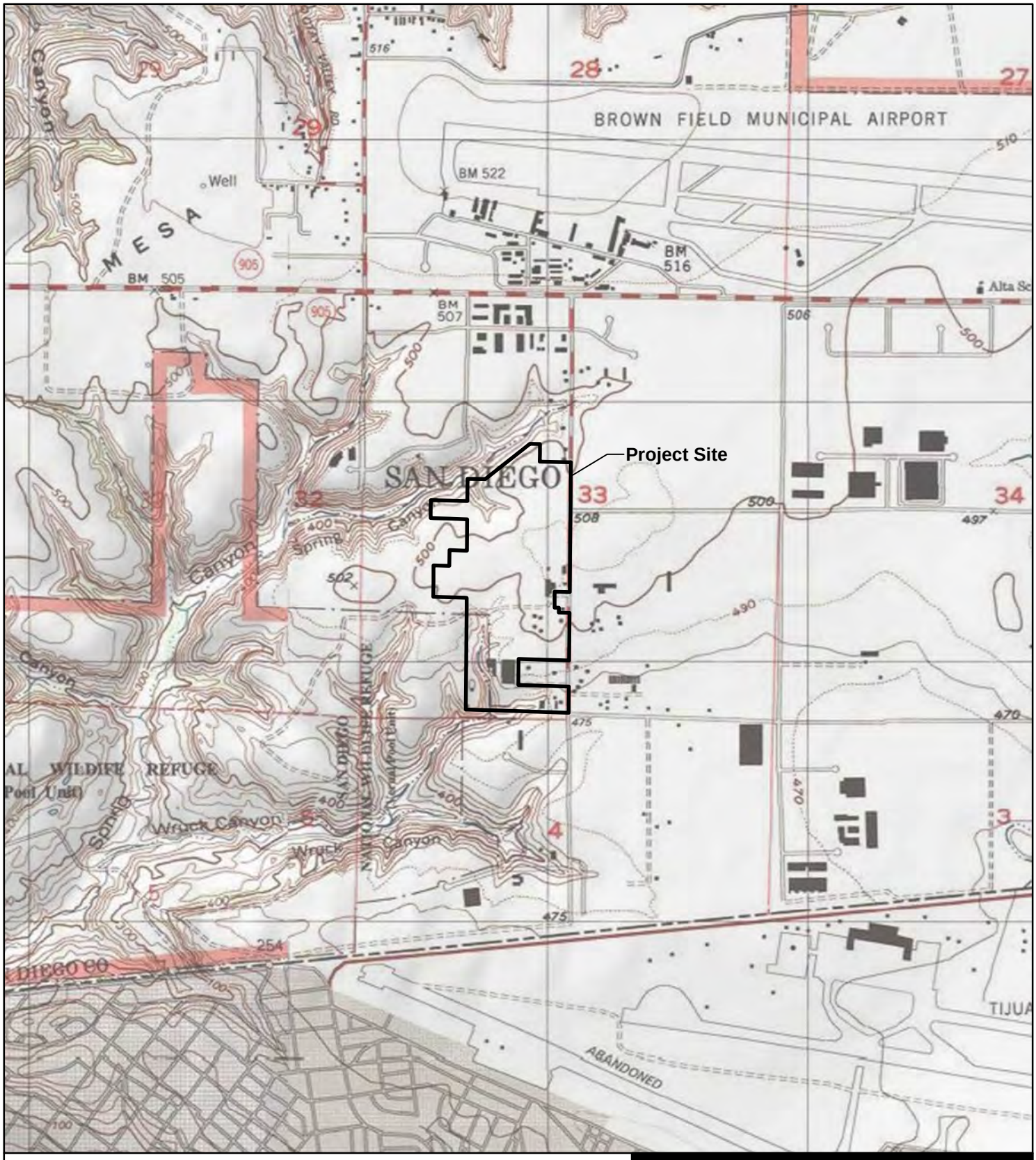
Regional Location

OTAY CANYON RANCH
QUINO CHECKERSPOT BUTTERFLY SURVEY

N
W E
S

0 2 4 Miles

ALDEN ENVIRONMENTAL, INC



Source: USGS Quadrangles (Otay Mesa, Imperial Beach);
Copyright:© 2013 National Geographic Society, i-cubed

Figure 2

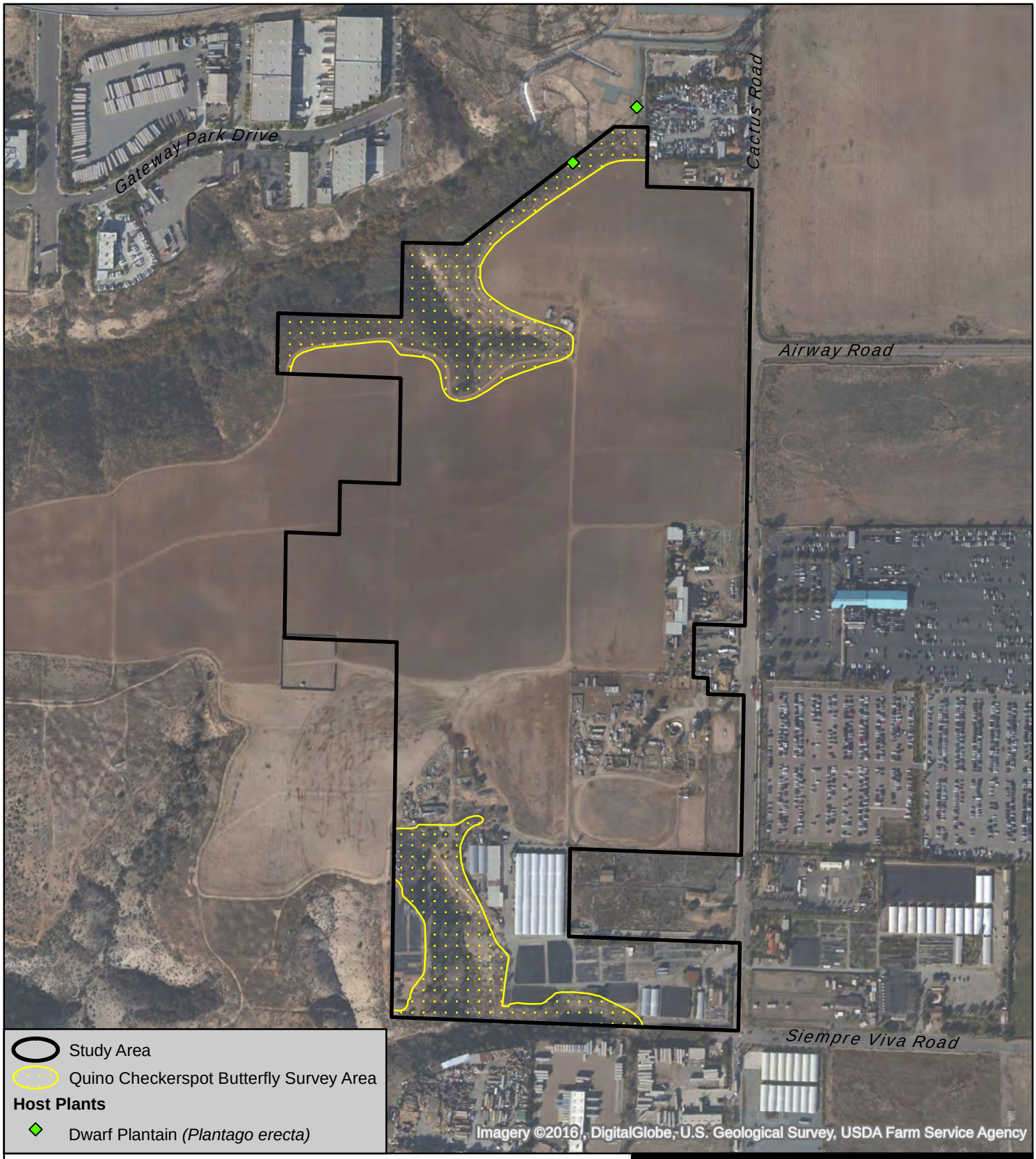
Project Location

OTAY CANYON RANCH
QUINO CHECKERSPOT BUTTERFLY SURVEY

N
W E
S

0 1,000 2,000 Feet

ALDEN ENVIRONMENTAL, INC



Source: Google

N
W E
S

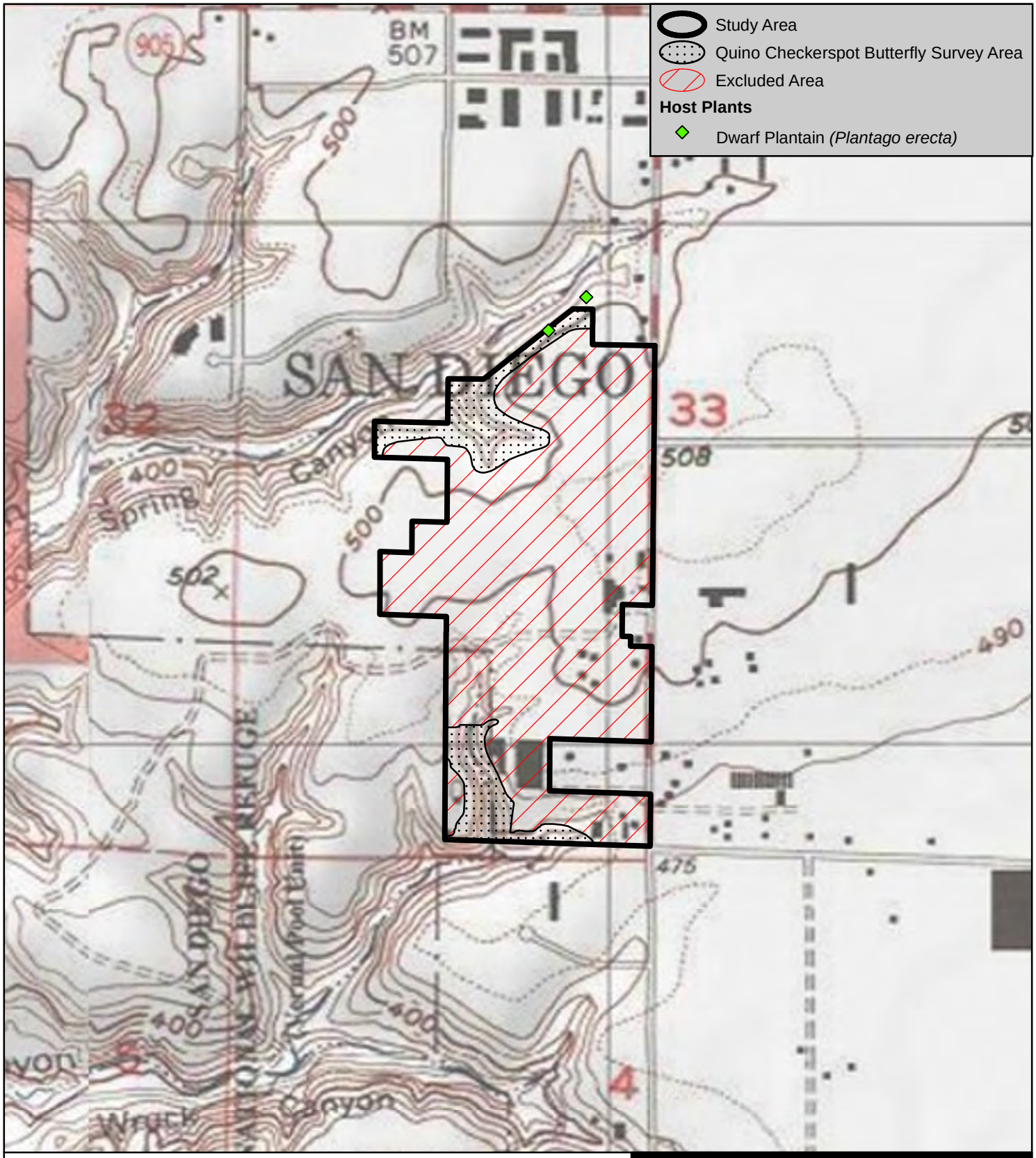
0 250 500 Feet

ALDEN ENVIRONMENTAL, INC

Figure 3

Survey Area

OTAY CANYON RANCH
QUINO CHECKERSPOT BUTTERFLY SURVEY



Source: USGS Quadrangles (Otay Mesa, Imperial Beach); Copyright:© 2013 National Geographic Society, i-cubed

Figure 4

QCB Site Assessment

OTAY CANYON RANCH
QUINO CHECKERSPOT BUTTERFLY SURVEY

N
W E
S

0 500 1,000 Feet

ALDEN ENVIRONMENTAL, INC

SUMMARY OF FIELD SURVEY CONDITIONS

Survey	Date	Biologist	Survey Times (start/stop)	Weather Conditions (start/stop)[1]
1	2/19/16	Garrett Huffman	0900-1045	15%, 61°F, wind 2-5 mph/ 20%, 68°F, wind 3-6 mph
2	2/25/16	Monica Alfaro	0925-155	0%, 71 °F, wind 1-2 mph/ 0%, 86°F, wind 1-2 mph
3	3/2/16	Monica Alfaro	0945-1200	80%, 73°F, wind 1-2 mph/ 80%, 76°F, wind 3-5 mph
4	3/9/16	Monica Alfaro	0955-1200	0%, 64°F, wind 0-2 mph/ 0%, 75°F, wind 2-5 mph
5	3/16/16	Monica Alfaro	1025-1240	0%, 76°F, wind 2-4 mph/ 0%, 77°F, wind 4-6 mph
6	3/24/16	Monica Alfaro	1005-1155	0%, 74°F, wind 2-3 mph/ 0%, 81°F, wind 2-3 mph
7	3/31/16	Monica Alfaro	0950-1145	0%, 62°F, wind 3-7 mph/ 0%, 68°F, wind 3-6 mph
8	4/4/16	Monica Alfaro	0950-1145	0%, 71°F, wind 2-3 mph/ 0%, 76°F, wind 5-8 mph
9	4/12/16	Monica Alfaro	1135-1325	25%, 71°F, wind 3-5 mph/ 15%, 75°F, wind 3-6 mph
10	4/18/16	Monica Alfaro	1120-1310	0%, 89°F, wind 5-8 mph/ 0%, 95°F, wind 6-10 mph
11	4/29/16	Monica Alfaro	1225-1420	0%, 68°F, wind 5-10 mph/ 5%, 68°F, wind 5-13mph
12	5/4/16	Monica Alfaro	1120-1320	100%, 68°F, wind 5-10 mph/ 55%, 72°F, wind 5-10 mph
13	5/9/16	Monica Alfaro	1245-1445	100%, 68°F, wind 5-10 mph/ 35%, 71°F, wind 5-12 mph

[1]Temperature was taken on the ground in the shade. Percentages indicate cloud cover.

ROCKS
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SPRING CANYON
~~SDG&E Natural Gas System Potential Upgrades~~

Surveyor Name: GARRETT HUFFMAN

Date 2/19/16 Survey # 1

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0900	61	15	2-5
End	1045	68	10	3-6

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
	Vanessa annabella (West Coast Lady)
1	*Vanessa cardui* (Painted Lady)
	Vanessa virginiensis (American Lady)
	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
1	*Pyrgus albescens* (White Checkered-Skipper)
	Erynnis funeralis (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
2	*Strymon melinus* (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
3	*Brephidium exilis* (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
4	*Anthocharis sara* (Sara's Orangetip)
	Pieris rapae (Cabbage White)
	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	

CSS ; NON-NATIVE GRASSLAND

List nectar sources and plant communities observed

DICHELOSTEMMA CAPITATUM
ALMISPON GLABER
PLANTAGO ERECTA
ALLIUM SP.
RIBES SPECIOSUM
PENTTOMA ARBOREA
ENCELIA CALIFORNICA
BATHIOPSIS LANCINIATA
DODECATHEON CLEVELANDII
ERIOGONUM FASCICULATUM
MARAH MACROCARPUS
ERODIUM SP.

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)*
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

AVIAN :
SAPH
CAQU
BUSH
ROPI
CATO
CALN
BEWR
ANHU
CORA
BGGN
NOMO
HOFI
HOSP
FLUST
RTHA
HOLA
WCSP
LEGO
HOWR
COTA
SOSP
NOHA

ROCKS
BIOLOGICAL CONSULTING

roject Otay Canyon Ranch

urveyor Name: Monica Alfaro

ate 2/25/16 Survey # 2

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
tart	9:25	70.7	0	1-2 mph
nd	11:55	86	0	1-2 mph

	ymphalidae (Brush Footed Butterflies)
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
	Vanessa annabella (West Coast Lady)
2	*Vanessa cardui* (Painted Lady)
	Vanessa virginiensis (American Lady)
2	*Vanessa atalanta* (Red Admiral)
	anaidae
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
	esperidae
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
	Pyrgus albescens (White Checkered-Skipper)
	Erynnis funeralis (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

	Lycaenidae (Hairstreaks)
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
	Strymon melinus (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
1	*Brephidium exilis* (Western Pygmy-Blue)
	Riodinidae (Metalmarks)
	Apodemia mormo virgulti (Behr's Metalmark)
	Papilionidae (Swallowtails)
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
	Pieridae (Whites and Orangetips)
	Anthocharis cethura (Desert Orangetip)
	Anthocharis sara (Sara's Orangetip)
	Pieris rapae (Cabbage White)
	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
	Satyridae (Satyrids)
	Coenonympha californica (Common California Ringlet)
	Others

List nectar sources and plant communities observed

wild hyacynth, erodium

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum,*
Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

ROCKS
BIOLOGICAL CONSULTING

Project Otay Canyon Ranch

Surveyor Name: Monica Alfaro

Date 3/2/16 Survey # 3

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	9:45 (11:00am)	on ground 73°	thin haze (80%)	1-2 mph
End	20 11:[illegible] am	76° on ground	thin haze 80%	3-5
	(11:58	76° air temp	"	3-5

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
	Vanessa annabella (West Coast Lady)
	Vanessa cardui (Painted Lady)
	Vanessa virginiensis (American Lady)
	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
	Pyrgus albescens (White Checkered-Skipper)
	Erynnis funeralis (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
	Strymon melinus (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
8	*Brephidium exilis* (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
	Anthocharis sara (Sara's Orangetip)
	Pieris rapae (Cabbage White)
	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	

List nectar sources and plant communities observed

Baliopsis, wild hyacynth

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum,*
Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

ROCKS
BIOLOGICAL CONSULTING

Project Otay Canyon Ranch

Surveyor Name: Monica Alfaro

Date 3/9/16 Survey # 4

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	9:55	65 ground 64 air	Ø	Ø - 2
End	~~11:05~~ 11:05	80 ground 71 air	Ø	2 - 5
	11:20 12:00	" 85/75 air	" Ø	" 2 - 5

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
	Vanessa annabella (West Coast Lady)
	Vanessa cardui (Painted Lady)
	Vanessa virginiensis (American Lady)
1	*Vanessa atalanta* (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
	Pyrgus albescens (White Checkered-Skipper)
	Erynnis funeralis (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
	Strymon melinus (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
1+3	*Brephidium exilis* (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
	Anthocharis sara (Sara's Orangetip)
	Pieris rapae (Cabbage White)
	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	

List nectar sources and plant communities observed

Onion, lasthenia
wild hyacynth
SD sunflower

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)*
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

ROCKS
BIOLOGICAL CONSULTING

Project: Otay Canyon Ranch

Surveyor Name: Monica Alfaro

Date: 3/16/16 Survey #: 5'

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	76 air 80 grnd	10:25	0	2-4
End	77 85 grnd	11:30	0	4-6

77 air / 85 grnd 11:55 same as before 4-6
12:40 0

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
	Vanessa annabella (West Coast Lady)
	Vanessa cardui (Painted Lady)
	Vanessa virginiensis (American Lady)
	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
1+2	*Pyrgus albescens* (White Checkered-Skipper)
1	*Erynnis funeralis* (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
	Strymon melinus (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
2	*Brephidium exilis* (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
	Anthocharis sara (Sara's Orangetip)
	Pieris rapae (Cabbage White)
	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	

List nectar sources and plant communities observed

CSS, Dist hab, NNG
lasthenia, SD sunflower, bladderpod
wild hyacynth, onion, erodium

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)*
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

ROCKS
BIOLOGICAL CONSULTING

Project: Otay Canyon Ranch

Surveyor Name: Monica

Date: 3/24/16 Survey #: 6

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	10:05	74 air / 78 ground	0%	2-3
End	11:05	79 air 88 ground	0	2-3
	11:15	81 air / 91 gr	0%	2-3
	11:55			

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
1	*Vanessa annabella* (West Coast Lady)
2	*Vanessa cardui* (Painted Lady)
	Vanessa virginiensis (American Lady)
	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
5	*Pyrgus albescens* (White Checkered-Skipper)
	Erynnis funeralis (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
	Strymon melinus (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
2	*Brephidium exilis* (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
2	*Anthocharis sara* (Sara's Orangetip)
	Pieris rapae (Cabbage White)
	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	
3	White

List nectar sources and plant communities observed

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum,*
Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

ROCKS
BIOLOGICAL CONSULTING

Project: Otay Canyon Ranch

Surveyor Name: Monica

Date: 3/31/16 Survey #: 7

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	9:50	62 air / 67 ground	0%	3-7
End	10:54	67 / 74	0	3-5
start	11:08	"	"	"
end	11:45	68° air	0 %	3-6

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
	Vanessa annabella (West Coast Lady)
1	*Vanessa cardui* (Painted Lady)
	Vanessa virginiensis (American Lady)
	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
	Pyrgus albescens (White Checkered-Skipper)
	Erynnis funeralis (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
	Strymon melinus (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
2	*Brephidium exilis* (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
1+4	*Anthocharis sara* (Sara's Orangetip)
	Pieris rapae (Cabbage White)
2+5	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	
1	Lorquin's Admiral

List nectar sources and plant communities observed

SD viguiera
Mariposa lilly
popcorn
blue dicks

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum,*
Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

ROCKS
BIOLOGICAL CONSULTING

Project: Otay Canyon Ranch

Surveyor Name: Monica Alfaro

Date: 04/04/16 Survey #: 8

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	9:50	71 air / 75	0%	2-3
End	10:50	76 air	"	5-8

start 11:05 76 air 0% 5-8
end 11:45 76 air/85 ground 0% 5-8

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
2+4	*Vanessa annabella* (West Coast Lady)
	Vanessa cardui (Painted Lady)
	Vanessa virginiensis (American Lady)
	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
2+3	*Heliopetes ericetorum* (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
	Pyrgus albescens (White Checkered-Skipper)
1	*Erynnis funeralis* (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
7	*Strymon melinus* (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
1	*Leptotes marina* (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
2+ 3+4	*Brephidium exilis* (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
3	*Anthocharis sara* (Sara's Orangetip)
	Pieris rapae (Cabbage White)
1+4	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	
2	white

List nectar sources and plant communities observed

~~6 SD gotde~~
~~5 SD vigie~~
SD viguiera

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)*
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

ROCKS
BIOLOGICAL CONSULTING

Project: Otay Canyon Ranch

Surveyor Name: Monica Alfaro

Date: 4/12/16 Survey #: 9

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	11:35	71° / 78 gr.	25%	3-5
End	12:30	72 / 78	15%	3-5
	12:45	"	"	"
	1:25	75° / 81 gr.	"	3-6

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
2	*Vanessa annabella* (West Coast Lady)
	Vanessa cardui (Painted Lady)
	Vanessa virginiensis (American Lady)
1	*Vanessa atalanta* (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
2	*Pyrgus albescens* (White Checkered-Skipper)
	Erynnis funeralis (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
1+1	*Strymon melinus* (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
3+4	*Brephidium exilis* (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
3	*Anthocharis cethura* (Desert Orangetip)
	Anthocharis sara (Sara's Orangetip)
	Pieris rapae (Cabbage White)
2+1	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	

List nectar sources and plant communities observed

SD viguiera
Buckwheat
mariposa lily

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)*
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

ROCKS
BIOLOGICAL CONSULTING

Project Otay Canyon Ranch

Surveyor Name: Monica Alfaro

Date 4/18/16 Survey # 10

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	11:20	89° air	0%	5-8
End	12:15	"	"	"
	12:30	91°	0%	6-10
end	1:10	95	"	"

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
2	*Nymphalis antiopa* (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
	Vanessa annabella (West Coast Lady)
	Vanessa cardui (Painted Lady)
1	*Vanessa virginiensis* (American Lady)
	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
	Pyrgus albescens (White Checkered-Skipper)
	Erynnis funeralis (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
2+3	*Strymon melinus* (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
4	*Brephidium exilis* (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
2	*Papilio rutulus* (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
	Anthocharis sara (Sara's Orangetip)
2	*Pieris rapae* (Cabbage White)
2+5	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	
1	Vanessa sp.

List nectar sources and plant communities observed

Deinandra
SD viguiera - flowers almost all gone to seed.

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum,*
Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

ROCKS
BIOLOGICAL CONSULTING

Project Otay Canyon Ranch

Surveyor Name: M. Alfaro

Date 4/29/16 Survey # 11

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	12:25	68 air / 60 gr	0	5-10 mph
End	1:25	"	"	"

Start - 1:40 68 air 0 5-13
end 2:20 69 air 5% cc "

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
3	*Nymphalis antiopa* (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
	Vanessa annabella (West Coast Lady)
	Vanessa cardui (Painted Lady)
	Vanessa virginiensis (American Lady)
	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
	Pyrgus albescens (White Checkered-Skipper)
1	*Erynnis funeralis* (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
5	*Strymon melinus* (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
3	*Brephidium exilis* (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
2	*Anthocharis sara* (Sara's Orangetip)
4	*Pieris rapae* (Cabbage White)
	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	

List nectar sources and plant communities observed

Deinandra fas?

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)*
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

ROCKS
BIOLOGICAL CONSULTING

Project Otay Canyon Ranch

Surveyor Name: M. Alfaro

Date 5/4/16 Survey # 12

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	11:20	68 air / 75 gr	100%	5-10
End	12:15		70%	5-10 mph
	12:30	69° / 78°	70%	5-10 mph
	1:20	72° 80°	55%	5-10 mph

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
3	*Nymphalis antiopa* (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
6	*Vanessa annabella* (West Coast Lady)
	Vanessa cardui (Painted Lady)
	Vanessa virginiensis (American Lady)
	Vanessa atalanta (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
6	*Pyrgus albescens* (White Checkered-Skipper)
2	*Erynnis funeralis* (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
2+4+1	*Strymon melinus* (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
5+2	*Brephidium exilis* (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
1	*Papilio rutulus* (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
	Anthocharis sara (Sara's Orangetip)
4	*Pieris rapae* (Cabbage White)
10	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	

List nectar sources and plant communities observed

some demandra
still w/ flowers

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)*
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

ROCKS
BIOLOGICAL CONSULTING

Project: Otay Canyon Ranch

Surveyor Name: Monica Alfaro

Date: 5/9/16 Survey #: 13

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	12:45	69° air / 77 ground	100%	5-10
End	1:45	70°	90%	5-10
	2:00	"	"	"
	2:45	71/83 ground	35%	5-12

Nymphalidae (Brush Footed Butterflies)	
	Euphydras editha quino (Quino Checkerspot)
	Euphydras chalcedona (Chalcedon Checkspot)
	Charidryas gabbii (Gabb's Checkerspot)
	Phycoides mylitta (Mylitta Crescent)
	Thessalia leanira (Leanira Checkerspot)
	Nymphalis antiopa (Mourning Cloak)
	Basilarchia lorquini (Lorquin's Admiral)
	Junonia coenia (Common Buckeye)
2	*Vanessa annabella* (West Coast Lady)
	Vanessa cardui (Painted Lady)
1	*Vanessa virginiensis* (American Lady)
2	*Vanessa atalanta* (Red Admiral)
Danaidae	
	Danaus gilippus (Queen)
	Danaus plexippus (Monarch)
Hesperidae	
	Heliopetes ericetorum (Northern White-Skipper)
	Hylephila phyleus (Fiery Skipper)
12	*Pyrgus albescens* (White Checkered-Skipper)
	Erynnis funeralis (Funereal Duskywing)
	Erynnis tristis (Mournful Duskywing)
	Erynnis propertius (Propertius Duskywing)
	Ochlodes agricola (Rural Skipper)

Lycaenidae (Hairstreaks)	
	Atlides halesus (Great Purple Hairstreak)
	Incisalia augustinus (Western Brown Elfin)
	Callophrys perplexa (Perplexing Hairstreak)
3	*Strymon melinus* (Gray Hairstreak)
	Glaucopsyche lygdamus (Silvery Blue)
	Icarcia acmon (Acmon Blue)
	Celastrina ladon (Echo Blue)
	Leptotes marina (Marine Blue)
	Philotes sonorensis (Sonoran Blue)
	Plebejus melissa (Melissa Blue)
	Everes amyntula (Western Tailed-Blue)
4	*Brephidium exilis* (Western Pygmy-Blue)
Riodinidae (Metalmarks)	
	Apodemia mormo virgulti (Behr's Metalmark)
Papilionidae (Swallowtails)	
	Papilio eurymedon (Pale Swallowtail)
	Papilio rutulus (Western Tiger Swallowtail)
	Papilio zelicaon (Anise Swallowtail)
Pieridae (Whites and Orangetips)	
	Anthocharis cethura (Desert Orangetip)
	Anthocharis sara (Sara's Orangetip)
3	*Pieris rapae* (Cabbage White)
1	Pontia protodice (Checkered White)
	Colias eurytheme (Orange Sulphur)
	Colias harfordii (Harford's Sulphur)
	Eurema nicippe (Sleepy Orange)
	Nathalis iole (Dainty Sulphur)
Satyridae (Satyrids)	
	Coenonympha californica (Common California Ringlet)
Others	

List nectar sources and plant communities observed

Deinandra still in bloom
buckwheat still in bloom but going to seed.
Site supports few buckwheat plants

List notes and GPS point names here, please write UTMs or Lat/Longs as backup:
GPS all QCB occurrences
GPS all potential host plant locations (*Plantago erecta, Plantago patagonica, Antirrhinum coulterianum, Cordylanthus rigidus, Castilleja exserta, and Collinsia heterophylla)*
Format: plant name_diameter of occurrence_density (low >20% cover per sq foot, medium 20-50%, high >50%)_date_observer

LISTS OF BUTTERFLIES OBSERVED DURING EACH SURVEY

Survey Number	Date	Species	Number Observed
1	**February 19, 2016**	Painted lady (*Vanessa cardui*)	11
		White checkered-skipper (*Pyrgus albescens*)	1
		Western pygmy-blue (*Brephidium exilis*)	3
		Gray Hairstreak (*Strymon melinus*)	2
		Sara's Orangetip (*Anthocharis sara*)	4
2	**February 25, 2016**	Painted lady (*Vanessa cardui*)	2
		Red Admiral (*Vanessa atalanta*)	2
		Western pygmy-blue (*Brephidium exilis*)	1
3	**March 2, 2016**	Western pygmy-blue (*Brephidium exilis*)	8
4	**March 9, 2016**	Red admiral (*Vanessa atalanta)*	1
		Western pygmy-blue (*Brephidium exilis)*	4
5	**March 16, 2016**	White checkered-skipper (*Pyrgus albescens)*	3
		Funereal duskywing (*Pyrgus albescens*)	1
		Western pygmy-blue (*Brephidium exilis*)	2
6	**March 24, 2016**	West coast lady (*Vanessa annabella*)	1
		Painted lady (*Vanessa cardui*)	2
		White checkered-skipper (*Pyrgus albescens*)	5
		Western pygmy-blue (*Brephidium exilis*)	2
		Sara's orangetip (*Anthocharis sara*)	2
		Checkered white (*Pontia protodice)*	3
9	**April 12, 2016**	West coast lady (*Vanessa annabella*)	2
		Red Admiral (*Vanessa atalanta*)	1
		White checkered-skipper (*Pyrgus albescens*)	2
		Gray hairstreak (*Strymon melinus)*	2
		Western pygmy-blue (*Brephidium exilis)*	7
		Desert Orangetip (*Anthocharis cethura*)	3
		Checkered white (*Pontia protodice)*	3
10	**April 18, 2016**	Mourning Cloak (*Nmphalis antiopa*)	2
		American Lady (*Vanessa virginiensis*)	1
		Gray hairstreak (*Strymon melinus)*	5
		Western pygmy-blue (*Brephidium exilis)*	4
		Western tiger swallowtail (*Papilio rutulus*)	2
		Cabbage white (*Pieris rapae)*	2
		Checkered white (*Pontia protodice)*	7
		Unidentified lady (*Vanessa sp*)	1

Survey Number	Date	Species	Number Observed
11	**April 29, 2016**	Mourning Cloak (*Nmphalis antiopa*)	3
		Funereal duskywing (*Pyrgus albescens*)	1
		Gray hairstreak (*Strymon melinus)*	5
		Western pygmy-blue (*Brephidium exilis)*	3
		Sara's orangetip (*Anthocharis sara*)	2
		Cabbage white (*Pieris rapae)*	5
12	**May 4, 2016**	Mourning Cloak (*Nmphalis antiopa*)	3
		West coast lady (*Vanessa annabella*)	6
		White checkered-skipper (*Pyrgus albescens)*	6
		Funereal duskywing (*Pyrgus albescens*)	2
		Gray hairstreak (*Strymon melinus)*	7
		Western pygmy-blue (*Brephidium exilis)*	7
		Western tiger swallowtail (*Papilio rutulus*)	1
		Cabbage white (*Pieris rapae)*	4
		Checkered white (*Pontia protodice)*	10
13	**May 9, 2016**	West coast lady (*Vanessa annabella*)	2
		American lady (*Vanessa virginiensis*)	1
		Red Admiral (*Vanessa atalanta*)	2
		White checkered-skipper (*Pyrgus albescens)*	12
		Gray hairstreak (*Strymon melinus)*	3
		Western pygmy-blue (*Brephidium exilis)*	4
		Cabbage white (*Pieris rapae)*	3
		Checkered white (*Pontia protodice)*	1

Appendix B

Coastal California Gnatcatcher Survey Report

2015 Report
U.S. Fish and Wildlife Service Protocol Level Presence/Absence Surveys for the Coastal California Gnatcatcher (*Polioptila californica californica*)

Prepared for:

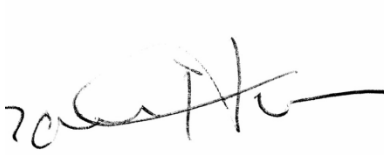
Davisson Enterprises

Prepared by:

Alden Environmental, Inc.
3245 University Ave., #1188
San Diego, CA 92104

June 4, 2015

I certify that the information in this survey report and attached exhibits fully and accurately represent my work.



Garrett Huffman (TE20168A-0)

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VEGETATION COMMUNITIES	1
SURVEY RESULTS	2
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B	Copies of Field Notes

LIST OF FIGURES

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2	USGS Topographic Map	2
3	Survey Results	2

INTRODUCTION

This report documents the results of a focused survey conducted for the coastal California gnatcatcher (*Polioptila californica californica*; CAGN) on the Otay Davisson project site located in the City of San Diego on Otay Mesa (Figures 1 and 2).

The approximately 40-acre study area consists primarily of a flat field that has been used for agricultural uses. Small portions of the study area extend into into the Spring Canyon complex on the northern site boundary, outside of the agricultural area. Elevations on site range between approximately 405 feet above mean sea level (AMSL) in the canyon and 495 feet AMSL on the mesa top. Soil on site is mapped as Stockpen gravelly clay loam (2 to 5 percent slopes) and Olivenhain cobbly loan (30 to 50 percent slopes; Bowman 1973).

The parcels are undeveloped and surrounded on all sides by undeveloped land. The canyon portion on the northern side supports native sage scrub habitat. The mesa portion of the parcels supports active agricultural uses.

METHODS

The surveys were performed in accordance with the Year 1997 Survey Protocol Information (USFWS 1997) by US Fish & Wildlife Service (USFWS) permitted biologist Garrett Huffman (TE20168A-0). The survey visits were conducted between April 2 and April 24, 2015. Each survey covered the suitable habitat on site. Suitable habitat on site consists of approximately 2.5 acres of Diegan coastal sage scrub located along the project's northern perimeter, on the edge of Spring Canyon.

Dates, times, and weather conditions at the start and end of each survey are presented in Appendix A. The survey was conducted by walking through, and adjacent to, suitable CAGN habitat on site. Birds were viewed with the aid of binoculars, where necessary. Recorded CAGN vocalizations ("mew calls") were broadcast for approximate 5-second durations at approximately 50-yard increments along the survey route, or as needed to adequately cover each suitable habitat patch. Recorded vocalizations were only broadcast to initially detect the possible presence of CAGNs. Copies of field notes from each survey are presented in Appendix B.

VEGETATION COMMUNITIES

One sensitive vegetation community occurs on site: Diegan coastal sage scrub.

Diegan Coastal Sage Scrub

Diegan sage scrub occupies xeric (dry) sites characterized by shallow soils. This habitat is dominated by subshrubs whose leaves abscise during the summer and may be replaced by a lesser amount of small leaves. This adaptation allows these species to better withstand the prolonged dry period in the summer and fall. Diegan sage scrub occurs throughout the majority of the study area (Figure 3). Predominant plant species in this community on site include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*),

and lemonadeberry (*Rhus integrifolia*). Approximately 2.5 acres of this habitat occurs on site.

SURVEY RESULTS

An adult pair was observed utilizing the sage scrub habitat on the north side on the site. A single male also was observed. The sitings were technically outside of the project footprint; however, the habitat is contiguous with the habitat on site. No nests were observed during the site visits. Following the CAGN survey, all of the Diegan coastal sage scrub habitat (2.5 acres) on site is considered occupied by the CAGN.

REFERENCES

Bowman, R. 1973. Soil Survey of the San Diego Area. USDA in cooperation with the USDI, UC Agricultural Experiment Station, Bureau of Indian Affairs, Department of the Navy, and the U.S. Marine Corps.

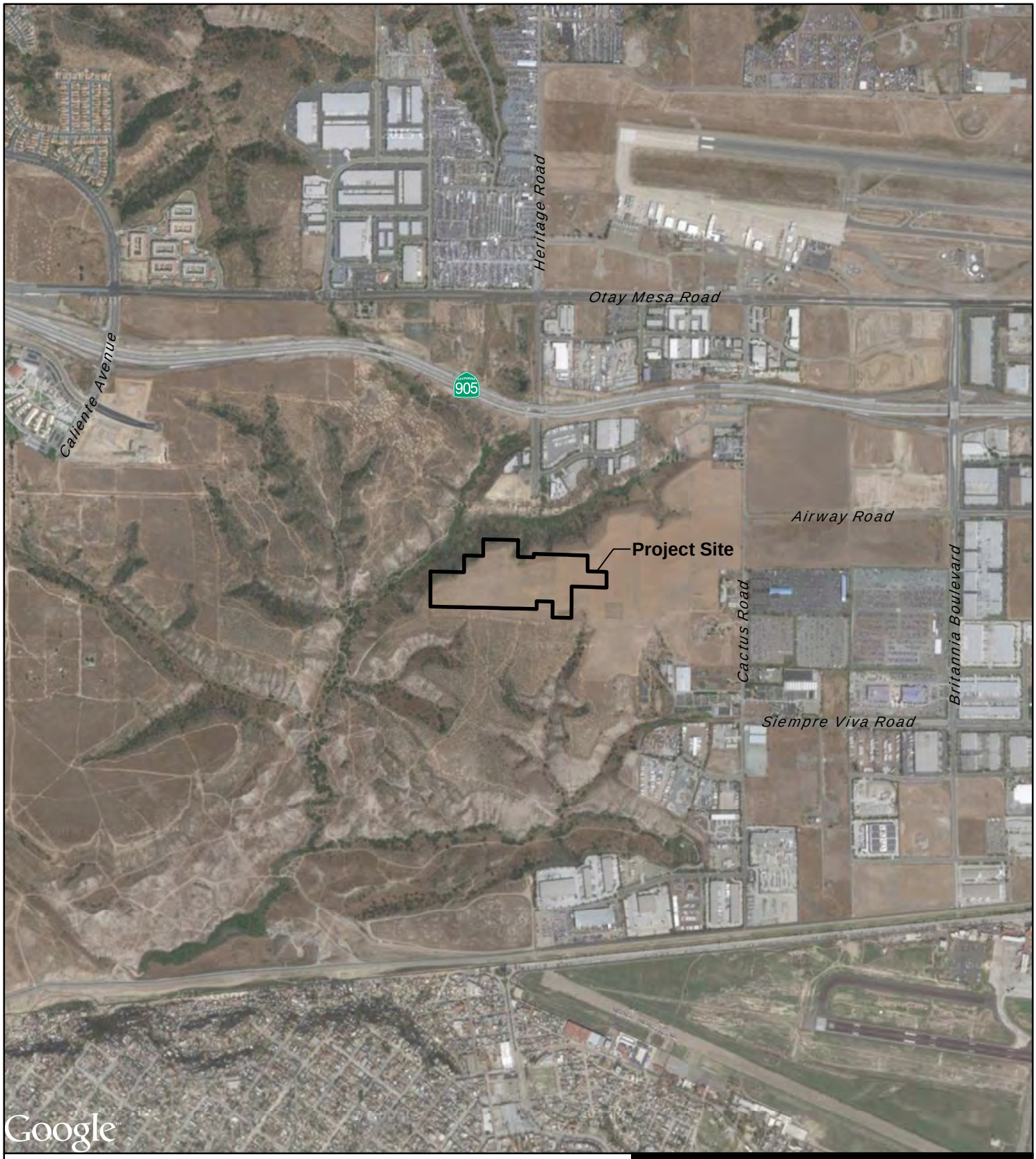
USFWS. 1997. Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Guidelines. February 28.

Figure 1

Regional Location

OTAY DAVISSON

ALDEN ENVIRONMENTAL, INC



Source: Imagery ©2015 , DigitalGlobe, U.S. Geological Survey

Figure 2

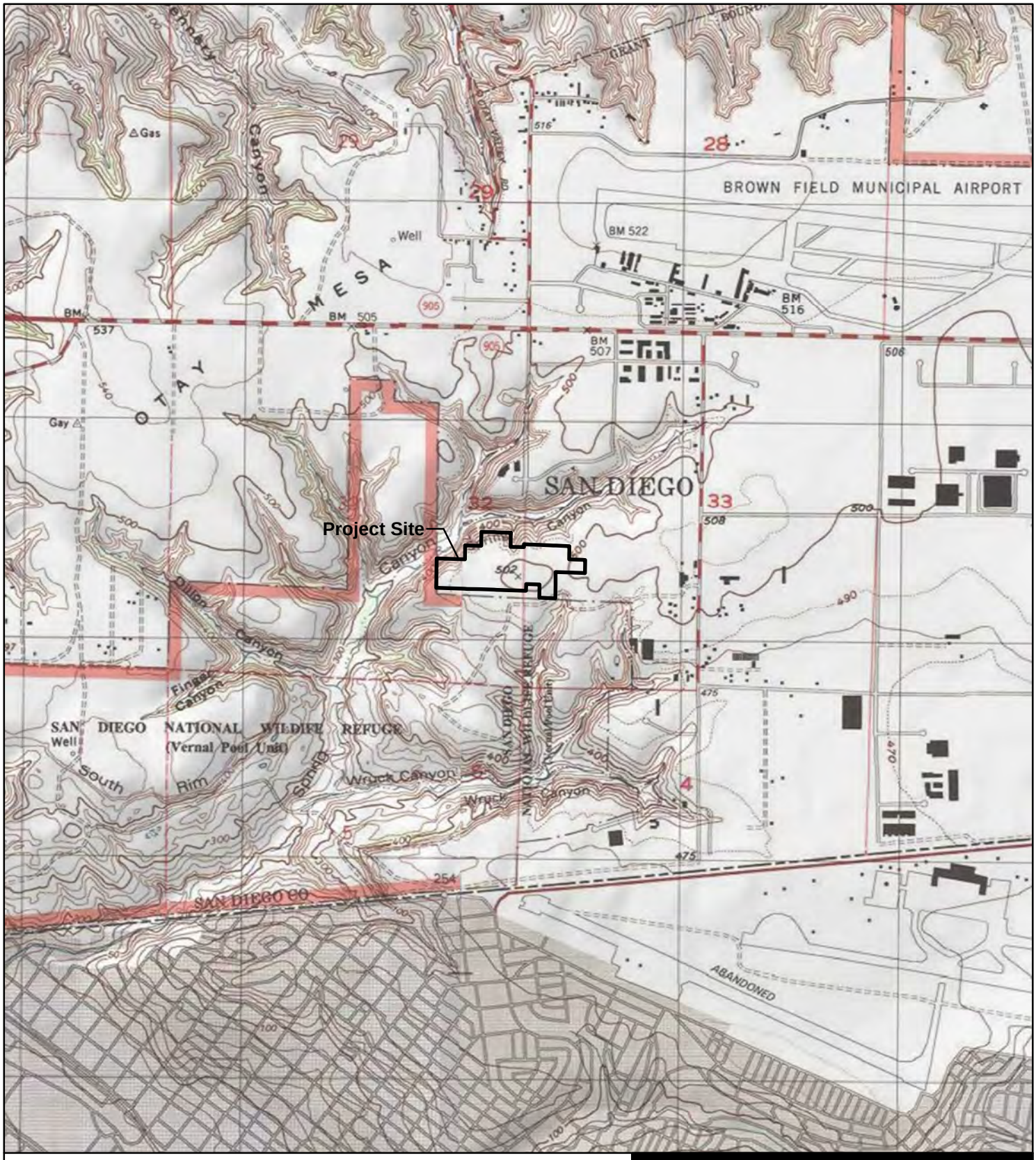
Project Location

OTAY DAVISSON

N
W E
S

0 1,000 2,000 Feet

ALDEN ENVIRONMENTAL, INC



Source: USGS Quadrangles (Imperial Beach, Otay Mesa);
Copyright:© 2013 National Geographic Society, i-cubed

Figure 3

USGS Topographic Map

OTAY DAVISSON

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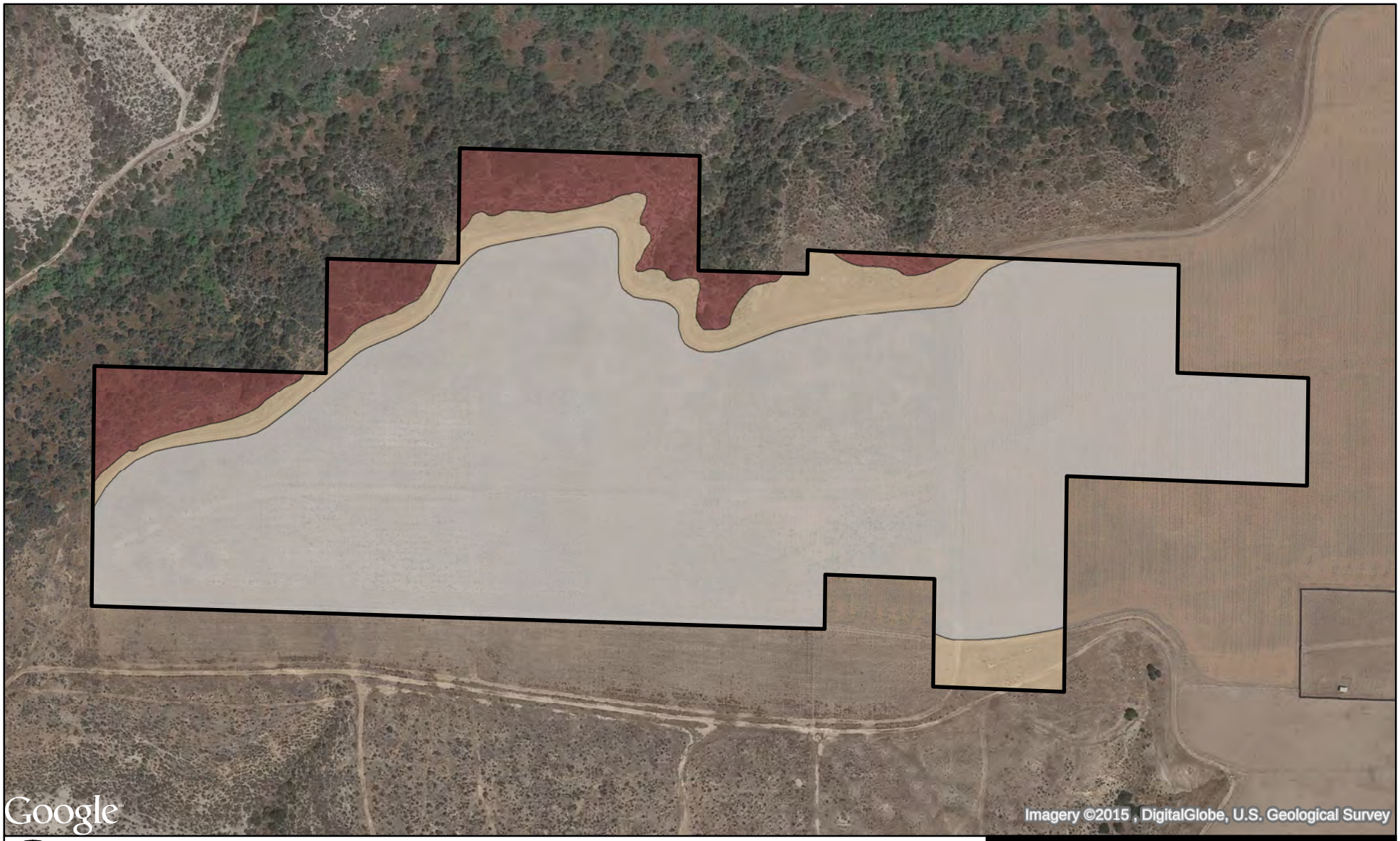
0 1,000 2,000 Feet

ALDEN ENVIRONMENTAL, INC



Project Boundary
Diegan Coastal Sage Scrub
Agriculture
Disturbed Habitat

N
W E
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0 125 250 Feet

ALDEN ENVIRONMENTAL, INC

Figure 4

Survey Results

OTAY DAVISSON

SUMMARY OF FIELD SURVEY CONDITIONS

Survey	Date	Biologist	Survey Times (start/stop)	Weather Conditions (start/stop)
1	4/4/15	Garrett Huffman	0745/1115	0% cloud cover, 67°F, wind 2-3mph/ 30%, 88°F, wind 3-4 mph
2	4/12/15	Garrett Huffman	0630/0945	0%, 58°F, wind 2-5 mph/ 0%, 70°F, wind 3-7 mph
3	4/24/15	Garrett Huffman	0800/1100	100%, 63°F, wind 2-5 mph/ 100%, 65°F, wind 3-7 mph

ROCKS
BIOLOGICAL CONSULTING

Project Name: DAVISSON

Surveyor Name: GARRETT HUFFMAN, WENDY ROWERS

Date: 4/4/15 Survey # 1

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0745	67	0	2-3
End	1115	88	30	3-4

General Habitat Description:
COASTAL SAGE SCRUB (CSS)

CAGN observations and notes:
0845 - 0945: CAGN HEARD VOCALIZING ACROSS CANYON. FROM SURVEY AREA. ONE MALE COULD BE OBSERVED MOVING WITH A DENSE PATCH OF CSS PRIMARILY REMAINING OBSCURED FROM VIEW, BUT CONSISTENTLY VOCALIZING. INDIVIDUAL DID NOT COME WITHIN 400 FT OF SURVEY POLYGON.
1040 - 1110: PAIR OF CAGN WAS OBSERVED WITHIN SURVEY AREA FORAGING. NO NESTING BEHAVIOR DETECTED.

Wildlife Species Observed:
AVIAN SPECIES: HOFI, WEME, CALT, CATO, BEWR, SPTO, SOSP, CATH, LEGO, LORA, WREN, ANHU, WCSP, BUSH, COYE, WEST, MOBO, NOMO, AMKE, TUVU

General Habitat Description:
COASTAL SAGE SCRUB

ROCKS
BIOLOGICAL CONSULTING

Project Name: DANISSONI

Surveyor Name: GARRETT HUFFMAN

Date: 4/12/15 Survey # 2

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0630	58	Ø	0-1
End	0945	70	Ø	0-3

CAGN observations and notes:
0900 - 0945: CAGN UNRESPONSIVE TO AUDIO PLAYBACK. CAGN PAIR DETECTED BY PHYSICAL TRANSECT METHODOLOGY. PAIR WAS MONITORED FOR 45 MINUTES WHILE THEY FORAGED AND FAINTLY VOCALIZED TO EACH OTHER PERIODICALLY. NO NESTING/NEST BUILDING BEHAVIOR OBSERVED. LOCATION OF PAIR CONSISTENT WITH RESULTS ~~OF~~ FROM SURVEY #1

Wildlife Species Observed:
AVIAN SPECIES: HOSP, MODO, WCSP, HOFI, BLPH, COYE, WEKI, SOSP, ANHU, WREN, SPTO, BUSH, HOLA, BEWR, ~~SPTO, BUSH~~, CATH, CAKI, BHCO, SAPH, WCSP, LABU, CLSW, NRWS, LEGO

ROCKS
BIOLOGICAL CONSULTING

Project Name: DAVISSON

Surveyor Name: GARRETT HUFFMAN

Date: 10/24/15 Survey # 3

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0800	63	100	2-5
End	1100	65	100	3-7

General Habitat Description:

COASTAL SAGE SCRUB

CAGN observations and notes:

1030 - PAIR DETECTED AND HEARD VOCALIZING. PAIR FORAGED TOGETHER DURING OBSERVATION. ~~OT~~ OBSERVATION OF 1 PAIR HAS BEEN CONSISTENT IN THIS SURVEY AREA DURING ALL 3 SURVEY VISITS

Wildlife Species Observed:

AVIAN SPECIES: SAPH, VEGO, CATO, CLSW, BEWR, SOTO, SOSP, CATH, BUSH, WREN, ANHU, MODO, HORA, CARI, WTSW, COYE, OCWA, RCSP, CORA.

Appendix C

Burrowing Owl Survey Reports

ALDEN ENVIRONMENTAL, INC
3245 University Ave, #1188 | San Diego, CA 92104 | Phone/Fax: 619.284.3815

August 11, 2014 COL-02

Ms. Rita Mahoney
Colrich
444 West Beech Street, Suite 300
San Diego, CA 92101

Subject: Burrowing Owl Survey Report for Spring Canyon Ranch

Dear Ms. Mahoney:

This letter presents the results of the 2014 nesting season survey for the burrowing owl (*Athene cunicularia*) conducted on the Spring Canyon Ranch project.

LOCATION AND SITE DESCRIPTION

The site consists of 6 parcels located south of State Route (SR) 905, west of Cactus Road, between Airway Road and Siempre Viva Road in the City of San Diego's (City's) Otay Mesa Community (Figures 1 through 3). Surrounding land uses include industrial, agricultural and automobile salvage yards. Cactus Road borders the site to the east. Elevation on site ranges from 425 to 510 feet above mean sea level. Soil on site consists of Stockpen gravelly clay loam (0 to 2 percent slopes and 2 to 5 percent slopes) and Olivenhain cobbly loam (30 to 50 percent slopes; Bowman 1973). A small portion of the City MSCP's Multi-habitat Planning Area (MHPA) occurs at the northwest corner of the property, within the northern canyon.

METHODS

The 2014 survey consisted of 4 site visits on separate days (Table 1) according to the survey methods in the Staff Report on Burrowing Owl Mitigation (CDFG 2012), which supersedes the survey, avoidance, minimization and mitigation recommendations in the 1995 Staff Report (CDFG 1995), and takes into account the Burrowing Owl Survey Protocol and Mitigation Guidelines (California Burrowing Owl Consortium 1993).

Burrowing owl habitat was examined by walking transects across the site. The area was surveyed for burrowing owls and potential burrows or perches that could be used by the owl. Burrowing owls are known to occupy California ground squirrel (*Spermophilus beecheyi*) burrows; therefore, particular attention was paid to any areas along fence lines, or other locations where squirrel activity has been observed in the past, was observed presently, or was likely to occur. Dirt piles, drainages, and culverts were also carefully examined as these sites can often provide cavities that can support the species. The determination of owl presence was made by direct owl observation or by owl signs such as, but not necessarily limited to, excavated soil, whitewash (excrement), castings (pellets), and/or feathers. Representative photographs are presented as Attachment A.

Table 1 Burrowing Owl Survey Information				
Survey Number	**Date**	**Biologist**	**Time**	**Weather Conditions** (start/stop)
1	4/14/14	Lee Ripma, Jim Rocks, Shannon Walsh	0610-1000	Hazy (10% cover), 57°F, wind 0-2 mph/clear, 78°F, wind 0-4 mph
2	5/8/14	Lee Ripma, Anabelle Bernabe	0550-1002	Partly cloudy (60% cover), 55°F, wind 0-2 mph/high thin clouds (25% cover), 74°F, wind 1-3 mph
3	5/30/14	Lee Ripma, Shannon Walsh	0530-0915	Hazy cloud (80% cover), 64°F, wind 0-2 mph/clear, 70°F, wind 1-3 mph
4	6/23/14	Lee Ripma, Shannon Walsh	0626-0950	Cloudy (100% cover), 66°F, wind 0-2 mph/sunny and humid (15% cover), 72°F, wind 1-4 mph

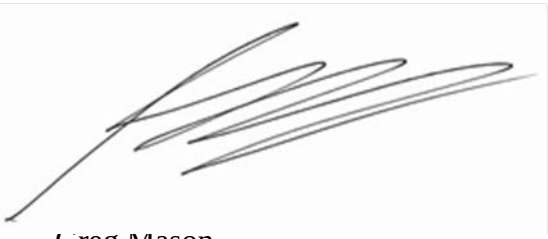
SURVEY RESULTS

The site supports Diegan Coastal Sage Scrub (including disturbed), Maritime Succulent Scrub Disturbed, non-native grassland, and disturbed habitat (Figure 4). The site also supports developed and active agricultural areas.

Suitable habitat for the burrowing owl occurs throughout most of the site. Only the developed areas were excluded from the owl surveys. Evidence of a previously occupied burrowing owl burrow was observed within the survey buffer approximately 200 feet to the west of the project site (Figure 4). Several squirrel burrows occur on the site; however, each squirrel burrow was checked for evidence of owl presence and none were found to be supporting burrowing owls. Based on the results of the field survey, the site does not support the burrowing owl.

Please contact me if you have any questions.

Sincerely,



Greg Mason
Senior Biologist

Enclosures:

Figure 1	Regional Location Map
Figure 2	Project Location Map
Figure 3	USGS Topographic Map
Figure 4	Survey Results
Attachment A	Representative Photographs

References:

Bowman, R. 1973. Soil Survey of the San Diego Area. USDA in cooperation with USDI, UC Agricultural Experiment Station, Bureau of Indian Affairs, Department of the Navy, and the U.S. Marine Corps.

California Department of Fish and Game (CDFG). 2012. Staff Report on Burrowing Owl Mitigation. March 17.

1995. Environmental Services Division. Staff Report on Burrowing Owl Mitigation. October 17. 8pp. plus attachments.

California Burrowing Owl Consortium. 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines. April.

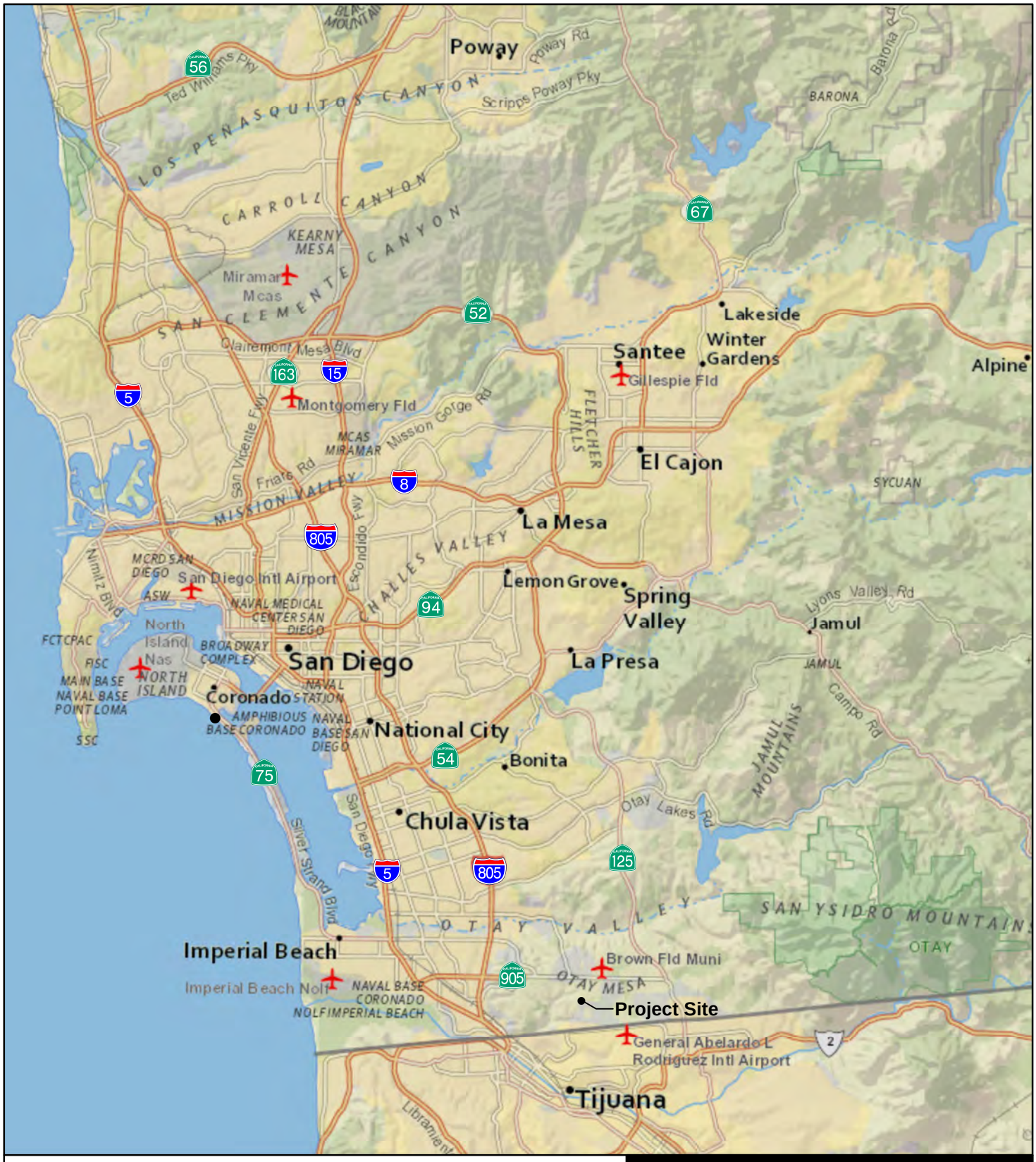


Figure 1

Regional Location

SPRING CANYON RANCH
BURROWING OWL SURVEY

N
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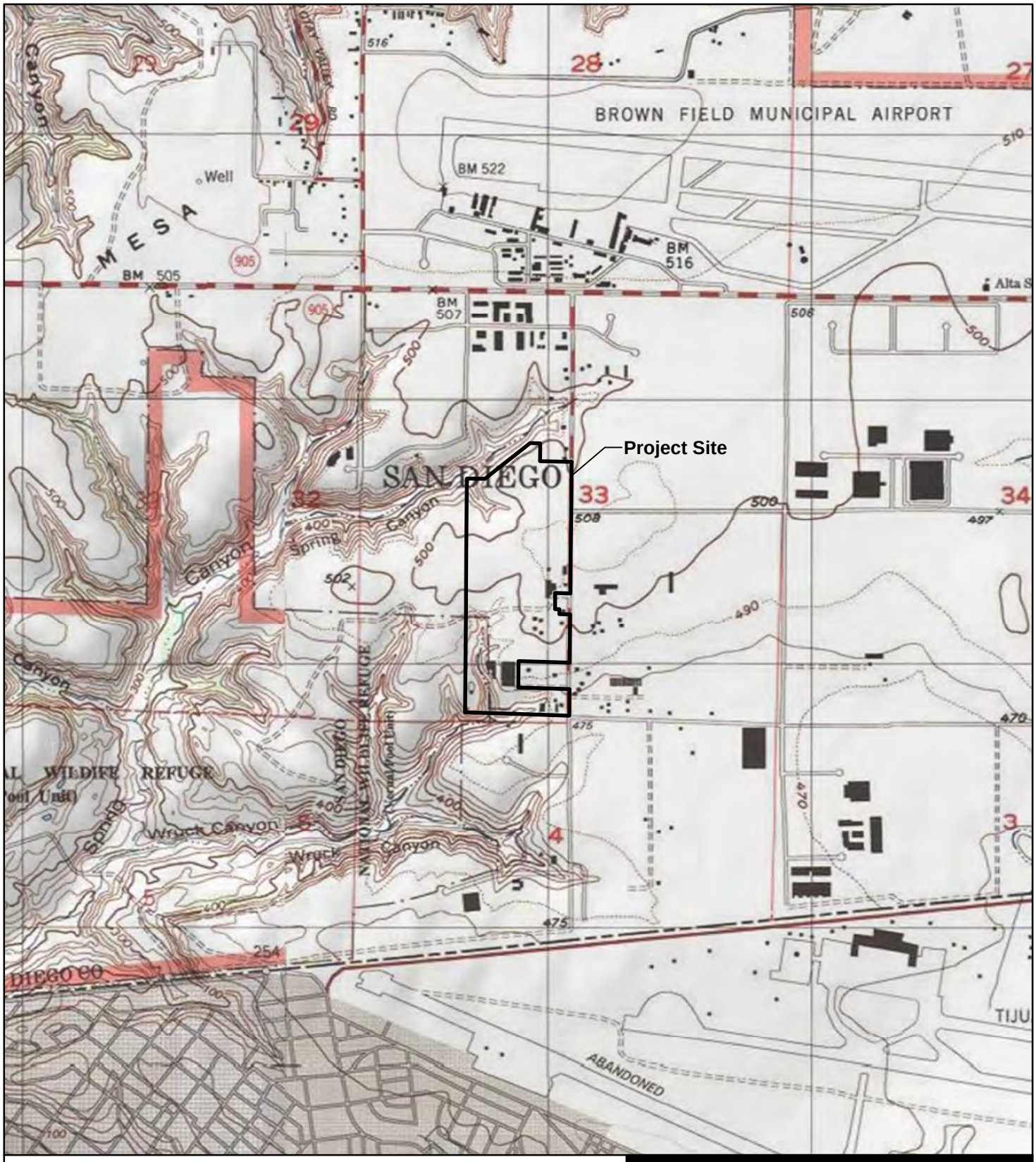
0 2 4 Miles

ALDEN ENVIRONMENTAL, INC



Source: USGS Quadrangles (Otay Mesa, Imperial Beach);
Copyright:© 2013 National Geographic Society, i-cubed

N
W E
S

0 1,000 2,000 Feet

ALDEN ENVIRONMENTAL, INC

Figure 3

USGS Topographic Map

SPRING CANYON RANCH
BURROWING OWL SURVEY

Source: Imagery ©2014 , DigitalGlobe, U.S. Geological Survey, USDA Farm Service Agency

N
W E
S

0 1,000 2,000 Feet

ALDEN ENVIRONMENTAL, INC

Figure 2

Project Location

SPRING CANYON RANCH
BURROWING OWL SURVEY

Service Layer Credits: Imagery ©2014 , Chula Vista, Cnes/Spot Image, DigitalGlobe, Landsat, Sanborn, U.S. Geological Survey, USDA Farm Service Agency

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ALDEN ENVIRONMENTAL, INC

Figure 4

Survey Results

SPRING CANYON RANCH
BURROWING OWL SURVEY

REPRESENTATIVE PHOTOGRAPHS

Westward view across northern portion of site.

Eastward view across northern portion of site.

Northward view from northern portion of site.

Southward view from northern portion of site.

View of active agricultural area.

View of sage scrub habitat in southern portion of site.

View of canyon in northern portion of site.

View of canyon in southern portion of site.

Northward view from southern portion of site.

View of off-site evidence of owl presence.

ALDEN ENVIRONMENTAL, INC
3245 University Ave, #1188 | San Diego, CA 92104 | Phone/Fax: 619.284.3815

July 09, 2015

Ms. Rita Mahoney
Colrich
444 West Beech Street, Suite 300
San Diego, CA 92101

Subject: Burrowing Owl Survey Report for Otay Canyon Ranch

Dear Ms. Mahoney:

This letter presents the results of the 2015 nesting season survey for the burrowing owl (*Athene cunicularia*) conducted on the Otay Canyon Ranch project.

LOCATION AND SITE DESCRIPTION

The site consists of 6 parcels located south of State Route (SR) 905, west of Cactus Road, between Airway Road and Siempre Viva Road in the City of San Diego's (City's) Otay Mesa Community (Figures 1 through 3). Surrounding land uses include industrial, agricultural and automobile salvage yards. Cactus Road borders the site to the east. Elevation on site ranges from 425 to 510 feet above mean sea level. Soil on site consists of Stockpen gravelly clay loam (0 to 2 percent slopes and 2 to 5 percent slopes) and Olivenhain cobbly loam (30 to 50 percent slopes; Bowman 1973). A small portion of the City MSCP's Multi-habitat Planning Area (MHPA) occurs at the northwest corner of the property, within the northern canyon.

METHODS

A previous Burrowing Owl survey, consisting of 4 separate site visits, was conducted in 2014 with negative results. The 2015 survey consisted of 4 site visits on separate days (Table 1) according to the survey methods in the Staff Report on Burrowing Owl Mitigation (CDFG 2012), which supersedes the survey, avoidance, minimization and mitigation recommendations in the 1995 Staff Report (CDFG 1995), and takes into account the Burrowing Owl Survey Protocol and Mitigation Guidelines (California Burrowing Owl Consortium 1993).

Burrowing owl habitat was examined by walking transects across the site. The area was surveyed for burrowing owls and potential burrows or perches that could be used by the owl. Burrowing owls are known to occupy California ground squirrel (*Spermophilus beecheyi*) burrows; therefore, particular attention was paid to any areas along fence lines, or other locations where squirrel activity has been observed in the past, was observed presently, or was likely to occur. Dirt piles, drainages, and culverts were also carefully examined as these sites can often provide cavities that can support the species. The determination of owl presence was made by direct owl observation or by owl signs such as, but not necessarily limited to, excavated soil, whitewash (excrement), castings (pellets), and/or feathers. Representative photographs are presented as Attachment A.

Table 1 Burrowing Owl Survey Information				
Survey Number	**Date**	**Biologist**	**Time**	**Weather Conditions** (start/stop)
1	3/19/15	Garrett Huffman, Shannon Walsh	0645-0815	100% 63°F, wind 0-2 mph/ 10%, 67°F, wind 0-1 mph
2	5/14/2015	Garrett Huffman, Shannon Walsh	0600-0930	25%, 63°F, wind 3-5mph/ 40%, 67°F, wind 3-8mph
3	6/8/2015	Garrett Huffman, Shannon Walsh	0530-0845	30%, 64°F, wind 0-2 mph/ 0%, 73°F, wind 0 mph
4	6/30/2015	Garrett Huffman, Shannon Walsh	0515-0815	5%, 68°F, wind 0-1 mph/ 35%, 73°F, wind 0-1 mph

SURVEY RESULTS

The site supports Diegan Coastal Sage Scrub (including disturbed), Maritime Succulent Scrub Disturbed, non-native grassland, and disturbed habitat (Figure 4). The site also supports developed and active agricultural areas.

Suitable habitat for the burrowing owl occurs throughout most of the site. Only the developed areas were excluded from the owl surveys. Several squirrel burrows occur on the site; however, each squirrel burrow was checked for evidence of owl presence and none were found to be supporting burrowing owls. Based on the negative results of the 2015 field surveys, in addition to the previous surveys conducted in 2014, the site does not support the burrowing owl.

Please contact me if you have any questions.

Sincerely,

Greg Mason
Senior Biologist

Enclosures:

Figure 1	Regional Location Map
Figure 2	Project Location Map
Figure 3	USGS Topographic Map
Figure 4	Survey Results
Attachment A	Representative Photographs

References:

Bowman, R. 1973. Soil Survey of the San Diego Area. USDA in cooperation with USDI, UC Agricultural Experiment Station, Bureau of Indian Affairs, Department of the Navy, and the U.S. Marine Corps.

California Department of Fish and Game (CDFG). 2012. Staff Report on Burrowing Owl Mitigation. March 17.

1995. Environmental Services Division. Staff Report on Burrowing Owl Mitigation. October 17. 8pp. plus attachments.

California Burrowing Owl Consortium. 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines. April.

Figure 1

Regional Location

OTAY CANYON RANCH
2015 BURROWING OWL SURVEY

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0 2 4 Miles

ALDEN ENVIRONMENTAL, INC

Source: Imagery ©2015 , DigitalGlobe, U.S. Geological Survey, USDA Farm Service Agency

Figure 2

Project Location

OTAY CANYON RANCH
2015 BURROWING OWL SURVEY

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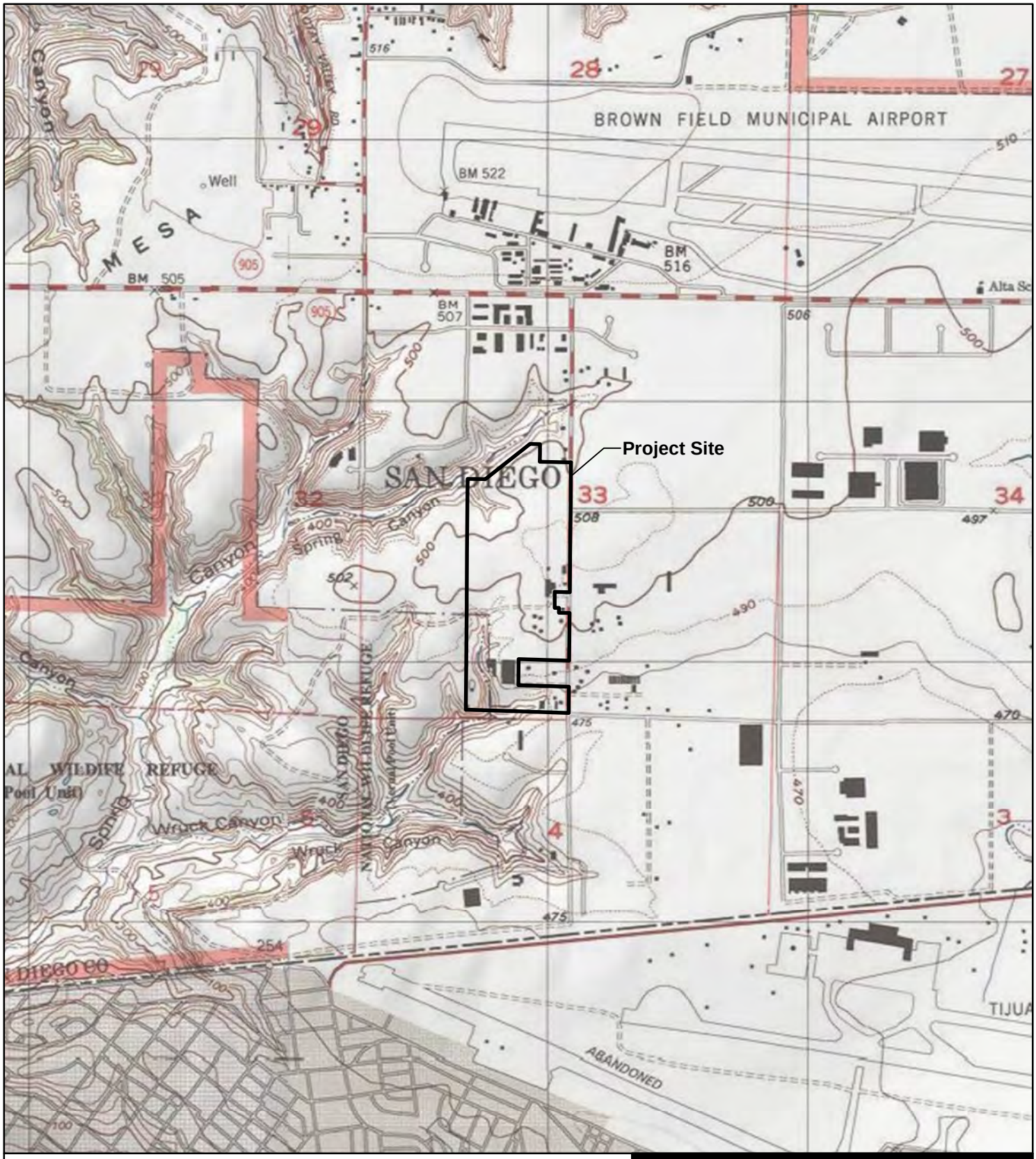
ALDEN ENVIRONMENTAL, INC



Source: USGS Quadrangles (Otay Mesa, Imperial Beach);
Copyright:© 2013 National Geographic Society, i-cubed

Figure 3

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ALDEN ENVIRONMENTAL, INC

USGS Topographic Map

OTAY CANYON RANCH
2015 BURROWING OWL SURVEY

Figure 4

Survey Results

OTAY CANYON RANCH
2015 BURROWING OWL SURVEY

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Feet

ALDEN
ENVIRONMENTAL, INC

REPRESENTATIVE PHOTOGRAPHS

Eastward view across northern portion of site.

Southward view across southeast portion of site.

Westward view from center of site.

ALDEN ENVIRONMENTAL, INC
3245 University Ave, #1188 | San Diego, CA 92104 | Phone/Fax: 619.284.3815

July 10, 2015

Mr. Mark Freed
Davisson Enterprises
5755 Amarillo Avenue
La Mesa, CA 91941

Dear Mr. Freed:

This letter presents the results of the 2015 nesting season survey for the burrowing owl (*Athene cunicularia*) conducted on the Otay Davisson project.

LOCATION AND SITE DESCRIPTION

The approximately 40-acre study area consists primarily of a flat field that has been used for agricultural uses. Small portions of the study area extend into the Spring Canyon complex on the northern site boundary, outside of the agricultural area. Elevations on site range between approximately 405 feet above mean sea level (AMSL) in the canyon and 495 feet AMSL on the mesa top. Soil on site is mapped as Stockpen gravelly clay loam (2 to 5 percent slopes) and Olivenhain cobbly loan (30 to 50 percent slopes; Bowman 1973).

The parcels are undeveloped and surrounded on all sides by undeveloped land. The canyon portion on the northern side supports native sage scrub habitat. The mesa portion of the parcels supports active agricultural uses.

METHODS

The survey consisted of 4 site visits on separate days (Table 1) according to the survey methods in the Staff Report on Burrowing Owl Mitigation (CDFG 2012), which supersedes the survey, avoidance, minimization and mitigation recommendations in the 1995 Staff Report (CDFG 1995), and takes into account the Burrowing Owl Survey Protocol and Mitigation Guidelines (California Burrowing Owl Consortium 1993).

All of the flat portion of the site, outside of Spring Canyon, was considered to be suitable habitat and was surveyed for the owl. The sage scrub habitat in the canyon is not considered suitable burrowing owl habitat. Suitable burrowing owl habitat was examined by walking transects across the site. The area was surveyed for burrowing owls and potential burrows or perches that could be used by the owl. Burrowing owls are known to occupy California ground squirrel (*Spermophilus beecheyi*) burrows; therefore, particular attention was paid to any areas along fence lines, or other locations where squirrel activity has been observed in the past, was observed presently, or was likely to occur. The determination of owl presence was made by direct owl observation or by owl signs such as, but not necessarily limited to, excavated soil, whitewash (excrement), castings (pellets), and/or feathers.

Table 1 Burrowing Owl Survey Information				
Survey Number	**Date**	**Biologist**	**Time**	**Weather Conditions** (start/stop)
1	3/19/15	Garrett Huffman, Shannon Walsh	1005-1100	10% 67.5°F, wind 0-1 mph/ 20%, 74.5°F, wind 3-6 mph
2	5/14/2015	Garrett Huffman, Shannon Walsh	0930-1100	40%, 67°F, wind 3-8mph/ 40%, 73°F, wind 4-7mph
3	6/8/2015	Garrett Huffman, Shannon Walsh	0845-1000	0%, 73°F, wind 0 mph/ 0%, 81°F, wind 0-2 mph
4	6/30/2015	Garrett Huffman, Shannon Walsh	0815-1000	35%, 73°F, wind 0-1 mph/ 10%, 80.3°F, wind 0-2 mph

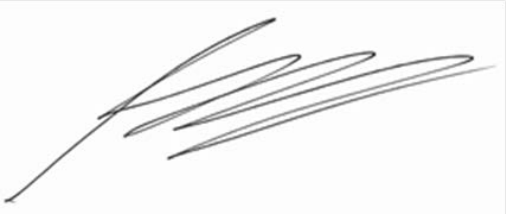
SURVEY RESULTS

The majority of the site supports agricultural and disturbed land that is considered suitable habitat for the burrowing owl (Figure 4). The site also supports some sage scrub habitat within Spring Canyon that is not considered suitable burrowing owl habitat.

No burrowing owl or sign of burrowing owl was detected on site. Based on the negative results of these surveys, the site does not support the burrowing owl.

Please contact me if you have any questions.

Sincerely,



Greg Mason
Senior Biologist

Enclosures:

Figure 1	Regional Location Map
Figure 2	Project Location Map
Figure 3	USGS Topographic Map
Figure 4	Survey Results

References:

Bowman, R. 1973. Soil Survey of the San Diego Area. USDA in cooperation with USDI, UC Agricultural Experiment Station, Bureau of Indian Affairs, Department of the Navy, and the U.S. Marine Corps.

California Department of Fish and Game (CDFG). 2012. Staff Report on Burrowing Owl Mitigation. March 17.

1995. Environmental Services Division. Staff Report on Burrowing Owl Mitigation. October 17. 8pp. plus attachments.

California Burrowing Owl Consortium. 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines. April.

Figure 1

Regional Location

OTAY DAVISSON

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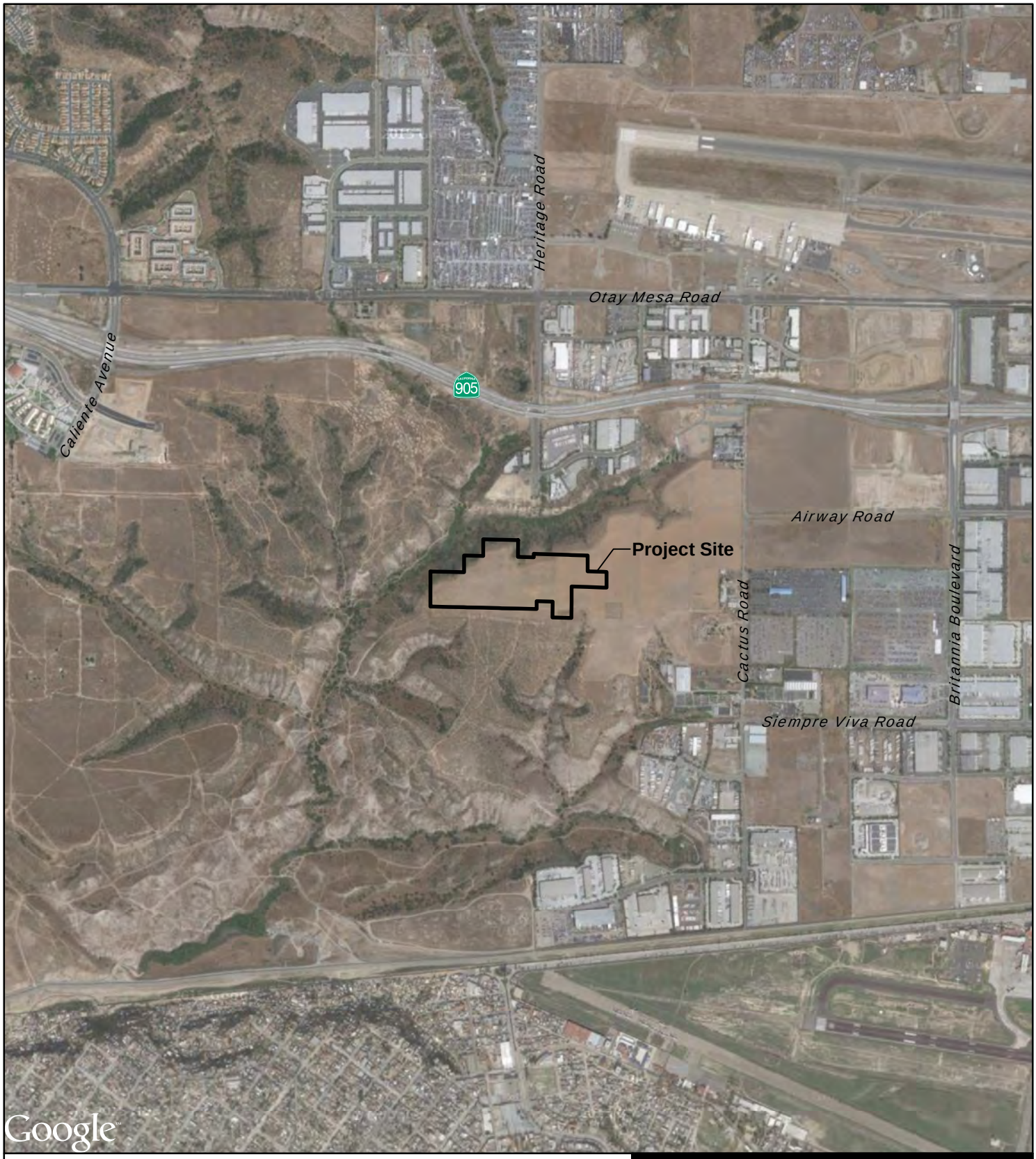
ALDEN ENVIRONMENTAL, INC



Source: Imagery ©2015 , DigitalGlobe, U.S. Geological Survey

Figure 2

Project Location

OTAY DAVISSON

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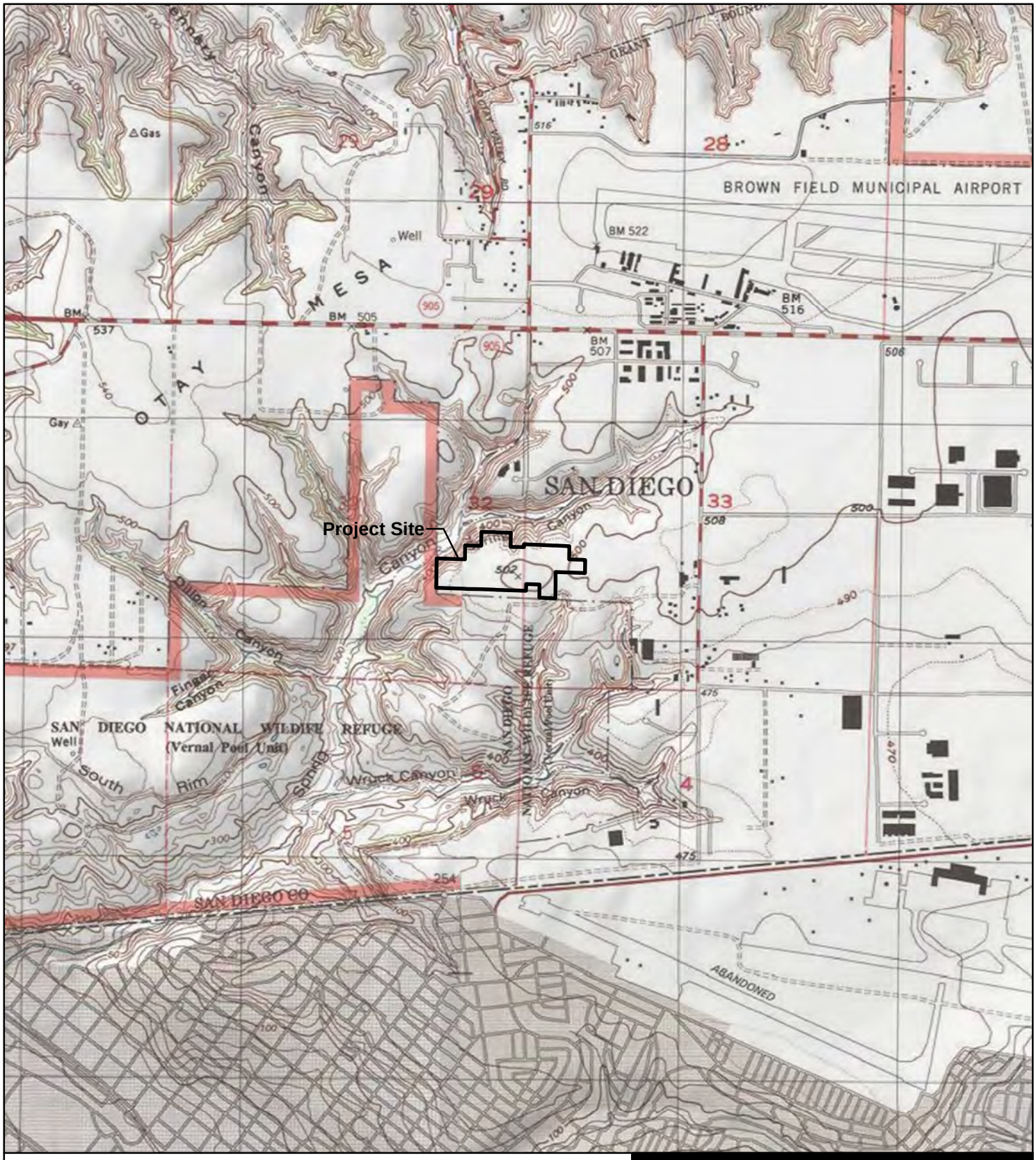
ALDEN ENVIRONMENTAL, INC



Source: USGS Quadrangles (Imperial Beach, Otay Mesa);
Copyright:© 2013 National Geographic Society, i-cubed

Figure 3

USGS Topographic Map

OTAY DAVISSON

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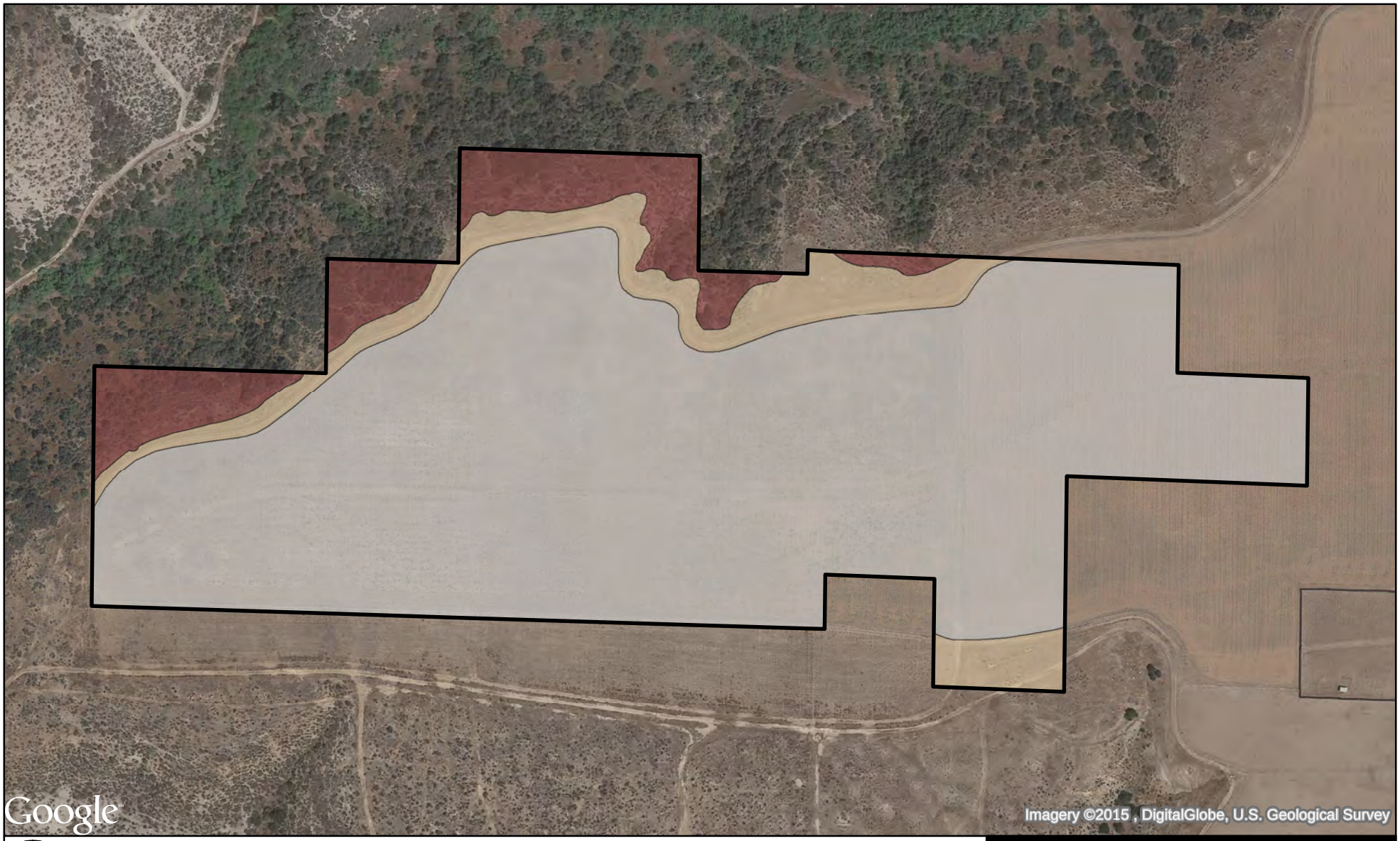
ALDEN ENVIRONMENTAL, INC



Project Boundary
Diegan Coastal Sage Scrub
Agriculture
Disturbed Habitat

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ALDEN ENVIRONMENTAL, INC

Figure 4

Survey Results

OTAY DAVISSON

ALDEN ENVIRONMENTAL, INC
3245 University Ave, #1188 | San Diego, CA 92104 | Phone/Fax: 619.284.3815

June 30, 2016

Ms. Rita Mahoney
Colrich
444 West Beech Street, Suite 300
San Diego, CA 92101

Subject: Burrowing Owl Survey Report for Otay Canyon Ranch

Dear Ms. Mahoney:

This letter presents the results of the 2016 nesting season survey for the burrowing owl (*Athene cunicularia*) conducted on 2 parcels that were added to the Otay Canyon Ranch project since the previous burrowing owl survey conducted in 2015 for the entire site.

LOCATION AND SITE DESCRIPTION

The survey area consists of 2 parcels located south of State Route (SR) 905, west of Cactus Road, between Airway Road and Siempre Viva Road in the City of San Diego's (City's) Otay Mesa Community (Figures 1 through 3). These parcels are new to the site since it was last surveyed in 2015.

Surrounding land uses include industrial, agricultural and automobile salvage yards. Cactus Road borders the site to the east. Elevation on site ranges from 425 to 510 feet above mean sea level. Soil on site consists of Stockpen gravelly clay loam (0 to 2 percent slopes and 2 to 5 percent slopes) and Olivenhain cobbly loam (30 to 50 percent slopes; Bowman 1973). The City MSCP's Multi-habitat Planning Area (MHPA) occurs along the northern boundary of the parcels, within the northern canyon.

METHODS

A previous Burrowing Owl survey, consisting of 4 separate site visits, was conducted on the adjacent parcels in 2015 with negative results. The 2016 survey consisted of 4 site visits on separate days (Table 1) according to the survey methods in the Staff Report on Burrowing Owl Mitigation (CDFG 2012), which supersedes the survey, avoidance, minimization and mitigation recommendations in the 1995 Staff Report (CDFG 1995), and takes into account the Burrowing Owl Survey Protocol and Mitigation Guidelines (California Burrowing Owl Consortium 1993).

Burrowing owl habitat was examined by walking transects across the site. The area was surveyed for burrowing owls and potential burrows or perches that could be used by the owl. Burrowing owls are known to occupy California ground squirrel (*Spermophilus beecheyi*) burrows; therefore, particular attention was paid to any areas along fence lines, or other locations where squirrel activity has been observed in the past, was observed presently, or was likely to occur. Dirt piles, drainages, and culverts were also carefully examined as these sites can often provide cavities that can support the species. The determination of owl presence was made by direct owl observation or by owl signs such as, but not necessarily limited to, excavated soil, whitewash

(excrement), castings (pellets), and/or feathers. Representative photographs are presented as Attachment A.

Table 1 **Burrowing Owl Survey Information**				
Survey Number	**Date**	**Biologist**	**Time**	**Weather Conditions** (start/stop)
1	3/30/16	Greg Mason	0716-0810	Mostly cloudy, 50°F, wind 0-1 mph/ Mostly cloudy, 50°F, wind 0-1 mph
2	4/18/16	Tara Baxter	0715-0900	5% cloud cover, 65°F, wind 3-7mph/ 0% cloud cover, 76°F, wind 2-4 mph
3	5/16/16	Tara Baxter	0700-0900	100% cloud cover, 61°F, wind 2-4 mph/ 95% cloud cover, 65°F, wind 2-4 mph
4	6/24/16	Tara Baxter	0645-0900	100% cloud cover, 64°F, wind 1-3 mph/ 0% cloud cover, 70°F, wind 0-2 mph

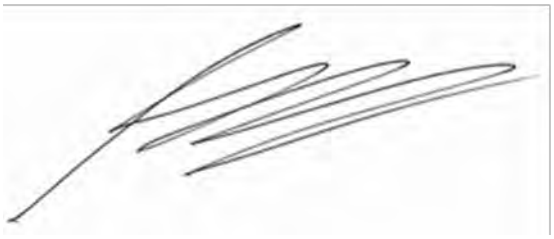
SURVEY RESULTS

The 2 parcels surveyed support Diegan Coastal Sage Scrub and non-native grassland (Figure 4). The site also supports disturbed and active agricultural areas.

Suitable foraging habitat for the burrowing owl occurs throughout most of the 2 parcels; however, no burrowing owls or potential owl burrows were observed. Based on the negative results of the 2015 field surveys and the current additional parcel survey, the burrowing owl is not anticipated to occur on the site.

Please contact me if you have any questions.

Sincerely,



Greg Mason
Senior Biologist

Enclosures:

Figure 1	Regional Location Map
Figure 2	Project Location Map
Figure 3	USGS Topographic Map
Figure 4	Survey Results
Attachment A	Representative Photographs

References:

Bowman, R. 1973. Soil Survey of the San Diego Area. USDA in cooperation with USDI, UC Agricultural Experiment Station, Bureau of Indian Affairs, Department of the Navy, and the U.S. Marine Corps.

California Department of Fish and Game (CDFG). 2012. Staff Report on Burrowing Owl Mitigation. March 17.

1995. Environmental Services Division. Staff Report on Burrowing Owl Mitigation. October 17. 8pp. plus attachments.

California Burrowing Owl Consortium. 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines. April.

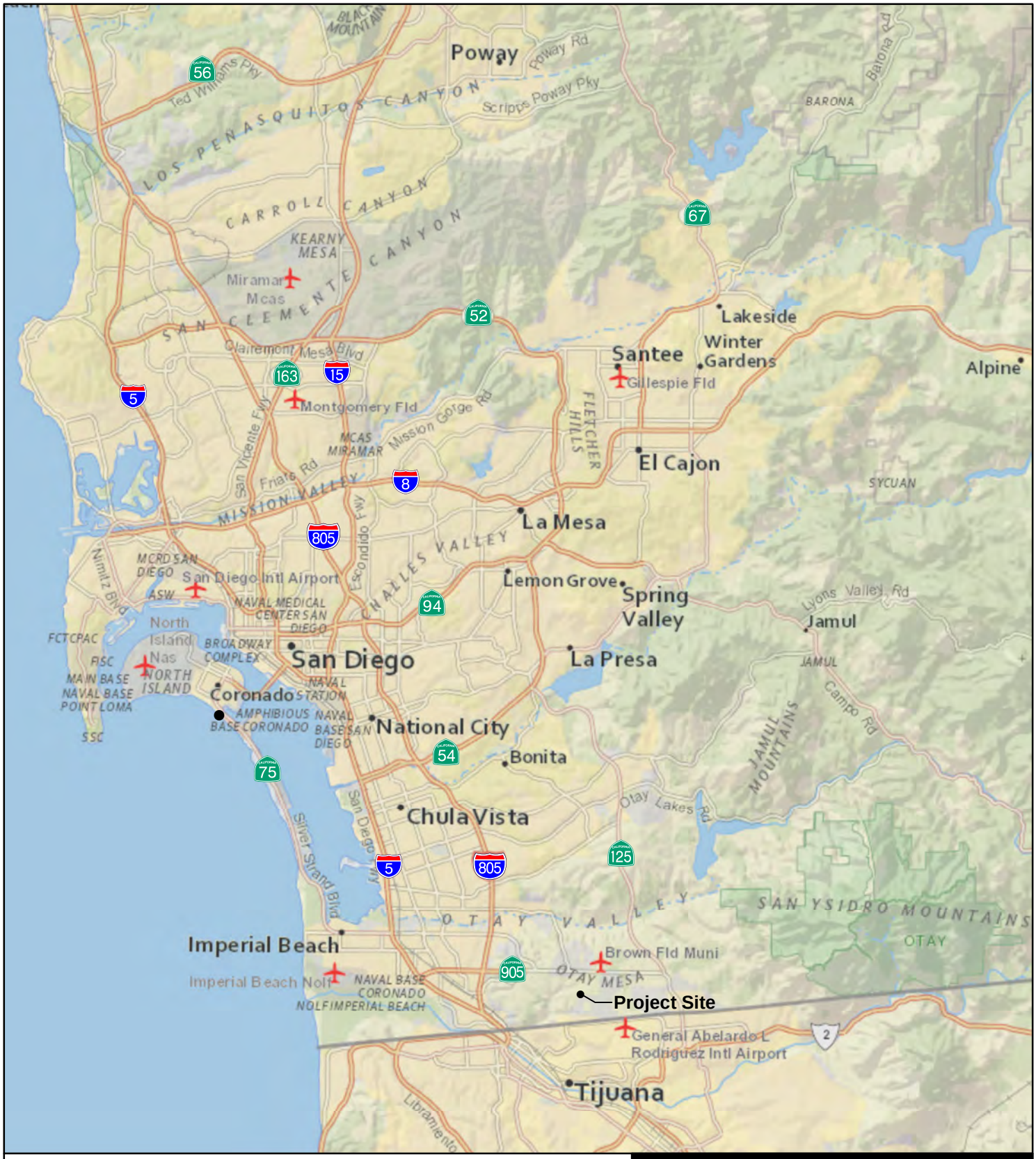


Figure 1

Regional Location

OTAY CANYON RANCH
2016 BURROWING OWL SURVEY

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ALDEN ENVIRONMENTAL, INC

Figure 2

Project Location

OTAY CANYON RANCH
2016 BURROWING OWL SURVEY

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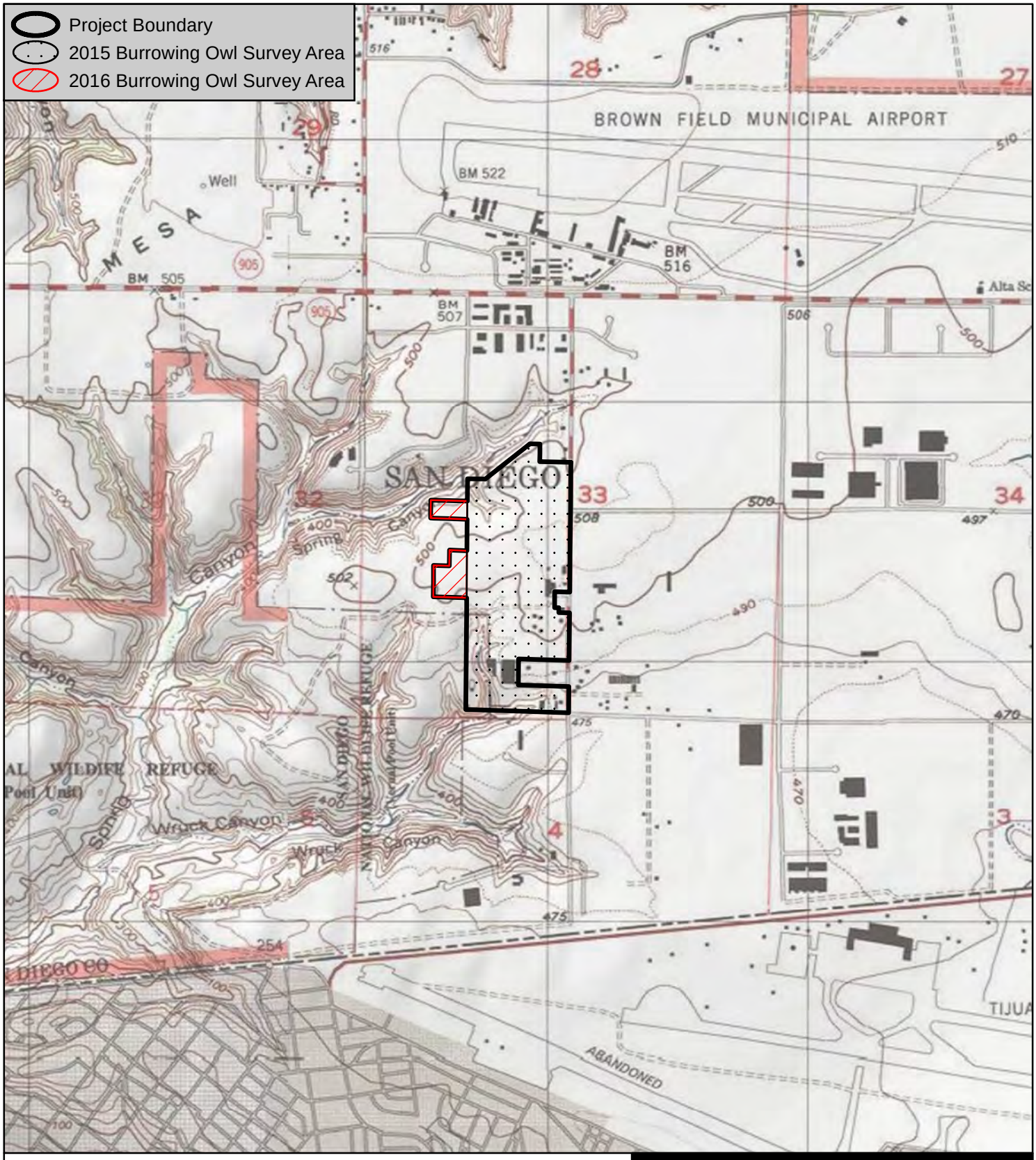
ALDEN ENVIRONMENTAL, INC



Source: USGS Quadrangles (Otay Mesa, Imperial Beach);
Copyright:© 2013 National Geographic Society, i-cubed

Figure 3

USGS Topographic Map

OTAY CANYON RANCH
2016 BURROWING OWL SURVEY

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ALDEN ENVIRONMENTAL, INC

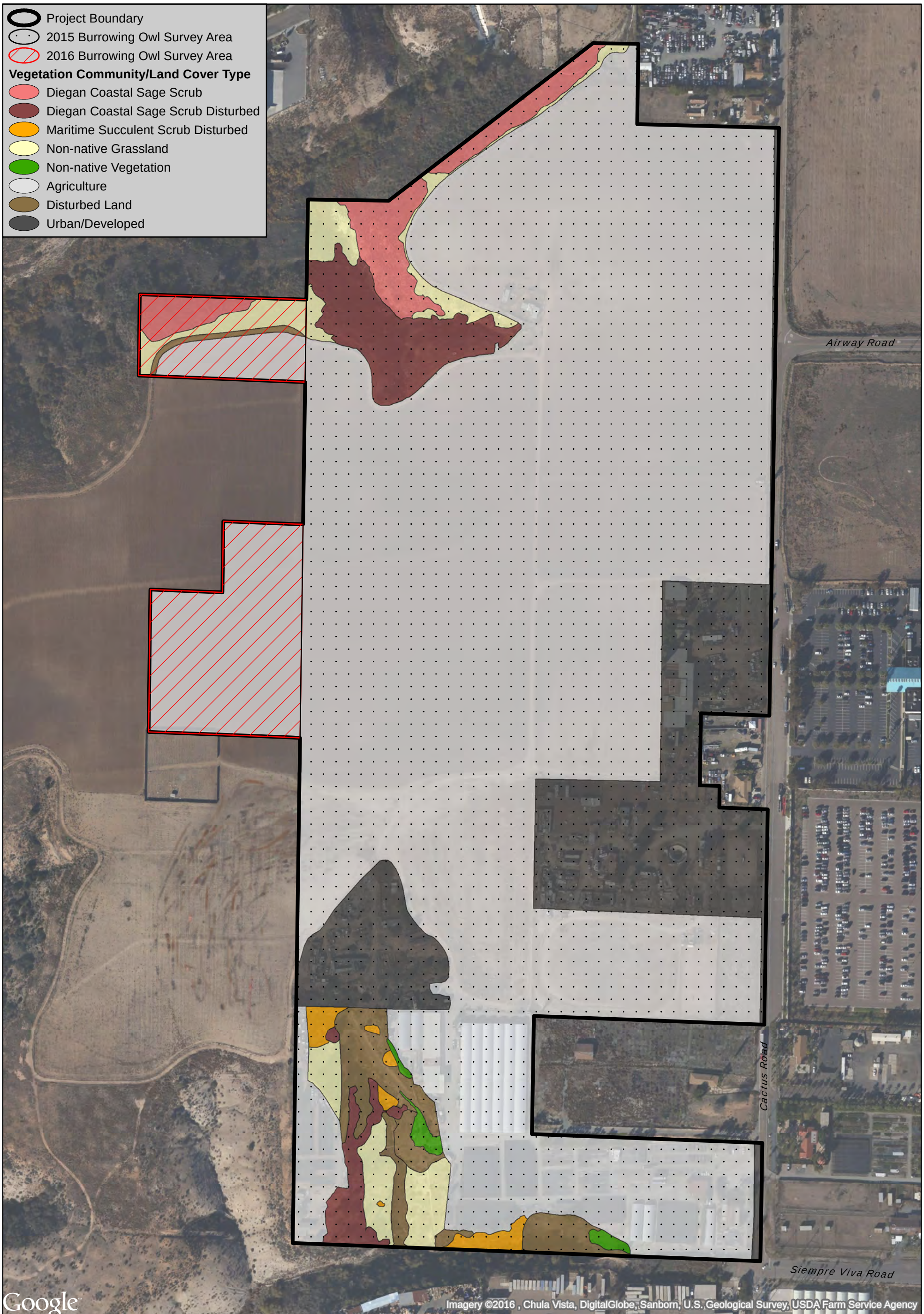

Figure 4

Survey Results

OTAY CANYON RANCH
2016 BURROWING OWL SURVEY

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ALDEN ENVIRONMENTAL, INC

Attachment A
REPRESENTATIVE PHOTOGRAPHS

Westward view across the parcels.

Eastward view across the parcels.

Appendix D

Sensitive Plant Species Survey Report

ALDEN ENVIRONMENTAL, INC
3245 University Ave, #1188 | San Diego, CA 92104 | **Phone/Fax:** 619.284.3815

July 13, 2016

Ms. Rita Mahoney, AICP
ColRich
444 West Beech Street
Suite 300
San Diego, CA 92101

Subject: Otay Canyon Ranch-Summer 2016 Rare Plant Survey

Dear Ms. Mahoney,

This letter report presents the results of a summer season rare plant survey conducted on the Otay Canyon Ranch project site. The survey area consists of 2 new parcels that were added to the project since the previous rare plant surveys that were conducted previously. The parcels are located south of State Route (SR) 905, west of Cactus Road, between Airway Road and Siempre Viva Road in the City of San Diego's (City's) Otay Mesa Community (Figures 1 and 2).

Methods

Prior to visiting the site, available maps and existing conditions material for the site were reviewed. The survey was conducted mainly to determine if the federal and state listed Otay tarplant (*Deinandra conjugens*) occurs on the site. Biologist Tara Baxter conducted a site visit on July 11, 2016 to search for the Otay tarplant and other sensitive plants that could be visible during the summer season. The survey was conducted on foot by walking transects through the project site.

Results

No Otay tarplant or other sensitive plant species were observed on site during the survey. Based on the current survey results, previous survey results, and the disturbed nature of the site, no sensitive plant species are expected to occur within the 2 additional parcels.

Please contact me if you have any questions regarding this letter report.

Sincerely,

Greg Mason
Senior Biologist

Enclosures: Figure 1 - Regional Location Map
Figure 2 - Project Location Map

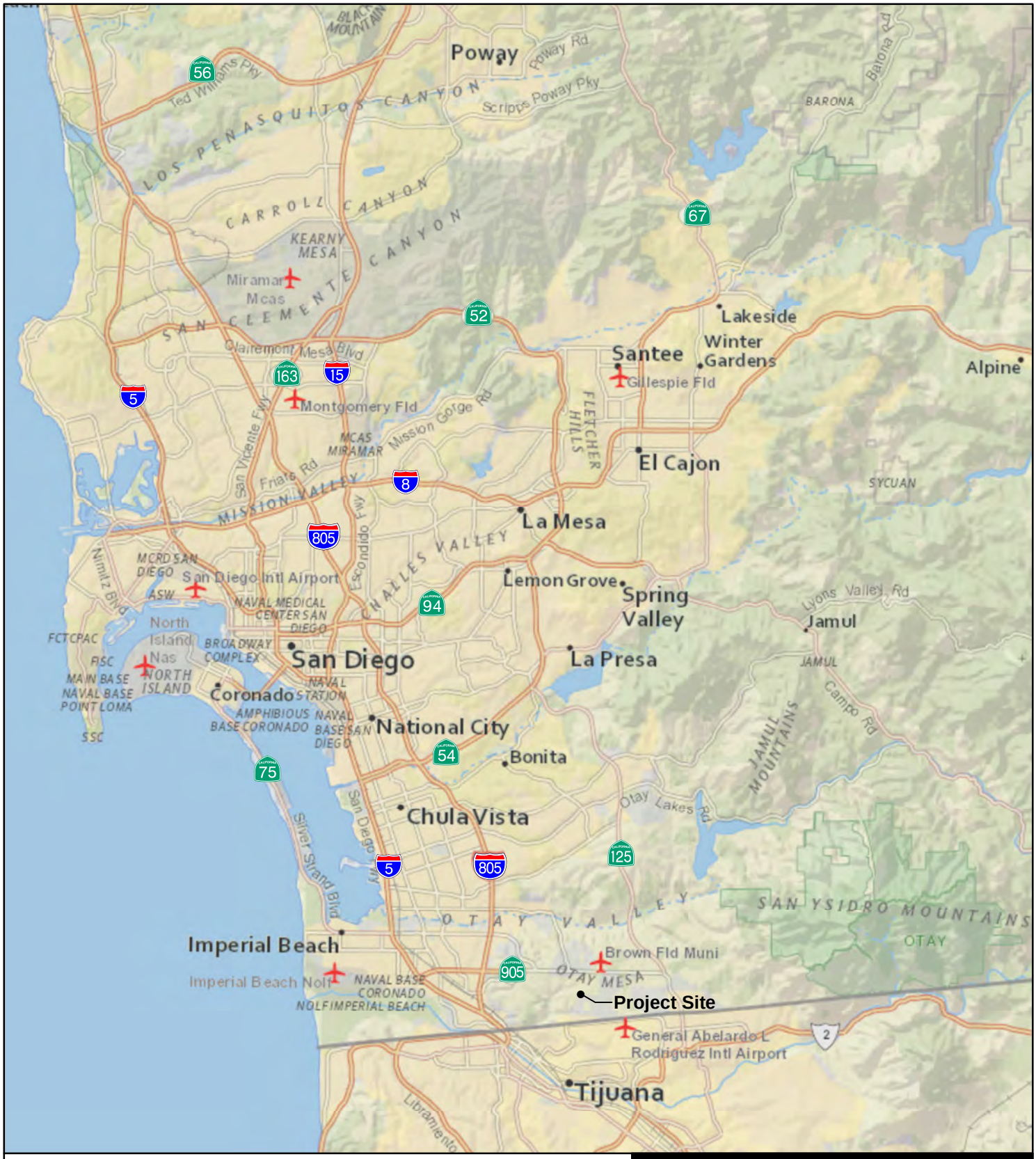

Figure 1

Regional Location

OTAY CANYON RANCH
2016 RARE PLANT SURVEY

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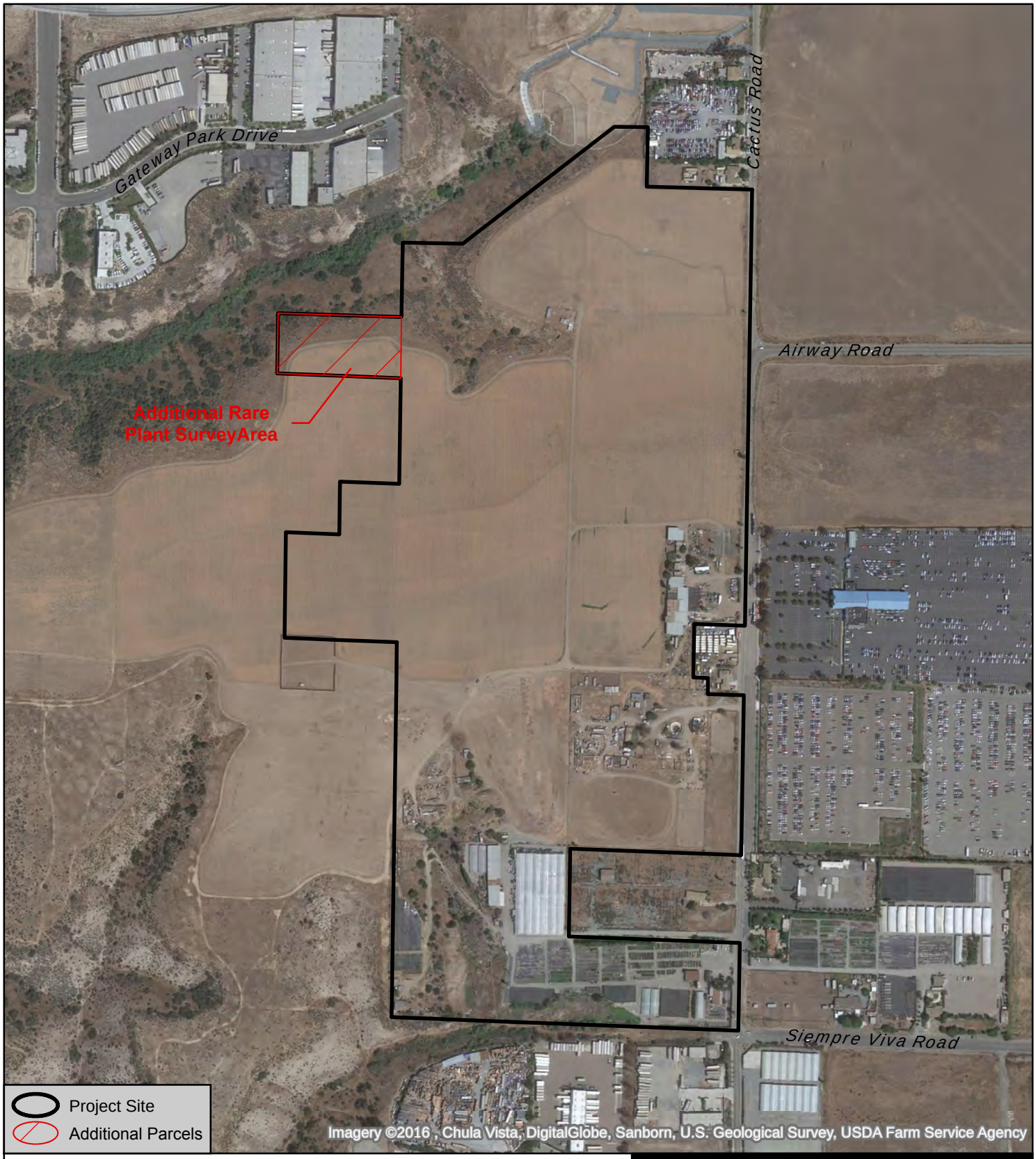
ALDEN ENVIRONMENTAL, INC



Source: Google

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ALDEN ENVIRONMENTAL, INC

Figure 2

Project Location

OTAY CANYON RANCH
2016 RARE PLANT SURVEY

OTAY MESA CENTRAL VILLAGE SPECIFIC PLAN
SAN DIEGO, CALIFORNIA

GEOCON
INCORPORATED

GEOTECHNICAL
ENVIRONMENTAL
MATERIALS

PREPARED FOR

COLRICH
SAN DIEGO, CALIFORNIA

PROJECT NO. 07254-42-04

GEOCON
INCORPORATED
GEOTECHNICAL ■ ENVIRONMENTAL ■ MATERIALS

Project No. 07254-42-04
July 8, 2015

ColRich
444 West Beech Street, Suite 300
San Diego, California 92101

Attention: Ms. Rita Mahoney

Subject: UPDATE LETTER
OTAY MESA CENTRAL VILLAGE SPECIFIC PLAN
SAN DIEGO, CALIFORNIA

References:
1. *EIR-:Level Update Geotechnical Report, Otay Mesa Community Plan Update, San Diego, California*, prepared by Geocon Incorporated, dated October 9, 2012 (Project No. 07254-42-03).
2. *Conceptual Land Use Plan, Central Village Specific Plan*, prepared by T & B Planning, Inc.

Dear Ms. Mahoney:

In accordance with your request, we herewith present this update to the referenced geotechnical report (Reference 1). To prepare this update we have reviewed Reference 2 and have performed a site visit.

The approximately 182 acre site is located generally on the flat mesa top near the intersection of Airway Road and Cactus Road in San Diego, California. Based on Reference 2, the site is planned for development of approximately: 52 acres of mixed-use properties; 86 acres of low to high density, multi-family, residential properties; 31 acres of open space and park; and a 13 acre school/park site.

Based on our review of the referenced documents and our site visit, it is our opinion that the conclusions and recommendations presented in Reference 1 are valid for the proposed development as shown on the conceptual land use plan; therefore, this letter updates the referenced report with respect to the Central Village Specific Plan.

Should you have any questions regarding this proposal, or if we may be of further service, please contact the undersigned at your convenience.

Very truly yours,

GEOCON INCORPORATED

Garry W. Cannon
CEC 2201, RCE 56468

Rodney C. Mikesell
GE 2533

GWC:RCM:dmc

(3) Addressee

REGISTERED PROFESSIONAL ENGINEER GARRY WELLS CANNON No. C 056468 CIVIL STATE OF CALIFORNIA

PROFESSIONAL GEOLOGIST GARRY WELLS CANNON No. 2201 CERTIFIED ENGINEERING GEOLOGIST STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER RODNEY C. MIKESELL No.2533 GEOTECHNICAL STATE OF CALIFORNIA

Project No. 07254-42-04
February 1, 2016

ColRich
444 West Beech Street, Suite 300
San Diego, California 92101

Attention: Ms. Rita Mahoney

Subject: 2ND UPDATE LETTER
OTAY MESA CENTRAL VILLAGE SPECIFIC PLAN
SAN DIEGO, CALIFORNIA

References:
1. *EIR: Level Update Geotechnical Report, Otay Mesa Community Plan Update, San Diego, California*, prepared by Geocon Incorporated, dated October 9, 2012 (Project No. 07254-42-03).

2. *Conceptual Land Use Plan, Central Village Specific Plan*, prepared by T&B Planning, Inc.

Dear Ms. Mahoney:

In accordance with your request, we herewith present this update to the referenced geotechnical report (Reference 1). To prepare this update we have reviewed Reference 2.

The approximately 229.2-acre site is located generally on the flat mesa top near the intersection of Airway Road and Cactus Road in San Diego, California. Based on Reference 2, the site is planned for development of approximately: 55.8 acres of mixed-use properties; 101.8 acres of low to high density, multi-family, residential properties; 32 acres of open space and parks; 15.5-acre school/recreation site; and 24.1 acres of public roadway.

Based on our review of the referenced documents and our site visit, it is our opinion that the conclusions and recommendations presented in Reference 1 are valid for the proposed development as shown on the conceptual land use plan; therefore, this letter updates the referenced report with respect to the Central Village Specific Plan.

Should you have any questions regarding this proposal, or if we may be of further service, please contact the undersigned at your convenience.

Very truly yours,

GEOCON INCORPORATED

Garry W. Cannon
CEC 2201, RCE 56468

Rodney C. Mikesell
GE 2533

GWC:RCM:dmc

(3) Addressee
(e-mail) T&B Planning, Inc.
Attention: Ms. Jerrica Harding

Project No. 07254-42-04
June 8, 2016

ColRich
444 West Beech Street, Suite 300
San Diego, California 92101

Attention: Ms. Rita Mahoney

Subject: OTAY MESA CENTRAL VILLAGE SPECIFIC PLAN
SAN DIEGO, CALIFORNIA

References:

1. *Remaining Cycle Issues DRAFT*, prepared by City of San Diego Development Services, LDR-Geology, Jim Quinn reviewer, dated April 29, 2016.

2. *2nd Update Letter, Otay Mesa Central Village Specific Plan*, prepared by Geocon Incorporated, dated February 1, 2016 (Project No. 07254-42-04).

3. *EIR-Level Update Geotechnical Report, Otay Mesa Community Plan Update, San Diego, California*, prepared by Geocon Incorporated, dated October 9, 2012 (Project No. 07254-42-03).

4. *Central Village Specific Plan, Otay Mesa Community, San Diego, California*, prepared by T&B Planning, Inc., dated February 11, 2016.

5. *Quaternary Fault and Fold Database of the United States:* U.S. Geological Survey website, http://earthquakes,usgs.gov/hazards/qfaults, accessed June 7, 2016.

Dear Ms. Mahoney:

In accordance with your request we have prepared this response to the geotechnical review comments presented in Reference 1. The review comments along with our responses are presented herein.

Issue 4: *Provide a geologic/geotechnical map of the Central Village Specific Plan area:*

Response: The map is provided herein as Figure 1 (Geologic Map) and Figure 2 (Land Use Plan).

Issue 5: *Address the potential for slope instability within or adjacent to the plan area, associated impacts, and potential mitigation measures.*

Response: Two landslides are mapped in the vicinity of the Central Village Boundary. Both are located within the canyon drainage area on the north side of the property (see Figure 1). The head of one of the landslides is mapped within the open space area

of PA 15 (see Figure 2). This suspected landslide does not pose a risk to the planned development as it is adjacent to land designated as open space. The risk associated with ground movement hazard due to landsliding is low.

A second landslide is mapped in the canyon hillside northeast of the Central Village plan area. This suspected landslide is not located in an area that could impact the property, and in our opinion, does not pose a risk to the planned development.

Landslides shown on Figures 1 and 2 are based on published sources or inferred using topography. The shallow, suspected landslides are based on reconnaissance mapping conducted for this report or the City of San Diego Seismic Safety Study (2008) and are not verified by subsurface exploration. As such, the mapped expression of suspected landslides may not be relied upon as definitive of their existence.

We do not expect mitigation measures will be required for the current Central Village Plan area. However, with respect to potential mitigation measures, if landslides are identified during geotechnical investigations in areas that could impact future development, engineered stabilization fills (earthwork or retaining devices) can be utilized to stabilize landslides. A structure/improvement setback from landslide areas is an alternative to engineered stabilization in areas of large landslides where engineered stabilization is not practical.

Issue 6: *Address seismic hazards within the plan area, associated impacts, and potential mitigation measures.*

Response: Review of published geologic literature including the on-line USGS database (Reference 5) shows the subject area is located east of the Quaternary La Nacion fault zone (LNFZ). Unnamed, north and northwest trending, Quaternary faults are shown east of the subject area on the San Diego Seismic Safety Study; however, no faults are mapped that traverse or are trending toward the Central Village Plan area. The risk associated with ground rupture due to faulting is low and we do not expect any associated impacts as a result of faulting. Additionally, mitigation measures due to faulting should not be required due to the absence of faulting on the property.

The nearest known active fault is the Rose Canyon/Newport-Inglewood Fault Zone located approximately 8 miles west of the site. Major earthquakes occurring on the Rose Canyon/Newport-Inglewood Fault Zone, or other regional active faults located in the southern California area, could subject the site to moderate to severe ground shaking.

The potential for liquefaction during a strong earthquake is limited to relatively clean sandy soils in a loose unconsolidated condition located below the water table. Due to the lack of a permanent, near-surface groundwater table and the dense nature of the underlying Very Old Paralic Deposits, San Diego Formation, and Otay Formation that underlies the site, the risk associated with ground movement hazard due to liquefaction and seismically-induced settlement is low.

Issue 7: Provide a general discussion of the opportunities and constraints on storm water infiltration BMPs with the plan area and potential for associated impacts.

Response: Based on geotechnical investigations performed by Geocon Incorporated in the plan area and our experience with the geologic units on the property, the near surface soils consist of expansive clays that have low permeability and low infiltration characteristics. As such, the native surficial soils are expected to be unsuitable for infiltration of storm-water runoff.

There may be an opportunity for infiltration into deeper terrace sands and gravels, however, consideration will need to be given to the potential for lateral water migration on the underlying San Diego Formation or Otay Formation bedrock. Future geotechnical studies will be required to assess if infiltration into the deeper terrace deposits is feasible.

We expect remedial grading will occur to remove the expansive near surface clay across the majority of the site. As such, we expect the majority of the site will be underlain by compacted fill following remedial grading operations. Infiltration into the compacted fill is not recommended as this could result in soil settlement and distress to structural improvements.

Issue 8: *Indicate if significant geologic hazards are present that can neither be avoided nor mitigated.*

Response: In our opinion there are no significant geologic hazards present within the subject area that cannot be either avoided or mitigated.

Issue 9: *Indicate if the proposed land uses are compatible with the known or reasonably anticipated geologic hazards.*

Response: Based on Reference 4, the proposed land use is low density multi-family, moderate to high density multi-family and mixed use (commercial), a school/recreation area, streets, parks and open space. It is our opinion that the proposed land use is compatible with known and reasonably anticipated geologic hazards.

Issue 10: *Identify any policies or programs of the Specific Plan, which may have direct or indirect significant environmental effects with regards to geologic hazards.*

Response: Based on our review of Reference 4, it is our opinion that there are no policies or programs presented in the Specific Plan that may have direct or indirect significant environmental effects regarding geologic hazards.

If there are any questions regarding this response, or if we may be of further service, please contact the undersigned at your convenience.

Very truly yours,

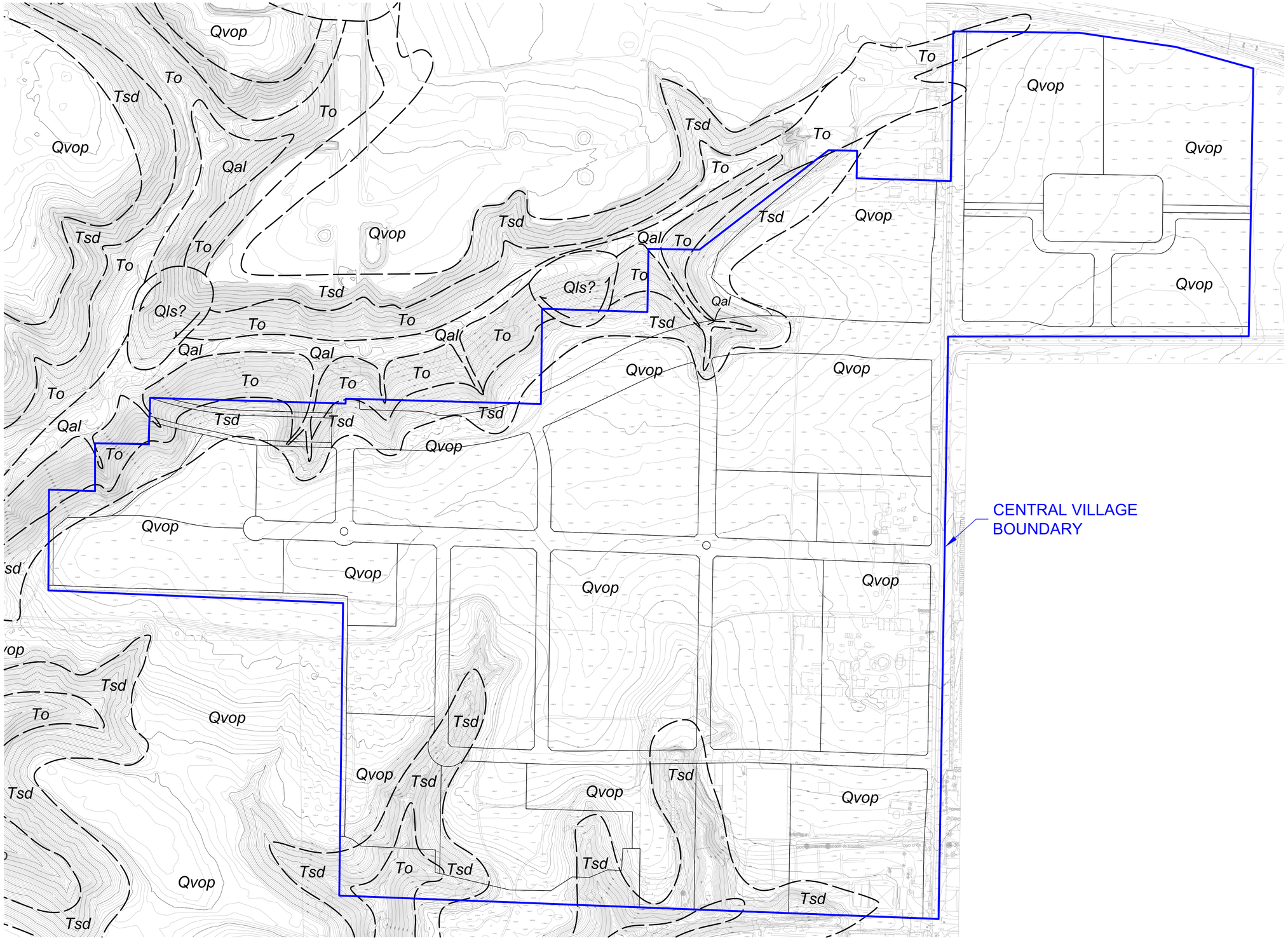
GEOCON INCORPORATED

Garry W. Cannon
CEG 2201
RCE 56468

Rodney C. Mikesell
GE 2533

GWC:RCM: dmc

(3/del) Addressee



GRAPHIC SCALE
0' 100' 200' 300' 400' 600' 800'
SCALE 1"= 200' (on 36x24)

GEOCON LEGEND

Qal.....ALLUVIUM
Qls.....LANDSLIDE DEBRIS (Suspected but not confirmed)
Qvop.....VERY OLD PARALIC DEPOSITS
To.....OTAY FORMATION
Tsd.....SAN DIEGO FORMATION
.....APPROX. LOCATION OF GEOLOGIC CONTACT (Queried Where Uncertain)

GEOLOGIC MAP

OTAY MESA CENTRAL VILLAGE
SAN DIEGO, CALIFORNIA

GEOCON INCORPORATED
GEOTECHNICAL ■ ENVIRONMENTAL ■ MATERIALS
6960 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121 - 2974
PHONE 858 558-6900 - FAX 858 558-6159

SCALE 1" = 200'	DATE 06 - 08 - 2016	
PROJECT NO. 07254 - 42 - 04		FIGURE 1
SHEET 1 OF 1		

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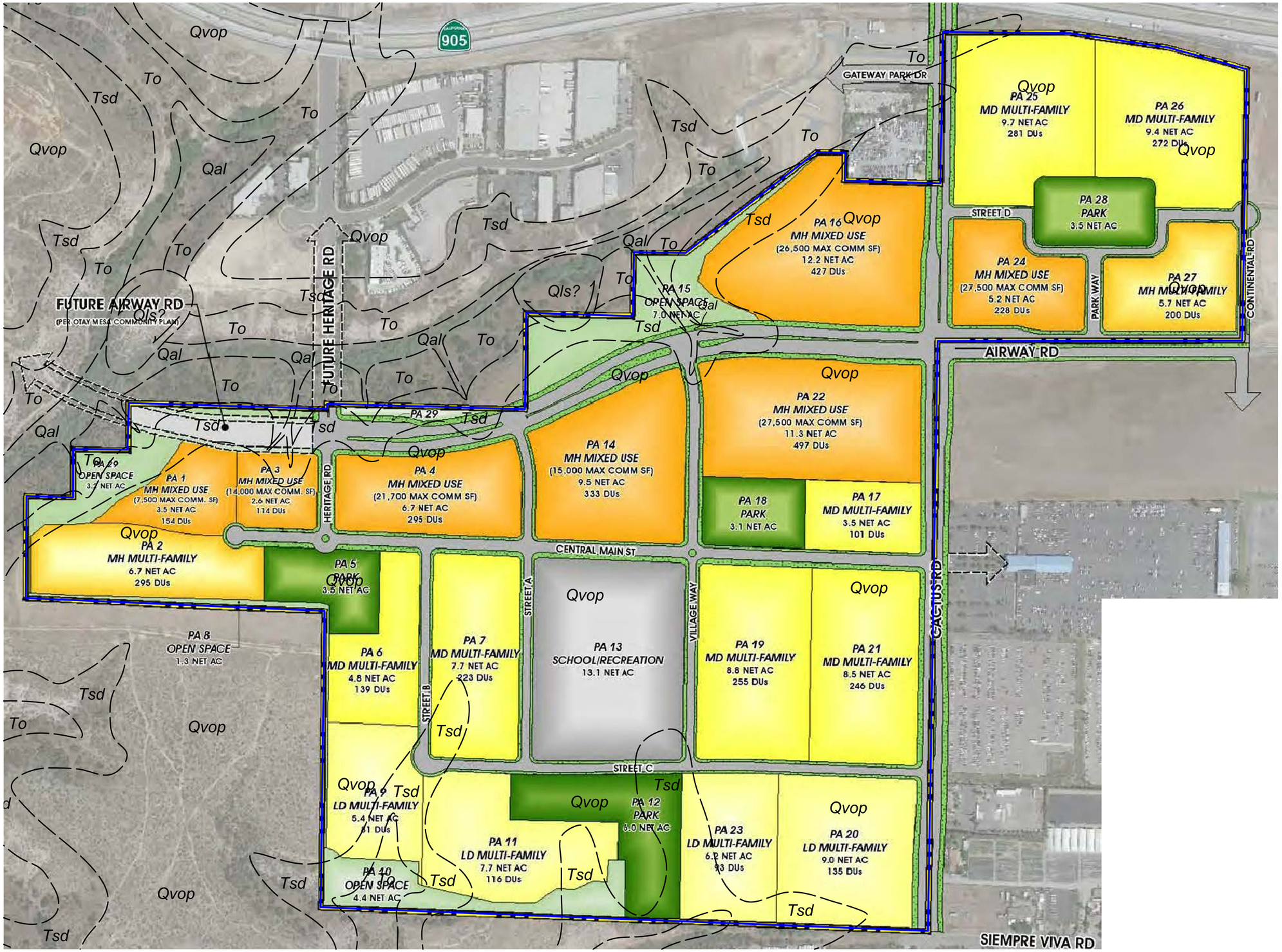

GRAPHIC SCALE

0' 100' 200' 300' 400' 600' 800'

SCALE 1"= 200' (on 36x24)

GEOCON LEGEND

Qal.....ALLUVIUM

Qls.....LANDSLIDE DEBRIS (Suspected but not confirmed)

Qvop.....VERY OLD PARALIC DEPOSITS

To.....OTAY FORMATION

Tsd.....SAN DIEGO FORMATION

.....APPROX. LOCATION OF GEOLOGIC CONTACT (Queried Where Uncertain)

LAND USE PLAN

OTAY MESA CENTRAL VILLAGE
SAN DIEGO, CALIFORNIA

GEOCON INCORPORATED
GEOTECHNICAL ■ ENVIRONMENTAL ■ MATERIALS
6960 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121 - 2974
PHONE 858 558-6900 - FAX 858 558-6159

SCALE 1" = 200'	DATE 06 - 08 - 2016
PROJECT NO. 07254 - 42 - 04	FIGURE 2
SHEET 1 OF 1	

LadrillonO

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Project No. 07254-42-04
October 3, 2016

ColRich
444 West Beech Street, Suite 300
San Diego, California 92101

Attention: Ms. Rita Mahoney

Subject: RESPONSE TO COMMENTS
OTAY MESA CENTRAL VILLAGE SPECIFIC PLAN
SAN DIEGO, CALIFORNIA

References:
1. *Remaining Cycle Issues DRAFT*, prepared by City of San Diego Development Services, LDR-Geology, Jim Quinn reviewer, dated September 14, 2016;
2. *Otay Mesa Central Village Specific Plan, San Diego, California*, prepared by Geocon Incorporated, dated June 8, 2016 (Project No. 07254-42-04).

Dear Ms. Mahoney:

In accordance with the request of Ms. Jerrica Harding (T&B Planning) we have prepared this response to the geotechnical review comments presented in Reference 1. The review comments along with our responses are presented herein.

Issue 14: *The project's geotechnical consultant addressed existing landslides, but did not address the potential for slope instability within the planning areas. As previously requested, address the potential for slope instability within the planning areas, associated impacts, and potential mitigation measures.*

Response: The highest risk associated with landslide hazard at the subject site occurs on slopes composed of the Tertiary-age Otay Formation. This condition occurs only along the northern border of the site.

As previously stated in Reference 2, two landslides are mapped within the canyon drainage area on the north side of the property, both occur within slopes mapped as Otay Formation. Bentonite layers within the Otay Formation can contribute to slope instability.

One of the mapped landslides is located, partially, within the designated open space area of PA 15 and does not pose a risk to the planned development. The second landslide is mapped in the canyon hillside northeast of and cross-canyon from the subject site and does not impact the property. The locations of these landslides are based on reconnaissance mapping conducted for our previously submitted report and the City of San Diego Seismic Safety Study (2008) and have

not been verified by subsurface exploration. As such, the mapped expression of suspected landslides should not be relied upon as definitive of their existence.

The remainder of the site is either flat or adjacent to slopes mapped as Tertiary-age San Diego Formation, which poses a low risk regarding landslide hazard. Also, the drainages along the southern boundary will likely be filled during site development.

It is our opinion that the risk associated with landslide hazard of the Otay Central Village Specific Plan is low; however, should landslides be are identified during future geotechnical investigations or grading in areas that could impact development, engineered stabilization fills (earthwork or retaining devices) can be utilized to stabilize landslides. A structure/improvement setback from landslide areas is an alternative to engineered stabilization in areas where engineered stabilization is not deemed practical.

If there are any questions regarding this response, or if we may be of further service, please contact the undersigned at your convenience.

Very truly yours,

GEOCON INCORPORATED

Garry W. Cannon
CEG 2201
RCE 56468

Rodney C. Mikesell
GE 2533

GWC:RCM:dmc

(e-mail) Addressee
(e-mail) T&B Planning
Attention: Ms. Jerrica Harding

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Project No. 07254-42-04
January 17, 2017

ColRich
444 West Beech Street, Suite 300
San Diego, California 92101

Attention: Ms. Rita Mahoney

Subject: 2nd RESPONSE TO CITY OF SAN DIEGO REVIEW COMMENTS
OTAY MESA CENTRAL VILLAGE SPECIFIC PLAN
SAN DIEGO, CALIFORNIA

References:

1. *Remaining Cycle Issues DRAFT*, prepared by City of San Diego Development Services, LDR-Geology, Jim Quinn reviewer, dated January 5, 2017;
2. *Response To Comments, Otay Central Village Specific Plan, San Diego, Californina*, prepared by Geocon Incorporated, dated October 3, 2016 (Project No. 07254-42-04);
3. *Central Village Specific Plan, Otay Mesa Community, San Diego, California*, prepared by T&B Planning, Inc., dated February 11, 2016;
4. *Otay Mesa Central Village Specific Plan, San Diego, California*, prepared by Geocon Incorporated, dated June 8, 2016 (Project No. 07254-42-04).
5. *EIR-Level Update Geotechnical Report, Otay Mesa Community Plan Update, San Diego, Californina*, prepared by Geocon Incorporated, dated October 9, 2012 (Project No. 07254-42-03);
6. *Otay Mesa Community Plan Update*, April 6, 2011 Public Draft.

Dear Ms. Mahoney:

In accordance with your request, we have prepared this response to the geotechnical review comments presented in Reference 1. The review comments along with our responses are presented herein.

Issue 17: *In their response to comments date October 3, 2016* [Reference 2], *the project's geotechnical consultant opines that the risk associated with landslide hazard of the Otay Central Village Specific Plan* [Reference 3] *is low. However, the geologic map included in their report dated October 9, 2012* [Reference 4] *indicates that landslides are suspected along the canyon slope in the northern portion of the of the Specific Plan area. The project's geotechnical consultant should indicate if slope stabilization will be necessary to support the improvements.*

Response: We have performed a site reconnaissance and reviewed aerial photographs specific to the proposed alignment of the Airway Road extension, as shown in Reference 3. Based on this review, it is our opinion that there is not convincing evidence to confirm

the presence of the conjectured landslide shown on Figure No. 1. It is also our opinion that, if this conjectured feature is present, its closest horizontal proximity to the proposed roadway is at least 150 feet and the likelihood of the slide impacting the proposed roadway in this area is low. It is our opinion that slope stabilization should not be required to support the proposed roadway improvements.

Issue 18: *Section 6.1.3 of the geotechnical report dated October 9, 2012* [Reference 5] *indicates if development is planned with in these suspected landslide zones, subsurface studies should be performed to establish their geometry and depth. Those studies should be conducted at this time if necessary to address potential impacts, mitigation measures, or alternative.*

Response: Reference 5 provides preliminary recommendations pertinent for the overall development area shown on Reference 6. This plan encompasses a much larger area than Central Village (Reference 4), which is the subject of this response. Although some development on the overall plan may be proposed in suspected landslide areas, the proposed roadway alignment for Central Village is not considered to traverse these zones.

Issue 19: *If stabilization of the slope supporting the planned extension of Airway Road is necessary, identify the approximate limits of grading for the purpose of analyzing the impacts to environmentally sensitive lands.*

Response: We don't anticipate that stabilization of the slopes supporting the extension of Airway Road as shown on Reference 3 will be necessary. A slope stability analysis was performed assuming conservative geotechnical conditions along Cross Sections A-A' and B-B' (see Figure 1). The analysis considered the natural slope configuration and assumed the presence of a horizontal Bedding Parallel Shear (BPS) daylighting along the toe of the north-facing slope. Strength parameters for the bedrock and BPS materials were selected based on our experience with the geologic units in the area. The stability analysis was performed using Geoslope 2007. A graphic summary of the stability analysis is provided on Figures 2 and 3. The location of the stability cross sections are shown on Figure 1. Based on our analysis, the minimum factor of safety for the overall existing hillside at the two cross section locations is at least 1.5 or greater. The stability analysis should be confirmed once grading plans have been prepared and a geotechnical investigation has been performed.

Issue 20: *The project's geotechnical consultant indicates that structure/improvement setbacks is* (sic) *an alternative if engineered stabilization is not deemed practical. The project's geotechnical consultant should clarify if modifications to the Specific Plan could be necessary;*

Response: Based on the discussion above; our review of available information; and our site reconnaissance, stabilization of the slopes along the extension of Airway Road and improvement setbacks should not be required for the alignment proposed in Reference 3. No modifications to the Specific Plan are expected from a geotechnical engineering standpoint.

If there are any questions regarding this response, or if we may be of further service, please contact the undersigned at your convenience.

Very truly yours,

GEOCON INCORPORATED

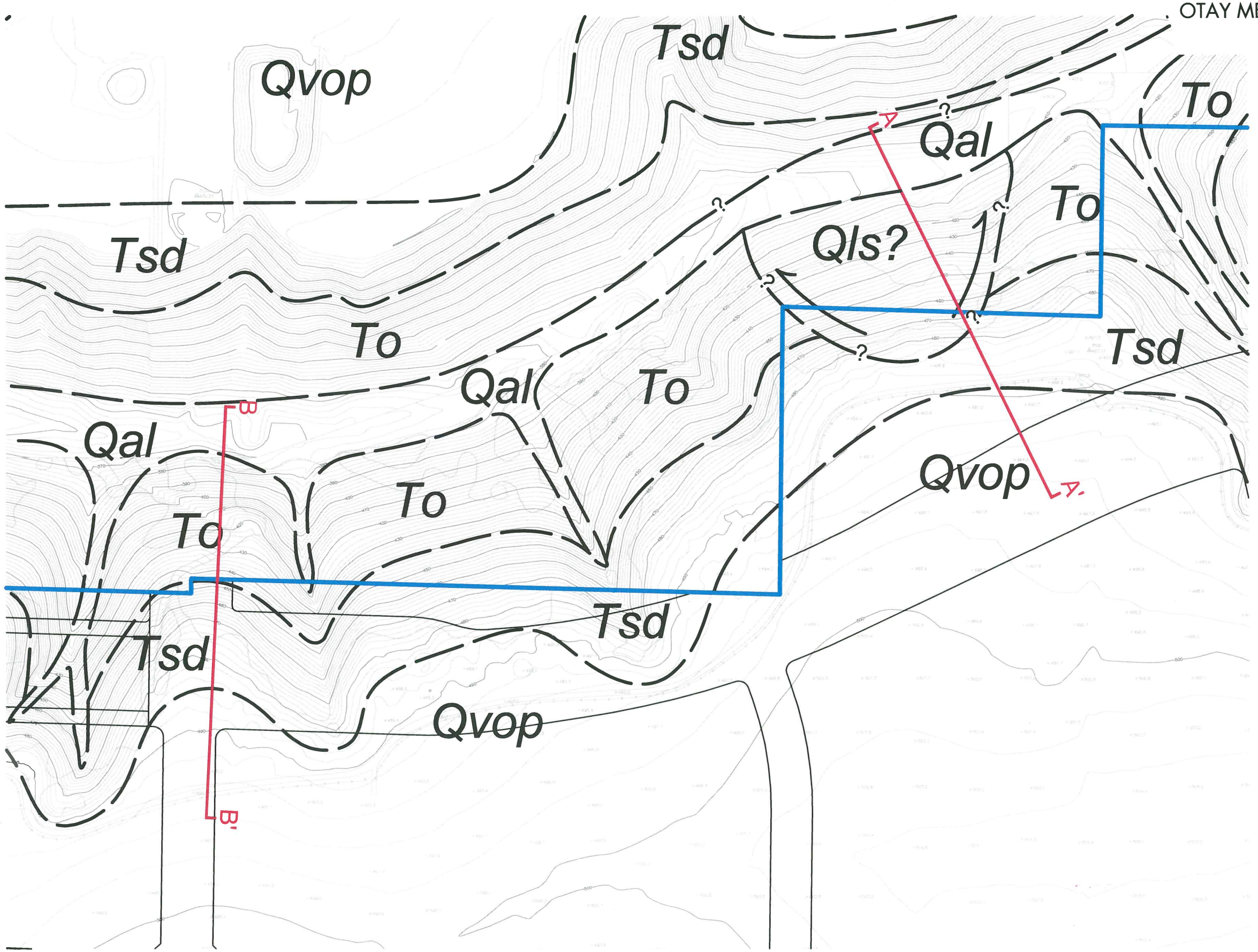
Garry W. Cannon
CEG 2201, RCE 56468

Rodney C. Mikesell
GE 2533

RCM:GWC:ejc

(e-mail) Addressee
(e-mail) T&B Planning
Attention: Ms. Jerrica Harding

OTAY MESA CENTRAL VILLAGE SPECIFIC PLAN
SAN DIEGO, CALIFORNIA



0' 75' 150' 325' 300'
SCALE 1"=150'(on 11x17)

GEOCON LEGEND

Qal.....ALLUVIUM
Qls.....CONJECTURED LANDSLIDE
Qvop.....VERY OLD PARALIC DEPOSITS
To.....OTAY FORMATION
Tsd.....SAN DIEGO FORMATION
.....APPROX. LOCATION OF GEOLOGIC CONTACT (Queried Where Uncertain)
B B.....SLOPE STABILITY CROSS SECTION

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PROJECT NO. 07254 - 42 - 04
FIGURE 1
DATE 01 - 17 - 2017

GEOLOGIC MAP

Ladrillono

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Otay Mesa Central Village Plan
Project No. 07254-42--04
Section A-A'
Name: A-A(2).gsz
Date: 1/12/2017

Assumed Bedding Plane Shear at Toe of Slope

Name: Qvop - Very Old Terrace Deposits Unit Weight: 125 pcf Cohesion: 100 psf Phi: 33 °
Name: Basal Slip Surface Unit Weight: 110 pcf Cohesion: 150 psf Phi: 10 °
Name: To - Otay Formation Unit Weight: 125 pcf Cohesion: 600 psf Phi: 34 °
Name: Tsd - San Diego Formation Unit Weight: 125 pcf Cohesion: 500 psf Phi: 35 °
Name: Qal - Alluvium Unit Weight: 125 pcf Cohesion: 100 psf Phi: 30 °

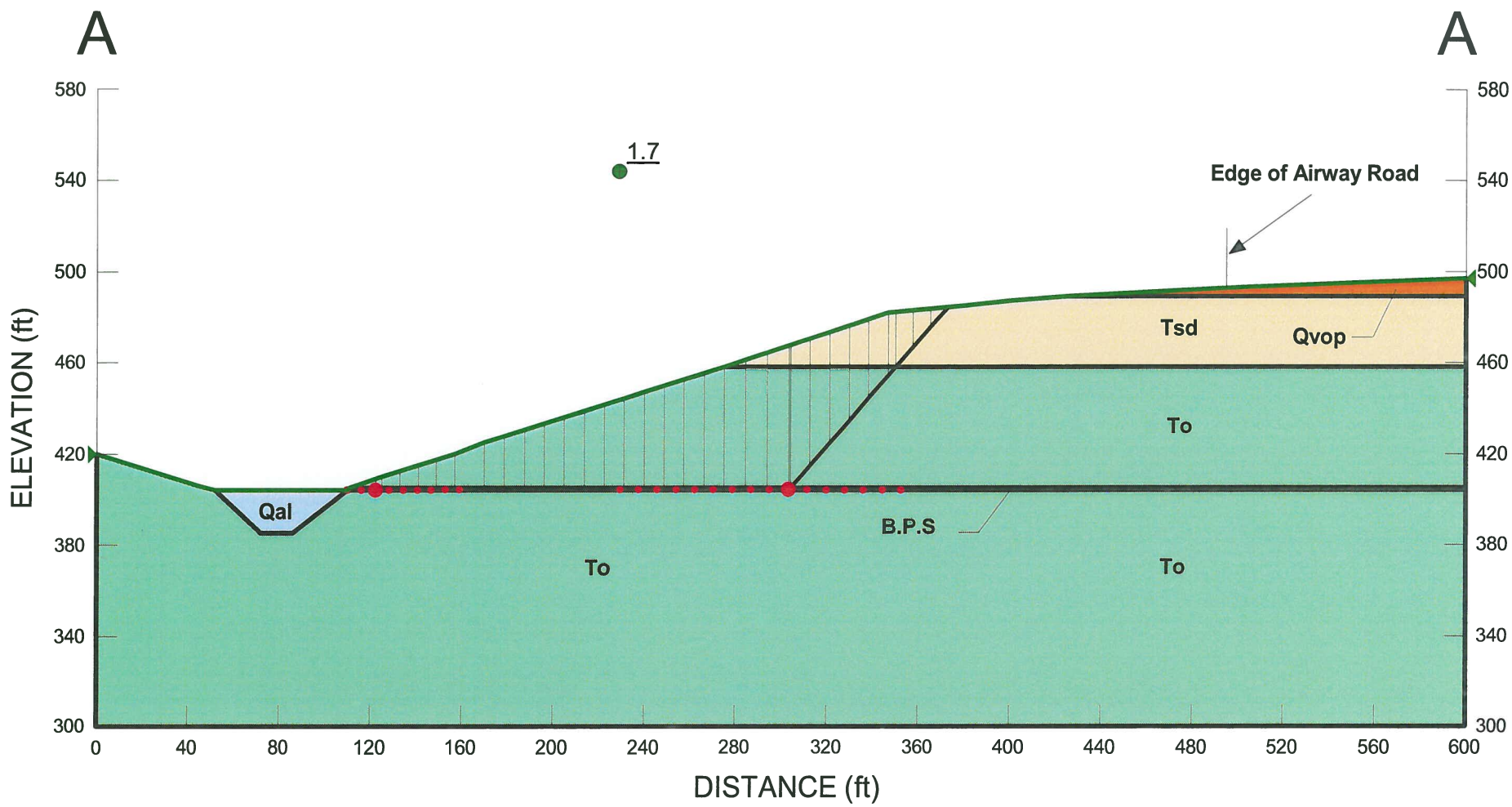

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Figure 2

Otay Mesa Central Village Plan
Project No. 07254-42--04
Section B-B'
Name: B-B(2).gsz
Date: 1/12/2017

Assumed Bedding Plane Shear at Toe of Slope

Name: Qvop - Old Terrace Deposits Unit Weight: 125 pcf Cohesion: 100 psf Phi: 33 °
Name: Basal Slip Surface Unit Weight: 110 pcf Cohesion: 150 psf Phi: 10 °
Name: To - Otay Formation Unit Weight: 125 pcf Cohesion: 600 psf Phi: 34 °
Name: Tsd - San Diego Formation Unit Weight: 125 pcf Cohesion: 500 psf Phi: 35 °
Name: Qal - Alluvium Unit Weight: 125 pcf Cohesion: 100 psf Phi: 30 °

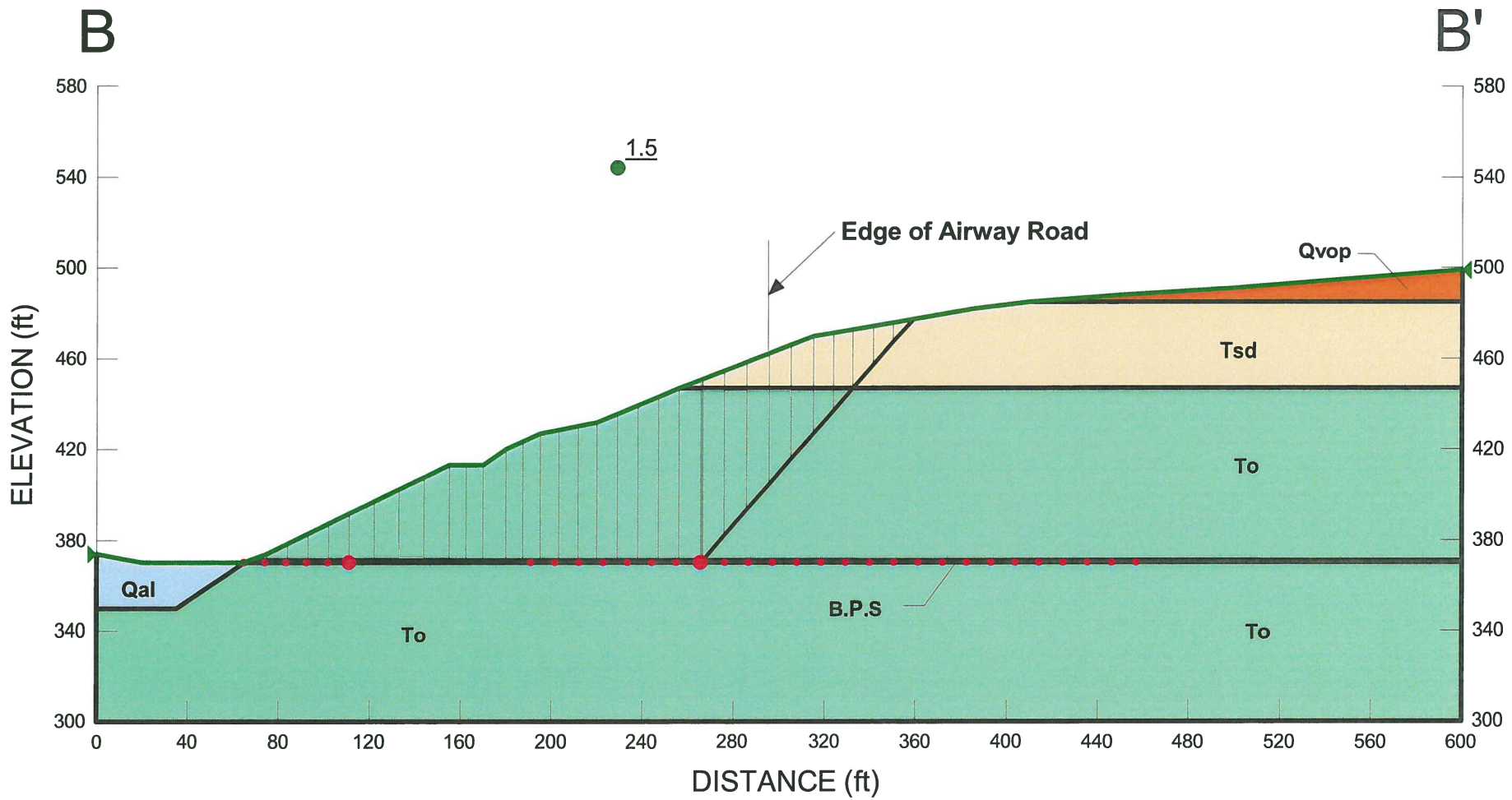

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Figure 3

GREENHOUSE GAS ASSESSMENT

Otay Mesa Central Village Specific Plan Update to the Otay Mesa Community Planning Area

City of San Diego, CA

Prepared By:

Ldn Consulting, Inc.
42428 Chisolm Trail
Murrieta, CA 92562

Prepared For:

ColRich
444 West Beech Street, Suite 300
San Diego, CA 92101

in conjunction with:

T&B Planning, Inc.

January 23, 2017

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Attachments

CALLEEMOD 2013.2.2 APPROVED CVSP
CALLEEMOD 2013.2.2 PROPOSED CVSP

LIST OF ACRONYMS

Assembly Bill 32 (AB32)

Business as Usual (BAU)

California Air Pollution Control Officers Association's (CAPCOA)

California Air Resource Board (CARB)

California Climate Action Registry General Reporting Protocol Version 3.1 (CCARGRPV3.1)

California Environmental Quality Act (CEQA)

Carbon Dioxide (CO2)

Central Village Specific Plan (CVSP)

Cubic Yards (CY)

Environmental Protection Agency (EPA)

Greenhouse Gas (GHG)

International Residential Code (IRC)

Low Carbon Fuel Standard (LCFS)

Methane (CH4)

Nitrous Oxide (N2O)

Otay Mesa Community Plan Update (OMCPU)

San Diego Air Basin (SDAB)

San Diego Air Pollution Control District (SDAPCD)

Senate Bill 97 (SB97)

Vehicle Miles Traveled (VMT)

EXECUTIVE SUMMARY

The City of San Diego certified a Final Environmental Impact Report for the Otay Mesa Community Plan Update in 2014 (EIR). The EIR disclosed potential greenhouse gas (GHG) emission impacts that would result from implementing the Otay Mesa Community Plan Update (March 2014, "OMCPU") and presented mitigation measures to address the impacts. The EIR concluded that future projects implemented in accordance with the OMCPU would need to demonstrate consistency with applicable GHG plans, policies, and regulations, but nonetheless, even with adherence to the OMCPU's Mitigation Framework, the City's General Plan, and OMCPU policies, GHG emissions from implementing projects could still be significant and unavoidable.

The OMCPU requires the City of San Diego to adopt a Specific Plan for the Central Village portion of the community. The purpose of this Greenhouse Gas report is to evaluate the currently proposed Central Village Specific Plan (CVSP) and determine if expected GHG emissions fall within the scope of impacts disclosed in the OMCPU EIR, and whether any additional mitigation measures beyond those presented in the EIR are warranted. Neither the OMCPU nor the proposed CVSP authorize the construction of any development. Future development proposals in the CVSP area would require discretionary approvals and be subject to additional CEQA review, including project-specific evaluations of GHG emissions through the City of San Diego's Climate Action Plan (CAP) Consistency Checklist.

The program level analysis presented in this report is consistent with the City of San Diego's Climate Action Plan (CAP), which was prepared in conformance with the guidelines and recommendations established within the California Global Warming Solutions Act of 2006 – Assembly Bill 32 (AB32), Senate Bill 97 (SB97), and California Environmental Quality Act (CEQA). GHGs analyzed in this study are Carbon Dioxide (CO_2), Methane (CH_4), and Nitrous Oxide (N_2O). To simplify GHG calculations, both CH_4 and N_2O are converted to equivalent amounts of CO_2 and are identified as CO_2e. In other words, CO_2e is an equivalent volume or mass of CO_2 converted from global warming potentials of other gases that may cause equivalent warming.

The OMCPU and associated EIR assumed the following land uses within the Central Village portion of the OMCPU area:

- 5,246 multi-family dwelling units
- 32.7 ksf of community commercial
- 32.3 acres of active park space
- 1 elementary school

The CVSP is proposing to change the land uses within the Central Village area to the following:

- 425 multi-family dwelling units (<20 du/ac)
- 4,060 multi-family dwelling units (>20 du/ac)
- 139.7 ksf of community commercial
- 16.1 acres of active park space
- 1 elementary school

The land use modifications proposed by the CVSP in comparison to the mix of land uses assumed for the Central Village by the OMCPU EIR are summarized below.

- A reduction of 761 Multi-family dwelling units
- An increase of 107 ksf of community commercial floor space
- A reduction of 16.2 acres of active park space

Based on the findings of this report, operational GHG emissions associated with buildout of the proposed CVSP project will be reduced by roughly 5,144.44 million tons (MT) of carbon dioxide equivalent (CO2e) per year in comparison to amount of annual GHG emissions disclosed for the Central Village by the OMCPU EIR. Depending on the category of emissions evaluated, implementation of the proposed CVSP would result in a 6.8% to 14% reduction in GHG emissions as compared to GHG emissions disclosed in the OMCPU EIR for the Central Village. Given this, no additional GHG impacts would be expected by making the land use modifications proposed by the CVSP.

It should be noted that this analysis is still a program level analysis, and specific project-level mitigation measures are not analyzed within this study; rather, the purpose of this study is to determine whether buildout of the proposed CVSP project would result in new or more severe environmental impacts related to GHG emissions as compared to what was evaluated and disclosed for the Central Village by the OMCPU EIR. In December 2015, the City of San Diego adopted a Climate Action Plan (CAP) that outlines the actions that the City will undertake to achieve its proportional share of State GHG emission reductions. Under the CAP, the City has developed policy and a consistency checklist to provide new developments better guidance on reducing GHGs for compliance with CEQA.

The CVSP's proposed arrangement of land uses and its proposed Policies and Design Standards take steps to increase success of the CAP's implementation. This report contains a detailed analysis of the CVSP's compliance with the CAP, which demonstrates that the CVSP is CAP-compliant. The land use arrangement and many of the CVSP's Policies and Design Standards promote the use of public transit, biking, and walking, which will reduce project-related and regional vehicle miles traveled (VMT) by reducing the need to drive a motor vehicle and shortening vehicle trip lengths. Refer to the CAP compliance analysis contained herein for more information. Because a main source of GHG emissions is from mobile sources (vehicles), reducing VMT through the CVSP's land use design and the implementation of CVSP Policies and Design Features would reduce GHG emissions.

Under the City's CAP, the OMCPU EIR, and per the findings of this analysis, all implementing development projects within the Central Village will be required to complete GHG studies consistent with the City's CAP and General Plan Conservation Element (the CAP requires that any development project that would emit at least 900 MT of CO2e is required to conduct a GHG analysis). Thus, all development projects that implement the CVSP will be subjected to a project-specific GHG analysis and be required to show necessary mitigation measures per the City's CAP Checklists to reduce GHG impacts. For the purposes of the analysis herein at the program level, impacts associated with the contribution of GHG emissions to cumulative statewide emissions would remain significant and unavoidable (even though the CVSP would reduce GHG emissions in comparison to the quantity disclosed for the Central Village by the OMCPU EIR). This significance conclusion is consistent with conclusion disclosed in the OMCPU EIR.

1.0 INTRODUCTION

1.1 Purpose of this Study

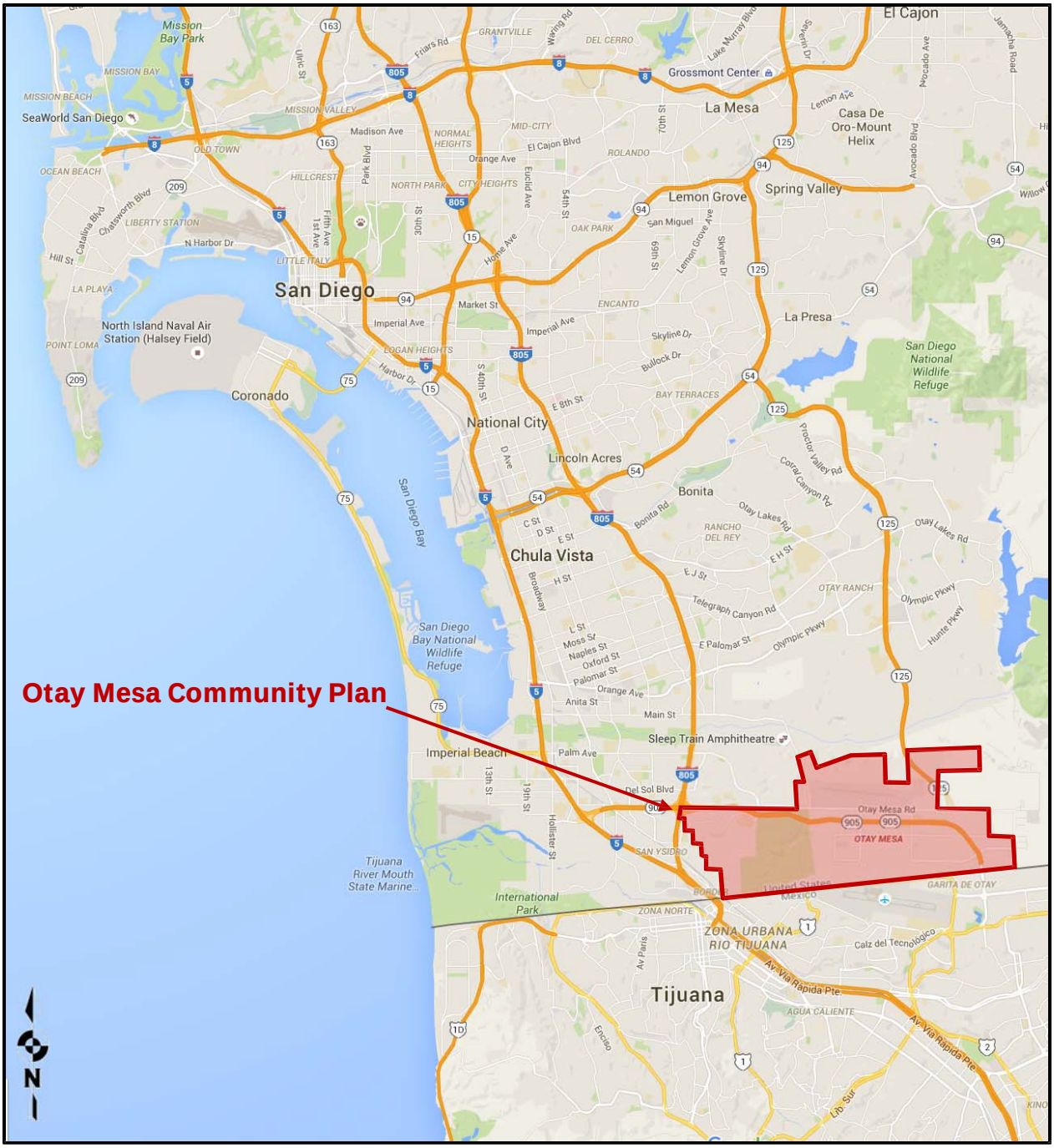
The City of San Diego certified a Final Environmental Impact Report for the Otay Mesa Community Plan Update in 2014 (EIR). The EIR disclosed potential greenhouse gas (GHG) emission impacts that would result from implementing the Otay Mesa Community Plan Update (March 2014, "OMCPU") and presented mitigation measures to address the impacts. The EIR concluded that future projects implemented in accordance with the OMCPU would need to demonstrate consistency with applicable GHG plans, policies, and regulations, but nonetheless, even with adherence to the OMCPU's Mitigation Framework, the City's General Plan, and OMCPU policies, GHG emissions from implementing projects could still be significant and unavoidable.

The purpose of this GHG study is to determine potential GHG impacts that may result from implementation of the proposed Central Village Specific Plan (CVSP) project, which seeks to modify the land use designations applied to the 229.2-acre Central Village Area by the Otay Mesa Community Plan Update (OMCPU). This analysis focuses on relative changes in GHG emissions that would result from implementation of the CVSP project, based on a comparison of the CVSP's Construction and Operational GHG emissions to the level of Construction and Operational GHG emissions disclosed by the OMCPU EIR. The analysis herein is conducted at a program level because neither the OMCPU nor the proposed CVSP authorize the construction of any development. Future development proposals in the CVSP area would require discretionary approval and be subject to additional CEQA review, including project-specific evaluations of GHG emissions.

1.2 Project Location

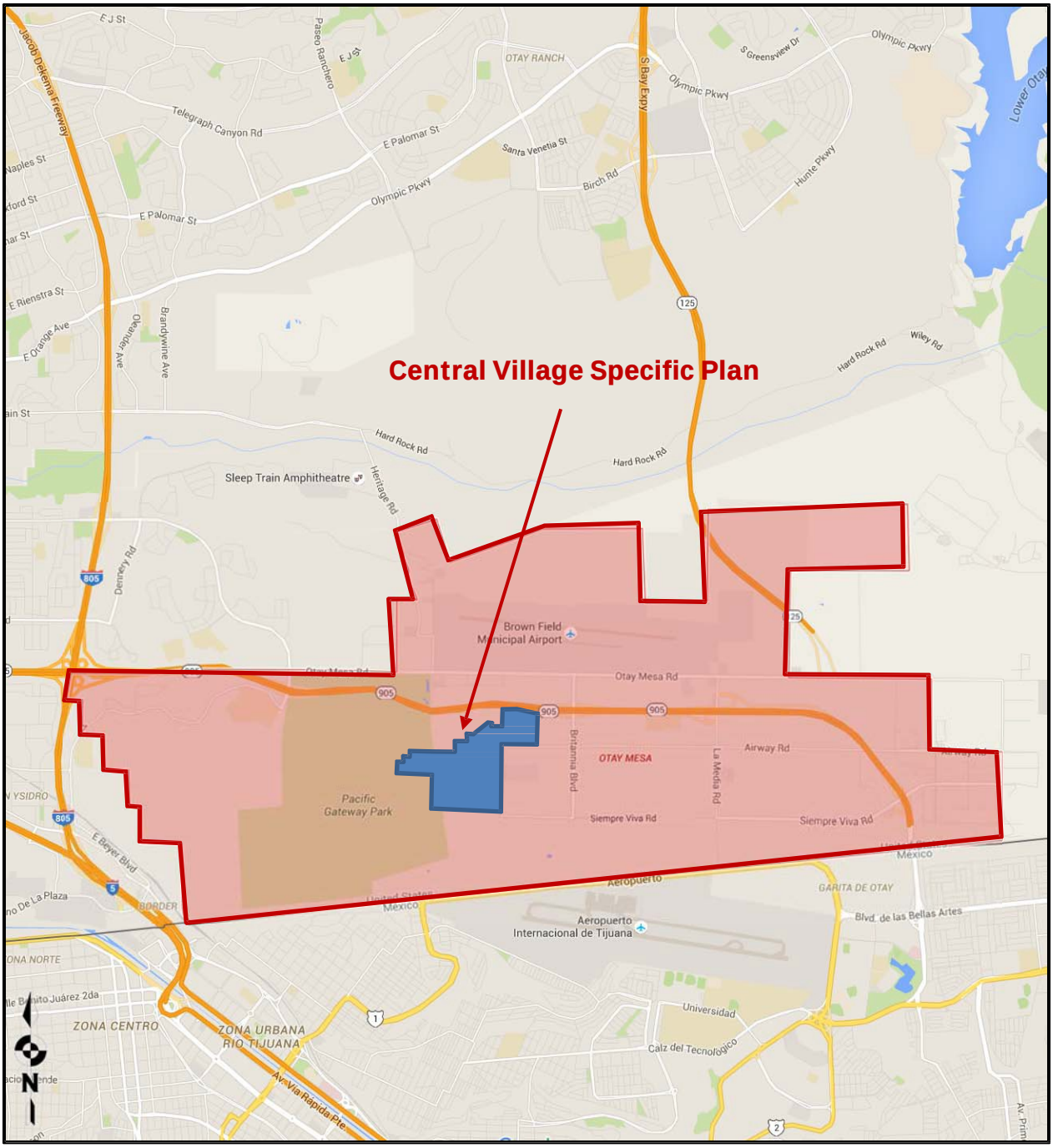
The Central Village Specific Plan (CVSP) area is located in the southern portion of the City of San Diego, within Otay Mesa Community. The CVSP is situated immediately south of California State Route 905 (SR-905), approximately 2.4 miles east of Interstate 805 (I-805) and Interstate 5 (I-5), and 0.5 mile north of the United States and Mexico International Border. Specifically, the CVSP area is bordered by SR-905 and Airway Road to the north, Cactus Road and Continental Road to the east, and Siempre Viva Road to the south, which terminates at Cactus Road. A general vicinity map showing the Otay Mesa Community Plan boundaries is shown in Figure 1–A on the following page and a map showing the CVSP within the Otay Mesa Community Plan is shown in Figure 1-B.

Figure 1-A: Otay Mesa Community Plan Location



Source: (Google 2016)

Figure 1-B: Central Village Specific Plan Location



Source: (Google 2016)

1.3 Project Description

The City of San Diego certified a Final Environmental Impact Report for the Otay Mesa Community Plan Update (OMCPU) in 2014 (FEIR; City of San Diego [City] 2014). The OMCPU requires the City to adopt a Specific Plan for the Central Village portion of the community. The purpose of this report is to evaluate the currently proposed Central Village Specific Plan (CVSP). Adoption of the proposed CVSP would develop up to 4,485 multi-family homes, 139,700 square feet (sf) of commercial space, a 13.1-acre combined school/recreation site, 16.1 acres of population-based park land uses, 15.9 acres of open space, and approximately 24.1 acres of major roadways within the 229.2-acre CVSP Area (SPA) (T&B Planning, Inc. 2017). The Project includes the adoption of the CVSP as an amendment to the Otay Mesa Community Plan and a rezoning program to implement the designated land uses. The land uses proposed by the CVSP are generally in conformance with the land uses analyzed in the EIR for the SPA, which assumed up to 5,246 multi-family homes and up to 32,700 sf of commercial uses arranged as a predominately residential community with core areas of mixed uses and public spaces sited along Airway Road.

The OMCPU and associated EIR assumed the following land uses within the Central Village portion of the OMCPU area:

- 5,246 multi-family dwelling units
- 32.7 ksf of community commercial
- 32.3 acres of active park space
- 1 elementary school

The CVSP is proposing to change the land uses within the Central Village area to the following:

- 425 multi-family dwelling units (<20 du/ac)
- 4,060 multi-family dwelling units (>20 du/ac)
- 139.7 ksf of community commercial
- 16.1 acres of active park space
- 1 elementary school

The land use modifications proposed by the CVSP in comparison to the mix of land uses assumed for the Central Village by the OMCPU EIR are summarized below.

- A reduction of 761 Multi-family dwelling units
- An increase of 107 ksf of community commercial floor space
- A reduction of 16.2 acres of active park space

Because the development area (229.2 acres) assumed by the OMCPU EIR and the development area (229.2 acres) proposed by the CVSP are the same, it is assumed that construction activities associated with buildout of the Central Village would largely remain the same as assumed by the OMCPU EIR in the Central Village area. The EIR's consideration of construction-related GHG emissions assumed that

sources of construction-related emissions would include: a) fugitive dust from grading activities; b) construction equipment exhaust; c) construction-related trips by workers, delivery trucks, and material-hauling trucks; and d) construction-related power consumption. (RECON, 2013). Based on industry-standard construction practices, these are reasonable assumptions for sources of construction activity air emissions in the Central Village.

In regards to long-term operation of land uses in the CVSP, the proposed land use changes described above were analyzed in the CVSP's *Transportation Facilities Trigger Analysis* (Chen Ryan & Associates, 2017), and as stated therein, the CVSP is calculated to generate 36,345 average daily vehicular trips (ADT), which is less traffic than was assumed for the Central Village by the OMCPU EIR, at 45,429 ADT. Also, the transportation analysis found that the increased commercial square footage would increase internal traffic from 4.67% to 9.4% or an additional 1,547 ADT. Given this, fewer vehicles will travel outside of the CVSP boundaries. Less external traffic means that vehicles will travel fewer miles, resulting in less vehicle miles traveled (VMT) and a lesser quantity of mobile source (vehicle tailpipe) GHG emissions.

Also, it should be noted, the proposed CVSP's arrangement of land uses provides four times as much commercial area along the more heavily traveled Airway Road as compared to the less traveled Cactus Avenue as originally planned for by the OMCPU. Because Airway Road will carry higher traffic volumes than Cactus Road, it is expected that the CVSP will increase pass-by trip usage. A pass-by trip means that a vehicle that is already on the road will stop to use a convenience use (to shop, get food, etc.) and reduce the need for an additional trip or longer trip for that purpose. Increased pass-by trips along Airway Road may ultimately reduce the number of trips from origin and destination points outside the CVSP boundaries. Less regional traffic means that vehicles will travel fewer miles, resulting in a less VMT and a lesser quantity of mobile source (vehicle tailpipe) GHG emissions.

Additionally, by providing fewer residential units and more commercial square footage within the CVSP compared to the number of residential units and amount of commercial floor space assumed under the OMCPU, the "Jobs to Housing" ratio within the CVSP area would improve from 0.018 to 1.89 ratio. This means that more people residing in the CVSP and OMCPU would have access to employment near their homes, reducing commute distances and potentially allowing for walking and biking to/from work. Shorter home/work commute distances and the encouragement of walking and biking also means that means that vehicles will travel fewer miles, resulting in a less VMT and a lesser quantity of mobile source (vehicle tailpipe) GHG emissions.

The CVSP was planned in accordance with the Otay Mesa Community Plan which identifies the vision for the Central Village Community as:

"a medium to high density residential community centered along Airway Road, and focused around school and park uses, as well as village-scale retail"

The proposed CVSP includes many Polices and Design Standards to encourage walking, biking, and the

use of transit, which also would reduce VMT and associated mobile source air emissions. Some of these Policies and Design Standards are provided below as examples and can be found in CVSP Section 2.3, *Mobility Element*, and Section 2.5, *Urban Design Element*. Please refer to the CVSP for a full list.

"Policy 2.3-1 If possible, include transit stops to support transit use within the Central Village."

"Policy 2.3-3 Design street corners to accommodate safe pedestrian crossings. Include ample unobstructed space at the street corner for people waiting to cross the street. Where there is demand for a pedestrian street crossing that does not align with an intersection, apply a mid-block crossing."

"Policy 2.3-4 Provide interconnected streets and pedestrian walkways. Avoid barriers to pedestrian access…."

"Policy 2.3-10 Incorporate traffic calming measures at intersections with pedestrian crossings."

"Policy 2.3-14 Design trails to include major gateways and intersections to enable trail users to connect to other segments of the on-site pedestrian network."

"Design Standard 2.3-13 Sidewalk widths shall be 8 or 10-feet wide where transit stops and shelters are proposed and shall extend for 25 feet parallel to the curb measured from the bus stop sign to provide adequate clearance to accommodate bus lifts for disabled persons."

"Design Standard 2.3-15 Bus facilities shall be developed in accordance with the standards provided in the City of San Diego Street Design Manual."

"Design Standard 2.3-16 Rapid Transit stops shall be designed to allow pedestrians to cross the street safely and within proximity to the stop."

"Design Standard 2.3-17 Rapid Transit facilities shall be developed in accordance with the standards provided in the City of San Diego Street Design Manual."

"Design Standard 2.3-18 Class I and Class II bike lanes shall be developed in locations shown on [CVSP] Figure 2.3-4, Alternative Transportation Plan…."

"Policy 2.5-1 Pedestrian plazas, either within the interior of the development or at building street corners, should be provided where possible to help activate street corners, provide a foreground to building entrances, and/or to serve adjacent uses (such as a retail space, café, or office use)."

"Policy 2.5-6 Pedestrian paseos are encouraged in all developments to provide enhanced connectivity and usable open space."

"Policy 2.5-8 Incorporate informal outdoor gathering areas and pedestrian nodes into design plans in

ways that allow these spaces to function as community gathering spaces."

"Policy 2.5-15 Orient development in ways that create compact blocks and lots. A 'block' is defined as an area of development that is delineated on all sides by public streets, paseos, trails, parks, community facilities, landscaped setbacks, and/or private internal streets. Except where site-specific circumstances preclude it, blocks within the Central Village shall have a maximum of perimeter of 2,000 feet."

"Policy 2.5-17 Developments should incorporate safe pedestrian connections to adjoining residential developments, commercial projects, and open space areas."

"Policy 2.5-20 Proposed developments should provide an interconnected system of paths, sidewalks, corridors, and walkways that create a safe and pleasant pedestrian environment, connect dwelling units and common areas, are well-integrated with the surrounding neighborhood, and provide multiple pedestrian access points."

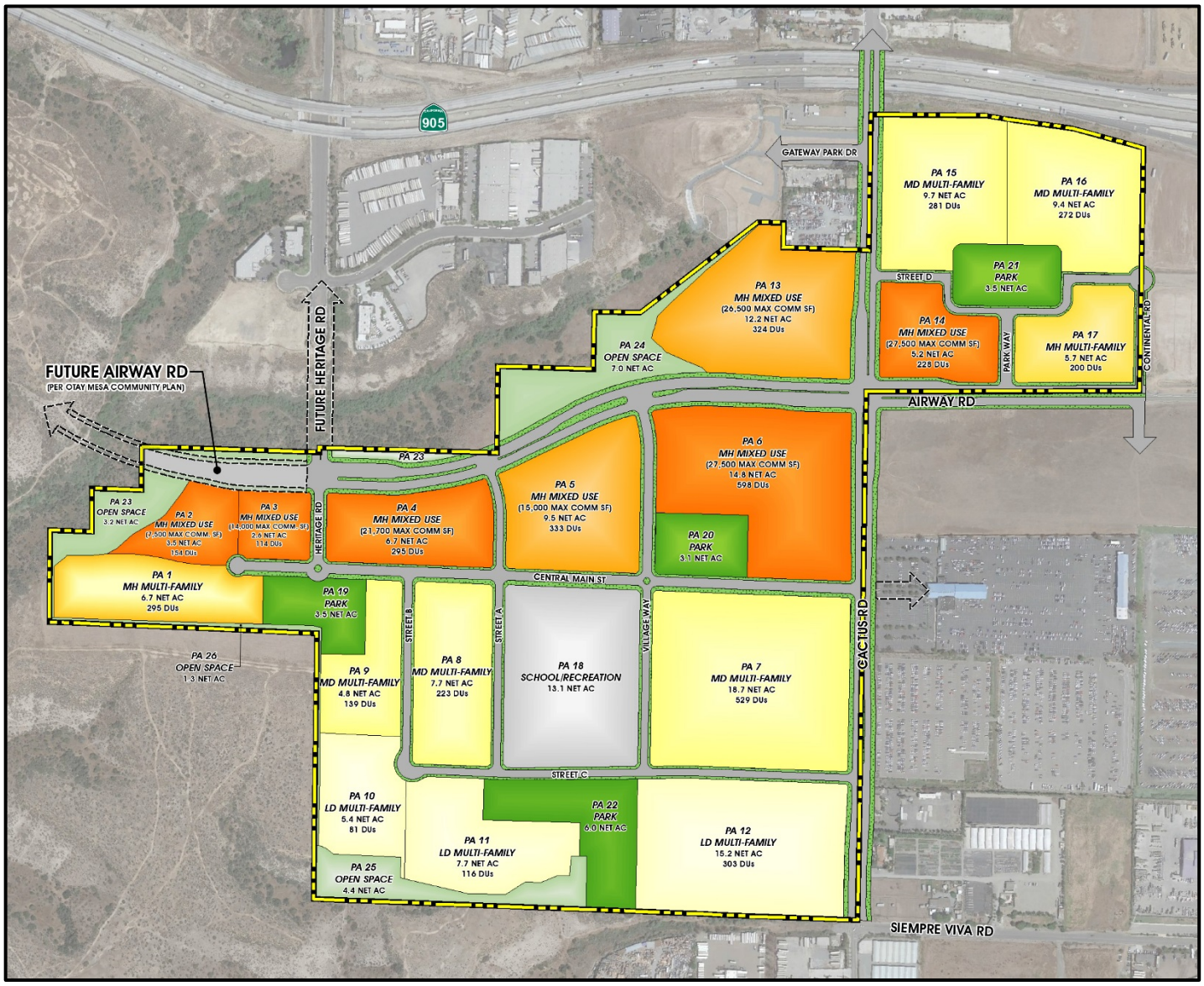
"Policy 2.5-22 Drive-through commercial site design is prohibited within Central Village."

"Policy 2.5-105 The following amenities may be provided to support bicyclists and pedestrians: street furniture, public art, bike paths, multiple access points, and safe street crossing opportunities."

"Policy 2.5-175 Pedestrian scaled lighting, such as low profile bollards, should be selected from highly durable materials that contribute to the overall design theme of Central Village."

Finally, the street sections illustrated in the proposed CVSP for Airway Road, Cactus Road, Heritage Road, Village Entry Streets, and Green Streets, all include bike lanes and sidewalks. Sidewalks are planned along every street interior to the Central Village, except alleys. Refer to the CVSP's Vehicular Mobility Plan (CVSP Figure 2.3-1), Street Cross-Sections (CVSP Figures 2.3-2 and 2.3-3), and Alternative Transportation Plan (CVSP Figure 2.3-4).

Figure 1-C: Central Village Specific Plan Land Use Plan



2.0 EXISTING ENVIRONMENTAL SETTING

2.1 Understanding Greenhouse Gasses

Greenhouse gases such as water vapor and carbon dioxide are abundant in the earth's atmosphere. These gases are called "Greenhouse Gases" because they absorb and emit thermal infrared radiation which acts like an insulator to the planet. Without these gases, the earth ambient temperature would either be extremely hot during the day or blistering cold at night. However, because these gases can both absorb and emit heat, the earth's temperature does not sway too far in either direction.

Over the years as human activities require the use of burning fossil fuels stored carbon is released into the air in the form of CO_2 and to a much lesser extent CO. Additionally, over the years scientist have measured this rise in Carbon Dioxide and fear that it may be heating the planet too. Additionally, it is thought that other greenhouse gases such as Methane and Nitrous Oxide are to blame.

Greenhouse Gasses of concern as analyzed in this study are Carbon Dioxide (CO_2), Methane (CH_4), and Nitrous Oxide (N_2O). To simplify greenhouse gas calculations, both CH_4 and N_2O can be converted to an equivalent amount of CO_2 or CO_2e. CO_2e is calculated by multiplying the predicted levels of CH_4 and N_2O by a Global Warming Potential (GWP) or a multiplication factor measure of how much a given mass of greenhouse gas is estimated to contribute to global warming relative to the same mass of carbon dioxide (whose GWP is by convention equal to 1). The exact calculations are complicated however; the U.S. Environmental Protection Agency publishes GWPs for various GHGs and reports that the GWP for CH_4 and N_2O is 21 and 310, respectively.

2.2 Existing Setting

In 2015 when the CVSP document was prepared, the 229.2-acre property was primarily characterized by large areas of undeveloped land and several scattered buildings and structures associated with agricultural crop production in the southeastern portion of the property. The site is surrounded by the Spring Canyon system to the north, west, and south, which physically separates the area from the Otay Mesa Community Plan's Southwest Specific Plan Area. Industrial land uses with pockets of undeveloped land are located north, east, and south of the site. At the time this report was written, the existing setting remains largely the same.

2.3 Climate and Meteorology

Climate within the SDAB area often varies dramatically over short geographical distances due to the county's size and topography. Most of southern California is dominated by high pressure systems for much of the year, which keeps San Diego mostly sunny and warm. Typically during the winter months, the high pressure system drops to the south and brings cooler, moister weather from the north.

It is common for inversion layers to develop within high pressure areas which mostly define pressure patterns over the SDAB. These inversions are caused when a thin layer of the atmosphere increases in temperature with height. An inversion acts like a lid preventing vertical mixing of air through convective overturning.

Daytime temperature highs within the Otay Community Plan is most like that of nearby Chula Vista. The project areas typically range between 68 ºF in the winter to approximately 80 ºF in the summer with the month of August usually being the hottest month. Median temperatures range from approximately 57 ºF in the winter to approximately 72 ºF in the summer. Chula Vista usually receives approximately 10 inches of rain per year with the month of March usually being the wettest month of the year. The average humidity is approximately 65% in the winter and about 73% in the summer (City-Data, 2016).

3.0 CLIMATE CHANGE REGULATORY ENVIRONMENT

3.1 Regulatory Standards (Assembly Bill 32)

The Global Warming Solutions Act of 2006 (AB 32), requires that by 2020 the state's greenhouse gas emissions be reduced to 1990 levels or roughly a 28.3% reduction. Significance thresholds have not been adopted but are currently being discussed. AB 32 is specific as to when thresholds shall be defined. The pertinent Sections are referenced within Part 4 of AB 32 Titled *Greenhouse Gas Emissions Reductions* are shown below:

Section 38560.5 (b) states:

On or before January 1, 2010, the state board shall adopt regulations to implement the measures identified on the list published pursuant to subdivision (a).

Section 38562 states:

(A) On or before January 1, 2011, the state board shall adopt greenhouse gas emission limits and emission reduction measures by regulation to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions in furtherance of achieving the statewide greenhouse gas emissions limit, to become operative beginning on January 1, 2012.

(B) In adopting regulations pursuant to this Section and Part 5 (commencing with Section (38570), to the extent feasible and in furtherance of achieving the statewide greenhouse gas emissions limit, the state board shall do all of the following:

1. *Design the regulations, including distribution of emissions allowances where appropriate, in a manner that is equitable, seeks to minimize costs and maximize the total benefits to California, and encourages early action to reduce greenhouse gas emissions.*
2. *Ensure that activities undertaken to comply with the regulations do not disproportionately impact low-income communities.*
3. *Ensure that entities that have voluntarily reduced their greenhouse gas emissions prior to the implementation of this Section receive appropriate credit for early voluntary reductions.*
4. *Ensure that activities undertaken pursuant to the regulations complement, and do not interfere with, efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminant emissions.*
5. *Consider cost-effectiveness of these regulations.*
6. *Consider overall societal benefits, including reductions in other air pollutants, diversification of energy sources, and other benefits to the economy, environment, and public health.*
7. *Minimize the administrative burden of implementing and complying with these regulations.*
8. *Minimize leakage.*
9. *Consider the significance of the contribution of each source or category of sources to statewide emissions of greenhouse gases.*

(C) In furtherance of achieving the statewide greenhouse gas emissions limit, by January 1, 2011, the state board may adopt a regulation that establishes a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit greenhouse gas emissions, applicable from January 1, 2012, to December 31, 2020, inclusive, that the state board determines will achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions, in the aggregate, from those sources or categories of sources.

(D) Any regulation adopted by the state board pursuant to this part or Part 5 (commencing with Section 38570) shall ensure all of the following:

1. *The greenhouse gas emission reductions achieved are real, permanent, quantifiable, verifiable, and enforceable by the state board.*
2. *For regulations pursuant to Part 5 (commencing with Section 38570), the reduction is in addition to any greenhouse gas emission reduction otherwise required by law or regulation, and any other greenhouse gas emission reduction that otherwise would occur.*
3. *If applicable, the greenhouse gas emission reduction occurs over the same time period and is equivalent in amount to any direct emission reduction required pursuant to this division.*

3.2 Regulatory Standards (Assembly Bill 341)

This bill makes a legislative declaration 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 would require the California Department of Resources Recycling and Recovery (CalRecycle), by January 1, 2014, to provide a report to the Legislature that provides strategies to achieve that policy goal and also includes other specified information and recommendations.

This bill will increase diversion requirements by an additional 25% over Business as Usual as was defined under AB 939 and SB 1322 which were signed into law as the Integrated Waste Management Act of 1989, which as of the year 2000 only required 50 percent diversion.

3.3 Regulatory Standards (Senate Bill 97)

SB 97 requires the Office of Planning and Research (OPR) to prepare and transmit to the Resources Agency, guidelines and directed amendments to the CEQA statute specifically for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions.

3.4 AB 1493 (Pavley Standards)

AB 1493 regulations are similar to CAFE Standards however are expected to produce a Greenhouse Gas Benefit greater to that of the CAFE Standard and would be expected to double the amount of GHGs saved under CAFE. The Pavley rules or also referred to as California Standards are designed to regulate GHG emissions while the federal standards are aimed at reducing the nation's fuel consumption.

Under Pavley starting with vehicles produced in 2009, manufactures have the flexibility in meeting California standards through a combination of reducing tailpipe emissions of Carbon Dioxide, Nitrous Oxide, Methane and hydrofluorocarbons from vehicle air conditions systems. Furthermore, the California standards are estimated to increase fuel efficiency to 35.7 miles per gallon by (California Air Resourrce Board, 2013).

3.5 Advanced Clean Car Program

Pavley II along with other low-Emission Vehicle (LEV) regulations including new approaches to increase zero emission vehicles and hybrids have since been combined into a single effort program termed Advanced Clean Cars (California Air Resource Board, 2014). The new effort uses a number of emission control programs to control smog, soot and global warming and would be in effect from 2017 to 2025. This program is estimated to reduce GHGs by 4.0 Million or roughly 2.4% beyond that of Pavley I (California Air Resource Board, 2011).

3.6 Vehicle Efficiency Measures

Additional vehicle efficiency measures within the Scoping Plan include Low Friction Oil, Tire Pressure Regulation, Tire Tread Program, and Solar Reflective Automotive Paint and specialized window glazing and according to the scooping plan will reduce GHGs by 4.5 MMTCO2e in 2020. To date however, some of the reduction measures under Vehicle Efficacy are still under review with the exception of the Tire Pressure Regulations which estimate to remove 0.6 MMTCO2e by 2020.

3.7 Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (P.L. 110-140, H.R. 6) is an energy policy law adopted by congress which consists mainly of provisions designed to increase energy efficiency and the availability of renewable energy. The law will require automakers to boost fleet wide gas mileage averages from the current 25 miles per gallon (mpg) to 35 mpg by 2020. The rule was updated in 2010 which required fleet-wide fuel economy standard to be set at 34.1 mpg by 2016 and affect cars built in 2012 through 2016. Also, in October 2012,

the rules were further changed to 54.5 mpg for cars and light-duty trucks by Model Year 2025. This fleet wide average is known as the Corporate Average Fuel Economy (CAFE) standard.

3.8 Executive Order S-3-05

Executive Order S-3-05 was signed by Governor Arnold Schwarzenegger in June 2005. That the following greenhouse gas emission reduction targets are hereby established for California: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels.

3.9 Executive Order S-01-07

Executive Order S-01-07 was signed by Governor Arnold Schwarzenegger in January 2007 and is effectively known as the Low Carbon Fuel Standard or LCFS. The executive order seeks to reduce the carbon intensity of California's passenger vehicle fuels by at least 10% by 2020. The LCFS will require fuel providers in California to ensure that the mix of fuel they sell into the California market meet, on average, a declining standard for GHG emissions measured in CO_2e grams per unit of fuel energy sold.

3.10 Executive Order B-30-15

Executive Order B-30-15 established a statewide emissions reduction target of 40% below 1990 levels by 2030. This interim measure was identified by the Governor as one way to keep the State on a trajectory needed to meet the 2050 goal of reducing GHG emissions to 80% below 1990 levels by 2050 pursuant to Executive Order S-3-05. The 2030 and 2050 goals described in both these Executive Orders are an expression of executive policy and (and not adopted legislative or regulatory action). (Office of Governor Edmund G. Brown Jr., 2015).

3.11 Executive Order S-14-08

Executive Order S-14-08 was signed by Governor Arnold Schwarzenegger and is effectively known as the Renewable Portfolio Standard (RPS). According to S-14-08, the RPS will require that all retail sellers of electricity shall serve 33 percent of their load with renewable energy by 2020. State government agencies are hereby directed to take all appropriate actions to implement this target in all regulatory proceedings, including siting, permitting, and procurement for renewable energy power plants and transmission lines.

It should be noted that Governor Jerry Brown is committed to increasing this regulation such that the renewable portfolio in 2030 would be at least 50%. This commitment was entered

into agreement with multiple international states signed on May 19, 2015 by California. (Subnational Global Climate Leadership Memorandum of Understanding, 2015). Though this is not law, for purposes of speculative GHG forecasting into 2030 and 2050, it's reasonable to assume that it will be a requirement. For purposes of the post-2020 analysis, the emission reduction benefits of achieving a 50 percent RPS by 2030 has been quantified as a 17 percent increase over RPS in 2020 and 30 percent over what has already been achieved.

3.12 Title 24 Standards

The California Energy Code, or Title 24, Part 6 of the California Code of Regulations, also titled The Energy Efficiency Standards for Residential and Nonresidential Buildings, were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods (California Energy Code, 2015)

The Energy Commission adopted the 2008 changes to the Building Energy Efficiency Standards for some of the following reasons and would reduce both Natural Gas and Electrical demand:

1. *To provide California with an adequate, reasonably-priced, and environmentally-sound supply of energy.*
2. *To respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its greenhouse gas emissions to 1990 levels by 2020.*
3. *To pursue California energy policy that energy efficiency is the resource of first choice for meeting California's energy needs.*
4. *To act on the findings of California's Integrated Energy Policy Report (IEPR) that Standards are the most cost effective means to achieve energy efficiency, expects the Building Energy Efficiency Standards to continue to be upgraded over time to reduce electricity and peak demand, and recognizes the role of the Standards in reducing energy related to meeting California's water needs and in reducing greenhouse gas emissions.*
5. *To meet the West Coast Governors' Global Warming Initiative commitment to include aggressive energy efficiency measures into updates of state building codes.*
6. *To meet the Executive Order in the Green Building Initiative to improve the energy efficiency of nonresidential buildings through aggressive standards.*

Title 24 2008 has been found reduce electrical emissions by 22.7% when comparing prototype buildings built to the minimum standards in 2005 and then comparing the prototypes within duplicate models built to standards in 2008. (Architectural Energy Corporation for California Energy Commission, November 7, 2007)

Title 24 2010 incorporated Cal Green standards and added a voluntary tiered approach which compared efficiency over Title 24 2008. (California Building Standards Commission, June 2010).

The latest standards are Title 24 2013 and are effective as of July 1, 2014. Looking at the entire construction outlook for low-rise single-family detached homes, electricity use is reduced by 36.4 percent and 23.3 percent for multi-family uses and natural gas consumption is reduced by 6.5 percent for single family developments and 3.8% for multi-family structures (Architectural Energy Corporation (AEC), 2013). Nonresidential Newly Constructed Buildings would have a reduction from the 2008 Standards of 21.8 percent for electricity and 16.8 percent for natural gas.

In addition, the CEC currently anticipates adopting the 2016 Title 24 standards in 2015, and assigning those standards with an effective date of January 1, 2017 Further, both the CEC and CPUC remain committed to their goal that all new residential construction in California achieves zero net energy standards by 2020 It is likely that a subsequent, more rigorous iteration of the Title 24 standards will apply to the project at the time of building permit issuance. The GHG emission and energy savings associated with those standards have not been quantified at this time because the savings are unknown.

3.13 California Environmental Quality Act (CEQA) Requirements

As directed by SB 97, the Natural Resources Agency adopted Amendments to Title 14 Division 6 Chapter 3 CEQA Guidelines for greenhouse gas emissions on December 30, 2009. On February 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The amendments became effective on March 18, 2010. The pertinent Sections are shown below:

Section 15064.4 - Determining the Significance of Impacts from Greenhouse Gas

(A) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

1. Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with

substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or

2. *Rely on a qualitative analysis or performance-based standards.*

(B) A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:

1. *The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;*
2. *Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.*
3. *The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.*

General Questions recommended within the environmental checklist are:

(a) Will the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

(b) Will the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

3.14 ARB Scoping Plan Measures

In response to AB 32, California Air Resource Board (ARB) developed the Climate Change Scoping Plan. In that plan, the Board developed GHG emission reduction strategies which expanded energy efficiency programs, increased utility renewable energy requirements, developed clean car and Low Carbon Fuel Standards (LCFS), developed the cap-and-trade program and identified adopted discretionary measures to assist the state in meeting the 2020 limits established by AB 32.

In May 2014, the ARB adopted the first update to the original scoping plan which was necessary to help establish long-term GHG policies to make deep GHG emission reductions to help achieve goals established in S-3-05. The update includes key recommendations for six key economic sectors (energy, transportation, agriculture, water, waste management, and natural and working lands) as well as short-lived climate pollutants, green buildings, and the Cap-and-Trade Program. The findings largely affect regulatory measures that will indirectly reduce GHG emissions and generate a need to update local policies.

3.15 City of San Diego Conservation Element

There are no specific local quantitative regulations that have been promulgated to control GHG emissions; however, both the City of San Diego and SANDAG have adopted policies and standards to reduce emissions in the area. The City of San Diego first adopted climate change policies in its *City of San Diego Climate Protection Action Plan* (City of San Diego 2005). That plan identified sources of GHGs within the City and identified policies and developed recommendations to reduce GHG emissions. The City of San Diego's General Plan (2008) addresses climate change in the Conservation Element of the plan. Policies that address local GHG mitigation strategies in San Diego are integrated within the General Plan, and applicable to development projects. Together, this collection of policies support and promote the adopted recommendations outlined in the City's Climate Protection Action Plan.

As part of the Conservation Element, the City's policies pertinent and related to Climate Change and Sustainable Development with respect to a private development project are:

CE.A.5

Employ sustainable or "green" building techniques for the construction and operation of buildings.

a. Develop and implement sustainable building standards for new and significant remodels of residential and commercial buildings to maximize energy efficiency, and to achieve overall net zero energy consumption by 2020 for new residential buildings and 2030 for new commercial buildings. This can be accomplished through factors including, but not limited to:

- *Designing mechanical and electrical systems that achieve greater energy efficiency with currently available technology;*
- *Minimizing energy use through innovative site design and building orientation that addresses factors such as sun-shade patterns, prevailing winds, landscape, and sun-screens;*
- *Employing self-generation of energy using renewable technologies;*
- *Combining energy efficient measures that have longer payback periods with measures that have shorter payback periods;*
- *Reducing levels of non-essential lighting, heating and cooling; and*
- *Using energy efficient appliances and lighting.*

b. Provide technical services for "green" buildings in partnership with other agencies and organizations.

CE.A.9:

Reuse building materials, use materials that have recycled content, or use materials that are derived from sustainable or rapidly renewable sources to the extent possible, through factors including:

- *Scheduling time for deconstruction and recycling activities to take place during project demolition and construction phases;*
- *Using life cycle costing in decision-making for materials and construction techniques. Life cycle costing analyzes the costs and benefits over the life of a particular product, technology, or system;*
- *Removing code obstacles to using recycled materials in buildings and for construction; and*
- *Implementing effective economic incentives to recycle construction and demolition debris (see also Public Facilities Element, Policy PF-I.2).*

CE.A.10:

Include features in buildings to facilitate recycling of waste generated by building occupants and associated refuse storage areas.

- *Provide permanent, adequate, and convenient space for individual building occupants to collect refuse and recyclable material.*
- *Provide a recyclables collection area that serves the entire building or project. The space should allow for the separation, collection and storage of paper, glass, plastic, metals, yard waste and other materials as needed.*

CE.A.11:

Implement sustainable landscape design and maintenance.

- *Use integrated pest management techniques, where feasible, to delay, reduce, or eliminate dependence on the use of pesticides, herbicides, and synthetic fertilizers.*
- *Encourage composting efforts through education, incentives, and other activities.*
- *Decrease the amount of impervious surfaces in developments, especially where public places, plazas and amenities are proposed to serve as recreation opportunities (see also Recreation Element, Policy RE-A.6 and A.7).*
- *Strategically plant deciduous shade trees, evergreen trees, and drought tolerant native vegetation, as appropriate, to contribute to sustainable development goals.*
- *Reduce use of lawn types that require high levels of irrigation.*
- *Strive to incorporate existing mature trees and native vegetation into site designs.*

- *Minimize the use of landscape equipment powered by fossil fuels.*
- *Implement water conservation measures in site/building design and landscaping.*
- *Encourage the use of high efficiency irrigation technology, and recycled site water to reduce the use of potable water for irrigation. Use recycled water to meet the needs of development projects to the maximum extent feasible. (See Policy CE-A.12).*

CE.A.12:

Reduce the San Diego Urban Heat Island, through actions such as:

- *Using cool roofing materials, such as reflective, low heat retention tiles, membranes and coatings, or vegetated eco-roofs to reduce heat build-up;*
- *Planting trees and other vegetation, to provide shade and cool air temperatures. In particular, properly position trees to shade buildings, air conditioning units, and parking lots; and*
- *Reducing heat buildup in parking lots through increased shading or use of cool paving materials as feasible (see also Urban Design Element, Policy UD-A.12).*

3.16 SANDAG – Climate Action Strategy

SANDAG's Climate Action Strategy is a guide for SANDAG on climate change policy. The Strategy identifies a range of potential policy measures for consideration as SANDAG updates long-term planning documents like the Regional Transportation Plan and Regional Comprehensive Plan, and as local jurisdictions update their General Plans and other community plans. The goals of the Climate Action Strategy include the reduction of vehicle miles traveled and use of alternatives modes of transportation. SANDAG has also developed in accordance with California Senate Bill 375 (SB 375); the Sustainable Communities Strategy (SCS) is a new element of the 2050 Regional Transportation Plan (RTP).

The legislation requires Metropolitan Planning Organizations (MPO) to prepare a SCS as part of their RTPs, along with the traditional policy, action, and financial requirements. After more than two years of extensive public input, the SANDAG Board of Directors adopted the final RTP with a SCS on October 28, 2011, making it the first agency in California to do so. The RTP was found to violate CEQA in December 2012.

The SCS lays out how the region will meet greenhouse gas (GHG) reduction targets set by the California Air Resources Board (CARB). CARB's targets call for the region to reduce per capita emissions seven percent by 2020 and 13 percent by 2035 from a 2005 baseline. There are no mandated targets beyond 2035.

Under SB 375, which went into effect in 2009, a SCS must demonstrate how development patterns and transportation network, policies, and programs can work together to achieve greenhouse gas emission reduction targets for cars and light trucks, if there is a feasible way to do so. If a MPO cannot meet the targets through a SCS, then the region is required to develop an alternative planning strategy that demonstrates how targets could be achieved. In essence, the SCS includes four building blocks:

1. *A land use component that accommodates the Regional Housing Needs Assessment (RHNA) and includes the protection of sensitive resources, including areas protected under habitat conservation plans;*
2. *Transportation networks including highways, transit, and local streets and roads;*
3. *Transportation demand management strategies; and*
4. *Transportation system management programs and policies.*

3.17 City of San Diego Climate Action Plan (CAP)

The City of San Diego adopted a Climate Action Plan (CAP) in December 2015 that outlines the actions that the City will undertake to achieve its proportional share of State GHG emission reductions. In accordance with the recommendations from the State of California and the California Air Resources Board, the City's CAP includes a target to achieve a 15 percent reduction from 2010 GHG baseline levels by the year 2020. The CAP also includes the City's 2050 GHG emissions reduction target at 80 percent below the 2010 baseline. The CAP identifies five strategies to reduce GHG emissions to achieve the 2020 and 2050 reduction targets. The five strategies include: energy and water efficient buildings; clean and renewable energy; bicycling, walking, transit, and land use; zero waste (gas and waste management); and climate resiliency. In order to ensure that future development projects comply with the CAP, the City d adopted a CAP a Consistency Checklist as an amendment to the CAP. The Checklist is part of the CAP and contains measures that are to be implemented on a project-by-project basis to ensure that the CAP's specified emissions targets are achieved. With the implementation of these measures identified in the CAP, new development can be found consistent with the CAP's assumptions for relevant CAP strategies directed toward achieving the identified Citywide GHG reduction targets. Projects that are consistent with the CAP as determined through the use of the Checklist may rely on the CAP to conclude that the project would have less than cumulatively considerable and less than significant impacts associated with GHG emissions.

4.0 METHODOLOGY

4.1 Construction CO_2e Emissions Calculation Methodology

The mix of land uses proposed by the CVSP in comparison to the mix of land uses assumed for the Central Village by the OMCPU EIR are similar, and contain residential uses, mixed-use areas accommodating commercial uses, parks, trails, and one elementary school. The land uses changes proposed by the CVSP include:

- A reduction of 761 Multi-family dwelling units
- An increase of 107 ksf of community commercial floor space
- A reduction of 16.2 acres of active park space

Because the mix of land uses assumed by the OMCPU EIR and the land uses proposed by the CVSP are substantially similar, it is assumed that construction activities associated with buildout of the Central Village would largely remain the same as assumed by the OMCPU EIR in the Central Village area. The EIR's analysis of construction activity assumed that sources of construction-related air emissions would include: a) fugitive dust from grading activities; b) construction equipment exhaust; c) construction-related trips by workers, delivery trucks, and material-hauling trucks; and d) construction-related power consumption. (RECON, 2013). Based on industry-standard construction practices, these are reasonable assumptions for sources of construction activity air emissions in the Central Village. Thus, the CVSP would not result in an increase of construction emissions as compared to what was assumed in the OMCPU EIR. For this reason, detailed construction-related GHG emissions modeling is not required, because the results for the Central Village would be identical to those reported in the OMCPU EIR. Because daily and total construction-related GHG emissions associated with the CVSP would not increase in relation to what was evaluated and disclosed in the OMCPU EIR, no new or more severe construction-related GHG impacts would result.

4.2 Operational Vehicular Emissions Calculation Methodology

The largest changes in GHG emission quantities associated with the land use changes proposed by the CVSP would be expected during the operational life of the CVSP project. GHG emissions from daily operations would include sources such as Area, Energy, Mobile, and Solid Waste and Water uses, which are calculated within CalEEMod. Area Source emissions include emissions from consumer products, landscaping maintenance equipment, and architectural coatings (such as painting) as part of regular maintenance activities in a predominately residential community. Energy sources emissions would be generated from the production and consumption of energy to operate the Central Village community, such as electricity and natural gas. Mobile (or transportation-related) source emissions would occur from motor vehicles (tailpipe emissions) generated by land uses in the Central Village, which are calculated in CalEEMod through the use of EMFAC2011. In the EMFAC model, an emissions

inventory is based on the emission rate (e.g., grams per pollutant emitted over a mile) and vehicle activity (e.g., miles driven per day).

CalEEMod 2013.2.2 and EMFAC2011 represent the most recent model versions available at the time environmental analysis of the CVSP project commenced. The operational model outputs for annual operation of land uses in the Central Village under the land use assumptions of the OMCPU and the land uses proposed by the CVSP are provided in ***Attachment A and B,*** respectively, at the end of this report. Traffic data for the Central Village relied upon in the modeling efforts were taken from the OMCPU EIR's traffic report (Urban Systems Associates, Inc. 2012) as summarized in the CVSP's *Transportation Facilities Trigger Analysis* (Chen Ryan & Associates, 2017), and traffic data for buildout of the CVSP as disclosed in the CVSP's *Transportation Facilities Trigger Analysis.* At full buildout of the Central Village, the OMCPU EIR assumed the generation of 45,429 daily trips. In comparison, 36,345 daily trips would be generated by land uses in the Central Village under the proposed CVSP. The CalEEMod 2013.2.2 air quality model was run on both scenarios to remain consistent. (The OMCPU EIR used CalEEMod 2011).

5.0 SIGNIFICANCE THRESHOLDS, ANALSYSIS, AND FINDINGS

5.1 Significance Determination Thresholds

The following significance thresholds were used by the OMCPU EIR to determine the significance of greenhouse gas impacts associated with implementation of the OMCPU:

A: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of GHGs.

B: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

In the time following the certification of the OMCPU EIR (2014), the City of San Diego adopted a CAP (December 2015) and an amendment to the CAP to add a Consistency Checklist. For purposes of analysis herein, the significance threshold related to "conflicting with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs" is based on the City's approved CAP, which is the methodology now used by the City in order to provide a consistent, localized, and comprehensive approach for the assessment of GHG impacts. Thus, Threshold A noted above from the OMCPU EIR is replaced with a threshold that specifically references the City's CAP as the applicable plan for reducing GHG emissions in the City of San Diego. The City of San Diego's Planning Department determined that the method for determining significance under this threshold for the proposed CVSP entailed the preparation of "Step 3" of the CAP Consistency Checklist. Step 3 of the CAP Consistency Checklist for the proposed Project is included below under Subsection 5.2.

Thus, the following thresholds are used herein to evaluate potential GHG impacts associated with approval of the CVSP. Impacts would be significant if the CVSP would result in any of the following:

A: Conflict with the City's Climate Action Plan or another applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

B: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

5.2 Consistency with the City's Climate Action Plan and Other Applicable Plans, Policies, and Regulations

The City of San Diego adopted a Climate Action Plan (CAP) in December 2015 that outlines the actions that the City will undertake to achieve its proportional share of State GHG emission reductions. In accordance with the recommendations from the State of California and the California Air Resources Board, the City's CAP includes a target to achieve a 15 percent reduction from 2010 GHG baseline levels

by the year 2020. The CAP also includes the City's 2050 GHG emissions reduction target at 80 percent below the 2010 baseline. The CAP identifies five strategies to reduce GHG emissions to achieve the 2020 and 2050 reduction targets. The five strategies include: energy and water efficient buildings; clean and renewable energy; bicycling, walking, transit, and land use; zero waste (gas and waste management); and climate resiliency. In order to ensure that future developments comply with the CAP, the City adopted a CAP Consistency Checklist. The Checklist is part of the CAP and contains measures that are to be implemented on a project-by-project basis to ensure that the specified emissions targets identified in the CAP are achieved. Implementation of these measures would ensure that new development projects are consistent with the CAP's assumptions and relevant CAP strategies to assist the City in achieving its identified GHG reduction targets. Projects that are consistent to conclude that the project would have less than significant cumulatively considerable GHG emissions impacts under CEQA.

Because the City's CAP was prepared in compliance with CEQA Section 15183.5 and is intended to achieve the City of San Diego's share of Statewide GHG reduction targets, compliance with the CAP constitutes a project's consistency with applicable plans, policies, and regulations for the purposes of reducing GHG emissions. As noted above in Subsection 5.1, Significance Determination Thresholds, the method for determining significance under this threshold entails the preparation of "Step 3" of the CAP Consistency Checklist. Provided below is an analysis of the CVSP project's compliance with the CAP using the CAP's conformance questions from Step 3 of the CAP Consistency Checklist as they relate to implementation actions. These questions serve as a tool to help guide the CAP-related compliance discussion as it relates to the proposed CVSP.

1. Would the proposed project implement the General Plan's City of Villages strategy in an identified Transit Priority Area (TPA) that will result in an increase in the capacity for transit-supportive residential and/or employment densities?

Question 1 Consideration 1:

- **Does the proposed land use and zoning designation associated with the project provide capacity for transit-supportive residential densities within the TPA?**

Yes; the proposed land uses and zoning designations associated with the Central Village Specific Plan (CVSP) provide capacity for transit-supportive residential densities (as described below) within the Transit Priority Area (TPA). Locations of the TPAs within the CVSP area are shown in Figure 5-A, OMCPU Transit Priority Area Map. The CVSP provides site-specific recommendations for implementing development projects consistent with the CVSP's land use and mobility strategies. The CVSP identifies Neighborhood Villages within the TPA, and the land use and zoning designations associated with the CVSP increases the capacity for transit-supportive residential densities across the entire CVSP area, as well as transit-supportive mobility options in the Neighborhood Villages. The CVSP land use plan also identifies locations within the Central Village suitable to accommodate mixed-use development, as defined in the General Plan.

The CVSP includes seven Planning Areas designated as Neighborhood Villages with the TPA

(Planning Areas 2, 3, 4, 5, 6, 13, and 14). Transit-supportive residential densities within these Planning Areas range from 35-44 dwelling units per acre (du/ac) within Planning Areas 2, 3, 4, 6, and 14, and range from 25-40 du/ac within Planning Areas 5, and 13. The Neighborhood Villages, implemented by the Specific Plan, concentrate on one area of intensification: the area along Airway Road, and are within walking distance of an Otay Mesa Community Plan Update (OMCPU) planned rapid transit route along Airway Road. Figure 5-B, CVSP Alternative Transportation Plan, shows three transit stops that are planned along Airway Road adjacent to the seven residential and commercial mixed-use Neighborhood Villages within the CVSP. (T&B Planning, 2017, p. 2.2-1, Figure 2.3-4)

Question 1 Consideration2:

- **Is the project site suitable to accommodate mixed-use village development, as defined in the General Plan, within the TPA?**

Yes; the CVSP is suitable to accommodate mixed-use village development, as defined in the General Plan, within the TPA. Seven Neighborhood Villages designated on the CVSP land use plan (Planning Areas 2, 3, 4, 5, 6, 13, and 14) concentrate on areas of intensification along the OMCPU planned rapid transit route along Airway Road. The Neighborhood Villages are envisioned to have an integrated mixture of uses, accessible and attractive streets, and public spaces. These CVSP Planning Areas are within the TPA, and are in close proximity to a future rapid transit line.

The seven Neighborhood Villages within the CVSP allow for the development of residential and commercial mixed-use areas within the TPA. The Neighborhood Villages allow for development of up to 139,700 s.f. of commercial floor space, and 2,046 residential homes on 54.5 acres, within an allowable density range of 15 to 44 dwelling units per acre (du/ac). (T&B Planning, 2017, p. 2.2-1)

Figure 5-A: OMCPU Transit Priority Area Map

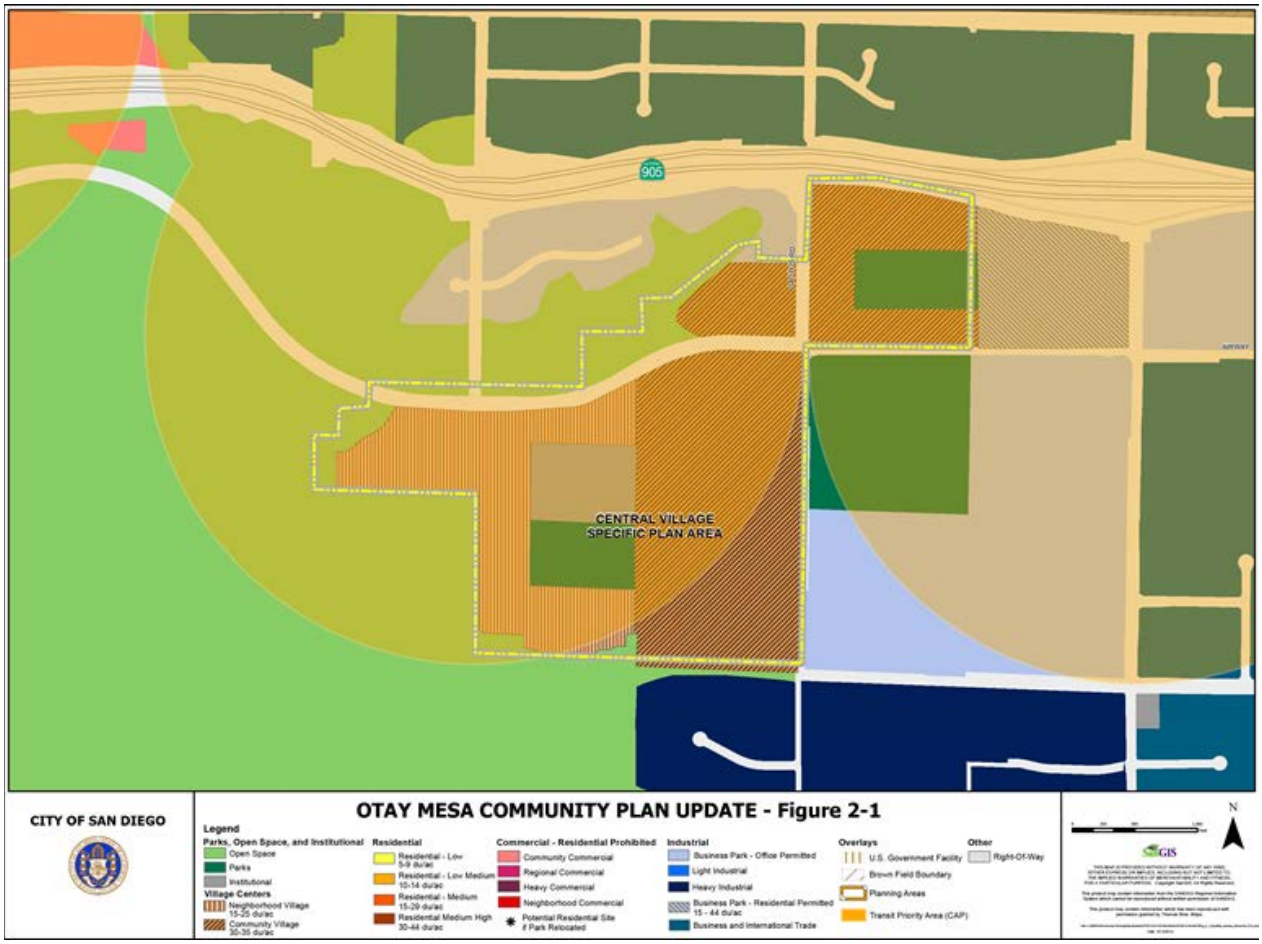
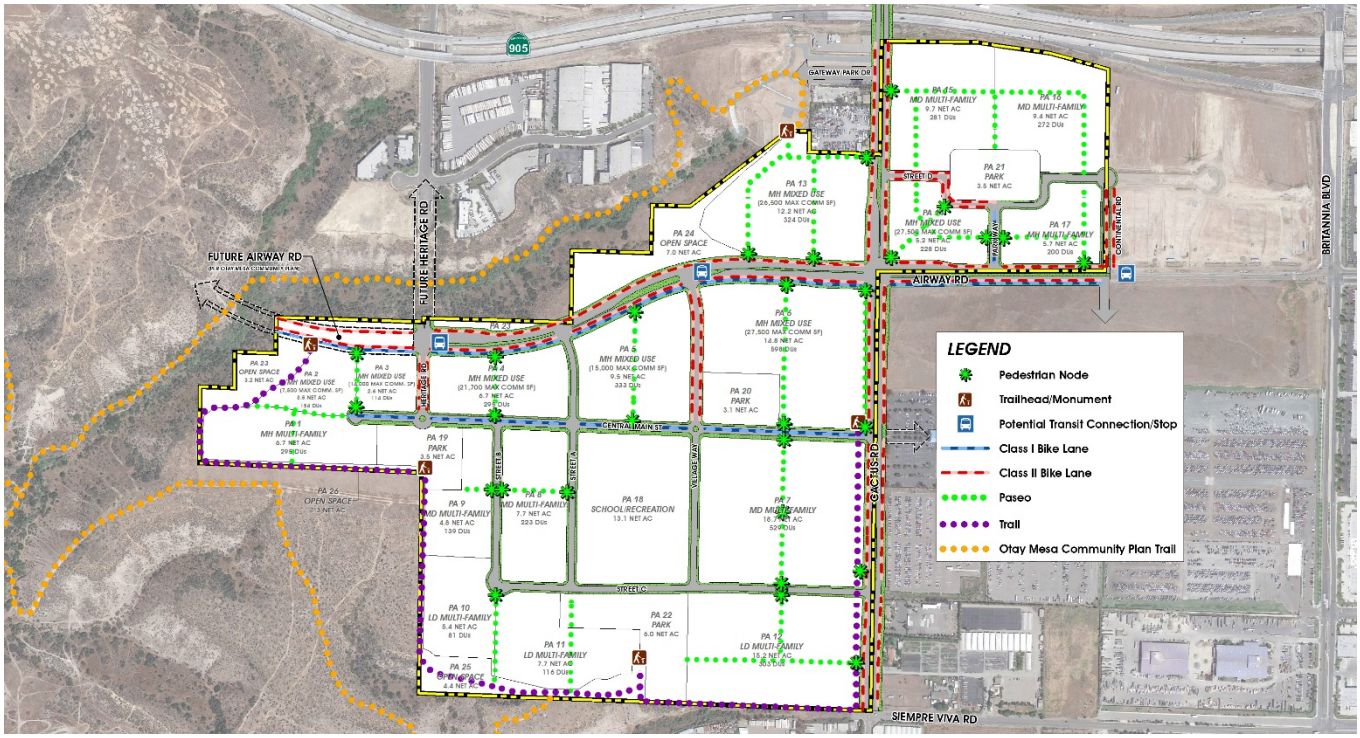


Figure 5-B, CVSP Alternative Transportation Plan



Question 1 Consideration 3:

- **Does the land use and zoning associated with the project increase the capacity for transit-supportive employment intensities within the TPA?**

Yes; the land use and zoning designations associated with the CVSP increase the capacity for transit-supportive employment intensities within the TPA. The CVSP provides community commercial land uses and base zone designations that will allow for more commercial development to occur along the future rapid transit corridor than was planned for along this corridor by the Otay Mesa Community Plan Update (OMCPU). Within the TPA area, the CVSP calls for a mix of land use types, including mixed-use commercial and multi-family residential uses, multi-family residential uses, and a public facility land use designation to accommodate a school site. This balance of land uses allows for housing and employment opportunities near one another. Refer to Figure 1-C of this report, Central Village Specific Plan, which shows the land uses proposed within the Central Village.

The Neighborhood Villages within the CVSP (Planning Areas 2, 3, 4, 5, 6, 13, and 14) allow for the development of residential and commercial mixed-use areas within the TPA. The Neighborhood Villages allow for development of up to 139,700 s.f. of commercial floor space which will increase the capacity for transit-supportive employment intensities within the TPA. The CVSP also calls for the development of an elementary school site on 13.1 acres, which would also increase the capacity of transit-supportive employment intensities within the TPA. (T&B Planning, 2017, p. 2.2-1)

2. Would the proposed project implement the General Plan's Mobility Element in Transit Priority Areas to increase the use of transit?

Question 2 Consideration 1:

- **Does the proposed project support/incorporate identified transit routes and stops/stations?**

Yes; the CVSP supports and incorporates identified future transit routes and stops. The CVSP takes a multi-modal approach to improving circulation and access through and within the CVSP area. The mobility polices and recommendations included in the CVSP build from the General Plan's Mobility Element to accommodate transit operation needs and improve access to transit through the provision of pedestrian and bicycle infrastructure.

CVSP Section 2.3, Mobility Element, provides information regarding identified transit routes within the CVSP vicinity. CVSP Subsection 2.3.2.1, Public Transit, details information regarding identified transit routes and stops/stations, and also includes Design Standards for the future transit stop facilities that would be located within the CVSP area. A new future rapid transit line was identified in the OMCPU along Airway Road, a segment of which will pass along Airway Road through the Central Village. The proposed mobility network complements the transit-supportive density proposed in the CVSP along a future major transit corridor. The CVSP incorporates the

OMCPU identified transit route (refer to Figure 4-B) by identifying three locations for transit stops along Airway Road. Furthermore, the CVSP includes Design Standards for the future construction of the rapid transit stop facilities. The following Design Standards and Policies included in the CVSP support/incorporate identified transit routes and stops/stations by providing requirements for the future construction of such facilities (T&B Planning, 2017, Subsection 2.3.1.4; Subsection 2.3.2):

"Policy 2.3-1 If possible, include transit stops to support transit use within the Central Village".

"Design Standard 2.3-13 Sidewalk widths shall be 8 or 10-feet wide where transit stops and shelters are proposed and shall extend for 25 feet parallel to the curb measured from the bus stop sign to provide adequate clearance to accommodate bus lifts for disabled persons."

"Design Standard 2.3-14 The edge zone (space between the roadway and sidewalk) shall be a minimum of 4 feet to provide wheelchair access to the shelter. In constrained conditions, the edge zone may be reduced to 21/2 feet."

"Design Standard 2.3-15 Bus facilities shall be developed in accordance with the standards provided in the City of San Diego Street Design Manual."

"Design Standard 2.3-16 Rapid Transit stops shall be designed to allow pedestrians to cross the street safely and within proximity to the stop."

"Design Standard 2.3-17 Rapid Transit facilities shall be developed in accordance with the standards provided in the City of San Diego Street Design Manual."

Question 2 Consideration 2:

- **Does the project include transit priority measures?**

The CVSP supports and plans for future transit routes and stops. The CVSP takes a multi-modal approach to improving circulation and access through and within the CVSP area. Mobility polices and recommendations contained in the CVSP build from the General Plan's Mobility Element to accommodate transit operation needs and improve access to transit through pedestrian and bicycle infrastructure.

Section 2.3, Mobility Element, of the CVSP provides information regarding identified transit routes within the CVSP vicinity. CVSP Subsection 2.3.2.1, Public Transit, details information regarding identified transit routes and stops/stations, and also includes Design Standards for construction of any future transit stop facilities in the CVSP area. A new future rapid transit line was identified in the OMCPU along Airway Road, a segment of which will pass along Airway Road through the Central Village area. The proposed mobility network complements the transit-supportive density proposed in the CVSP along a future major transit corridor. The CVSP incorporates the OMCPU identified transit route (refer to Figure 4-B), by identifying three locations for transit stops along Airway Road. As the future transit line goes into place within the CVSP area, the City, through

the Otay Mesa Community Plan Update implementation process, would have the ability to work with MTS and SANDAG to implement transit priority measures to improve transit travel times.

3. Would the proposed project implement pedestrian improvements in Transit Priority Areas to increase walking opportunities?

Question 3 Consideration 1:

- **Does the proposed project circulation system provide multiple and direct pedestrian connections and accessibility to local activity centers (such as transit stations, schools, shopping centers, and libraries)?**

Yes; the CVSP's planned circulation system provides multiple and direct pedestrian connections and accessibility to local activity centers, including transit stations, a school, and shopping centers. The CVSP provides for an interconnected system of paseos, pedestrian nodes, trails, and sidewalks that connect pedestrians to parks, future transit stops, an elementary school site in the Central Village, Otay Mesa Community Plan identified trails, and to other destinations within and beyond the CVSP area. As shown previously in Figure 4-B, the CVSP's alternative transportation plan is comprised of traditional sidewalks along roadway facilities as well as other pedestrian facilities including paseos, pedestrian nodes, and trails which will make the community a friendly and highly walkable environment. Some of the CVSP's stated Policies are targeted to the provision of pedestrian connections and accessibility to local activity centers. Some of these Policies include (T&B Planning, 2017,Subsection 2.3.2):

"Policy 2.3-3 Design street corners to accommodate safe pedestrian crossings. Include ample unobstructed space at the street corner for people waiting to cross the street. Where there is demand for a pedestrian street crossing that does not align with an intersection, apply a mid-block crossing. The design of mid-block crosswalks and crosswalks at uncontrolled intersections shall comply with Council Policy 200-07, the San Diego Street Design Manual, and other industry standards to the satisfaction of the City Engineer."

"Policy 2.3-4 Provide interconnected streets and pedestrian walkways. Avoid barriers to pedestrian access, such as:

- Walls, fences, and gates that separate related uses or isolate neighborhoods;
- Cul-de-sacs and dead end streets that cut off access within neighborhoods;
- Disconnected bike and pedestrian paths;
- Wide streets that lack sidewalks and landscaping;
- Street-adjacent parking lots that separate pedestrians on street sidewalks from commercial operations;
- Transit stops that are not easily accessible from primary pedestrian routes;
- Auto-oriented retail centers; and
- Long blocks that discourage walking."

"Policy 2.3-7 Minimize cross-circulation between vehicles and pedestrians. Provide a clearly marked walkway between parking areas and main entrances of buildings."

"Policy 2.3-10 Incorporate traffic calming measures at intersections with pedestrian crossings."

"Policy 2.3-14 Design trails to include major gateways and intersections to enable trail users to connect to other segments of the on-site pedestrian network."

"Policy 2.3-18 Locate trailheads at trail access points. As shown on Figure 2.3-4, Alternative Transportation Plan, trailheads are located at major trail intersection points to the perimeter trail."

Question 3 Consideration 2:

- **Does the proposed project urban design include features for walkability to promote a transit supportive environment?**

Yes; the CVSP Urban Design Element includes features for walkability to promote a transit supportive environment. The CVSP recommends a highly walkable streetscape focused around transit and access to rapid transit opportunities along Airway Road. Furthermore, the CVSP recommends a "Green Street" focus that improves connections between destinations within the Central Village and provides for a transit supportive environment. Some of the Policies in the CVSP that provide features for walkability to promote a transit supportive environment include the following (T&B Planning, 2017, Subsection 2.5.1):

"Policy 2.5-6 Pedestrian paseos are encouraged in all developments to provide enhanced connectivity and usable open space."

"Policy 2.5-15 Orient development in ways that create compact blocks and lots. A 'block' is defined as an area of development that is delineated on all sides by public streets, paseos, trails, parks, community facilities, landscaped setbacks, and/or private internal streets. Except where site-specific circumstances preclude it, blocks within the Central Village should have a maximum of perimeter of 2,000 feet."

"Policy 2.5-17 Developments should incorporate safe pedestrian connections to adjoining residential developments, commercial projects, and open space areas."

"Policy 2.5-20 Proposed developments should provide an interconnected system of paths, sidewalks, corridors, and walkways that create a safe and pleasant pedestrian environment, connect dwelling units and common areas, are well-integrated with the surrounding neighborhood, and provide multiple pedestrian access points."

"Policy 2.5-22 Drive-through commercial site design is prohibited within Central Village."

4. Would the proposed project implement the City of San Diego's Bicycle Master Plan to increase bicycling opportunities?

Question 4 Consideration 1:

- **Does the proposed project circulation system include bicycle improvements consistent with the Bicycle Master Plan?**

Yes; the CVSP's proposed circulation system includes bicycle improvements consistent with the Bicycle Master Plan. The CVSP develops a well-connected, effective bicycle network, including protected facilities where feasible, to facilitate cycling and help meet travel needs within the Central Village. The CVSP provides and supports a continuous network of safe, convenient, and attractive bicycle facilities that connect the Central Village to the off-site planned bicycle network, and implement the San Diego Bicycle Master Plan. The San Diego Bicycle Master Plan identifies a planned Class I bicycle lane along Airway Road, and a planned Class II bicycle lane along Cactus Road within the CVSP boundaries (City of San Diego, 2013, Figure 6-2). As shown in Figure 4-B, the CVSP includes Class I bicycle lanes along the south side of Airway Road, and one side of the road along Central Main Street and Park Way; and Class II bicycle lanes along both sides of the street along Airway Road, Heritage Road, Cactus Road, and Village Entry Streets (T&B Planning, 2017,Subsection 2.3.2). The following Design Standards and Policies include bicycle improvements consistent with the Bicycle Master Plan (T&B Planning, 2017,Subsection 2.3.2):

"Design Standard 2.3-18 Class I and Class II bike lanes shall be developed in the locations depicted on Figure 2.3-4, Alternative Transportation Plan, and in accordance with the widths and specifications shown on [CVSP] Figure 2.3-2 and Figure 2.3-3, Street Cross-Sections."

"Policy 2.5-21 Residential and commercial buildings should provide adequate, accessible, and conveniently located bicycle parking and storage. In addition, development should accommodate bicycle traffic within the village by incorporating bike lanes or wide circulation paths to facilitate bicycle movement throughout Central Village."

Question 4 Consideration 2:

- **Does the overall project circulation system provide a balanced, multimodal, "complete streets" approach to accommodate mobility needs of all users?**

Yes; the CVSP's planned circulation system will provide a balanced, multimodal, "complete streets" approach to accommodate the mobility needs of all users. The multi-modal circulation network discussed in the CVSP states that "[c]lear and interconnected circulation for all modes of transit will ensure that the pedestrian network is accessible and well-utilized" (T&B Planning, 2017,Subsection 2.5.1). The multi-modal circulation network discussed in the CVSP provides connections between residential areas to transit facilities. CVSP Development Standards and Policies promote the establishment of a multi-modal circulation network that capitalizes on access to transit and connectivity to other destinations within the Central Village, provides a walkable and pedestrian environment, and encourages traffic calming, and bicycle facilities. CVSP Development Standards and Policies that provide multi-modal "complete street" approach to accommodate mobility needs of all users include (T&B Planning, 2017,Section 2.3; Section 2.5):

"Policy 2.3-1 If possible, include transit stops to support transit use within the Central Village."

"Policy 2.3-2 Traffic calming features, such as roundabouts and bulb-outs at street intersection crossings, are encouraged."

"Policy 2.3-4 Provide interconnected streets and pedestrian walkways. Avoid barriers to pedestrian access, such as:

- Walls, fences, and gates that separate related uses or isolate neighborhoods;
- Cul-de-sacs and dead end streets that cut off access within neighborhoods;
- Disconnected bike and pedestrian paths;
- Wide streets that lack sidewalks and landscaping;
- Street-adjacent parking lots that separate pedestrians on street sidewalks from commercial operations;
- Transit stops that are not easily accessible from primary pedestrian routes;
- Auto-oriented retail centers; and
- Long blocks that discourage walking."

"Design Standard 2.3-18 Class I and Class II bike lanes shall be developed in the locations depicted on [CVSP] Figure 2.3-4, Alternative Transportation Plan, and in accordance with the widths and specifications shown on [CVSP] Figure 2.3-2 and Figure 2.3-3, Street Cross-Sections."

"Policy 2.5-17 Developments should incorporate safe pedestrian connections to adjoining residential developments, commercial projects, and open space areas."

"Policy 2.5-18Provide clear and direct vehicular and non-vehicular connections between blocks. This may be accomplished through private streets and drives.

"Policy 2.5-19Minimize cross circulation between vehicles and pedestrians. Provide a continuous, clearly marked walkway from the parking areas to main entrances of buildings.

"Policy 2.5-20 Proposed developments should provide an interconnected system of paths, sidewalks, corridors, and walkways that create a safe and pleasant pedestrian environment, connect dwelling units and common areas, are well-integrated with the surrounding neighborhood, and provide multiple pedestrian access points."

"Policy 2.5-21 Residential and commercial buildings should provide adequate, accessible, and conveniently located bicycle parking and storage. In addition, development should accommodate bicycle traffic within the village by incorporating bike lanes or wide circulation paths to facilitate bicycle movement throughout Central Village

"Policy 2.5-98 A special treatment should be provided at the intersection of Cactus Road and Central Main Street to provide safe and convenient non-vehicular access between the Central Village and the Grand Park, located east of the Central Village, which will be designed pursuant to Council Policy 200-07, the San Diego Street Design Manual, and industry standards, to the

satisfaction of the City Engineer."

5. Would the proposed project incorporate implementation mechanisms that support Transit Oriented Development?

Question 5 Consideration 1:

- **Does the proposed project include new or expanded urban public spaces such as plazas, pocket parks, or urban greens in the TPA?**

Yes; the CVSP includes new urban public spaces in the TPA including but not limited to outdoor plazas pocket parks. Also, the CVSP encourages site planning in the TPA to include outdoor gathering areas. CVSP Urban Design Element Development Standards and Policies blend the public and private spaces of the community together into a network of pedestrian spaces, connected through streets, alleys, paseos, and plazas. Enhancing connectivity with pedestrian amenities and cultural elements will create a lively and attractive street character and provide healthy mobility alternatives. Strategies included in the CVSP include incorporating pedestrian lighting, streetscape amenities, public art and small plazas or seating areas. A number of locations are suggested for pocket parks and plazas. Some Policies that implement the urban public spaces include the following (T&B Planning, 2017, Section 2.5):

"Policy 2.5-1 Pedestrian plazas, either within the interior of the development or at building street corners, should be provided where possible to help activate street corners, provide a foreground to building entrances, and/or to serve adjacent uses (such as a retail space, café, or office use). A conceptual design of a pedestrian plaza is provided on [CVSP] Figure 2.5-4, Conceptual Pedestrian Plaza Design."

"Policy 2.5-6 Pedestrian paseos are encouraged in all developments to provide enhanced connectivity and usable open space."

"Policy 2.5-8 Incorporate informal outdoor gathering areas and pedestrian nodes into design plans in ways that allow these spaces to function as community gathering spaces."

"Policy 2.5-13Locate outdoor play areas adjacent to common building facilities, such as a community center, and near pedestrian access points as warranted. Avoid locating play areas near public streets, parking, or entry areas unless physically separated with landscaping."

"Policy 2.5-48 Design and arrange buildings around common areas and open space to define the open space. For example, buildings can be clustered around courtyards, greenways, paseos, and plazas."

"Policy 2.5-105 The following amenities may be provided to support bicyclists and pedestrians: street furniture, public art, bike paths, multiple access points, and safe street crossing opportunitie"

"Policy 2.5-106 Public artwork, such as murals or sculptures that do not restrict sight distance for drivers and pedestrians, are encouraged to activate the bulb-out area, as conceptually shown in [CVSP] Figure 2.5-30, Conceptual Mural at Bulb-Outs Design".

"Policy 2.5-135 Incorporate public art and/or cultural elements."

"Policy 2.5-175 Pedestrian scaled lighting, such as low profile bollards, should be selected from highly durable materials that contribute to the overall design theme of Central Village".

Question 5 Consideration 2:

- **Does the land use and zoning associated with the proposed project increase the potential for jobs within the TPA?**

Yes; the land use and zoning associated with the CVSP increases the potential for jobs within the TPA. As previously shown in Figure 1-C of this report, the CVSP plans for the development of up to 139,700 s.f. of new commercial floor space, which is an employment generating use. Although the exact occupants of this commercial space and the number of jobs is unknown at this time, development of up to 139,700 s.f. of commercial space in the Central Village increases the potential for jobs within the TPA. In addition, an elementary school site is proposed in the CVSP, which will generate jobs.

The provision of fewer residential units and more commercial square footage within the CVSP compared to the amount assumed for the Central Village under the OMCPU, will increase the "Jobs to Housing" ratio within the community. This means that more people residing in the CVSP and OMCPU would have access to employment within the same area, reducing commute distances and potentially allowing for walking and biking to/from work. Shorter home/work commute distances and the encouragement of walking and biking would also means that motor vehicles will travel fewer miles, result in a reduction of vehicle miles traveled (VMT), resulting in a lesser quantity of GHG emissions.

Question 5 Consideration 3:

- **Do the zoning/implementing regulations associated with the proposed project support the efficient use of parking through mechanisms such as: shared parking, parking districts, unbundled parking, reduced parking, paid or time-limited parking, etc.?**

Yes; the zoning and implementing regulations associated with the CVSP (refer to the Design Standards in CVSP Chapter 2 and CVSP Chapter 3, Implementation) support the efficient use of parking. The CVSP supports the efficient use of parking through the mobility and urban design features called for by the Specific Plan, which call for the Central Village to be a transit oriented and highly walkable community. The numerous Design Standards and Policies cited throughout this CAP compliance analysis, as well in the CVSP, are centered on public transit, bicycle, and pedestrian transportation. The CVSP does not focus on the use of cars, and instead focuses on transit and non-vehicular oriented development features, which will reduce the Central Village's

dependency on parking. Thus, the CVSP supports the efficient use of parking by planning for land uses in arrangements that are not automobile intensive.

In addition, the CVSP includes the development of seven Neighborhood Villages (Planning Areas 2, 3, 4, 5, 6, 13, and 14) which allow for the development of residential and commercial mixed-uses integrated horizontally or vertically. The Neighborhood Villages have a MH Mixed Use land use designation, which accommodates medium-scale retail, housing, office, civic, and entertainment uses, as well as compact and compatible condominium/apartment buildings (T&B Planning, 2017,Section 3.0). The mixed-use nature of the Neighborhood Village areas will allow for the possibility of shared parking among residential and non-residential uses.

Some of the CVSP's Policies that support the efficient use of parking include the following (T&B Planning, 2017, Section 2.5):

"Policy 2.5-24 Support shared parking agreements in Mixed Use planning areas and other areas of the Central Village where shared parking can be supported."

"Policy 2.5-25 Designate on-street and off-street parking areas for car-sharing services."

"Policy 2.5-26 Allow for unbundled parking, wherein the price to rent or buy a multi-family residential unit or commercial building space is separate from the price to rent or buy associated parking spaces."

6. Would the proposed project implement the Urban Forest Management Plan to increase urban tree canopy coverage?

Question 6 Consideration 1:

- **Does the proposed project provide at least three different species for the primary, secondary, and accent trees in order to accommodate varying parkway widths?**

Yes; the CVSP provides for the planting of at least three different tree species along the Central Village's roadways in order to accommodate varying parkway widths. Specifically, the CVSP includes Design Standard 2.5-1, which requires tree species within the CVSP area be selected from the City of San Diego's Otay Mesa Street Tree Plan (T&B Planning, 2017,Subsection 2.5.3). Furthermore, the CVSP includes a Village-Wide Plant Palette (refer to CVSP Table 2.5-2) which provides for a wide variety of tree species throughout the Central Village community (T&B Planning, 2017,Subsection 2.5.3). The Village-Wide Plant Palette provides tree species by street location. Design Standards and Policies including the CVSP to provide at least three different tree species include:

"Design Standard 2.5-1 Per the requirements of the Otay Mesa Community Plan, tree species used within Central Village shall be selected from the City of San Diego's Otay Mesa Street Tree Plan. [CVSP] Table 2.5-2, Village-Wide Plant Palette, provides a detailed plant palette for the

Central Village and [CVSP] Figure 2.5-23 and Figure 2.5-24 provide representative images of the plant palette."

"Policy 2.5-90 All street trees within Central Village are predetermined by the Otay Mesa Community Plan Street Tree List (see Otay Mesa Community Plan Appendix B, Street Tree Plan).

"Policy 2.5-108 The landscape theme of Green Streets features a double row canopy of shade trees on both the right-of-way and adjacent property to soften the effect of adjacent high density residential and commercial buildings and provide for an enhanced pedestrian experience.

- Plant the first row of smaller trees behind the street curb within the parkway and the second row of larger trees within the landscaped strip located adjacent to the right-of-way.
- Each row of trees represents a single species selected from the Otay Mesa Community Plan Street Tree List."

"Policy 2.5-112 Each roadway features a different theme tree that serves as an identifying element and helps define the character of each street."

"Policy 2.5-113 To provide visual interest, an accent tree (a different variety from the same approved list), may be used to compliment the theme tree."

Question 6 Consideration 2:

- **Does the proposed project include policies or strategies for preserving existing trees?**

The CVSP area is largely undeveloped under existing conditions. Based on historical aerial photographs, large portions of the site have been used for agricultural production since at least the early 1990s. Due to the agricultural uses on the property, no trees exist within the majority of the CVSP area (Google Earth, 2017). The CVSP incorporates Design Standards, Policies, and strategies that promote extensive tree planting throughout the Central Village area upon its development. Also, the CVSP includes a Policy that supports the preservation of existing trees after they are planted (T&B Planning, 2017, Section 2.5):

"Policy 2.5-82 All trees should be maintained in a healthy state and replaced in-kind if removal is necessary."

Question 6 Consideration 3:

- **Does the proposed project incorporate tree planting that will contribute to the City's 20% urban canopy tree coverage goal?**

Yes; the CVSP calls for the planting of trees that will contribute to the City's 20% urban canopy tree coverage goal. The CVSP incorporates Design Standards, Policies, and strategies that promote extensive tree planting throughout the Central Village area upon its development. The

CVSP includes Policies related to tree planting include the following: (T&B Planning, 2017, Section 2.4; Section 2.5):

"Policy 2.4-4 Locate open lawn areas and neighborhood gathering areas and activity nodes in the central portion of the park. Canopy shade trees may be located along the northern and southern edges of the park to visually strengthen the edges of the park. Informal groupings of accent trees may be used to enhance the eastern and western sides of the park. A concept plan of Village Park is provided on [CVSP] Figure 2.4-2, Village Park Concept Plan."

"Policy 2.4-12 Define the park space by placing accent and canopy trees around the edges of the park to enhance the aesthetics and attractiveness of the facility and provide a buffer from adjacent streets."

"Policy 2.4-13 Provide shade in areas for seating, gathering, and picnicking by locating trees and/or shade structures around and within these areas. A concept plan for Village Central Park is provided on [CVSP] Figure 2.4-3, Village Central Park Concept Plan."

"Policy 2.4-23 Plant canopy trees to provide shade and define the park design. A concept plan of Trails Park is provided on [CVSP] Figure 2.4-5, Trails Park Concept Plan."

"Policy 2.5-42 Provide a 24-inch box canopy tree within 30-feet of each parking space."

"Policy 2.5-85 Incorporate sustainable design to all streetscapes, where feasible. These standards include incorporating stormwater control and treatment measures through planting and permeable paving, as well as tree planting techniques that maximize growth conditions, improve overall tree health, and increase shade canopy coverage."

"Policy 2.5-108 The landscape theme of Green Streets features a double row canopy of shade trees on both the right-of-way and adjacent property to soften the effect of adjacent high density residential and commercial buildings and provide for an enhanced pedestrian experience.

- Plant the first row of smaller trees behind the street curb within the parkway and the second row of larger trees within the landscaped strip located adjacent to the right-of-way.
- Each row of trees represents a single species selected from the Otay Mesa Community Plan Street Tree List."

"Policy 2.5-112 Each roadway features a different theme tree that serves as an identifying element and helps define the character of each street."

"Policy 2.5-113 To provide visual interest, an accent tree (a different variety from the same approved list), may be used to compliment the theme tree."

As demonstrated above, the CVSP project is compliant with the City's CAP. The CVSP will help to implement the City's strategies to reduce GHG emissions to achieve the 2020 and 2050 reduction targets. Because the City's CAP was prepared in compliance with CEQA Section 15183.5 and is intended

to achieve the City of San Diego's share of Statewide GHG reduction targets, the CVSP's demonstrated compliance with the CAP indicates that a less than significant GHG impact would occur related to compliance with planning policies and regulations. No new impact would occur in comparison to the GHG analysis presented in the OMCPU EIR.

5.3 Quantification of Construction CO_2e Emissions

Because the development area (229.2 acres) assumed by the OMCPU EIR and the development area (229.2 acres) proposed by the CVSP are the same, it is assumed that construction activities associated with buildout of the Central Village would largely remain the same as assumed by the OMCPU EIR in the Central Village area. The EIR's consideration of construction-related GHG emissions assumed that sources of construction-related emissions would include: a) fugitive dust from grading activities; b) construction equipment exhaust; c) construction-related trips by workers, delivery trucks, and material-hauling trucks; and d) construction-related power consumption. (RECON, 2013). Based on industry-standard construction practices, these are reasonable assumptions for sources of construction activity air emissions in the Central Village. As such, there would be no change in construction-related GHG emissions quantities associated with the CVSP.

5.4 Quantification of Operational Emissions

As previously discussed in the Methodology section of this report, GHG emissions generated from Area, Energy, Mobile, Solid Waste and Water uses is calculated within CalEEMod. The program is largely based on default settings though were modified to match the inputs used for the GHG study under the OMCPU EIR's analysis. Statewide averages for utility emissions were utilized for the calculations throughout the model. The calculated operational emissions are identified in Table 5.2 of this report.

The CalEEMod 2013.2.2 air quality model was used to quantify GHG emissions from operation of land uses in th Central Village. CalEEMod defaults were adjusted where necessary to account for compatibility of input data from the OMCPU EIR for the Central Village, and traffic trip generation data from the CVSP's *Transportation Facilities Trigger Analysis* (Chen Ryan & Associates, 2017). At full buildout of the Central Village, the OMCPU EIR assumed the generation of 45,429 daily trips. In comparison, 36,345 daily trips would be generated by land uses in the Central Village under the proposed CVSP. The CalEEMod 2013.2.2 air quality model was run on both scenarios to remain consistent. (The OMCPU EIR used CalEEMod 2011). As a result of the land use changes proposed by the CVSP (namely, more commercial square footage and a repositioning of commercial space to the Airway Road corridor, fewer residential units, and less park space), the CVSP project would generate fewer vehicle trips and consequently less VMT than it would have under the planning assumptions utilized by the OMCPU EIR.

The reduction in VMTs under the proposed CVSP project is largely due to the fact that the CVSP orients higher density residential and commercial land uses along Airway Road which will have better public transit access, better access from areas outside of the CVSP to allow pass-by usage, an increased job to housing ratio and better internal connectivity to parks, the school site, and open space/trails.

Given this, VMTs under the CVSP project would be reduced by approximately 7,897,311.

The expected daily pollutant generation can be calculated utilizing the product of the average daily miles traveled and the expected emissions inventory calculated by CALEEMOD utilizing emissions from EMFAC2011. Table 5.1 of this report compares the GHG emissions disclosed by the OMCPU EIR for the Central Village and emissions calculated to occur upon buildout of the proposed CVSP project, and shows the differences between the land use development plans. Based on these findings, operational GHG emissions will be reduced roughly 5,144.44 metric tons (MT) per year under the proposed CVSP project as compared to what was evaluated and disclosed by the OMCPU EIR for the Central Village. Depending on the category of emissions, a 6.8% to 14% reduction can be expected from implementation of the proposed CVSP project. Given this, no new or more severe GHG impacts would result from implementation of the proposed CVSP project beyond the emissions that were already evaluated and disclosed by the OMCPU EIR for the Central Village.

Table 5.1: Expected Operational Emissions Summary MT/Year

Year	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_2O	CO_2e
Existing Approved OMCPU Central Village Land Uses						
Area	5,418.90	2,336.25	7,755.15	5.06	0.43	7,993.60
Energy	0.00	7,785.51	7,785.51	0.28	0.08	7,816.34
Mobile	0.00	48,993.70	48,993.70	1.90	0.00	49,033.51
Waste	530.73	0.00	530.73	31.37	0.00	1,189.39
Water	109.90	2,421.94	2,531.84	11.39	0.29	2,859.80
Total	**6,059.52**	**61,537.40**	**67,596.92**	**49.99**	**0.79**	**68,892.64**
Proposed CVSP Land Uses for the Central Village						
Area	4,632.82	1,997.35	6,630.17	4.33	0.36	6,834.03
Energy	0.00	7,207.37	7,207.37	0.26	0.07	7,235.67
Mobile	0.00	46,096.48	46,096.48	1.79	0.00	46,134.13
Waste	482.19	0.00	482.19	28.50	0.00	1,080.62
Water	96.68	2,078.74	2,175.42	10.01	0.25	2,463.77
Total	**5,211.69**	**57,379.94**	**62,591.62**	**44.89**	**0.69**	**63,748.21**
Difference between the Approved and Proposed CVSP						
Area	-786.08	-338.90	-1,124.98	-0.73	-0.06	-1,159.57
Energy	0.00	-578.14	-578.14	-0.02	-0.01	-580.68
Mobile	0.00	-2,897.22	-2,897.22	-0.10	0.00	-2,899.38
Waste	-48.54	0.00	-48.54	-2.87	0.00	-108.77
Water	-13.22	-343.20	-356.42	-1.37	-0.03	-396.04
GHG Reduction over Approved Plan	**-847.83**	**-4,157.46**	**-5,005.29**	**-5.10**	**-0.10**	**-5,144.44**
Proposed CVSP Percent Reduction	**-14.0%**	**-6.8%**	**-7.4%**	**-10.2%**	**-13.1%**	**-7.5%**

Expected Construction emissions are based upon CalEEMod modeling assumptions for equipment and durations listed in Table 5.1 above.
Data is presented in decimal format and may have rounding errors.

It should be noted that this analysis is still a program level analysis, and specific project-level development plans and their associated design features are not available to analyze within this study; rather, the purpose of this study is to determine whether buildout of the proposed CVSP project would result in new or more severe environmental impacts related to GHG emissions as compared to what was evaluated and disclosed for the Central Village by the OMCPU EIR. The OMCPU EIR concluded that GHG emissions would be generated from development in the OMCPU area, either directly or indirectly, that may have a significant impact on the environment. Although impacts associated with the contribution of GHG emissions to cumulative statewide emissions were found to be significant and unavoidable for the Central Village by the OMCPU EIR, the City's updated significance threshold enacted pursuant to the CAP (as described in Subsection 5.1) would apply to the currently proposed CVSP. The significance threshold for GHG emissions based on CAP

compliance provides an updated, localized, and comprehensive approach for the assessment of the significance of GHG emissions. As demonstrated in the analysis throughout this report, the CVSP Project is compliant with the CAP and does not conflict with the CAP; this report provides evidence of this consistency through the CAP Consistency Checklist (provided under Subsection 5.2 of this report). The CAP provides a localized evaluation of GHG emissions, and reduction targets and strategies to reduce impacts to cumulative state emissions. Therefore, impacts associated with CVSP's contribution of GHG emissions to cumulative statewide emissions would be less than significant, because the proposed CVSP is consistent with the CAP which reduces the cumulative contribution to statewide GHG emissions to less-than-significant levels. Thus, the CVSP would result in an reduced impact as compared to the OMCPU EIR, pursuant to the use of the updated and localized CAP threshold in addition to reducing the quantity of GHG emissions as calculated herein. The proposed CVSP would be consistent with the findings and conclusion of the OMCPU EIR because the proposed CVSP reduces a significant and unavoidable impact under the OMCPU EIR to less than significant levels.

5.5 Mitigation Measures

The following mitigation measure has been updated from the OMCPU EIR in order to comply with updated significance threshold identified by the City of San Diego's CAP. The following mitigation measure, tiered from PEIR No. 416603/SCH No. 2015021053 prepared for the CAP and the Addendum to the CAP EIR No. 416603 prepared for the CAP Consistency Checklist and other CAP Implementing Actions is applicable to the CVSP:

GHG-1 Future projects implemented in accordance with the [CVSP] CPU shall be required to demonstrate their avoidance of significant impacts related to long-term GHG emissions. The Mobility, Urban Design, and Conservation elements of the [CVSP] CPU include specific policies to require dense, compact, and diverse development, encourage highly efficient energy and water conservation design, increase walkability and bicycle and transit accessibility, increase urban forestry practices and community gardens, decrease urban heat islands, and increase climate sensitive community design. Future projects implemented in accordance with the [CVSP] CPU shall be required to prepare a project-level CAP Consistency Checklist to demonstrate consistency.

6.0 References

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7.0 CERTIFICATIONS

The contents of this report represent an accurate depiction of the projected CO_2e emissions from the proposed CVSP development. This report was prepared utilizing the latest emission rates and reduction methodologies.

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Date: January 23, 2017

ATTACHMENT A

CALLEEMOD 2013.2.2 APPROVED CVSP

Central Village Specific Plan (Existing Approved Specific Plan)

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	900.00	Student	13.10	75,243.03	0
City Park	32.30	Acre	32.30	1,406,988.00	0
Apartments Mid Rise	5,246.00	Dwelling Unit	150.00	5,246,000.00	15004
Strip Mall	32.70	1000sqft	33.80	32,700.00	0

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)	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 - Project Size

Construction Phase -

Off-road Equipment -

Grading - 229.2 acre site

Architectural Coating -

Vehicle Trips - Adjusted to meet Otay Community Plan Assumptions

Area Coating - 150 g/l

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	250
tblGrading	AcresOfGrading	1,162.50	229.20
tblGrading	AcresOfGrading	0.00	229.20
tblLandUse	LotAcreage	1.73	13.10
tblLandUse	LotAcreage	138.05	150.00
tblLandUse	LotAcreage	0.75	33.80
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	8.00
tblVehicleTrips	ST_TR	1.59	45.24
tblVehicleTrips	ST_TR	42.04	67.06
tblVehicleTrips	SU_TR	6.07	8.00
tblVehicleTrips	SU_TR	1.59	45.24
tblVehicleTrips	SU_TR	20.43	67.06
tblVehicleTrips	WD_TR	6.59	8.00
tblVehicleTrips	WD_TR	1.59	45.24
tblVehicleTrips	WD_TR	1.29	1.98
tblVehicleTrips	WD_TR	44.32	67.06

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					
2017	0.6869	7.4515	5.5122	6.2300e-003	3.2886	0.3807	3.6693	1.6948	0.3503	2.0451	0.0000	573.3203	573.3203	0.1712	0.0000	576.9159
2018	0.6977	7.7790	5.6130	8.3100e-003	1.5426	0.3640	1.9066	0.7883	0.3349	1.1232	0.0000	753.5661	753.5661	0.2299	0.0000	758.3932
2019	1.7653	9.8263	20.0339	0.0487	4.3145	0.3207	4.6353	1.5322	0.2970	1.8292	0.0000	3,660.8836	3,660.8836	0.2532	0.0000	3,666.2004
2020	2.6227	10.8503	31.7666	0.0855	5.3220	0.2819	5.6039	1.4282	0.2625	1.6908	0.0000	6,118.6003	6,118.6003	0.2649	0.0000	6,124.1623
2021	2.4621	9.3056	30.2239	0.0852	5.3017	0.2505	5.5522	1.4228	0.2333	1.6561	0.0000	6,030.5013	6,030.5013	0.2564	0.0000	6,035.8854
2022	2.3298	8.2979	28.7027	0.0849	5.2814	0.2290	5.5104	1.4173	0.2131	1.6304	0.0000	5,945.2940	5,945.2940	0.2484	0.0000	5,950.5110
2023	2.2024	7.4533	27.4039	0.0848	5.2815	0.2129	5.4943	1.4174	0.1980	1.6154	0.0000	5,887.1248	5,887.1248	0.2411	0.0000	5,892.1881
2024	2.1071	7.2560	26.3221	0.0854	5.3221	0.2038	5.5259	1.4283	0.1894	1.6177	0.0000	5,884.3505	5,884.3505	0.2374	0.0000	5,889.3359
2025	2.0197	6.9983	25.3634	0.0851	5.3018	0.1925	5.4943	1.4228	0.1788	1.6016	0.0000	5,820.6105	5,820.6105	0.2319	0.0000	5,825.4797
2026	1.9655	6.8867	24.7291	0.0851	5.3019	0.1919	5.4938	1.4229	0.1782	1.6011	0.0000	5,784.9506	5,784.9506	0.2284	0.0000	5,789.7466
2027	1.9142	6.8062	24.0668	0.0851	5.3019	0.1923	5.4943	1.4229	0.1786	1.6015	0.0000	5,754.3462	5,754.3462	0.2254	0.0000	5,759.0803
2028	1.8664	6.7080	23.5479	0.0848	5.2817	0.1917	5.4734	1.4175	0.1781	1.5955	0.0000	5,706.4245	5,706.4245	0.2218	0.0000	5,711.0825
2029	1.8299	6.6689	23.1584	0.0851	5.3021	0.1927	5.4948	1.4229	0.1790	1.6019	0.0000	5,706.2077	5,706.2077	0.2200	0.0000	5,710.8281
2030	1.7840	6.0277	22.8014	0.0856	5.3021	0.1436	5.4457	1.4230	0.1340	1.5569	0.0000	5,727.5579	5,727.5579	0.1606	0.0000	5,730.9298
2031	1.7514	5.9819	22.5198	0.0856	5.3021	0.1437	5.4458	1.4229	0.1341	1.5570	0.0000	5,711.4794	5,711.4794	0.1585	0.0000	5,714.8084
2032	1.7278	5.9665	22.3592	0.0859	5.3223	0.1444	5.4667	1.4284	0.1347	1.5630	0.0000	5,719.8936	5,719.8936	0.1573	0.0000	5,723.1976
2033	1.6831	5.8818	21.9735	0.0853	5.2816	0.1433	5.4249	1.4174	0.1336	1.5511	0.0000	5,664.9821	5,664.9821	0.1545	0.0000	5,668.2255

	ROG	NOx	CO	SO2	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					
2034	1.6532	5.8517	21.7589	0.0853	5.2816	0.1433	5.4248	1.4174	0.1336	1.5510	0.0000	5,655.5101	5,655.5101	0.1529	0.0000	5,658.7201
2035	1.6216	5.7504	21.6664	0.0856	5.3018	0.1363	5.4381	1.4228	0.1266	1.5494	0.0000	5,669.4118	5,669.4118	0.1511	0.0000	5,672.5842
2036	0.1588	0.9368	2.1081	4.0400e-003	4.5089	0.0118	4.5207	1.1067	0.0118	1.1185	0.0000	342.8367	342.8367	0.0128	0.0000	343.1050
2037	0.1494	0.7159	2.0447	3.7100e-003	1.3347	0.0203	1.3550	0.3276	0.0203	0.3479	0.0000	317.7548	317.7548	0.0121	0.0000	318.0091
2038	20.9175	0.3932	1.2340	2.1700e-003	0.3598	0.0139	0.3737	0.0883	0.0139	0.1023	0.0000	186.8640	186.8640	7.1700e-003	0.0000	187.0146
2039	38.9543	0.0815	0.1929	3.2000e-004	0.6584	1.0600e-003	0.6594	0.1616	1.0600e-003	0.1627	0.0000	27.4475	27.4475	1.0100e-003	0.0000	27.4688
Total	**94.8707**	**139.8752**	**435.1026**	**1.4377**	**100.7971**	**4.1061**	**104.9032**	**28.4544**	**3.8148**	**32.2692**	**0.0000**	**98,649.9182**	**98,649.9182**	**3.9978**	**0.0000**	**98,733.8722**

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					
2017	0.6869	7.4515	5.5121	6.2300e-003	3.2886	0.3807	3.6693	1.6948	0.3503	2.0451	0.0000	573.3196	573.3196	0.1712	0.0000	576.9153
2018	0.6977	7.7790	5.6129	8.3100e-003	1.5426	0.3640	1.9066	0.7883	0.3349	1.1232	0.0000	753.5652	753.5652	0.2299	0.0000	758.3923
2019	1.7653	9.8263	20.0339	0.0487	4.3145	0.3207	4.6353	1.5322	0.2970	1.8292	0.0000	3,660.8830	3,660.8830	0.2532	0.0000	3,666.1998
2020	2.6227	10.8503	31.7666	0.0855	5.3220	0.2819	5.6039	1.4282	0.2625	1.6908	0.0000	6,118.5999	6,118.5999	0.2649	0.0000	6,124.1620
2021	2.4621	9.3056	30.2239	0.0852	5.3017	0.2505	5.5522	1.4228	0.2333	1.6561	0.0000	6,030.5010	6,030.5010	0.2564	0.0000	6,035.8851
2022	2.3298	8.2979	28.7027	0.0849	5.2814	0.2290	5.5104	1.4173	0.2131	1.6304	0.0000	5,945.2936	5,945.2936	0.2484	0.0000	5,950.5107

	ROG	NOx	CO	SO2	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					
2023	2.2024	7.4533	27.4038	0.0848	5.2815	0.2129	5.4943	1.4174	0.1980	1.6154	0.0000	5,887.1245	5,887.1245	0.2411	0.0000	5,892.1877
2024	2.1071	7.2560	26.3221	0.0854	5.3221	0.2038	5.5259	1.4283	0.1894	1.6177	0.0000	5,884.3501	5,884.3501	0.2374	0.0000	5,889.3356
2025	2.0197	6.9983	25.3634	0.0851	5.3018	0.1925	5.4943	1.4228	0.1788	1.6016	0.0000	5,820.6102	5,820.6102	0.2319	0.0000	5,825.4794
2026	1.9655	6.8867	24.7291	0.0851	5.3019	0.1919	5.4938	1.4229	0.1782	1.6011	0.0000	5,784.9503	5,784.9503	0.2284	0.0000	5,789.7462
2027	1.9142	6.8062	24.0668	0.0851	5.3019	0.1923	5.4943	1.4229	0.1786	1.6015	0.0000	5,754.3459	5,754.3459	0.2254	0.0000	5,759.0799
2028	1.8664	6.7080	23.5479	0.0848	5.2817	0.1917	5.4734	1.4175	0.1781	1.5955	0.0000	5,706.4241	5,706.4241	0.2218	0.0000	5,711.0821
2029	1.8299	6.6689	23.1584	0.0851	5.3021	0.1927	5.4948	1.4229	0.1790	1.6019	0.0000	5,706.2073	5,706.2073	0.2200	0.0000	5,710.8277
2030	1.7840	6.0277	22.8014	0.0856	5.3021	0.1436	5.4457	1.4230	0.1340	1.5569	0.0000	5,727.5575	5,727.5575	0.1606	0.0000	5,730.9294
2031	1.7514	5.9819	22.5198	0.0856	5.3021	0.1437	5.4458	1.4229	0.1341	1.5570	0.0000	5,711.4790	5,711.4790	0.1585	0.0000	5,714.8080
2032	1.7278	5.9665	22.3592	0.0859	5.3223	0.1444	5.4667	1.4284	0.1347	1.5630	0.0000	5,719.8932	5,719.8932	0.1573	0.0000	5,723.1972
2033	1.6831	5.8818	21.9735	0.0853	5.2816	0.1433	5.4249	1.4174	0.1336	1.5511	0.0000	5,664.9817	5,664.9817	0.1545	0.0000	5,668.2251
2034	1.6532	5.8517	21.7589	0.0853	5.2816	0.1433	5.4248	1.4174	0.1336	1.5510	0.0000	5,655.5097	5,655.5097	0.1529	0.0000	5,658.7197
2035	1.6216	5.7504	21.6664	0.0856	5.3018	0.1363	5.4381	1.4228	0.1266	1.5494	0.0000	5,669.4114	5,669.4114	0.1511	0.0000	5,672.5838
2036	0.1588	0.9368	2.1081	4.0400e-003	4.5089	0.0118	4.5207	1.1067	0.0118	1.1185	0.0000	342.8363	342.8363	0.0128	0.0000	343.1046
2037	0.1494	0.7159	2.0447	3.7100e-003	1.3347	0.0203	1.3550	0.3276	0.0203	0.3479	0.0000	317.7544	317.7544	0.0121	0.0000	318.0087
2038	20.9175	0.3932	1.2340	2.1700e-003	0.3598	0.0139	0.3737	0.0883	0.0139	0.1023	0.0000	186.8638	186.8638	7.1700e-003	0.0000	187.0143
2039	38.9543	0.0815	0.1929	3.2000e-004	0.6584	1.0600e-003	0.6594	0.1616	1.0600e-003	0.1627	0.0000	27.4475	27.4475	1.0100e-003	0.0000	27.4687
Total	**94.8707**	**139.8752**	**435.1025**	**1.4377**	**100.7971**	**4.1061**	**104.9032**	**28.4544**	**3.8147**	**32.2692**	**0.0000**	**98,649.9090**	**98,649.9090**	**3.9978**	**0.0000**	**98,733.8630**

	ROG	NOx	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	tons/yr										MT/yr					
Area	366.5485	4.9180	444.5884	0.1604		57.1849	57.1849		57.1832	57.1832	5,418.8961	2,336.2509	7,755.1470	5.0628	0.4262	7,993.6000
Energy	0.1580	1.3518	0.5862	8.6200e-003		0.1092	0.1092		0.1092	0.1092	0.0000	7,785.5070	7,785.5070	0.2804	0.0805	7,816.3445
Mobile	25.2544	54.8989	258.2545	0.7058	48.5575	0.8105	49.3680	12.9867	0.7479	13.7346	0.0000	48,993.6960	48,993.6960	1.8957	0.0000	49,033.5064
Waste						0.0000	0.0000		0.0000	0.0000	530.7260	0.0000	530.7260	31.3650	0.0000	1,189.3911
Water						0.0000	0.0000		0.0000	0.0000	109.8974	2,421.9438	2,531.8412	11.3850	0.2867	2,859.8006
Total	**391.9609**	**61.1687**	**703.4291**	**0.8749**	**48.5575**	**58.1046**	**106.6621**	**12.9867**	**58.0403**	**71.0270**	**6,059.5195**	**61,537.3976**	**67,596.9171**	**49.9890**	**0.7934**	**68,892.6425**

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	366.5485	4.9180	444.5884	0.1604		57.1849	57.1849		57.1832	57.1832	5,418.8961	2,336.2509	7,755.1470	5.0628	0.4262	7,993.6000
Energy	0.1580	1.3518	0.5862	8.6200e-003		0.1092	0.1092		0.1092	0.1092	0.0000	7,785.5070	7,785.5070	0.2804	0.0805	7,816.3445
Mobile	25.2544	54.8989	258.2545	0.7058	48.5575	0.8105	49.3680	12.9867	0.7479	13.7346	0.0000	48,993.6960	48,993.6960	1.8957	0.0000	49,033.5064
Waste						0.0000	0.0000		0.0000	0.0000	530.7260	0.0000	530.7260	31.3650	0.0000	1,189.3911
Water						0.0000	0.0000		0.0000	0.0000	87.9179	1,896.6250	1,984.5429	9.1064	0.2290	2,246.7702
Total	**391.9609**	**61.1687**	**703.4291**	**0.8749**	**48.5575**	**58.1046**	**106.6621**	**12.9867**	**58.0403**	**71.0270**	**6,037.5400**	**61,012.0789**	**67,049.6188**	**47.7103**	**0.7357**	**68,279.6122**

	ROG	NOx	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**	**0.36**	**0.85**	**0.81**	**4.56**	**7.27**	**0.89**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2017	9/8/2017	5	180	
2	Grading	Grading	9/9/2017	6/21/2019	5	465	
3	Building Construction	Building Construction	6/22/2019	4/17/2037	5	4650	
4	Paving	Paving	4/18/2037	7/23/2038	5	330	
5	Architectural Coating	Architectural Coating	7/24/2038	10/28/2039	5	330	

Acres of Grading (Site Preparation Phase): 229.2

Acres of Grading (Grading Phase): 229.2

Acres of Paving: 0

Residential Indoor: 10,623,150; Residential Outdoor: 3,541,050; Non-Residential Indoor: 2,272,397; Non-Residential Outdoor: 757,466 (Architectural Coating – sqft)

<u>OffRoad Equipment</u>

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
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
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	4,410.00	809.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	882.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

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					1.7475	0.0000	1.7475	0.9069	0.0000	0.9069	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4354	4.6578	3.5457	3.5200e-003		0.2479	0.2479		0.2281	0.2281	0.0000	326.8385	326.8385	0.1001	0.0000	328.9415
Total	**0.4354**	**4.6578**	**3.5457**	**3.5200e-003**	**1.7475**	**0.2479**	**1.9954**	**0.9069**	**0.2281**	**1.1349**	**0.0000**	**326.8385**	**326.8385**	**0.1001**	**0.0000**	**328.9415**

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	5.0300e-003	6.6700e-003	0.0631	1.6000e-004	0.0130	1.0000e-004	0.0131	3.4500e-003	9.0000e-005	3.5400e-003	0.0000	11.6387	11.6387	5.9000e-004	0.0000	11.6511
Total	**5.0300e-003**	**6.6700e-003**	**0.0631**	**1.6000e-004**	**0.0130**	**1.0000e-004**	**0.0131**	**3.4500e-003**	**9.0000e-005**	**3.5400e-003**	**0.0000**	**11.6387**	**11.6387**	**5.9000e-004**	**0.0000**	**11.6511**

3.2 Site Preparation - 2017

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					1.7475	0.0000	1.7475	0.9069	0.0000	0.9069	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4354	4.6578	3.5457	3.5200e-003		0.2479	0.2479		0.2281	0.2281	0.0000	326.8381	326.8381	0.1001	0.0000	328.9411
Total	**0.4354**	**4.6578**	**3.5457**	**3.5200e-003**	**1.7475**	**0.2479**	**1.9954**	**0.9069**	**0.2281**	**1.1349**	**0.0000**	**326.8381**	**326.8381**	**0.1001**	**0.0000**	**328.9411**

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	5.0300e-003	6.6700e-003	0.0631	1.6000e-004	0.0130	1.0000e-004	0.0131	3.4500e-003	9.0000e-005	3.5400e-003	0.0000	11.6387	11.6387	5.9000e-004	0.0000	11.6511
Total	**5.0300e-003**	**6.6700e-003**	**0.0631**	**1.6000e-004**	**0.0130**	**1.0000e-004**	**0.0131**	**3.4500e-003**	**9.0000e-005**	**3.5400e-003**	**0.0000**	**11.6387**	**11.6387**	**5.9000e-004**	**0.0000**	**11.6511**

3.3 Grading - 2017

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					1.5217	0.0000	1.5217	0.7828	0.0000	0.7828	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2440	2.7837	1.8722	2.4700e-003		0.1327	0.1327		0.1221	0.1221	0.0000	229.0957	229.0957	0.0702	0.0000	230.5698
Total	**0.2440**	**2.7837**	**1.8722**	**2.4700e-003**	**1.5217**	**0.1327**	**1.6544**	**0.7828**	**0.1221**	**0.9048**	**0.0000**	**229.0957**	**229.0957**	**0.0702**	**0.0000**	**230.5698**

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	2.4900e-003	3.2900e-003	0.0311	8.0000e-005	6.4200e-003	5.0000e-005	6.4600e-003	1.7000e-003	4.0000e-005	1.7500e-003	0.0000	5.7475	5.7475	2.9000e-004	0.0000	5.7536
Total	**2.4900e-003**	**3.2900e-003**	**0.0311**	**8.0000e-005**	**6.4200e-003**	**5.0000e-005**	**6.4600e-003**	**1.7000e-003**	**4.0000e-005**	**1.7500e-003**	**0.0000**	**5.7475**	**5.7475**	**2.9000e-004**	**0.0000**	**5.7536**

3.3 Grading - 2017

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					1.5217	0.0000	1.5217	0.7828	0.0000	0.7828	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2440	2.7837	1.8722	2.4700e-003		0.1327	0.1327		0.1221	0.1221	0.0000	229.0954	229.0954	0.0702	0.0000	230.5695
Total	**0.2440**	**2.7837**	**1.8722**	**2.4700e-003**	**1.5217**	**0.1327**	**1.6544**	**0.7828**	**0.1221**	**0.9048**	**0.0000**	**229.0954**	**229.0954**	**0.0702**	**0.0000**	**230.5695**

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	2.4900e-003	3.2900e-003	0.0311	8.0000e-005	6.4200e-003	5.0000e-005	6.4600e-003	1.7000e-003	4.0000e-005	1.7500e-003	0.0000	5.7475	5.7475	2.9000e-004	0.0000	5.7536
Total	**2.4900e-003**	**3.2900e-003**	**0.0311**	**8.0000e-005**	**6.4200e-003**	**5.0000e-005**	**6.4600e-003**	**1.7000e-003**	**4.0000e-005**	**1.7500e-003**	**0.0000**	**5.7475**	**5.7475**	**2.9000e-004**	**0.0000**	**5.7536**

3.3 Grading - 2018

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					1.5217	0.0000	1.5217	0.7828	0.0000	0.7828	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.6903	7.7692	5.5210	8.0500e-003		0.3638	0.3638		0.3347	0.3347	0.0000	735.5190	735.5190	0.2290	0.0000	740.3275
Total	**0.6903**	**7.7692**	**5.5210**	**8.0500e-003**	**1.5217**	**0.3638**	**1.8855**	**0.7828**	**0.3347**	**1.1175**	**0.0000**	**735.5190**	**735.5190**	**0.2290**	**0.0000**	**740.3275**

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	7.3700e-003	9.8100e-003	0.0919	2.6000e-004	0.0209	1.5000e-004	0.0211	5.5600e-003	1.4000e-004	5.7000e-003	0.0000	18.0471	18.0471	8.9000e-004	0.0000	18.0657
Total	**7.3700e-003**	**9.8100e-003**	**0.0919**	**2.6000e-004**	**0.0209**	**1.5000e-004**	**0.0211**	**5.5600e-003**	**1.4000e-004**	**5.7000e-003**	**0.0000**	**18.0471**	**18.0471**	**8.9000e-004**	**0.0000**	**18.0657**

3.3 Grading - 2018

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					1.5217	0.0000	1.5217	0.7828	0.0000	0.7828	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.6903	7.7692	5.5210	8.0500e-003		0.3638	0.3638		0.3347	0.3347	0.0000	735.5182	735.5182	0.2290	0.0000	740.3267
Total	**0.6903**	**7.7692**	**5.5210**	**8.0500e-003**	**1.5217**	**0.3638**	**1.8855**	**0.7828**	**0.3347**	**1.1175**	**0.0000**	**735.5182**	**735.5182**	**0.2290**	**0.0000**	**740.3267**

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	7.3700e-003	9.8100e-003	0.0919	2.6000e-004	0.0209	1.5000e-004	0.0211	5.5600e-003	1.4000e-004	5.7000e-003	0.0000	18.0471	18.0471	8.9000e-004	0.0000	18.0657
Total	**7.3700e-003**	**9.8100e-003**	**0.0919**	**2.6000e-004**	**0.0209**	**1.5000e-004**	**0.0211**	**5.5600e-003**	**1.4000e-004**	**5.7000e-003**	**0.0000**	**18.0471**	**18.0471**	**8.9000e-004**	**0.0000**	**18.0657**

3.3 Grading - 2019

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					1.5217	0.0000	1.5217	0.7828	0.0000	0.7828	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3033	3.3603	2.4979	3.8300e-003		0.1553	0.1553		0.1429	0.1429	0.0000	343.7335	343.7335	0.1088	0.0000	346.0174
Total	**0.3033**	**3.3603**	**2.4979**	**3.8300e-003**	**1.5217**	**0.1553**	**1.6770**	**0.7828**	**0.1429**	**0.9256**	**0.0000**	**343.7335**	**343.7335**	**0.1088**	**0.0000**	**346.0174**

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	3.2500e-003	4.3100e-003	0.0402	1.2000e-004	9.9400e-003	7.0000e-005	0.0100	2.6400e-003	7.0000e-005	2.7100e-003	0.0000	8.2639	8.2639	4.0000e-004	0.0000	8.2722
Total	**3.2500e-003**	**4.3100e-003**	**0.0402**	**1.2000e-004**	**9.9400e-003**	**7.0000e-005**	**0.0100**	**2.6400e-003**	**7.0000e-005**	**2.7100e-003**	**0.0000**	**8.2639**	**8.2639**	**4.0000e-004**	**0.0000**	**8.2722**

3.3 Grading - 2019

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					1.5217	0.0000	1.5217	0.7828	0.0000	0.7828	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3033	3.3603	2.4979	3.8300e-003		0.1553	0.1553		0.1429	0.1429	0.0000	343.7331	343.7331	0.1088	0.0000	346.0169
Total	**0.3033**	**3.3603**	**2.4979**	**3.8300e-003**	**1.5217**	**0.1553**	**1.6770**	**0.7828**	**0.1429**	**0.9256**	**0.0000**	**343.7331**	**343.7331**	**0.1088**	**0.0000**	**346.0169**

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	3.2500e-003	4.3100e-003	0.0402	1.2000e-004	9.9400e-003	7.0000e-005	0.0100	2.6400e-003	7.0000e-005	2.7100e-003	0.0000	8.2639	8.2639	4.0000e-004	0.0000	8.2722
Total	**3.2500e-003**	**4.3100e-003**	**0.0402**	**1.2000e-004**	**9.9400e-003**	**7.0000e-005**	**0.0100**	**2.6400e-003**	**7.0000e-005**	**2.7100e-003**	**0.0000**	**8.2639**	**8.2639**	**4.0000e-004**	**0.0000**	**8.2722**

3.4 Building Construction - 2019

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	0.1611	1.4361	1.1727	1.8400e-003		0.0880	0.0880		0.0828	0.0828	0.0000	160.3741	160.3741	0.0390	0.0000	161.1935
Total	**0.1611**	**1.4361**	**1.1727**	**1.8400e-003**		**0.0880**	**0.0880**		**0.0828**	**0.0828**	**0.0000**	**160.3741**	**160.3741**	**0.0390**	**0.0000**	**161.1935**

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	0.5061	3.9768	6.5382	0.0131	0.3604	0.0598	0.4202	0.1031	0.0550	0.1581	0.0000	1,135.2864	1,135.2864	8.4800e-003	0.0000	1,135.4645
Worker	0.7916	1.0488	9.7849	0.0298	2.4225	0.0176	2.4401	0.6437	0.0163	0.6600	0.0000	2,013.2257	2,013.2257	0.0965	0.0000	2,015.2528
Total	**1.2977**	**5.0257**	**16.3231**	**0.0429**	**2.7829**	**0.0773**	**2.8602**	**0.7468**	**0.0713**	**0.8181**	**0.0000**	**3,148.5121**	**3,148.5121**	**0.1050**	**0.0000**	**3,150.7173**

3.4 Building Construction - 2019

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	0.1611	1.4361	1.1727	1.8400e-003		0.0880	0.0880		0.0828	0.0828	0.0000	160.3739	160.3739	0.0390	0.0000	161.1933
Total	**0.1611**	**1.4361**	**1.1727**	**1.8400e-003**		**0.0880**	**0.0880**		**0.0828**	**0.0828**	**0.0000**	**160.3739**	**160.3739**	**0.0390**	**0.0000**	**161.1933**

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	0.5061	3.9768	6.5382	0.0131	0.3604	0.0598	0.4202	0.1031	0.0550	0.1581	0.0000	1,135.2864	1,135.2864	8.4800e-003	0.0000	1,135.4645
Worker	0.7916	1.0488	9.7849	0.0298	2.4225	0.0176	2.4401	0.6437	0.0163	0.6600	0.0000	2,013.2257	2,013.2257	0.0965	0.0000	2,015.2528
Total	**1.2977**	**5.0257**	**16.3231**	**0.0429**	**2.7829**	**0.0773**	**2.8602**	**0.7468**	**0.0713**	**0.8181**	**0.0000**	**3,148.5121**	**3,148.5121**	**0.1050**	**0.0000**	**3,150.7173**

3.4 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	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1514	302.1514	0.0736	0.0000	303.6973
Total	**0.2766**	**2.5000**	**2.2019**	**3.5100e-003**		**0.1458**	**0.1458**		**0.1371**	**0.1371**	**0.0000**	**302.1514**	**302.1514**	**0.0736**	**0.0000**	**303.6973**

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	0.9144	6.4764	12.0765	0.0250	0.6892	0.1024	0.7917	0.1972	0.0942	0.2914	0.0000	2,121.4832	2,121.4832	0.0157	0.0000	2,121.8128
Worker	1.4317	1.8740	17.4883	0.0570	4.6328	0.0337	4.6664	1.2311	0.0312	1.2623	0.0000	3,694.9657	3,694.9657	0.1756	0.0000	3,698.6523
Total	**2.3461**	**8.3504**	**29.5647**	**0.0820**	**5.3220**	**0.1361**	**5.4581**	**1.4282**	**0.1255**	**1.5537**	**0.0000**	**5,816.4489**	**5,816.4489**	**0.1912**	**0.0000**	**5,820.4651**

3.4 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	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1510	302.1510	0.0736	0.0000	303.6969
Total	**0.2766**	**2.5000**	**2.2019**	**3.5100e-003**		**0.1458**	**0.1458**		**0.1371**	**0.1371**	**0.0000**	**302.1510**	**302.1510**	**0.0736**	**0.0000**	**303.6969**

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	0.9144	6.4764	12.0765	0.0250	0.6892	0.1024	0.7917	0.1972	0.0942	0.2914	0.0000	2,121.4832	2,121.4832	0.0157	0.0000	2,121.8128
Worker	1.4317	1.8740	17.4883	0.0570	4.6328	0.0337	4.6664	1.2311	0.0312	1.2623	0.0000	3,694.9657	3,694.9657	0.1756	0.0000	3,698.6523
Total	**2.3461**	**8.3504**	**29.5647**	**0.0820**	**5.3220**	**0.1361**	**5.4581**	**1.4282**	**0.1255**	**1.5537**	**0.0000**	**5,816.4489**	**5,816.4489**	**0.1912**	**0.0000**	**5,820.4651**

3.4 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	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0339	301.0339	0.0725	0.0000	302.5568
Total	**0.2471**	**2.2629**	**2.1582**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.0339**	**301.0339**	**0.0725**	**0.0000**	**302.5568**

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	0.8572	5.2901	11.5496	0.0249	0.6866	0.0919	0.7785	0.1964	0.0845	0.2809	0.0000	2,110.0131	2,110.0131	0.0156	0.0000	2,110.3403
Worker	1.3578	1.7526	16.5162	0.0569	4.6151	0.0341	4.6491	1.2264	0.0316	1.2580	0.0000	3,619.4543	3,619.4543	0.1683	0.0000	3,622.9882
Total	**2.2150**	**7.0427**	**28.0657**	**0.0817**	**5.3017**	**0.1259**	**5.4276**	**1.4228**	**0.1161**	**1.5389**	**0.0000**	**5,729.4675**	**5,729.4675**	**0.1839**	**0.0000**	**5,733.3286**

3.4 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	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0335	301.0335	0.0725	0.0000	302.5565
Total	**0.2471**	**2.2629**	**2.1582**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.0335**	**301.0335**	**0.0725**	**0.0000**	**302.5565**

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	0.8572	5.2901	11.5496	0.0249	0.6866	0.0919	0.7785	0.1964	0.0845	0.2809	0.0000	2,110.0131	2,110.0131	0.0156	0.0000	2,110.3403
Worker	1.3578	1.7526	16.5162	0.0569	4.6151	0.0341	4.6491	1.2264	0.0316	1.2580	0.0000	3,619.4543	3,619.4543	0.1683	0.0000	3,622.9882
Total	**2.2150**	**7.0427**	**28.0657**	**0.0817**	**5.3017**	**0.1259**	**5.4276**	**1.4228**	**0.1161**	**1.5389**	**0.0000**	**5,729.4675**	**5,729.4675**	**0.1839**	**0.0000**	**5,733.3286**

3.4 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	0.2209	2.0197	2.1226	3.4900e-003		0.1047	0.1047		0.0986	0.0986	0.0000	299.9946	299.9946	0.0718	0.0000	301.5017
Total	**0.2209**	**2.0197**	**2.1226**	**3.4900e-003**		**0.1047**	**0.1047**		**0.0986**	**0.0986**	**0.0000**	**299.9946**	**299.9946**	**0.0718**	**0.0000**	**301.5017**

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	0.8203	4.6291	11.0540	0.0247	0.6840	0.0900	0.7741	0.1957	0.0828	0.2785	0.0000	2,099.7557	2,099.7557	0.0158	0.0000	2,100.0884
Worker	1.2887	1.6491	15.5261	0.0566	4.5974	0.0342	4.6316	1.2217	0.0317	1.2534	0.0000	3,545.5437	3,545.5437	0.1608	0.0000	3,548.9210
Total	**2.1089**	**6.2782**	**26.5801**	**0.0814**	**5.2814**	**0.1242**	**5.4056**	**1.4173**	**0.1145**	**1.5319**	**0.0000**	**5,645.2994**	**5,645.2994**	**0.1767**	**0.0000**	**5,649.0093**

3.4 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	0.2209	2.0197	2.1226	3.4900e-003		0.1047	0.1047		0.0986	0.0986	0.0000	299.9943	299.9943	0.0718	0.0000	301.5013
Total	**0.2209**	**2.0197**	**2.1226**	**3.4900e-003**		**0.1047**	**0.1047**		**0.0986**	**0.0986**	**0.0000**	**299.9943**	**299.9943**	**0.0718**	**0.0000**	**301.5013**

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	0.8203	4.6291	11.0540	0.0247	0.6840	0.0900	0.7741	0.1957	0.0828	0.2785	0.0000	2,099.7557	2,099.7557	0.0158	0.0000	2,100.0884
Worker	1.2887	1.6491	15.5261	0.0566	4.5974	0.0342	4.6316	1.2217	0.0317	1.2534	0.0000	3,545.5437	3,545.5437	0.1608	0.0000	3,548.9210
Total	**2.1089**	**6.2782**	**26.5801**	**0.0814**	**5.2814**	**0.1242**	**5.4056**	**1.4173**	**0.1145**	**1.5319**	**0.0000**	**5,645.2994**	**5,645.2994**	**0.1767**	**0.0000**	**5,649.0093**

3.4 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	0.2036	1.8606	2.1072	3.4900e-003		0.0906	0.0906		0.0852	0.0852	0.0000	300.0980	300.0980	0.0713	0.0000	301.5949
Total	**0.2036**	**1.8606**	**2.1072**	**3.4900e-003**		**0.0906**	**0.0906**		**0.0852**	**0.0852**	**0.0000**	**300.0980**	**300.0980**	**0.0713**	**0.0000**	**301.5949**

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	0.7688	4.0289	10.6014	0.0247	0.6841	0.0879	0.7719	0.1957	0.0808	0.2765	0.0000	2,095.0542	2,095.0542	0.0149	0.0000	2,095.3666
Worker	1.2301	1.5637	14.6952	0.0566	4.5974	0.0344	4.6318	1.2217	0.0319	1.2536	0.0000	3,491.9727	3,491.9727	0.1550	0.0000	3,495.2266
Total	**1.9988**	**5.5927**	**25.2966**	**0.0813**	**5.2815**	**0.1223**	**5.4037**	**1.4174**	**0.1128**	**1.5301**	**0.0000**	**5,587.0269**	**5,587.0269**	**0.1698**	**0.0000**	**5,590.5932**

3.4 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	0.2036	1.8606	2.1072	3.4900e-003		0.0906	0.0906		0.0852	0.0852	0.0000	300.0976	300.0976	0.0713	0.0000	301.5946
Total	**0.2036**	**1.8606**	**2.1072**	**3.4900e-003**		**0.0906**	**0.0906**		**0.0852**	**0.0852**	**0.0000**	**300.0976**	**300.0976**	**0.0713**	**0.0000**	**301.5946**

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	0.7688	4.0289	10.6014	0.0247	0.6841	0.0879	0.7719	0.1957	0.0808	0.2765	0.0000	2,095.0542	2,095.0542	0.0149	0.0000	2,095.3666
Worker	1.2301	1.5637	14.6952	0.0566	4.5974	0.0344	4.6318	1.2217	0.0319	1.2536	0.0000	3,491.9727	3,491.9727	0.1550	0.0000	3,495.2266
Total	**1.9988**	**5.5927**	**25.2966**	**0.0813**	**5.2815**	**0.1223**	**5.4037**	**1.4174**	**0.1128**	**1.5301**	**0.0000**	**5,587.0269**	**5,587.0269**	**0.1698**	**0.0000**	**5,590.5932**

3.4 Building Construction - 2024

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	0.1920	1.7524	2.1135	3.5200e-003		0.0800	0.0800		0.0752	0.0752	0.0000	302.4646	302.4646	0.0714	0.0000	303.9643
Total	**0.1920**	**1.7524**	**2.1135**	**3.5200e-003**		**0.0800**	**0.0800**		**0.0752**	**0.0752**	**0.0000**	**302.4646**	**302.4646**	**0.0714**	**0.0000**	**303.9643**

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	0.7298	4.0031	10.1060	0.0249	0.6893	0.0889	0.7782	0.1972	0.0818	0.2790	0.0000	2,111.0340	2,111.0340	0.0150	0.0000	2,111.3498
Worker	1.1853	1.5005	14.1027	0.0571	4.6328	0.0350	4.6677	1.2311	0.0324	1.2635	0.0000	3,470.8519	3,470.8519	0.1510	0.0000	3,474.0218
Total	**1.9151**	**5.5036**	**24.2086**	**0.0819**	**5.3221**	**0.1238**	**5.4459**	**1.4283**	**0.1142**	**1.5425**	**0.0000**	**5,581.8859**	**5,581.8859**	**0.1660**	**0.0000**	**5,585.3716**

3.4 Building Construction - 2024

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	0.1920	1.7524	2.1135	3.5200e-003		0.0800	0.0800		0.0752	0.0752	0.0000	302.4642	302.4642	0.0714	0.0000	303.9639
Total	**0.1920**	**1.7524**	**2.1135**	**3.5200e-003**		**0.0800**	**0.0800**		**0.0752**	**0.0752**	**0.0000**	**302.4642**	**302.4642**	**0.0714**	**0.0000**	**303.9639**

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	0.7298	4.0031	10.1060	0.0249	0.6893	0.0889	0.7782	0.1972	0.0818	0.2790	0.0000	2,111.0340	2,111.0340	0.0150	0.0000	2,111.3498
Worker	1.1853	1.5005	14.1027	0.0571	4.6328	0.0350	4.6677	1.2311	0.0324	1.2635	0.0000	3,470.8519	3,470.8519	0.1510	0.0000	3,474.0218
Total	**1.9151**	**5.5036**	**24.2086**	**0.0819**	**5.3221**	**0.1238**	**5.4459**	**1.4283**	**0.1142**	**1.5425**	**0.0000**	**5,581.8859**	**5,581.8859**	**0.1660**	**0.0000**	**5,585.3716**

3.4 Building Construction - 2025

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	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4019	301.4019	0.0707	0.0000	302.8874
Total	**0.1777**	**1.6195**	**2.0948**	**3.5000e-003**		**0.0685**	**0.0685**		**0.0645**	**0.0645**	**0.0000**	**301.4019**	**301.4019**	**0.0707**	**0.0000**	**302.8874**

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	0.7069	3.9462	9.8019	0.0248	0.6868	0.0888	0.7756	0.1965	0.0817	0.2782	0.0000	2,103.1550	2,103.1550	0.0150	0.0000	2,103.4705
Worker	1.1352	1.4326	13.4668	0.0568	4.6151	0.0352	4.6502	1.2264	0.0326	1.2590	0.0000	3,416.0537	3,416.0537	0.1461	0.0000	3,419.1218
Total	**1.8421**	**5.3788**	**23.2687**	**0.0816**	**5.3018**	**0.1240**	**5.4258**	**1.4228**	**0.1143**	**1.5372**	**0.0000**	**5,519.2087**	**5,519.2087**	**0.1611**	**0.0000**	**5,522.5923**

3.4 Building Construction - 2025

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	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4015	301.4015	0.0707	0.0000	302.8871
Total	**0.1777**	**1.6195**	**2.0948**	**3.5000e-003**		**0.0685**	**0.0685**		**0.0645**	**0.0645**	**0.0000**	**301.4015**	**301.4015**	**0.0707**	**0.0000**	**302.8871**

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	0.7069	3.9462	9.8019	0.0248	0.6868	0.0888	0.7756	0.1965	0.0817	0.2782	0.0000	2,103.1550	2,103.1550	0.0150	0.0000	2,103.4705
Worker	1.1352	1.4326	13.4668	0.0568	4.6151	0.0352	4.6502	1.2264	0.0326	1.2590	0.0000	3,416.0537	3,416.0537	0.1461	0.0000	3,419.1218
Total	**1.8421**	**5.3788**	**23.2687**	**0.0816**	**5.3018**	**0.1240**	**5.4258**	**1.4228**	**0.1143**	**1.5372**	**0.0000**	**5,519.2087**	**5,519.2087**	**0.1611**	**0.0000**	**5,522.5923**

3.4 Building Construction - 2026

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	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4019	301.4019	0.0707	0.0000	302.8874
Total	**0.1777**	**1.6195**	**2.0948**	**3.5000e-003**		**0.0685**	**0.0685**		**0.0645**	**0.0645**	**0.0000**	**301.4019**	**301.4019**	**0.0707**	**0.0000**	**302.8874**

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	0.6900	3.8832	9.6154	0.0248	0.6868	0.0878	0.7746	0.1965	0.0808	0.2773	0.0000	2,103.3335	2,103.3335	0.0149	0.0000	2,103.6466
Worker	1.0978	1.3841	13.0190	0.0568	4.6151	0.0355	4.6506	1.2264	0.0330	1.2593	0.0000	3,380.2153	3,380.2153	0.1427	0.0000	3,383.2126
Total	**1.7878**	**5.2673**	**22.6343**	**0.0816**	**5.3019**	**0.1234**	**5.4252**	**1.4229**	**0.1138**	**1.5366**	**0.0000**	**5,483.5488**	**5,483.5488**	**0.1576**	**0.0000**	**5,486.8592**

3.4 Building Construction - 2026

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	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4015	301.4015	0.0707	0.0000	302.8871
Total	**0.1777**	**1.6195**	**2.0948**	**3.5000e-003**		**0.0685**	**0.0685**		**0.0645**	**0.0645**	**0.0000**	**301.4015**	**301.4015**	**0.0707**	**0.0000**	**302.8871**

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	0.6900	3.8832	9.6154	0.0248	0.6868	0.0878	0.7746	0.1965	0.0808	0.2773	0.0000	2,103.3335	2,103.3335	0.0149	0.0000	2,103.6466
Worker	1.0978	1.3841	13.0190	0.0568	4.6151	0.0355	4.6506	1.2264	0.0330	1.2593	0.0000	3,380.2153	3,380.2153	0.1427	0.0000	3,383.2126
Total	**1.7878**	**5.2673**	**22.6343**	**0.0816**	**5.3019**	**0.1234**	**5.4252**	**1.4229**	**0.1138**	**1.5366**	**0.0000**	**5,483.5488**	**5,483.5488**	**0.1576**	**0.0000**	**5,486.8592**

3.4 Building Construction - 2027

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	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4019	301.4019	0.0707	0.0000	302.8874
Total	**0.1777**	**1.6195**	**2.0948**	**3.5000e-003**		**0.0685**	**0.0685**		**0.0645**	**0.0645**	**0.0000**	**301.4019**	**301.4019**	**0.0707**	**0.0000**	**302.8874**

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	0.6732	3.8442	9.3481	0.0248	0.6869	0.0879	0.7748	0.1965	0.0809	0.2774	0.0000	2,103.5876	2,103.5876	0.0149	0.0000	2,103.9012
Worker	1.0633	1.3425	12.6240	0.0568	4.6151	0.0359	4.6509	1.2264	0.0333	1.2596	0.0000	3,349.3567	3,349.3567	0.1398	0.0000	3,352.2916
Total	**1.7365**	**5.1867**	**21.9720**	**0.0816**	**5.3020**	**0.1238**	**5.4258**	**1.4229**	**0.1142**	**1.5371**	**0.0000**	**5,452.9443**	**5,452.9443**	**0.1547**	**0.0000**	**5,456.1929**

3.4 Building Construction - 2027

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	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4015	301.4015	0.0707	0.0000	302.8871
Total	**0.1777**	**1.6195**	**2.0948**	**3.5000e-003**		**0.0685**	**0.0685**		**0.0645**	**0.0645**	**0.0000**	**301.4015**	**301.4015**	**0.0707**	**0.0000**	**302.8871**

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	0.6732	3.8442	9.3481	0.0248	0.6869	0.0879	0.7748	0.1965	0.0809	0.2774	0.0000	2,103.5876	2,103.5876	0.0149	0.0000	2,103.9012
Worker	1.0633	1.3425	12.6240	0.0568	4.6151	0.0359	4.6509	1.2264	0.0333	1.2596	0.0000	3,349.3567	3,349.3567	0.1398	0.0000	3,352.2916
Total	**1.7365**	**5.1867**	**21.9720**	**0.0816**	**5.3020**	**0.1238**	**5.4258**	**1.4229**	**0.1142**	**1.5371**	**0.0000**	**5,452.9443**	**5,452.9443**	**0.1547**	**0.0000**	**5,456.1929**

3.4 Building Construction - 2028

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	0.1770	1.6133	2.0867	3.4900e-003		0.0683	0.0683		0.0642	0.0642	0.0000	300.2471	300.2471	0.0705	0.0000	301.7269
Total	**0.1770**	**1.6133**	**2.0867**	**3.4900e-003**		**0.0683**	**0.0683**		**0.0642**	**0.0642**	**0.0000**	**300.2471**	**300.2471**	**0.0705**	**0.0000**	**301.7269**

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	0.6636	3.7975	9.2420	0.0247	0.6843	0.0875	0.7718	0.1958	0.0805	0.2763	0.0000	2,095.8256	2,095.8256	0.0149	0.0000	2,096.1378
Worker	1.0258	1.2972	12.2192	0.0566	4.5974	0.0360	4.6334	1.2217	0.0334	1.2551	0.0000	3,310.3518	3,310.3518	0.1365	0.0000	3,313.2177
Total	**1.6894**	**5.0947**	**21.4612**	**0.0813**	**5.2817**	**0.1235**	**5.4052**	**1.4175**	**0.1139**	**1.5313**	**0.0000**	**5,406.1774**	**5,406.1774**	**0.1513**	**0.0000**	**5,409.3555**

3.4 Building Construction - 2028

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	0.1770	1.6133	2.0867	3.4900e-003		0.0683	0.0683		0.0642	0.0642	0.0000	300.2467	300.2467	0.0705	0.0000	301.7266
Total	**0.1770**	**1.6133**	**2.0867**	**3.4900e-003**		**0.0683**	**0.0683**		**0.0642**	**0.0642**	**0.0000**	**300.2467**	**300.2467**	**0.0705**	**0.0000**	**301.7266**

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	0.6636	3.7975	9.2420	0.0247	0.6843	0.0875	0.7718	0.1958	0.0805	0.2763	0.0000	2,095.8256	2,095.8256	0.0149	0.0000	2,096.1378
Worker	1.0258	1.2972	12.2192	0.0566	4.5974	0.0360	4.6334	1.2217	0.0334	1.2551	0.0000	3,310.3518	3,310.3518	0.1365	0.0000	3,313.2177
Total	**1.6894**	**5.0947**	**21.4612**	**0.0813**	**5.2817**	**0.1235**	**5.4052**	**1.4175**	**0.1139**	**1.5313**	**0.0000**	**5,406.1774**	**5,406.1774**	**0.1513**	**0.0000**	**5,409.3555**

3.4 Building Construction - 2029

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	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4019	301.4019	0.0707	0.0000	302.8874
Total	**0.1777**	**1.6195**	**2.0948**	**3.5000e-003**		**0.0685**	**0.0685**		**0.0645**	**0.0645**	**0.0000**	**301.4019**	**301.4019**	**0.0707**	**0.0000**	**302.8874**

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	0.6555	3.7869	9.1410	0.0248	0.6870	0.0878	0.7748	0.1966	0.0808	0.2773	0.0000	2,104.1183	2,104.1183	0.0149	0.0000	2,104.4319
Worker	0.9967	1.2626	11.9226	0.0568	4.6151	0.0364	4.6515	1.2264	0.0338	1.2601	0.0000	3,300.6874	3,300.6874	0.1344	0.0000	3,303.5088
Total	**1.6522**	**5.0494**	**21.0636**	**0.0816**	**5.3021**	**0.1242**	**5.4262**	**1.4229**	**0.1145**	**1.5375**	**0.0000**	**5,404.8058**	**5,404.8058**	**0.1493**	**0.0000**	**5,407.9406**

3.4 Building Construction - 2029

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	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4015	301.4015	0.0707	0.0000	302.8871
Total	**0.1777**	**1.6195**	**2.0948**	**3.5000e-003**		**0.0685**	**0.0685**		**0.0645**	**0.0645**	**0.0000**	**301.4015**	**301.4015**	**0.0707**	**0.0000**	**302.8871**

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	0.6555	3.7869	9.1410	0.0248	0.6870	0.0878	0.7748	0.1966	0.0808	0.2773	0.0000	2,104.1183	2,104.1183	0.0149	0.0000	2,104.4319
Worker	0.9967	1.2626	11.9226	0.0568	4.6151	0.0364	4.6515	1.2264	0.0338	1.2601	0.0000	3,300.6874	3,300.6874	0.1344	0.0000	3,303.5088
Total	**1.6522**	**5.0494**	**21.0636**	**0.0816**	**5.3021**	**0.1242**	**5.4262**	**1.4229**	**0.1145**	**1.5375**	**0.0000**	**5,404.8058**	**5,404.8058**	**0.1493**	**0.0000**	**5,407.9406**

3.4 Building Construction - 2030

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	0.1702	1.0333	2.1051	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.5281	341.5281	0.0137	0.0000	341.8160
Total	**0.1702**	**1.0333**	**2.1051**	**4.0200e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**341.5281**	**341.5281**	**0.0137**	**0.0000**	**341.8160**

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	0.6482	3.7670	9.0799	0.0248	0.6871	0.0878	0.7749	0.1966	0.0808	0.2774	0.0000	2,104.3581	2,104.3581	0.0149	0.0000	2,104.6718
Worker	0.9656	1.2274	11.6164	0.0568	4.6151	0.0366	4.6516	1.2264	0.0339	1.2603	0.0000	3,281.6717	3,281.6717	0.1319	0.0000	3,284.4420
Total	**1.6138**	**4.9944**	**20.6963**	**0.0816**	**5.3021**	**0.1244**	**5.4265**	**1.4230**	**0.1147**	**1.5376**	**0.0000**	**5,386.0298**	**5,386.0298**	**0.1469**	**0.0000**	**5,389.1138**

3.4 Building Construction - 2030

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	0.1702	1.0333	2.1051	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.5277	341.5277	0.0137	0.0000	341.8156
Total	**0.1702**	**1.0333**	**2.1051**	**4.0200e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**341.5277**	**341.5277**	**0.0137**	**0.0000**	**341.8156**

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	0.6482	3.7670	9.0799	0.0248	0.6871	0.0878	0.7749	0.1966	0.0808	0.2774	0.0000	2,104.3581	2,104.3581	0.0149	0.0000	2,104.6718
Worker	0.9656	1.2274	11.6164	0.0568	4.6151	0.0366	4.6516	1.2264	0.0339	1.2603	0.0000	3,281.6717	3,281.6717	0.1319	0.0000	3,284.4420
Total	**1.6138**	**4.9944**	**20.6963**	**0.0816**	**5.3021**	**0.1244**	**5.4265**	**1.4230**	**0.1147**	**1.5376**	**0.0000**	**5,386.0298**	**5,386.0298**	**0.1469**	**0.0000**	**5,389.1138**

3.4 Building Construction - 2031

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	0.1702	1.0333	2.1051	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.5281	341.5281	0.0137	0.0000	341.8160
Total	**0.1702**	**1.0333**	**2.1051**	**4.0200e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**341.5281**	**341.5281**	**0.0137**	**0.0000**	**341.8160**

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	0.6422	3.7520	9.0421	0.0248	0.6870	0.0878	0.7748	0.1966	0.0808	0.2774	0.0000	2,104.2454	2,104.2454	0.0150	0.0000	2,104.5592
Worker	0.9390	1.1966	11.3726	0.0568	4.6151	0.0367	4.6517	1.2264	0.0340	1.2604	0.0000	3,265.7059	3,265.7059	0.1299	0.0000	3,268.4332
Total	**1.5812**	**4.9486**	**20.4147**	**0.0816**	**5.3021**	**0.1245**	**5.4265**	**1.4229**	**0.1148**	**1.5377**	**0.0000**	**5,369.9513**	**5,369.9513**	**0.1448**	**0.0000**	**5,372.9924**

3.4 Building Construction - 2031

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	0.1702	1.0333	2.1051	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.5277	341.5277	0.0137	0.0000	341.8156
Total	**0.1702**	**1.0333**	**2.1051**	**4.0200e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**341.5277**	**341.5277**	**0.0137**	**0.0000**	**341.8156**

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	0.6422	3.7520	9.0421	0.0248	0.6870	0.0878	0.7748	0.1966	0.0808	0.2774	0.0000	2,104.2454	2,104.2454	0.0150	0.0000	2,104.5592
Worker	0.9390	1.1966	11.3726	0.0568	4.6151	0.0367	4.6517	1.2264	0.0340	1.2604	0.0000	3,265.7059	3,265.7059	0.1299	0.0000	3,268.4332
Total	**1.5812**	**4.9486**	**20.4147**	**0.0816**	**5.3021**	**0.1245**	**5.4265**	**1.4229**	**0.1148**	**1.5377**	**0.0000**	**5,369.9513**	**5,369.9513**	**0.1448**	**0.0000**	**5,372.9924**

3.4 Building Construction - 2032

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	0.1708	1.0372	2.1132	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	342.8367	342.8367	0.0138	0.0000	343.1257
Total	**0.1708**	**1.0372**	**2.1132**	**4.0400e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**342.8367**	**342.8367**	**0.0138**	**0.0000**	**343.1257**

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	0.6389	3.7539	9.0465	0.0249	0.6896	0.0882	0.7778	0.1973	0.0811	0.2784	0.0000	2,112.2145	2,112.2145	0.0150	0.0000	2,112.5297
Worker	0.9181	1.1753	11.1994	0.0571	4.6328	0.0369	4.6696	1.2311	0.0342	1.2653	0.0000	3,264.8425	3,264.8425	0.1286	0.0000	3,267.5423
Total	**1.5570**	**4.9292**	**20.2460**	**0.0819**	**5.3223**	**0.1250**	**5.4474**	**1.4284**	**0.1153**	**1.5437**	**0.0000**	**5,377.0570**	**5,377.0570**	**0.1436**	**0.0000**	**5,380.0719**

3.4 Building Construction - 2032

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	0.1708	1.0372	2.1132	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	342.8363	342.8363	0.0138	0.0000	343.1252
Total	**0.1708**	**1.0372**	**2.1132**	**4.0400e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**342.8363**	**342.8363**	**0.0138**	**0.0000**	**343.1252**

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	0.6389	3.7539	9.0465	0.0249	0.6896	0.0882	0.7778	0.1973	0.0811	0.2784	0.0000	2,112.2145	2,112.2145	0.0150	0.0000	2,112.5297
Worker	0.9181	1.1753	11.1994	0.0571	4.6328	0.0369	4.6696	1.2311	0.0342	1.2653	0.0000	3,264.8425	3,264.8425	0.1286	0.0000	3,267.5423
Total	**1.5570**	**4.9292**	**20.2460**	**0.0819**	**5.3223**	**0.1250**	**5.4474**	**1.4284**	**0.1153**	**1.5437**	**0.0000**	**5,377.0570**	**5,377.0570**	**0.1436**	**0.0000**	**5,380.0719**

3.4 Building Construction - 2033

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	0.1695	1.0293	2.0971	4.0100e-003		0.0192	0.0192		0.0192	0.0192	0.0000	340.2196	340.2196	0.0137	0.0000	340.5064
Total	**0.1695**	**1.0293**	**2.0971**	**4.0100e-003**		**0.0192**	**0.0192**		**0.0192**	**0.0192**	**0.0000**	**340.2196**	**340.2196**	**0.0137**	**0.0000**	**340.5064**

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	0.6269	3.7104	8.9529	0.0247	0.6843	0.0875	0.7717	0.1958	0.0805	0.2763	0.0000	2,095.8655	2,095.8655	0.0149	0.0000	2,096.1783
Worker	0.8867	1.1421	10.9235	0.0566	4.5974	0.0366	4.6340	1.2217	0.0340	1.2556	0.0000	3,228.8970	3,228.8970	0.1259	0.0000	3,231.5409
Total	**1.5136**	**4.8525**	**19.8764**	**0.0813**	**5.2816**	**0.1241**	**5.4057**	**1.4174**	**0.1145**	**1.5319**	**0.0000**	**5,324.7625**	**5,324.7625**	**0.1408**	**0.0000**	**5,327.7192**

3.4 Building Construction - 2033

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	0.1695	1.0293	2.0971	4.0100e-003		0.0192	0.0192		0.0192	0.0192	0.0000	340.2192	340.2192	0.0137	0.0000	340.5060
Total	**0.1695**	**1.0293**	**2.0971**	**4.0100e-003**		**0.0192**	**0.0192**		**0.0192**	**0.0192**	**0.0000**	**340.2192**	**340.2192**	**0.0137**	**0.0000**	**340.5060**

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	0.6269	3.7104	8.9529	0.0247	0.6843	0.0875	0.7717	0.1958	0.0805	0.2763	0.0000	2,095.8655	2,095.8655	0.0149	0.0000	2,096.1783
Worker	0.8867	1.1421	10.9235	0.0566	4.5974	0.0366	4.6340	1.2217	0.0340	1.2556	0.0000	3,228.8970	3,228.8970	0.1259	0.0000	3,231.5409
Total	**1.5136**	**4.8525**	**19.8764**	**0.0813**	**5.2816**	**0.1241**	**5.4057**	**1.4174**	**0.1145**	**1.5319**	**0.0000**	**5,324.7625**	**5,324.7625**	**0.1408**	**0.0000**	**5,327.7192**

3.4 Building Construction - 2034

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	0.1695	1.0293	2.0971	4.0100e-003		0.0192	0.0192		0.0192	0.0192	0.0000	340.2196	340.2196	0.0137	0.0000	340.5064
Total	**0.1695**	**1.0293**	**2.0971**	**4.0100e-003**		**0.0192**	**0.0192**		**0.0192**	**0.0192**	**0.0000**	**340.2196**	**340.2196**	**0.0137**	**0.0000**	**340.5064**

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	0.6212	3.7003	8.9325	0.0247	0.6842	0.0875	0.7716	0.1957	0.0805	0.2762	0.0000	2,095.6843	2,095.6843	0.0149	0.0000	2,095.9970
Worker	0.8624	1.1221	10.7294	0.0566	4.5974	0.0366	4.6340	1.2217	0.0340	1.2556	0.0000	3,219.6062	3,219.6062	0.1243	0.0000	3,222.2167
Total	**1.4837**	**4.8224**	**19.6619**	**0.0813**	**5.2816**	**0.1241**	**5.4056**	**1.4174**	**0.1144**	**1.5318**	**0.0000**	**5,315.2905**	**5,315.2905**	**0.1392**	**0.0000**	**5,318.2137**

3.4 Building Construction - 2034

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	0.1695	1.0293	2.0971	4.0100e-003		0.0192	0.0192		0.0192	0.0192	0.0000	340.2192	340.2192	0.0137	0.0000	340.5060
Total	**0.1695**	**1.0293**	**2.0971**	**4.0100e-003**		**0.0192**	**0.0192**		**0.0192**	**0.0192**	**0.0000**	**340.2192**	**340.2192**	**0.0137**	**0.0000**	**340.5060**

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	0.6212	3.7003	8.9325	0.0247	0.6842	0.0875	0.7716	0.1957	0.0805	0.2762	0.0000	2,095.6843	2,095.6843	0.0149	0.0000	2,095.9970
Worker	0.8624	1.1221	10.7294	0.0566	4.5974	0.0366	4.6340	1.2217	0.0340	1.2556	0.0000	3,219.6062	3,219.6062	0.1243	0.0000	3,222.2167
Total	**1.4837**	**4.8224**	**19.6619**	**0.0813**	**5.2816**	**0.1241**	**5.4056**	**1.4174**	**0.1144**	**1.5318**	**0.0000**	**5,315.2905**	**5,315.2905**	**0.1392**	**0.0000**	**5,318.2137**

3.4 Building Construction - 2035

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	0.1582	0.9332	2.1000	4.0200e-003		0.0118	0.0118		0.0118	0.0118	0.0000	341.5281	341.5281	0.0127	0.0000	341.7954
Total	**0.1582**	**0.9332**	**2.1000**	**4.0200e-003**		**0.0118**	**0.0118**		**0.0118**	**0.0118**	**0.0000**	**341.5281**	**341.5281**	**0.0127**	**0.0000**	**341.7954**

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	0.6195	3.7071	8.9513	0.0248	0.6868	0.0878	0.7745	0.1965	0.0808	0.2772	0.0000	2,103.5794	2,103.5794	0.0150	0.0000	2,103.8933
Worker	0.8440	1.1101	10.6151	0.0568	4.6151	0.0367	4.6518	1.2264	0.0341	1.2604	0.0000	3,224.3044	3,224.3044	0.1234	0.0000	3,226.8955
Total	**1.4634**	**4.8172**	**19.5664**	**0.0816**	**5.3018**	**0.1245**	**5.4263**	**1.4228**	**0.1148**	**1.5377**	**0.0000**	**5,327.8837**	**5,327.8837**	**0.1383**	**0.0000**	**5,330.7887**

3.4 Building Construction - 2035

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	0.1582	0.9332	2.1000	4.0200e-003		0.0118	0.0118		0.0118	0.0118	0.0000	341.5277	341.5277	0.0127	0.0000	341.7950
Total	**0.1582**	**0.9332**	**2.1000**	**4.0200e-003**		**0.0118**	**0.0118**		**0.0118**	**0.0118**	**0.0000**	**341.5277**	**341.5277**	**0.0127**	**0.0000**	**341.7950**

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	0.6195	3.7071	8.9513	0.0248	0.6868	0.0878	0.7745	0.1965	0.0808	0.2772	0.0000	2,103.5794	2,103.5794	0.0150	0.0000	2,103.8933
Worker	0.8440	1.1101	10.6151	0.0568	4.6151	0.0367	4.6518	1.2264	0.0341	1.2604	0.0000	3,224.3044	3,224.3044	0.1234	0.0000	3,226.8955
Total	**1.4634**	**4.8172**	**19.5664**	**0.0816**	**5.3018**	**0.1245**	**5.4263**	**1.4228**	**0.1148**	**1.5377**	**0.0000**	**5,327.8837**	**5,327.8837**	**0.1383**	**0.0000**	**5,330.7887**

3.4 Building Construction - 2036

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	0.1588	0.9368	2.1081	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	342.8367	342.8367	0.0128	0.0000	343.1050
Total	**0.1588**	**0.9368**	**2.1081**	**4.0400e-003**		**0.0118**	**0.0118**		**0.0118**	**0.0118**	**0.0000**	**342.8367**	**342.8367**	**0.0128**	**0.0000**	**343.1050**

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
Vendor					0.4974	0.0000	0.4974	0.1221	0.0000	0.1221	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					4.0115	0.0000	4.0115	0.9846	0.0000	0.9846	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**4.5089**	**0.0000**	**4.5089**	**1.1067**	**0.0000**	**1.1067**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Building Construction - 2036

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	0.1588	0.9368	2.1081	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	342.8363	342.8363	0.0128	0.0000	343.1046
Total	**0.1588**	**0.9368**	**2.1081**	**4.0400e-003**		**0.0118**	**0.0118**		**0.0118**	**0.0118**	**0.0000**	**342.8363**	**342.8363**	**0.0128**	**0.0000**	**343.1046**

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
Vendor					0.4974	0.0000	0.4974	0.1221	0.0000	0.1221	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					4.0115	0.0000	4.0115	0.9846	0.0000	0.9846	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**4.5089**	**0.0000**	**4.5089**	**1.1067**	**0.0000**	**1.1067**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Building Construction - 2037

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	0.0467	0.2753	0.6196	1.1900e-003		3.4700e-003	3.4700e-003		3.4700e-003	3.4700e-003	0.0000	100.7573	100.7573	3.7600e-003	0.0000	100.8362
Total	**0.0467**	**0.2753**	**0.6196**	**1.1900e-003**		**3.4700e-003**	**3.4700e-003**		**3.4700e-003**	**3.4700e-003**	**0.0000**	**100.7573**	**100.7573**	**3.7600e-003**	**0.0000**	**100.8362**

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
Vendor					0.1462	0.0000	0.1462	0.0359	0.0000	0.0359	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					1.1790	0.0000	1.1790	0.2894	0.0000	0.2894	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**1.3251**	**0.0000**	**1.3251**	**0.3253**	**0.0000**	**0.3253**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Building Construction - 2037

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	0.0467	0.2753	0.6196	1.1900e-003		3.4700e-003	3.4700e-003		3.4700e-003	3.4700e-003	0.0000	100.7572	100.7572	3.7600e-003	0.0000	100.8361
Total	**0.0467**	**0.2753**	**0.6196**	**1.1900e-003**		**3.4700e-003**	**3.4700e-003**		**3.4700e-003**	**3.4700e-003**	**0.0000**	**100.7572**	**100.7572**	**3.7600e-003**	**0.0000**	**100.8361**

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
Vendor					0.1462	0.0000	0.1462	0.0359	0.0000	0.0359	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					1.1790	0.0000	1.1790	0.2894	0.0000	0.2894	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**1.3251**	**0.0000**	**1.3251**	**0.3253**	**0.0000**	**0.3253**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Paving - 2037

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	0.1027	0.4406	1.4251	2.5300e-003		0.0169	0.0169		0.0169	0.0169	0.0000	216.9975	216.9975	8.3500e-003	0.0000	217.1729
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1027**	**0.4406**	**1.4251**	**2.5300e-003**		**0.0169**	**0.0169**		**0.0169**	**0.0169**	**0.0000**	**216.9975**	**216.9975**	**8.3500e-003**	**0.0000**	**217.1729**

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
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
Worker					9.5800e-003	0.0000	9.5800e-003	2.3500e-003	0.0000	2.3500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**9.5800e-003**	**0.0000**	**9.5800e-003**	**2.3500e-003**	**0.0000**	**2.3500e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Paving - 2037

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	0.1027	0.4406	1.4251	2.5300e-003		0.0169	0.0169		0.0169	0.0169	0.0000	216.9972	216.9972	8.3500e-003	0.0000	217.1726
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1027**	**0.4406**	**1.4251**	**2.5300e-003**		**0.0169**	**0.0169**		**0.0169**	**0.0169**	**0.0000**	**216.9972**	**216.9972**	**8.3500e-003**	**0.0000**	**217.1726**

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
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
Worker					9.5800e-003	0.0000	9.5800e-003	2.3500e-003	0.0000	2.3500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**9.5800e-003**	**0.0000**	**9.5800e-003**	**2.3500e-003**	**0.0000**	**2.3500e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Paving - 2038

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	0.0815	0.3496	1.1308	2.0000e-003		0.0134	0.0134		0.0134	0.0134	0.0000	172.1828	172.1828	6.6300e-003	0.0000	172.3220
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0815**	**0.3496**	**1.1308**	**2.0000e-003**		**0.0134**	**0.0134**		**0.0134**	**0.0134**	**0.0000**	**172.1828**	**172.1828**	**6.6300e-003**	**0.0000**	**172.3220**

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
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
Worker					7.6000e-003	0.0000	7.6000e-003	1.8700e-003	0.0000	1.8700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**7.6000e-003**	**0.0000**	**7.6000e-003**	**1.8700e-003**	**0.0000**	**1.8700e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Paving - 2038

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	0.0815	0.3496	1.1308	2.0000e-003		0.0134	0.0134		0.0134	0.0134	0.0000	172.1826	172.1826	6.6300e-003	0.0000	172.3217
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0815**	**0.3496**	**1.1308**	**2.0000e-003**		**0.0134**	**0.0134**		**0.0134**	**0.0134**	**0.0000**	**172.1826**	**172.1826**	**6.6300e-003**	**0.0000**	**172.3217**

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
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
Worker					7.6000e-003	0.0000	7.6000e-003	1.8700e-003	0.0000	1.8700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**7.6000e-003**	**0.0000**	**7.6000e-003**	**1.8700e-003**	**0.0000**	**1.8700e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Architectural Coating - 2038

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	20.8292					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7800e-003	0.0436	0.1032	1.7000e-004		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004	0.0000	14.6812	14.6812	5.4000e-004	0.0000	14.6926
Total	**20.8360**	**0.0436**	**0.1032**	**1.7000e-004**		**5.7000e-004**	**5.7000e-004**		**5.7000e-004**	**5.7000e-004**	**0.0000**	**14.6812**	**14.6812**	**5.4000e-004**	**0.0000**	**14.6926**

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
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
Worker					0.3522	0.0000	0.3522	0.0864	0.0000	0.0864	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**0.3522**	**0.0000**	**0.3522**	**0.0864**	**0.0000**	**0.0864**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Architectural Coating - 2038

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	20.8292					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7800e-003	0.0436	0.1032	1.7000e-004		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004	0.0000	14.6812	14.6812	5.4000e-004	0.0000	14.6926
Total	**20.8360**	**0.0436**	**0.1032**	**1.7000e-004**		**5.7000e-004**	**5.7000e-004**		**5.7000e-004**	**5.7000e-004**	**0.0000**	**14.6812**	**14.6812**	**5.4000e-004**	**0.0000**	**14.6926**

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
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
Worker					0.3522	0.0000	0.3522	0.0864	0.0000	0.0864	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**0.3522**	**0.0000**	**0.3522**	**0.0864**	**0.0000**	**0.0864**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Architectural Coating - 2039

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	38.9416					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.0815	0.1929	3.2000e-004		1.0600e-003	1.0600e-003		1.0600e-003	1.0600e-003	0.0000	27.4475	27.4475	1.0100e-003	0.0000	27.4688
Total	**38.9543**	**0.0815**	**0.1929**	**3.2000e-004**		**1.0600e-003**	**1.0600e-003**		**1.0600e-003**	**1.0600e-003**	**0.0000**	**27.4475**	**27.4475**	**1.0100e-003**	**0.0000**	**27.4688**

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
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
Worker					0.6584	0.0000	0.6584	0.1616	0.0000	0.1616	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**0.6584**	**0.0000**	**0.6584**	**0.1616**	**0.0000**	**0.1616**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Architectural Coating - 2039

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	38.9416					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.0815	0.1929	3.2000e-004		1.0600e-003	1.0600e-003		1.0600e-003	1.0600e-003	0.0000	27.4475	27.4475	1.0100e-003	0.0000	27.4687
Total	**38.9543**	**0.0815**	**0.1929**	**3.2000e-004**		**1.0600e-003**	**1.0600e-003**		**1.0600e-003**	**1.0600e-003**	**0.0000**	**27.4475**	**27.4475**	**1.0100e-003**	**0.0000**	**27.4687**

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
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
Worker					0.6584	0.0000	0.6584	0.1616	0.0000	0.1616	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**0.6584**	**0.0000**	**0.6584**	**0.1616**	**0.0000**	**0.1616**	**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	25.2544	54.8989	258.2545	0.7058	48.5575	0.8105	49.3680	12.9867	0.7479	13.7346	0.0000	48,993.6960	48,993.6960	1.8957	0.0000	49,033.5064
Unmitigated	25.2544	54.8989	258.2545	0.7058	48.5575	0.8105	49.3680	12.9867	0.7479	13.7346	0.0000	48,993.6960	48,993.6960	1.8957	0.0000	49,033.5064

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	41,968.00	41,968.00	41968.00	119,831,371	119,831,371
City Park	1,461.25	1,461.25	1461.25	3,119,558	3,119,558
Elementary School	1,782.00	0.00	0.00	2,806,572	2,806,572
Strip Mall	2,192.86	2,192.86	2192.86	3,377,080	3,377,080
Total	47,404.11	45,622.11	45,622.11	129,134,582	129,134,582

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513300	0.073549	0.191092	0.130830	0.036094	0.005140	0.012550	0.022916	0.001871	0.002062	0.006564	0.000586	0.003446

5.0 Energy Detail

4.4 Fleet Mix

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	6,221.8179	6,221.8179	0.2504	0.0518	6,243.1390
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6,221.8179	6,221.8179	0.2504	0.0518	6,243.1390
NaturalGas Mitigated	0.1580	1.3518	0.5862	8.6200e-003		0.1092	0.1092		0.1092	0.1092	0.0000	1,563.6891	1,563.6891	0.0300	0.0287	1,573.2055
NaturalGas Unmitigated	0.1580	1.3518	0.5862	8.6200e-003		0.1092	0.1092		0.1092	0.1092	0.0000	1,563.6891	1,563.6891	0.0300	0.0287	1,573.2055

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					
City Park	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
Elementary School	466507	2.5200e-003	0.0229	0.0192	1.4000e-004		1.7400e-003	1.7400e-003		1.7400e-003	1.7400e-003	0.0000	24.8946	24.8946	4.8000e-004	4.6000e-004	25.0461
Strip Mall	74883	4.0000e-004	3.6700e-003	3.0800e-003	2.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	3.9960	3.9960	8.0000e-005	7.0000e-005	4.0204
Apartments Mid Rise	2.8761e+007	0.1551	1.3253	0.5639	8.4600e-003		0.1072	0.1072		0.1072	0.1072	0.0000	1,534.7985	1,534.7985	0.0294	0.0281	1,544.1390
Total		**0.1580**	**1.3518**	**0.5862**	**8.6200e-003**		**0.1092**	**0.1092**		**0.1092**	**0.1092**	**0.0000**	**1,563.6891**	**1,563.6891**	**0.0300**	**0.0287**	**1,573.2055**

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					
Elementary School	466507	2.5200e-003	0.0229	0.0192	1.4000e-004		1.7400e-003	1.7400e-003		1.7400e-003	1.7400e-003	0.0000	24.8946	24.8946	4.8000e-004	4.6000e-004	25.0461
Strip Mall	74883	4.0000e-004	3.6700e-003	3.0800e-003	2.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	3.9960	3.9960	8.0000e-005	7.0000e-005	4.0204
Apartments Mid Rise	2.8761e+007	0.1551	1.3253	0.5639	8.4600e-003		0.1072	0.1072		0.1072	0.1072	0.0000	1,534.7985	1,534.7985	0.0294	0.0281	1,544.1390
City Park	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		**0.1580**	**1.3518**	**0.5862**	**8.6200e-003**		**0.1092**	**0.1092**		**0.1092**	**0.1092**	**0.0000**	**1,563.6891**	**1,563.6891**	**0.0300**	**0.0287**	**1,573.2055**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.81305e+007	5,925.2205	0.2385	0.0493	5,945.5252
City Park	0	0.0000	0.0000	0.0000	0.0000
Elementary School	448448	146.5569	5.9000e-003	1.2200e-003	147.0591
Strip Mall	459108	150.0405	6.0400e-003	1.2500e-003	150.5547
Total		**6,221.8179**	**0.2504**	**0.0518**	**6,243.1390**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.81305e+007	5,925.2205	0.2385	0.0493	5,945.5252
City Park	0	0.0000	0.0000	0.0000	0.0000
Elementary School	448448	146.5569	5.9000e-003	1.2200e-003	147.0591
Strip Mall	459108	150.0405	6.0400e-003	1.2500e-003	150.5547
Total		**6,221.8179**	**0.2504**	**0.0518**	**6,243.1390**

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	366.5485	4.9180	444.5884	0.1604		57.1849	57.1849		57.1832	57.1832	5,418.8961	2,336.2509	7,755.1470	5.0628	0.4262	7,993.6000
Unmitigated	366.5485	4.9180	444.5884	0.1604		57.1849	57.1849		57.1832	57.1832	5,418.8961	2,336.2509	7,755.1470	5.0628	0.4262	7,993.6000

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	9.7863					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	26.4048					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	329.1665	4.4659	405.4978	0.1584		56.9700	56.9700		56.9683	56.9683	5,418.8961	2,272.6060	7,691.5021	5.0007	0.4262	7,928.6512
Landscaping	1.1909	0.4521	39.0906	2.0600e-003		0.2149	0.2149		0.2149	0.2149	0.0000	63.6449	63.6449	0.0621	0.0000	64.9488
Total	**366.5485**	**4.9180**	**444.5884**	**0.1605**		**57.1849**	**57.1849**		**57.1832**	**57.1832**	**5,418.8961**	**2,336.2509**	**7,755.1470**	**5.0628**	**0.4262**	**7,993.6000**

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	9.7863					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	26.4048					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	329.1665	4.4659	405.4978	0.1584		56.9700	56.9700		56.9683	56.9683	5,418.8961	2,272.6060	7,691.5021	5.0007	0.4262	7,928.6512
Landscaping	1.1909	0.4521	39.0906	2.0600e-003		0.2149	0.2149		0.2149	0.2149	0.0000	63.6449	63.6449	0.0621	0.0000	64.9488
Total	**366.5485**	**4.9180**	**444.5884**	**0.1605**		**57.1849**	**57.1849**		**57.1832**	**57.1832**	**5,418.8961**	**2,336.2509**	**7,755.1470**	**5.0628**	**0.4262**	**7,993.6000**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1,984.5429	9.1064	0.2290	2,246.7702
Unmitigated	2,531.8412	11.3850	0.2867	2,859.8006

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	341.798 / 215.481	2,345.2957	11.2275	0.2816	2,668.3723
City Park	0 / 38.4848	139.7325	5.6200e-003	1.1600e-003	140.2114
Elementary School	2.18182 / 5.61038	30.3471	0.0723	1.9300e-003	32.4621
Strip Mall	2.42217 / 1.48456	16.4659	0.0796	1.9900e-003	18.7549
Total		**2,531.8412**	**11.3850**	**0.2867**	**2,859.8006**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	273.438 / 172.385	1,835.8505	8.9804	0.2250	2,094.1734
City Park	0 / 30.7879	111.7860	4.5000e-003	9.3000e-004	112.1691
Elementary School	1.74545 / 4.48831	24.0199	0.0578	1.5400e-003	25.7110
Strip Mall	1.93774 / 1.18765	12.8865	0.0636	1.5900e-003	14.7167
Total		**1,984.5429**	**9.1064**	**0.2290**	**2,246.7702**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	530.7260	31.3650	0.0000	1,189.3911
Unmitigated	530.7260	31.3650	0.0000	1,189.3911

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	2413.16	489.8497	28.9493	0.0000	1,097.7847
City Park	2.78	0.5643	0.0334	0.0000	1.2647
Elementary School	164.25	33.3413	1.9704	0.0000	74.7199
Strip Mall	34.34	6.9707	0.4120	0.0000	15.6218
Total		**530.7260**	**31.3650**	**0.0000**	**1,189.3911**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	2413.16	489.8497	28.9493	0.0000	1,097.7847
City Park	2.78	0.5643	0.0334	0.0000	1.2647
Elementary School	164.25	33.3413	1.9704	0.0000	74.7199
Strip Mall	34.34	6.9707	0.4120	0.0000	15.6218
Total		**530.7260**	**31.3650**	**0.0000**	**1,189.3911**

9.0 Operational Offroad

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

10.0 Vegetation

ATTACHMENT B

CALLEEMOD 2013.2.2 PROPOSED CVSP

Central Village Specific Plan (Proposed Specific Plan)

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	900.00	Student	13.10	75,243.03	0
City Park	16.10	Acre	16.10	701,316.00	0
Apartments Mid Rise	4,485.00	Dwelling Unit	150.00	4,485,000.00	12827
Strip Mall	139.70	1000sqft	50.00	139,700.00	0

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)	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 - Project Size

Construction Phase -

Off-road Equipment -

Grading - 229.2 acre site

Architectural Coating - 150 g/l

Vehicle Trips - Adjusted to meet Otay Community Plan Assumptions

Area Coating - 150 g/l

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	250
tblGrading	AcresOfGrading	1,162.50	229.20
tblGrading	AcresOfGrading	0.00	229.20
tblLandUse	LotAcreage	1.73	13.10
tblLandUse	LotAcreage	118.03	150.00
tblLandUse	LotAcreage	3.21	50.00
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	8.00
tblVehicleTrips	ST_TR	1.59	45.24
tblVehicleTrips	ST_TR	42.04	67.06
tblVehicleTrips	SU_TR	6.07	8.00
tblVehicleTrips	SU_TR	1.59	45.24
tblVehicleTrips	SU_TR	20.43	67.06
tblVehicleTrips	WD_TR	6.59	8.00
tblVehicleTrips	WD_TR	1.59	45.24
tblVehicleTrips	WD_TR	1.29	1.98
tblVehicleTrips	WD_TR	44.32	67.06

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					
2017	0.6869	7.4515	5.5122	6.2300e-003	3.2886	0.3807	3.6693	1.6948	0.3503	2.0451	0.0000	573.3203	573.3203	0.1712	0.0000	576.9159
2018	0.6977	7.7790	5.6130	8.3100e-003	1.5426	0.3640	1.9066	0.7883	0.3349	1.1232	0.0000	753.5661	753.5661	0.2299	0.0000	758.3932
2019	1.5079	8.7538	16.7900	0.0403	3.7898	0.3043	4.0941	1.3912	0.2818	1.6730	0.0000	3,039.9130	3,039.9130	0.2336	0.0000	3,044.8181
2020	2.1574	9.0732	25.8825	0.0695	4.3186	0.2530	4.5716	1.1585	0.2360	1.3944	0.0000	4,970.5320	4,970.5320	0.2291	0.0000	4,975.3440
2021	2.0230	7.8132	24.6349	0.0693	4.3021	0.2240	4.5261	1.1541	0.2088	1.3628	0.0000	4,898.8404	4,898.8404	0.2220	0.0000	4,903.5030
2022	1.9116	6.9708	23.4051	0.0690	4.2857	0.2028	4.4884	1.1497	0.1889	1.3386	0.0000	4,829.4780	4,829.4780	0.2154	0.0000	4,834.0011
2023	1.8064	6.2746	22.3591	0.0689	4.2857	0.1871	4.4728	1.1497	0.1743	1.3239	0.0000	4,782.1887	4,782.1887	0.2094	0.0000	4,786.5852
2024	1.7279	6.0947	21.4957	0.0695	4.3187	0.1777	4.4964	1.1585	0.1654	1.3239	0.0000	4,779.7580	4,779.7580	0.2064	0.0000	4,784.0913
2025	1.6548	5.8620	20.7211	0.0692	4.3022	0.1664	4.4686	1.1541	0.1547	1.3088	0.0000	4,727.8263	4,727.8263	0.2017	0.0000	4,732.0622
2026	1.6112	5.7733	20.2104	0.0692	4.3023	0.1659	4.4682	1.1541	0.1543	1.3084	0.0000	4,698.7095	4,698.7095	0.1989	0.0000	4,702.8856
2027	1.5699	5.7090	19.6797	0.0692	4.3023	0.1663	4.4686	1.1542	0.1546	1.3088	0.0000	4,673.7167	4,673.7167	0.1965	0.0000	4,677.8423
2028	1.5312	5.6295	19.2587	0.0689	4.2859	0.1658	4.4516	1.1498	0.1541	1.3039	0.0000	4,634.6766	4,634.6766	0.1935	0.0000	4,638.7391
2029	1.5018	5.5991	18.9460	0.0692	4.3024	0.1666	4.4690	1.1542	0.1549	1.3091	0.0000	4,634.4000	4,634.4000	0.1920	0.0000	4,638.4328
2030	1.4632	4.9688	18.6588	0.0697	4.3024	0.1175	4.4199	1.1542	0.1099	1.2641	0.0000	4,659.1899	4,659.1899	0.1330	0.0000	4,661.9835
2031	1.4368	4.9319	18.4303	0.0697	4.3024	0.1176	4.4200	1.1542	0.1099	1.2641	0.0000	4,646.0688	4,646.0688	0.1314	0.0000	4,648.8275
2032	1.4178	4.9200	18.3005	0.0700	4.3188	0.1181	4.4369	1.1586	0.1104	1.2690	0.0000	4,652.8784	4,652.8784	0.1304	0.0000	4,655.6167
2033	1.3816	4.8511	17.9862	0.0694	4.2858	0.1172	4.4030	1.1497	0.1096	1.2593	0.0000	4,608.1864	4,608.1864	0.1280	0.0000	4,610.8751

	ROG	NOx	CO	SO2	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					
2034	1.3573	4.8269	17.8118	0.0694	4.2858	0.1172	4.4030	1.1497	0.1096	1.2593	0.0000	4,600.4610	4,600.4610	0.1267	0.0000	4,603.1223
2035	1.3296	4.7263	17.7361	0.0697	4.3022	0.1101	4.4123	1.1541	0.1025	1.2566	0.0000	4,611.7530	4,611.7530	0.1251	0.0000	4,614.3799
2036	0.1588	0.9368	2.1081	4.0400e-003	3.6621	0.0118	3.6739	0.8989	0.0118	0.9107	0.0000	342.8367	342.8367	0.0128	0.0000	343.1050
2037	0.1494	0.7159	2.0447	3.7100e-003	1.0858	0.0203	1.1062	0.2665	0.0203	0.2868	0.0000	317.7548	317.7548	0.0121	0.0000	318.0091
2038	16.9779	0.3932	1.2340	2.1700e-003	0.2951	0.0139	0.3090	0.0724	0.0139	0.0864	0.0000	186.8640	186.8640	7.1700e-003	0.0000	187.0146
2039	31.5890	0.0815	0.1929	3.2000e-004	0.5375	1.0600e-003	0.5385	0.1319	1.0600e-003	0.1330	0.0000	27.4475	27.4475	1.0100e-003	0.0000	27.4688
Total	**77.6491**	**120.1358**	**359.0116**	**1.1747**	**83.0046**	**3.6691**	**86.6737**	**23.7013**	**3.4119**	**27.1131**	**0.0000**	**80,650.3661**	**80,650.3661**	**3.5071**	**0.0000**	**80,724.0162**

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					
2017	0.6869	7.4515	5.5121	6.2300e-003	3.2886	0.3807	3.6693	1.6948	0.3503	2.0451	0.0000	573.3196	573.3196	0.1712	0.0000	576.9153
2018	0.6977	7.7790	5.6129	8.3100e-003	1.5426	0.3640	1.9066	0.7883	0.3349	1.1232	0.0000	753.5652	753.5652	0.2299	0.0000	758.3923
2019	1.5079	8.7538	16.7900	0.0403	3.7898	0.3043	4.0941	1.3912	0.2818	1.6730	0.0000	3,039.9124	3,039.9124	0.2336	0.0000	3,044.8175
2020	2.1574	9.0732	25.8825	0.0695	4.3186	0.2530	4.5716	1.1585	0.2360	1.3944	0.0000	4,970.5317	4,970.5317	0.2291	0.0000	4,975.3436
2021	2.0230	7.8132	24.6349	0.0693	4.3021	0.2240	4.5261	1.1541	0.2088	1.3628	0.0000	4,898.8400	4,898.8400	0.2220	0.0000	4,903.5026
2022	1.9116	6.9708	23.4051	0.0690	4.2857	0.2028	4.4884	1.1497	0.1889	1.3386	0.0000	4,829.4777	4,829.4777	0.2154	0.0000	4,834.0008

	ROG	NOx	CO	SO2	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					
2023	1.8064	6.2746	22.3590	0.0689	4.2857	0.1871	4.4728	1.1497	0.1743	1.3239	0.0000	4,782.1884	4,782.1884	0.2094	0.0000	4,786.5848
2024	1.7279	6.0947	21.4957	0.0695	4.3187	0.1777	4.4964	1.1585	0.1654	1.3239	0.0000	4,779.7576	4,779.7576	0.2064	0.0000	4,784.0909
2025	1.6548	5.8620	20.7211	0.0692	4.3022	0.1664	4.4686	1.1541	0.1547	1.3088	0.0000	4,727.8260	4,727.8260	0.2017	0.0000	4,732.0618
2026	1.6112	5.7733	20.2103	0.0692	4.3023	0.1659	4.4682	1.1541	0.1543	1.3084	0.0000	4,698.7091	4,698.7091	0.1989	0.0000	4,702.8853
2027	1.5699	5.7090	19.6797	0.0692	4.3023	0.1663	4.4686	1.1542	0.1546	1.3088	0.0000	4,673.7164	4,673.7164	0.1965	0.0000	4,677.8420
2028	1.5312	5.6295	19.2587	0.0689	4.2859	0.1658	4.4516	1.1498	0.1541	1.3039	0.0000	4,634.6763	4,634.6763	0.1935	0.0000	4,638.7388
2029	1.5018	5.5991	18.9460	0.0692	4.3024	0.1666	4.4690	1.1542	0.1549	1.3091	0.0000	4,634.3997	4,634.3997	0.1920	0.0000	4,638.4325
2030	1.4632	4.9688	18.6588	0.0697	4.3024	0.1175	4.4199	1.1542	0.1099	1.2641	0.0000	4,659.1895	4,659.1895	0.1330	0.0000	4,661.9831
2031	1.4368	4.9319	18.4303	0.0697	4.3024	0.1176	4.4200	1.1542	0.1099	1.2641	0.0000	4,646.0684	4,646.0684	0.1314	0.0000	4,648.8271
2032	1.4178	4.9200	18.3005	0.0700	4.3188	0.1181	4.4369	1.1586	0.1104	1.2690	0.0000	4,652.8780	4,652.8780	0.1304	0.0000	4,655.6163
2033	1.3816	4.8511	17.9862	0.0694	4.2858	0.1172	4.4030	1.1497	0.1096	1.2593	0.0000	4,608.1860	4,608.1860	0.1280	0.0000	4,610.8747
2034	1.3573	4.8269	17.8118	0.0694	4.2858	0.1172	4.4030	1.1497	0.1096	1.2593	0.0000	4,600.4606	4,600.4606	0.1267	0.0000	4,603.1219
2035	1.3296	4.7263	17.7361	0.0697	4.3022	0.1101	4.4123	1.1541	0.1025	1.2566	0.0000	4,611.7526	4,611.7526	0.1251	0.0000	4,614.3795
2036	0.1588	0.9368	2.1081	4.0400e-003	3.6621	0.0118	3.6739	0.8989	0.0118	0.9107	0.0000	342.8363	342.8363	0.0128	0.0000	343.1046
2037	0.1494	0.7159	2.0447	3.7100e-003	1.0858	0.0203	1.1062	0.2665	0.0203	0.2868	0.0000	317.7544	317.7544	0.0121	0.0000	318.0087
2038	16.9779	0.3932	1.2340	2.1700e-003	0.2951	0.0139	0.3090	0.0724	0.0139	0.0864	0.0000	186.8638	186.8638	7.1700e-003	0.0000	187.0143
2039	31.5890	0.0815	0.1929	3.2000e-004	0.5375	1.0600e-003	0.5385	0.1319	1.0600e-003	0.1330	0.0000	27.4475	27.4475	1.0100e-003	0.0000	27.4687
Total	**77.6490**	**120.1357**	**359.0115**	**1.1747**	**83.0046**	**3.6691**	**86.6737**	**23.7013**	**3.4118**	**27.1131**	**0.0000**	**80,650.3569**	**80,650.3569**	**3.5071**	**0.0000**	**80,724.0070**

	ROG	NOx	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	tons/yr										MT/yr					
Area	311.5011	4.2046	380.0972	0.1372		48.8895	48.8895		48.8881	48.8881	4,632.8153	1,997.3517	6,630.1670	4.3284	0.3644	6,834.0295
Energy	0.1368	1.1716	0.5145	7.4600e-003		0.0945	0.0945		0.0945	0.0945	0.0000	7,207.3690	7,207.3690	0.2616	0.0736	7,235.6681
Mobile	24.8681	52.1850	248.1034	0.6641	45.5879	0.7658	46.3537	12.1925	0.7066	12.8991	0.0000	46,096.4775	46,096.4775	1.7928	0.0000	46,134.1270
Waste						0.0000	0.0000		0.0000	0.0000	482.1888	0.0000	482.1888	28.4965	0.0000	1,080.6162
Water						0.0000	0.0000		0.0000	0.0000	96.6817	2,078.7407	2,175.4224	10.0138	0.2518	2,463.7652
Total	**336.5061**	**57.5612**	**628.7151**	**0.8088**	**45.5879**	**49.7498**	**95.3378**	**12.1925**	**49.6892**	**61.8817**	**5,211.6858**	**57,379.9389**	**62,591.6247**	**44.8931**	**0.6898**	**63,748.2058**

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	311.5011	4.2046	380.0972	0.1372		48.8895	48.8895		48.8881	48.8881	4,632.8153	1,997.3517	6,630.1670	4.3284	0.3644	6,834.0295
Energy	0.1368	1.1716	0.5145	7.4600e-003		0.0945	0.0945		0.0945	0.0945	0.0000	7,207.3690	7,207.3690	0.2616	0.0736	7,235.6681
Mobile	24.8681	52.1850	248.1034	0.6641	45.5879	0.7658	46.3537	12.1925	0.7066	12.8991	0.0000	46,096.4775	46,096.4775	1.7928	0.0000	46,134.1270
Waste						0.0000	0.0000		0.0000	0.0000	482.1888	0.0000	482.1888	28.4965	0.0000	1,080.6162
Water						0.0000	0.0000		0.0000	0.0000	77.3454	1,626.9846	1,704.3299	8.0096	0.2011	1,934.8807
Total	**336.5061**	**57.5612**	**628.7151**	**0.8088**	**45.5879**	**49.7498**	**95.3378**	**12.1925**	**49.6892**	**61.8817**	**5,192.3495**	**56,928.1828**	**62,120.5322**	**42.8889**	**0.6391**	**63,219.3214**

	ROG	NOx	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**	**0.37**	**0.79**	**0.75**	**4.46**	**7.34**	**0.83**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2017	9/8/2017	5	180	
2	Grading	Grading	9/9/2017	6/21/2019	5	465	
3	Building Construction	Building Construction	6/22/2019	4/17/2037	5	4650	
4	Paving	Paving	4/18/2037	7/23/2038	5	330	
5	Architectural Coating	Architectural Coating	7/24/2038	10/28/2039	5	330	

Acres of Grading (Site Preparation Phase): 229.2

Acres of Grading (Grading Phase): 229.2

Acres of Paving: 0

Residential Indoor: 9,082,125; Residential Outdoor: 3,027,375; Non-Residential Indoor: 1,374,389; Non-Residential Outdoor: 458,130 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
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
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	3,600.00	630.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	720.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

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					1.7475	0.0000	1.7475	0.9069	0.0000	0.9069	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4354	4.6578	3.5457	3.5200e-003		0.2479	0.2479		0.2281	0.2281	0.0000	326.8385	326.8385	0.1001	0.0000	328.9415
Total	**0.4354**	**4.6578**	**3.5457**	**3.5200e-003**	**1.7475**	**0.2479**	**1.9954**	**0.9069**	**0.2281**	**1.1349**	**0.0000**	**326.8385**	**326.8385**	**0.1001**	**0.0000**	**328.9415**

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	5.0300e-003	6.6700e-003	0.0631	1.6000e-004	0.0130	1.0000e-004	0.0131	3.4500e-003	9.0000e-005	3.5400e-003	0.0000	11.6387	11.6387	5.9000e-004	0.0000	11.6511
Total	**5.0300e-003**	**6.6700e-003**	**0.0631**	**1.6000e-004**	**0.0130**	**1.0000e-004**	**0.0131**	**3.4500e-003**	**9.0000e-005**	**3.5400e-003**	**0.0000**	**11.6387**	**11.6387**	**5.9000e-004**	**0.0000**	**11.6511**

3.2 Site Preparation - 2017

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					1.7475	0.0000	1.7475	0.9069	0.0000	0.9069	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4354	4.6578	3.5457	3.5200e-003		0.2479	0.2479		0.2281	0.2281	0.0000	326.8381	326.8381	0.1001	0.0000	328.9411
Total	**0.4354**	**4.6578**	**3.5457**	**3.5200e-003**	**1.7475**	**0.2479**	**1.9954**	**0.9069**	**0.2281**	**1.1349**	**0.0000**	**326.8381**	**326.8381**	**0.1001**	**0.0000**	**328.9411**

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	5.0300e-003	6.6700e-003	0.0631	1.6000e-004	0.0130	1.0000e-004	0.0131	3.4500e-003	9.0000e-005	3.5400e-003	0.0000	11.6387	11.6387	5.9000e-004	0.0000	11.6511
Total	**5.0300e-003**	**6.6700e-003**	**0.0631**	**1.6000e-004**	**0.0130**	**1.0000e-004**	**0.0131**	**3.4500e-003**	**9.0000e-005**	**3.5400e-003**	**0.0000**	**11.6387**	**11.6387**	**5.9000e-004**	**0.0000**	**11.6511**

3.3 Grading - 2017

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					1.5217	0.0000	1.5217	0.7828	0.0000	0.7828	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2440	2.7837	1.8722	2.4700e-003		0.1327	0.1327		0.1221	0.1221	0.0000	229.0957	229.0957	0.0702	0.0000	230.5698
Total	**0.2440**	**2.7837**	**1.8722**	**2.4700e-003**	**1.5217**	**0.1327**	**1.6544**	**0.7828**	**0.1221**	**0.9048**	**0.0000**	**229.0957**	**229.0957**	**0.0702**	**0.0000**	**230.5698**

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	2.4900e-003	3.2900e-003	0.0311	8.0000e-005	6.4200e-003	5.0000e-005	6.4600e-003	1.7000e-003	4.0000e-005	1.7500e-003	0.0000	5.7475	5.7475	2.9000e-004	0.0000	5.7536
Total	**2.4900e-003**	**3.2900e-003**	**0.0311**	**8.0000e-005**	**6.4200e-003**	**5.0000e-005**	**6.4600e-003**	**1.7000e-003**	**4.0000e-005**	**1.7500e-003**	**0.0000**	**5.7475**	**5.7475**	**2.9000e-004**	**0.0000**	**5.7536**

3.3 Grading - 2017

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					1.5217	0.0000	1.5217	0.7828	0.0000	0.7828	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2440	2.7837	1.8722	2.4700e-003		0.1327	0.1327		0.1221	0.1221	0.0000	229.0954	229.0954	0.0702	0.0000	230.5695
Total	**0.2440**	**2.7837**	**1.8722**	**2.4700e-003**	**1.5217**	**0.1327**	**1.6544**	**0.7828**	**0.1221**	**0.9048**	**0.0000**	**229.0954**	**229.0954**	**0.0702**	**0.0000**	**230.5695**

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	2.4900e-003	3.2900e-003	0.0311	8.0000e-005	6.4200e-003	5.0000e-005	6.4600e-003	1.7000e-003	4.0000e-005	1.7500e-003	0.0000	5.7475	5.7475	2.9000e-004	0.0000	5.7536
Total	**2.4900e-003**	**3.2900e-003**	**0.0311**	**8.0000e-005**	**6.4200e-003**	**5.0000e-005**	**6.4600e-003**	**1.7000e-003**	**4.0000e-005**	**1.7500e-003**	**0.0000**	**5.7475**	**5.7475**	**2.9000e-004**	**0.0000**	**5.7536**

3.3 Grading - 2018

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					1.5217	0.0000	1.5217	0.7828	0.0000	0.7828	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.6903	7.7692	5.5210	8.0500e-003		0.3638	0.3638		0.3347	0.3347	0.0000	735.5190	735.5190	0.2290	0.0000	740.3275
Total	**0.6903**	**7.7692**	**5.5210**	**8.0500e-003**	**1.5217**	**0.3638**	**1.8855**	**0.7828**	**0.3347**	**1.1175**	**0.0000**	**735.5190**	**735.5190**	**0.2290**	**0.0000**	**740.3275**

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	7.3700e-003	9.8100e-003	0.0919	2.6000e-004	0.0209	1.5000e-004	0.0211	5.5600e-003	1.4000e-004	5.7000e-003	0.0000	18.0471	18.0471	8.9000e-004	0.0000	18.0657
Total	**7.3700e-003**	**9.8100e-003**	**0.0919**	**2.6000e-004**	**0.0209**	**1.5000e-004**	**0.0211**	**5.5600e-003**	**1.4000e-004**	**5.7000e-003**	**0.0000**	**18.0471**	**18.0471**	**8.9000e-004**	**0.0000**	**18.0657**

3.3 Grading - 2018

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					1.5217	0.0000	1.5217	0.7828	0.0000	0.7828	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.6903	7.7692	5.5210	8.0500e-003		0.3638	0.3638		0.3347	0.3347	0.0000	735.5182	735.5182	0.2290	0.0000	740.3267
Total	**0.6903**	**7.7692**	**5.5210**	**8.0500e-003**	**1.5217**	**0.3638**	**1.8855**	**0.7828**	**0.3347**	**1.1175**	**0.0000**	**735.5182**	**735.5182**	**0.2290**	**0.0000**	**740.3267**

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	7.3700e-003	9.8100e-003	0.0919	2.6000e-004	0.0209	1.5000e-004	0.0211	5.5600e-003	1.4000e-004	5.7000e-003	0.0000	18.0471	18.0471	8.9000e-004	0.0000	18.0657
Total	**7.3700e-003**	**9.8100e-003**	**0.0919**	**2.6000e-004**	**0.0209**	**1.5000e-004**	**0.0211**	**5.5600e-003**	**1.4000e-004**	**5.7000e-003**	**0.0000**	**18.0471**	**18.0471**	**8.9000e-004**	**0.0000**	**18.0657**

3.3 Grading - 2019

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					1.5217	0.0000	1.5217	0.7828	0.0000	0.7828	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3033	3.3603	2.4979	3.8300e-003		0.1553	0.1553		0.1429	0.1429	0.0000	343.7335	343.7335	0.1088	0.0000	346.0174
Total	**0.3033**	**3.3603**	**2.4979**	**3.8300e-003**	**1.5217**	**0.1553**	**1.6770**	**0.7828**	**0.1429**	**0.9256**	**0.0000**	**343.7335**	**343.7335**	**0.1088**	**0.0000**	**346.0174**

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	3.2500e-003	4.3100e-003	0.0402	1.2000e-004	9.9400e-003	7.0000e-005	0.0100	2.6400e-003	7.0000e-005	2.7100e-003	0.0000	8.2639	8.2639	4.0000e-004	0.0000	8.2722
Total	**3.2500e-003**	**4.3100e-003**	**0.0402**	**1.2000e-004**	**9.9400e-003**	**7.0000e-005**	**0.0100**	**2.6400e-003**	**7.0000e-005**	**2.7100e-003**	**0.0000**	**8.2639**	**8.2639**	**4.0000e-004**	**0.0000**	**8.2722**

3.3 Grading - 2019

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					1.5217	0.0000	1.5217	0.7828	0.0000	0.7828	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3033	3.3603	2.4979	3.8300e-003		0.1553	0.1553		0.1429	0.1429	0.0000	343.7331	343.7331	0.1088	0.0000	346.0169
Total	**0.3033**	**3.3603**	**2.4979**	**3.8300e-003**	**1.5217**	**0.1553**	**1.6770**	**0.7828**	**0.1429**	**0.9256**	**0.0000**	**343.7331**	**343.7331**	**0.1088**	**0.0000**	**346.0169**

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	3.2500e-003	4.3100e-003	0.0402	1.2000e-004	9.9400e-003	7.0000e-005	0.0100	2.6400e-003	7.0000e-005	2.7100e-003	0.0000	8.2639	8.2639	4.0000e-004	0.0000	8.2722
Total	**3.2500e-003**	**4.3100e-003**	**0.0402**	**1.2000e-004**	**9.9400e-003**	**7.0000e-005**	**0.0100**	**2.6400e-003**	**7.0000e-005**	**2.7100e-003**	**0.0000**	**8.2639**	**8.2639**	**4.0000e-004**	**0.0000**	**8.2722**

3.4 Building Construction - 2019

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	0.1611	1.4361	1.1727	1.8400e-003		0.0880	0.0880		0.0828	0.0828	0.0000	160.3741	160.3741	0.0390	0.0000	161.1935
Total	**0.1611**	**1.4361**	**1.1727**	**1.8400e-003**		**0.0880**	**0.0880**		**0.0828**	**0.0828**	**0.0000**	**160.3741**	**160.3741**	**0.0390**	**0.0000**	**161.1935**

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	0.3941	3.0969	5.0916	0.0102	0.2807	0.0465	0.3272	0.0803	0.0428	0.1231	0.0000	884.0920	884.0920	6.6000e-003	0.0000	884.2307
Worker	0.6462	0.8562	7.9877	0.0243	1.9775	0.0144	1.9919	0.5255	0.0133	0.5388	0.0000	1,643.4495	1,643.4495	0.0788	0.0000	1,645.1044
Total	**1.0403**	**3.9531**	**13.0792**	**0.0345**	**2.2582**	**0.0609**	**2.3191**	**0.6058**	**0.0561**	**0.6619**	**0.0000**	**2,527.5415**	**2,527.5415**	**0.0854**	**0.0000**	**2,529.3350**

3.4 Building Construction - 2019

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	0.1611	1.4361	1.1727	1.8400e-003		0.0880	0.0880		0.0828	0.0828	0.0000	160.3739	160.3739	0.0390	0.0000	161.1933
Total	**0.1611**	**1.4361**	**1.1727**	**1.8400e-003**		**0.0880**	**0.0880**		**0.0828**	**0.0828**	**0.0000**	**160.3739**	**160.3739**	**0.0390**	**0.0000**	**161.1933**

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	0.3941	3.0969	5.0916	0.0102	0.2807	0.0465	0.3272	0.0803	0.0428	0.1231	0.0000	884.0920	884.0920	6.6000e-003	0.0000	884.2307
Worker	0.6462	0.8562	7.9877	0.0243	1.9775	0.0144	1.9919	0.5255	0.0133	0.5388	0.0000	1,643.4495	1,643.4495	0.0788	0.0000	1,645.1044
Total	**1.0403**	**3.9531**	**13.0792**	**0.0345**	**2.2582**	**0.0609**	**2.3191**	**0.6058**	**0.0561**	**0.6619**	**0.0000**	**2,527.5415**	**2,527.5415**	**0.0854**	**0.0000**	**2,529.3350**

3.4 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	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1514	302.1514	0.0736	0.0000	303.6973
Total	**0.2766**	**2.5000**	**2.2019**	**3.5100e-003**		**0.1458**	**0.1458**		**0.1371**	**0.1371**	**0.0000**	**302.1514**	**302.1514**	**0.0736**	**0.0000**	**303.6973**

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	0.7121	5.0434	9.4044	0.0195	0.5367	0.0798	0.6165	0.1535	0.0734	0.2269	0.0000	1,652.0821	1,652.0821	0.0122	0.0000	1,652.3388
Worker	1.1687	1.5298	14.2761	0.0465	3.7818	0.0275	3.8093	1.0050	0.0255	1.0304	0.0000	3,016.2985	3,016.2985	0.1433	0.0000	3,019.3080
Total	**1.8808**	**6.5732**	**23.6806**	**0.0660**	**4.3186**	**0.1073**	**4.4258**	**1.1585**	**0.0989**	**1.2574**	**0.0000**	**4,668.3807**	**4,668.3807**	**0.1555**	**0.0000**	**4,671.6467**

3.4 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	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1510	302.1510	0.0736	0.0000	303.6969
Total	**0.2766**	**2.5000**	**2.2019**	**3.5100e-003**		**0.1458**	**0.1458**		**0.1371**	**0.1371**	**0.0000**	**302.1510**	**302.1510**	**0.0736**	**0.0000**	**303.6969**

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	0.7121	5.0434	9.4044	0.0195	0.5367	0.0798	0.6165	0.1535	0.0734	0.2269	0.0000	1,652.0821	1,652.0821	0.0122	0.0000	1,652.3388
Worker	1.1687	1.5298	14.2761	0.0465	3.7818	0.0275	3.8093	1.0050	0.0255	1.0304	0.0000	3,016.2985	3,016.2985	0.1433	0.0000	3,019.3080
Total	**1.8808**	**6.5732**	**23.6806**	**0.0660**	**4.3186**	**0.1073**	**4.4258**	**1.1585**	**0.0989**	**1.2574**	**0.0000**	**4,668.3807**	**4,668.3807**	**0.1555**	**0.0000**	**4,671.6467**

3.4 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	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0339	301.0339	0.0725	0.0000	302.5568
Total	**0.2471**	**2.2629**	**2.1582**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.0339**	**301.0339**	**0.0725**	**0.0000**	**302.5568**

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	0.6675	4.1196	8.9941	0.0194	0.5347	0.0715	0.6062	0.1530	0.0658	0.2188	0.0000	1,643.1499	1,643.1499	0.0121	0.0000	1,643.4047
Worker	1.1084	1.4307	13.4826	0.0464	3.7674	0.0278	3.7952	1.0011	0.0258	1.0269	0.0000	2,954.6566	2,954.6566	0.1374	0.0000	2,957.5414
Total	**1.7760**	**5.5503**	**22.4767**	**0.0658**	**4.3021**	**0.0993**	**4.4014**	**1.1541**	**0.0916**	**1.2457**	**0.0000**	**4,597.8065**	**4,597.8065**	**0.1495**	**0.0000**	**4,600.9461**

3.4 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	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0335	301.0335	0.0725	0.0000	302.5565
Total	**0.2471**	**2.2629**	**2.1582**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.0335**	**301.0335**	**0.0725**	**0.0000**	**302.5565**

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	0.6675	4.1196	8.9941	0.0194	0.5347	0.0715	0.6062	0.1530	0.0658	0.2188	0.0000	1,643.1499	1,643.1499	0.0121	0.0000	1,643.4047
Worker	1.1084	1.4307	13.4826	0.0464	3.7674	0.0278	3.7952	1.0011	0.0258	1.0269	0.0000	2,954.6566	2,954.6566	0.1374	0.0000	2,957.5414
Total	**1.7760**	**5.5503**	**22.4767**	**0.0658**	**4.3021**	**0.0993**	**4.4014**	**1.1541**	**0.0916**	**1.2457**	**0.0000**	**4,597.8065**	**4,597.8065**	**0.1495**	**0.0000**	**4,600.9461**

3.4 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	0.2209	2.0197	2.1226	3.4900e-003		0.1047	0.1047		0.0986	0.0986	0.0000	299.9946	299.9946	0.0718	0.0000	301.5017
Total	**0.2209**	**2.0197**	**2.1226**	**3.4900e-003**		**0.1047**	**0.1047**		**0.0986**	**0.0986**	**0.0000**	**299.9946**	**299.9946**	**0.0718**	**0.0000**	**301.5017**

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	0.6388	3.6048	8.6082	0.0193	0.5327	0.0701	0.6028	0.1524	0.0645	0.2169	0.0000	1,635.1620	1,635.1620	0.0123	0.0000	1,635.4211
Worker	1.0520	1.3462	12.6744	0.0462	3.7530	0.0279	3.7809	0.9973	0.0259	1.0232	0.0000	2,894.3214	2,894.3214	0.1313	0.0000	2,897.0783
Total	**1.6907**	**4.9510**	**21.2826**	**0.0655**	**4.2857**	**0.0980**	**4.3837**	**1.1497**	**0.0904**	**1.2400**	**0.0000**	**4,529.4834**	**4,529.4834**	**0.1436**	**0.0000**	**4,532.4994**

3.4 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	0.2209	2.0197	2.1226	3.4900e-003		0.1047	0.1047		0.0986	0.0986	0.0000	299.9943	299.9943	0.0718	0.0000	301.5013
Total	**0.2209**	**2.0197**	**2.1226**	**3.4900e-003**		**0.1047**	**0.1047**		**0.0986**	**0.0986**	**0.0000**	**299.9943**	**299.9943**	**0.0718**	**0.0000**	**301.5013**

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	0.6388	3.6048	8.6082	0.0193	0.5327	0.0701	0.6028	0.1524	0.0645	0.2169	0.0000	1,635.1620	1,635.1620	0.0123	0.0000	1,635.4211
Worker	1.0520	1.3462	12.6744	0.0462	3.7530	0.0279	3.7809	0.9973	0.0259	1.0232	0.0000	2,894.3214	2,894.3214	0.1313	0.0000	2,897.0783
Total	**1.6907**	**4.9510**	**21.2826**	**0.0655**	**4.2857**	**0.0980**	**4.3837**	**1.1497**	**0.0904**	**1.2400**	**0.0000**	**4,529.4834**	**4,529.4834**	**0.1436**	**0.0000**	**4,532.4994**

3.4 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	0.2036	1.8606	2.1072	3.4900e-003		0.0906	0.0906		0.0852	0.0852	0.0000	300.0980	300.0980	0.0713	0.0000	301.5949
Total	**0.2036**	**1.8606**	**2.1072**	**3.4900e-003**		**0.0906**	**0.0906**		**0.0852**	**0.0852**	**0.0000**	**300.0980**	**300.0980**	**0.0713**	**0.0000**	**301.5949**

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	0.5987	3.1375	8.2557	0.0192	0.5327	0.0684	0.6011	0.1524	0.0630	0.2154	0.0000	1,631.5008	1,631.5008	0.0116	0.0000	1,631.7441
Worker	1.0041	1.2765	11.9961	0.0462	3.7530	0.0281	3.7811	0.9973	0.0261	1.0233	0.0000	2,850.5899	2,850.5899	0.1265	0.0000	2,853.2462
Total	**1.6028**	**4.4140**	**20.2518**	**0.0654**	**4.2857**	**0.0965**	**4.3822**	**1.1497**	**0.0890**	**1.2387**	**0.0000**	**4,482.0907**	**4,482.0907**	**0.1381**	**0.0000**	**4,484.9902**

3.4 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	0.2036	1.8606	2.1072	3.4900e-003		0.0906	0.0906		0.0852	0.0852	0.0000	300.0976	300.0976	0.0713	0.0000	301.5946
Total	**0.2036**	**1.8606**	**2.1072**	**3.4900e-003**		**0.0906**	**0.0906**		**0.0852**	**0.0852**	**0.0000**	**300.0976**	**300.0976**	**0.0713**	**0.0000**	**301.5946**

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	0.5987	3.1375	8.2557	0.0192	0.5327	0.0684	0.6011	0.1524	0.0630	0.2154	0.0000	1,631.5008	1,631.5008	0.0116	0.0000	1,631.7441
Worker	1.0041	1.2765	11.9961	0.0462	3.7530	0.0281	3.7811	0.9973	0.0261	1.0233	0.0000	2,850.5899	2,850.5899	0.1265	0.0000	2,853.2462
Total	**1.6028**	**4.4140**	**20.2518**	**0.0654**	**4.2857**	**0.0965**	**4.3822**	**1.1497**	**0.0890**	**1.2387**	**0.0000**	**4,482.0907**	**4,482.0907**	**0.1381**	**0.0000**	**4,484.9902**

3.4 Building Construction - 2024

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	0.1920	1.7524	2.1135	3.5200e-003		0.0800	0.0800		0.0752	0.0752	0.0000	302.4646	302.4646	0.0714	0.0000	303.9643
Total	**0.1920**	**1.7524**	**2.1135**	**3.5200e-003**		**0.0800**	**0.0800**		**0.0752**	**0.0752**	**0.0000**	**302.4646**	**302.4646**	**0.0714**	**0.0000**	**303.9643**

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	0.5683	3.1174	7.8699	0.0194	0.5368	0.0692	0.6060	0.1536	0.0637	0.2172	0.0000	1,643.9449	1,643.9449	0.0117	0.0000	1,644.1908
Worker	0.9676	1.2249	11.5124	0.0466	3.7818	0.0285	3.8104	1.0050	0.0265	1.0314	0.0000	2,833.3485	2,833.3485	0.1232	0.0000	2,835.9362
Total	**1.5360**	**4.3422**	**19.3823**	**0.0659**	**4.3187**	**0.0977**	**4.4164**	**1.1585**	**0.0901**	**1.2487**	**0.0000**	**4,477.2934**	**4,477.2934**	**0.1349**	**0.0000**	**4,480.1270**

3.4 Building Construction - 2024

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	0.1920	1.7524	2.1135	3.5200e-003		0.0800	0.0800		0.0752	0.0752	0.0000	302.4642	302.4642	0.0714	0.0000	303.9639
Total	**0.1920**	**1.7524**	**2.1135**	**3.5200e-003**		**0.0800**	**0.0800**		**0.0752**	**0.0752**	**0.0000**	**302.4642**	**302.4642**	**0.0714**	**0.0000**	**303.9639**

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	0.5683	3.1174	7.8699	0.0194	0.5368	0.0692	0.6060	0.1536	0.0637	0.2172	0.0000	1,643.9449	1,643.9449	0.0117	0.0000	1,644.1908
Worker	0.9676	1.2249	11.5124	0.0466	3.7818	0.0285	3.8104	1.0050	0.0265	1.0314	0.0000	2,833.3485	2,833.3485	0.1232	0.0000	2,835.9362
Total	**1.5360**	**4.3422**	**19.3823**	**0.0659**	**4.3187**	**0.0977**	**4.4164**	**1.1585**	**0.0901**	**1.2487**	**0.0000**	**4,477.2934**	**4,477.2934**	**0.1349**	**0.0000**	**4,480.1270**

3.4 Building Construction - 2025

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	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4019	301.4019	0.0707	0.0000	302.8874
Total	**0.1777**	**1.6195**	**2.0948**	**3.5000e-003**		**0.0685**	**0.0685**		**0.0645**	**0.0645**	**0.0000**	**301.4019**	**301.4019**	**0.0707**	**0.0000**	**302.8874**

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	0.5505	3.0731	7.6331	0.0193	0.5348	0.0692	0.6040	0.1530	0.0636	0.2166	0.0000	1,637.8092	1,637.8092	0.0117	0.0000	1,638.0549
Worker	0.9267	1.1695	10.9933	0.0464	3.7674	0.0287	3.7961	1.0011	0.0266	1.0277	0.0000	2,788.6152	2,788.6152	0.1193	0.0000	2,791.1199
Total	**1.4772**	**4.2425**	**18.6264**	**0.0657**	**4.3022**	**0.0979**	**4.4001**	**1.1541**	**0.0903**	**1.2444**	**0.0000**	**4,426.4244**	**4,426.4244**	**0.1310**	**0.0000**	**4,429.1747**

3.4 Building Construction - 2025

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	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4015	301.4015	0.0707	0.0000	302.8871
Total	**0.1777**	**1.6195**	**2.0948**	**3.5000e-003**		**0.0685**	**0.0685**		**0.0645**	**0.0645**	**0.0000**	**301.4015**	**301.4015**	**0.0707**	**0.0000**	**302.8871**

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	0.5505	3.0731	7.6331	0.0193	0.5348	0.0692	0.6040	0.1530	0.0636	0.2166	0.0000	1,637.8092	1,637.8092	0.0117	0.0000	1,638.0549
Worker	0.9267	1.1695	10.9933	0.0464	3.7674	0.0287	3.7961	1.0011	0.0266	1.0277	0.0000	2,788.6152	2,788.6152	0.1193	0.0000	2,791.1199
Total	**1.4772**	**4.2425**	**18.6264**	**0.0657**	**4.3022**	**0.0979**	**4.4001**	**1.1541**	**0.0903**	**1.2444**	**0.0000**	**4,426.4244**	**4,426.4244**	**0.1310**	**0.0000**	**4,429.1747**

3.4 Building Construction - 2026

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	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4019	301.4019	0.0707	0.0000	302.8874
Total	**0.1777**	**1.6195**	**2.0948**	**3.5000e-003**		**0.0685**	**0.0685**		**0.0645**	**0.0645**	**0.0000**	**301.4019**	**301.4019**	**0.0707**	**0.0000**	**302.8874**

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	0.5373	3.0240	7.4879	0.0193	0.5349	0.0684	0.6032	0.1530	0.0629	0.2159	0.0000	1,637.9482	1,637.9482	0.0116	0.0000	1,638.1920
Worker	0.8962	1.1299	10.6277	0.0464	3.7674	0.0290	3.7964	1.0011	0.0269	1.0280	0.0000	2,759.3594	2,759.3594	0.1165	0.0000	2,761.8062
Total	**1.4335**	**4.1539**	**18.1156**	**0.0657**	**4.3023**	**0.0974**	**4.3997**	**1.1541**	**0.0898**	**1.2440**	**0.0000**	**4,397.3076**	**4,397.3076**	**0.1281**	**0.0000**	**4,399.9982**

3.4 Building Construction - 2026

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	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4015	301.4015	0.0707	0.0000	302.8871
Total	**0.1777**	**1.6195**	**2.0948**	**3.5000e-003**		**0.0685**	**0.0685**		**0.0645**	**0.0645**	**0.0000**	**301.4015**	**301.4015**	**0.0707**	**0.0000**	**302.8871**

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	0.5373	3.0240	7.4879	0.0193	0.5349	0.0684	0.6032	0.1530	0.0629	0.2159	0.0000	1,637.9482	1,637.9482	0.0116	0.0000	1,638.1920
Worker	0.8962	1.1299	10.6277	0.0464	3.7674	0.0290	3.7964	1.0011	0.0269	1.0280	0.0000	2,759.3594	2,759.3594	0.1165	0.0000	2,761.8062
Total	**1.4335**	**4.1539**	**18.1156**	**0.0657**	**4.3023**	**0.0974**	**4.3997**	**1.1541**	**0.0898**	**1.2440**	**0.0000**	**4,397.3076**	**4,397.3076**	**0.1281**	**0.0000**	**4,399.9982**

3.4 Building Construction - 2027

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	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4019	301.4019	0.0707	0.0000	302.8874
Total	**0.1777**	**1.6195**	**2.0948**	**3.5000e-003**		**0.0685**	**0.0685**		**0.0645**	**0.0645**	**0.0000**	**301.4019**	**301.4019**	**0.0707**	**0.0000**	**302.8874**

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	0.5242	2.9936	7.2797	0.0193	0.5349	0.0685	0.6034	0.1530	0.0630	0.2160	0.0000	1,638.1461	1,638.1461	0.0116	0.0000	1,638.3903
Worker	0.8680	1.0959	10.3053	0.0464	3.7674	0.0293	3.7967	1.0011	0.0272	1.0283	0.0000	2,734.1688	2,734.1688	0.1141	0.0000	2,736.5646
Total	**1.3923**	**4.0896**	**17.5850**	**0.0657**	**4.3023**	**0.0978**	**4.4001**	**1.1542**	**0.0902**	**1.2443**	**0.0000**	**4,372.3149**	**4,372.3149**	**0.1257**	**0.0000**	**4,374.9549**

3.4 Building Construction - 2027

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	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4015	301.4015	0.0707	0.0000	302.8871
Total	**0.1777**	**1.6195**	**2.0948**	**3.5000e-003**		**0.0685**	**0.0685**		**0.0645**	**0.0645**	**0.0000**	**301.4015**	**301.4015**	**0.0707**	**0.0000**	**302.8871**

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	0.5242	2.9936	7.2797	0.0193	0.5349	0.0685	0.6034	0.1530	0.0630	0.2160	0.0000	1,638.1461	1,638.1461	0.0116	0.0000	1,638.3903
Worker	0.8680	1.0959	10.3053	0.0464	3.7674	0.0293	3.7967	1.0011	0.0272	1.0283	0.0000	2,734.1688	2,734.1688	0.1141	0.0000	2,736.5646
Total	**1.3923**	**4.0896**	**17.5850**	**0.0657**	**4.3023**	**0.0978**	**4.4001**	**1.1542**	**0.0902**	**1.2443**	**0.0000**	**4,372.3149**	**4,372.3149**	**0.1257**	**0.0000**	**4,374.9549**

3.4 Building Construction - 2028

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	0.1770	1.6133	2.0867	3.4900e-003		0.0683	0.0683		0.0642	0.0642	0.0000	300.2471	300.2471	0.0705	0.0000	301.7269
Total	**0.1770**	**1.6133**	**2.0867**	**3.4900e-003**		**0.0683**	**0.0683**		**0.0642**	**0.0642**	**0.0000**	**300.2471**	**300.2471**	**0.0705**	**0.0000**	**301.7269**

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	0.5168	2.9573	7.1971	0.0192	0.5329	0.0681	0.6010	0.1525	0.0627	0.2151	0.0000	1,632.1015	1,632.1015	0.0116	0.0000	1,632.3446
Worker	0.8374	1.0589	9.9749	0.0462	3.7530	0.0294	3.7824	0.9973	0.0273	1.0246	0.0000	2,702.3280	2,702.3280	0.1114	0.0000	2,704.6675
Total	**1.3542**	**4.0162**	**17.1720**	**0.0654**	**4.2859**	**0.0975**	**4.3834**	**1.1497**	**0.0899**	**1.2397**	**0.0000**	**4,334.4295**	**4,334.4295**	**0.1230**	**0.0000**	**4,337.0122**

3.4 Building Construction - 2028

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	0.1770	1.6133	2.0867	3.4900e-003		0.0683	0.0683		0.0642	0.0642	0.0000	300.2467	300.2467	0.0705	0.0000	301.7266
Total	**0.1770**	**1.6133**	**2.0867**	**3.4900e-003**		**0.0683**	**0.0683**		**0.0642**	**0.0642**	**0.0000**	**300.2467**	**300.2467**	**0.0705**	**0.0000**	**301.7266**

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	0.5168	2.9573	7.1971	0.0192	0.5329	0.0681	0.6010	0.1525	0.0627	0.2151	0.0000	1,632.1015	1,632.1015	0.0116	0.0000	1,632.3446
Worker	0.8374	1.0589	9.9749	0.0462	3.7530	0.0294	3.7824	0.9973	0.0273	1.0246	0.0000	2,702.3280	2,702.3280	0.1114	0.0000	2,704.6675
Total	**1.3542**	**4.0162**	**17.1720**	**0.0654**	**4.2859**	**0.0975**	**4.3834**	**1.1497**	**0.0899**	**1.2397**	**0.0000**	**4,334.4295**	**4,334.4295**	**0.1230**	**0.0000**	**4,337.0122**

3.4 Building Construction - 2029

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	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4019	301.4019	0.0707	0.0000	302.8874
Total	**0.1777**	**1.6195**	**2.0948**	**3.5000e-003**		**0.0685**	**0.0685**		**0.0645**	**0.0645**	**0.0000**	**301.4019**	**301.4019**	**0.0707**	**0.0000**	**302.8874**

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	0.5104	2.9490	7.1184	0.0193	0.5350	0.0684	0.6034	0.1531	0.0629	0.2160	0.0000	1,638.5594	1,638.5594	0.0116	0.0000	1,638.8036
Worker	0.8136	1.0307	9.7328	0.0464	3.7674	0.0297	3.7971	1.0011	0.0276	1.0287	0.0000	2,694.4387	2,694.4387	0.1097	0.0000	2,696.7418
Total	**1.3241**	**3.9797**	**16.8512**	**0.0657**	**4.3024**	**0.0981**	**4.4005**	**1.1542**	**0.0905**	**1.2446**	**0.0000**	**4,332.9981**	**4,332.9981**	**0.1213**	**0.0000**	**4,335.5454**

3.4 Building Construction - 2029

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	0.1777	1.6195	2.0948	3.5000e-003		0.0685	0.0685		0.0645	0.0645	0.0000	301.4015	301.4015	0.0707	0.0000	302.8871
Total	**0.1777**	**1.6195**	**2.0948**	**3.5000e-003**		**0.0685**	**0.0685**		**0.0645**	**0.0645**	**0.0000**	**301.4015**	**301.4015**	**0.0707**	**0.0000**	**302.8871**

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	0.5104	2.9490	7.1184	0.0193	0.5350	0.0684	0.6034	0.1531	0.0629	0.2160	0.0000	1,638.5594	1,638.5594	0.0116	0.0000	1,638.8036
Worker	0.8136	1.0307	9.7328	0.0464	3.7674	0.0297	3.7971	1.0011	0.0276	1.0287	0.0000	2,694.4387	2,694.4387	0.1097	0.0000	2,696.7418
Total	**1.3241**	**3.9797**	**16.8512**	**0.0657**	**4.3024**	**0.0981**	**4.4005**	**1.1542**	**0.0905**	**1.2446**	**0.0000**	**4,332.9981**	**4,332.9981**	**0.1213**	**0.0000**	**4,335.5454**

3.4 Building Construction - 2030

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	0.1702	1.0333	2.1051	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.5281	341.5281	0.0137	0.0000	341.8160
Total	**0.1702**	**1.0333**	**2.1051**	**4.0200e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**341.5281**	**341.5281**	**0.0137**	**0.0000**	**341.8160**

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	0.5047	2.9335	7.0709	0.0193	0.5350	0.0684	0.6034	0.1531	0.0629	0.2160	0.0000	1,638.7461	1,638.7461	0.0116	0.0000	1,638.9904
Worker	0.7883	1.0019	9.4828	0.0464	3.7674	0.0298	3.7972	1.0011	0.0277	1.0288	0.0000	2,678.9157	2,678.9157	0.1077	0.0000	2,681.1771
Total	**1.2930**	**3.9355**	**16.5536**	**0.0657**	**4.3024**	**0.0982**	**4.4007**	**1.1542**	**0.0906**	**1.2448**	**0.0000**	**4,317.6618**	**4,317.6618**	**0.1193**	**0.0000**	**4,320.1675**

3.4 Building Construction - 2030

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	0.1702	1.0333	2.1051	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.5277	341.5277	0.0137	0.0000	341.8156
Total	**0.1702**	**1.0333**	**2.1051**	**4.0200e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**341.5277**	**341.5277**	**0.0137**	**0.0000**	**341.8156**

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	0.5047	2.9335	7.0709	0.0193	0.5350	0.0684	0.6034	0.1531	0.0629	0.2160	0.0000	1,638.7461	1,638.7461	0.0116	0.0000	1,638.9904
Worker	0.7883	1.0019	9.4828	0.0464	3.7674	0.0298	3.7972	1.0011	0.0277	1.0288	0.0000	2,678.9157	2,678.9157	0.1077	0.0000	2,681.1771
Total	**1.2930**	**3.9355**	**16.5536**	**0.0657**	**4.3024**	**0.0982**	**4.4007**	**1.1542**	**0.0906**	**1.2448**	**0.0000**	**4,317.6618**	**4,317.6618**	**0.1193**	**0.0000**	**4,320.1675**

3.4 Building Construction - 2031

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	0.1702	1.0333	2.1051	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.5281	341.5281	0.0137	0.0000	341.8160
Total	**0.1702**	**1.0333**	**2.1051**	**4.0200e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**341.5281**	**341.5281**	**0.0137**	**0.0000**	**341.8160**

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	0.5001	2.9218	7.0414	0.0193	0.5350	0.0684	0.6034	0.1531	0.0629	0.2160	0.0000	1,638.6583	1,638.6583	0.0116	0.0000	1,638.9027
Worker	0.7665	0.9768	9.2838	0.0464	3.7674	0.0299	3.7973	1.0011	0.0278	1.0289	0.0000	2,665.8824	2,665.8824	0.1060	0.0000	2,668.1087
Total	**1.2666**	**3.8986**	**16.3252**	**0.0657**	**4.3024**	**0.0983**	**4.4007**	**1.1542**	**0.0907**	**1.2449**	**0.0000**	**4,304.5407**	**4,304.5407**	**0.1177**	**0.0000**	**4,307.0114**

3.4 Building Construction - 2031

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	0.1702	1.0333	2.1051	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.5277	341.5277	0.0137	0.0000	341.8156
Total	**0.1702**	**1.0333**	**2.1051**	**4.0200e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**341.5277**	**341.5277**	**0.0137**	**0.0000**	**341.8156**

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	0.5001	2.9218	7.0414	0.0193	0.5350	0.0684	0.6034	0.1531	0.0629	0.2160	0.0000	1,638.6583	1,638.6583	0.0116	0.0000	1,638.9027
Worker	0.7665	0.9768	9.2838	0.0464	3.7674	0.0299	3.7973	1.0011	0.0278	1.0289	0.0000	2,665.8824	2,665.8824	0.1060	0.0000	2,668.1087
Total	**1.2666**	**3.8986**	**16.3252**	**0.0657**	**4.3024**	**0.0983**	**4.4007**	**1.1542**	**0.0907**	**1.2449**	**0.0000**	**4,304.5407**	**4,304.5407**	**0.1177**	**0.0000**	**4,307.0114**

3.4 Building Construction - 2032

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	0.1708	1.0372	2.1132	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	342.8367	342.8367	0.0138	0.0000	343.1257
Total	**0.1708**	**1.0372**	**2.1132**	**4.0400e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**342.8367**	**342.8367**	**0.0138**	**0.0000**	**343.1257**

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	0.4975	2.9233	7.0449	0.0194	0.5370	0.0687	0.6057	0.1537	0.0632	0.2168	0.0000	1,644.8642	1,644.8642	0.0117	0.0000	1,645.1096
Worker	0.7495	0.9594	9.1424	0.0466	3.7818	0.0301	3.8119	1.0050	0.0279	1.0329	0.0000	2,665.1775	2,665.1775	0.1050	0.0000	2,667.3814
Total	**1.2470**	**3.8827**	**16.1873**	**0.0659**	**4.3189**	**0.0987**	**4.4176**	**1.1586**	**0.0911**	**1.2497**	**0.0000**	**4,310.0417**	**4,310.0417**	**0.1166**	**0.0000**	**4,312.4910**

3.4 Building Construction - 2032

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	0.1708	1.0372	2.1132	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	342.8363	342.8363	0.0138	0.0000	343.1252
Total	**0.1708**	**1.0372**	**2.1132**	**4.0400e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**342.8363**	**342.8363**	**0.0138**	**0.0000**	**343.1252**

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	0.4975	2.9233	7.0449	0.0194	0.5370	0.0687	0.6057	0.1537	0.0632	0.2168	0.0000	1,644.8642	1,644.8642	0.0117	0.0000	1,645.1096
Worker	0.7495	0.9594	9.1424	0.0466	3.7818	0.0301	3.8119	1.0050	0.0279	1.0329	0.0000	2,665.1775	2,665.1775	0.1050	0.0000	2,667.3814
Total	**1.2470**	**3.8827**	**16.1873**	**0.0659**	**4.3189**	**0.0987**	**4.4176**	**1.1586**	**0.0911**	**1.2497**	**0.0000**	**4,310.0417**	**4,310.0417**	**0.1166**	**0.0000**	**4,312.4910**

3.4 Building Construction - 2033

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	0.1695	1.0293	2.0971	4.0100e-003		0.0192	0.0192		0.0192	0.0192	0.0000	340.2196	340.2196	0.0137	0.0000	340.5064
Total	**0.1695**	**1.0293**	**2.0971**	**4.0100e-003**		**0.0192**	**0.0192**		**0.0192**	**0.0192**	**0.0000**	**340.2196**	**340.2196**	**0.0137**	**0.0000**	**340.5064**

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	0.4882	2.8894	6.9720	0.0192	0.5329	0.0681	0.6010	0.1525	0.0627	0.2151	0.0000	1,632.1326	1,632.1326	0.0116	0.0000	1,632.3762
Worker	0.7239	0.9323	8.9172	0.0462	3.7530	0.0299	3.7829	0.9973	0.0277	1.0250	0.0000	2,635.8342	2,635.8342	0.1028	0.0000	2,637.9925
Total	**1.2120**	**3.8218**	**15.8892**	**0.0654**	**4.2858**	**0.0980**	**4.3838**	**1.1497**	**0.0904**	**1.2401**	**0.0000**	**4,267.9669**	**4,267.9669**	**0.1144**	**0.0000**	**4,270.3687**

3.4 Building Construction - 2033

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	0.1695	1.0293	2.0971	4.0100e-003		0.0192	0.0192		0.0192	0.0192	0.0000	340.2192	340.2192	0.0137	0.0000	340.5060
Total	**0.1695**	**1.0293**	**2.0971**	**4.0100e-003**		**0.0192**	**0.0192**		**0.0192**	**0.0192**	**0.0000**	**340.2192**	**340.2192**	**0.0137**	**0.0000**	**340.5060**

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	0.4882	2.8894	6.9720	0.0192	0.5329	0.0681	0.6010	0.1525	0.0627	0.2151	0.0000	1,632.1326	1,632.1326	0.0116	0.0000	1,632.3762
Worker	0.7239	0.9323	8.9172	0.0462	3.7530	0.0299	3.7829	0.9973	0.0277	1.0250	0.0000	2,635.8342	2,635.8342	0.1028	0.0000	2,637.9925
Total	**1.2120**	**3.8218**	**15.8892**	**0.0654**	**4.2858**	**0.0980**	**4.3838**	**1.1497**	**0.0904**	**1.2401**	**0.0000**	**4,267.9669**	**4,267.9669**	**0.1144**	**0.0000**	**4,270.3687**

3.4 Building Construction - 2034

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	0.1695	1.0293	2.0971	4.0100e-003		0.0192	0.0192		0.0192	0.0192	0.0000	340.2196	340.2196	0.0137	0.0000	340.5064
Total	**0.1695**	**1.0293**	**2.0971**	**4.0100e-003**		**0.0192**	**0.0192**		**0.0192**	**0.0192**	**0.0000**	**340.2196**	**340.2196**	**0.0137**	**0.0000**	**340.5064**

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	0.4838	2.8815	6.9561	0.0192	0.5328	0.0681	0.6009	0.1524	0.0627	0.2151	0.0000	1,631.9915	1,631.9915	0.0116	0.0000	1,632.2350
Worker	0.7040	0.9160	8.7587	0.0462	3.7530	0.0299	3.7829	0.9973	0.0277	1.0250	0.0000	2,628.2500	2,628.2500	0.1015	0.0000	2,630.3810
Total	**1.1878**	**3.7976**	**15.7148**	**0.0654**	**4.2858**	**0.0980**	**4.3838**	**1.1497**	**0.0904**	**1.2401**	**0.0000**	**4,260.2414**	**4,260.2414**	**0.1131**	**0.0000**	**4,262.6160**

3.4 Building Construction - 2034

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	0.1695	1.0293	2.0971	4.0100e-003		0.0192	0.0192		0.0192	0.0192	0.0000	340.2192	340.2192	0.0137	0.0000	340.5060
Total	**0.1695**	**1.0293**	**2.0971**	**4.0100e-003**		**0.0192**	**0.0192**		**0.0192**	**0.0192**	**0.0000**	**340.2192**	**340.2192**	**0.0137**	**0.0000**	**340.5060**

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	0.4838	2.8815	6.9561	0.0192	0.5328	0.0681	0.6009	0.1524	0.0627	0.2151	0.0000	1,631.9915	1,631.9915	0.0116	0.0000	1,632.2350
Worker	0.7040	0.9160	8.7587	0.0462	3.7530	0.0299	3.7829	0.9973	0.0277	1.0250	0.0000	2,628.2500	2,628.2500	0.1015	0.0000	2,630.3810
Total	**1.1878**	**3.7976**	**15.7148**	**0.0654**	**4.2858**	**0.0980**	**4.3838**	**1.1497**	**0.0904**	**1.2401**	**0.0000**	**4,260.2414**	**4,260.2414**	**0.1131**	**0.0000**	**4,262.6160**

3.4 Building Construction - 2035

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	0.1582	0.9332	2.1000	4.0200e-003		0.0118	0.0118		0.0118	0.0118	0.0000	341.5281	341.5281	0.0127	0.0000	341.7954
Total	**0.1582**	**0.9332**	**2.1000**	**4.0200e-003**		**0.0118**	**0.0118**		**0.0118**	**0.0118**	**0.0000**	**341.5281**	**341.5281**	**0.0127**	**0.0000**	**341.7954**

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	0.4824	2.8869	6.9707	0.0193	0.5348	0.0684	0.6032	0.1530	0.0629	0.2159	0.0000	1,638.1397	1,638.1397	0.0116	0.0000	1,638.3841
Worker	0.6890	0.9062	8.6654	0.0464	3.7674	0.0300	3.7974	1.0011	0.0278	1.0289	0.0000	2,632.0852	2,632.0852	0.1007	0.0000	2,634.2004
Total	**1.1714**	**3.7931**	**15.6361**	**0.0657**	**4.3022**	**0.0983**	**4.4005**	**1.1541**	**0.0907**	**1.2448**	**0.0000**	**4,270.2249**	**4,270.2249**	**0.1124**	**0.0000**	**4,272.5845**

3.4 Building Construction - 2035

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	0.1582	0.9332	2.1000	4.0200e-003		0.0118	0.0118		0.0118	0.0118	0.0000	341.5277	341.5277	0.0127	0.0000	341.7950
Total	**0.1582**	**0.9332**	**2.1000**	**4.0200e-003**		**0.0118**	**0.0118**		**0.0118**	**0.0118**	**0.0000**	**341.5277**	**341.5277**	**0.0127**	**0.0000**	**341.7950**

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	0.4824	2.8869	6.9707	0.0193	0.5348	0.0684	0.6032	0.1530	0.0629	0.2159	0.0000	1,638.1397	1,638.1397	0.0116	0.0000	1,638.3841
Worker	0.6890	0.9062	8.6654	0.0464	3.7674	0.0300	3.7974	1.0011	0.0278	1.0289	0.0000	2,632.0852	2,632.0852	0.1007	0.0000	2,634.2004
Total	**1.1714**	**3.7931**	**15.6361**	**0.0657**	**4.3022**	**0.0983**	**4.4005**	**1.1541**	**0.0907**	**1.2448**	**0.0000**	**4,270.2249**	**4,270.2249**	**0.1124**	**0.0000**	**4,272.5845**

3.4 Building Construction - 2036

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	0.1588	0.9368	2.1081	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	342.8367	342.8367	0.0128	0.0000	343.1050
Total	**0.1588**	**0.9368**	**2.1081**	**4.0400e-003**		**0.0118**	**0.0118**		**0.0118**	**0.0118**	**0.0000**	**342.8367**	**342.8367**	**0.0128**	**0.0000**	**343.1050**

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
Vendor					0.3874	0.0000	0.3874	0.0951	0.0000	0.0951	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					3.2747	0.0000	3.2747	0.8038	0.0000	0.8038	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**3.6621**	**0.0000**	**3.6621**	**0.8989**	**0.0000**	**0.8989**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Building Construction - 2036

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	0.1588	0.9368	2.1081	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	342.8363	342.8363	0.0128	0.0000	343.1046
Total	**0.1588**	**0.9368**	**2.1081**	**4.0400e-003**		**0.0118**	**0.0118**		**0.0118**	**0.0118**	**0.0000**	**342.8363**	**342.8363**	**0.0128**	**0.0000**	**343.1046**

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
Vendor					0.3874	0.0000	0.3874	0.0951	0.0000	0.0951	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					3.2747	0.0000	3.2747	0.8038	0.0000	0.8038	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**3.6621**	**0.0000**	**3.6621**	**0.8989**	**0.0000**	**0.8989**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Building Construction - 2037

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	0.0467	0.2753	0.6196	1.1900e-003		3.4700e-003	3.4700e-003		3.4700e-003	3.4700e-003	0.0000	100.7573	100.7573	3.7600e-003	0.0000	100.8362
Total	**0.0467**	**0.2753**	**0.6196**	**1.1900e-003**		**3.4700e-003**	**3.4700e-003**		**3.4700e-003**	**3.4700e-003**	**0.0000**	**100.7573**	**100.7573**	**3.7600e-003**	**0.0000**	**100.8362**

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
Vendor					0.1138	0.0000	0.1138	0.0279	0.0000	0.0279	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.9624	0.0000	0.9624	0.2362	0.0000	0.2362	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**1.0763**	**0.0000**	**1.0763**	**0.2642**	**0.0000**	**0.2642**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Building Construction - 2037

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	0.0467	0.2753	0.6196	1.1900e-003		3.4700e-003	3.4700e-003		3.4700e-003	3.4700e-003	0.0000	100.7572	100.7572	3.7600e-003	0.0000	100.8361
Total	**0.0467**	**0.2753**	**0.6196**	**1.1900e-003**		**3.4700e-003**	**3.4700e-003**		**3.4700e-003**	**3.4700e-003**	**0.0000**	**100.7572**	**100.7572**	**3.7600e-003**	**0.0000**	**100.8361**

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
Vendor					0.1138	0.0000	0.1138	0.0279	0.0000	0.0279	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.9624	0.0000	0.9624	0.2362	0.0000	0.2362	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**1.0763**	**0.0000**	**1.0763**	**0.2642**	**0.0000**	**0.2642**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Paving - 2037

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	0.1027	0.4406	1.4251	2.5300e-003		0.0169	0.0169		0.0169	0.0169	0.0000	216.9975	216.9975	8.3500e-003	0.0000	217.1729
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1027**	**0.4406**	**1.4251**	**2.5300e-003**		**0.0169**	**0.0169**		**0.0169**	**0.0169**	**0.0000**	**216.9975**	**216.9975**	**8.3500e-003**	**0.0000**	**217.1729**

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
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
Worker					9.5800e-003	0.0000	9.5800e-003	2.3500e-003	0.0000	2.3500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**9.5800e-003**	**0.0000**	**9.5800e-003**	**2.3500e-003**	**0.0000**	**2.3500e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Paving - 2037

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	0.1027	0.4406	1.4251	2.5300e-003		0.0169	0.0169		0.0169	0.0169	0.0000	216.9972	216.9972	8.3500e-003	0.0000	217.1726
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1027**	**0.4406**	**1.4251**	**2.5300e-003**		**0.0169**	**0.0169**		**0.0169**	**0.0169**	**0.0000**	**216.9972**	**216.9972**	**8.3500e-003**	**0.0000**	**217.1726**

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
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
Worker					9.5800e-003	0.0000	9.5800e-003	2.3500e-003	0.0000	2.3500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**9.5800e-003**	**0.0000**	**9.5800e-003**	**2.3500e-003**	**0.0000**	**2.3500e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Paving - 2038

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	0.0815	0.3496	1.1308	2.0000e-003		0.0134	0.0134		0.0134	0.0134	0.0000	172.1828	172.1828	6.6300e-003	0.0000	172.3220
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0815**	**0.3496**	**1.1308**	**2.0000e-003**		**0.0134**	**0.0134**		**0.0134**	**0.0134**	**0.0000**	**172.1828**	**172.1828**	**6.6300e-003**	**0.0000**	**172.3220**

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
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
Worker					7.6000e-003	0.0000	7.6000e-003	1.8700e-003	0.0000	1.8700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**7.6000e-003**	**0.0000**	**7.6000e-003**	**1.8700e-003**	**0.0000**	**1.8700e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Paving - 2038

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	0.0815	0.3496	1.1308	2.0000e-003		0.0134	0.0134		0.0134	0.0134	0.0000	172.1826	172.1826	6.6300e-003	0.0000	172.3217
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0815**	**0.3496**	**1.1308**	**2.0000e-003**		**0.0134**	**0.0134**		**0.0134**	**0.0134**	**0.0000**	**172.1826**	**172.1826**	**6.6300e-003**	**0.0000**	**172.3217**

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
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
Worker					7.6000e-003	0.0000	7.6000e-003	1.8700e-003	0.0000	1.8700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**7.6000e-003**	**0.0000**	**7.6000e-003**	**1.8700e-003**	**0.0000**	**1.8700e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Architectural Coating - 2038

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	16.8897					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7800e-003	0.0436	0.1032	1.7000e-004		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004	0.0000	14.6812	14.6812	5.4000e-004	0.0000	14.6926
Total	**16.8964**	**0.0436**	**0.1032**	**1.7000e-004**		**5.7000e-004**	**5.7000e-004**		**5.7000e-004**	**5.7000e-004**	**0.0000**	**14.6812**	**14.6812**	**5.4000e-004**	**0.0000**	**14.6926**

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
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
Worker					0.2875	0.0000	0.2875	0.0706	0.0000	0.0706	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**0.2875**	**0.0000**	**0.2875**	**0.0706**	**0.0000**	**0.0706**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Architectural Coating - 2038

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	16.8897					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7800e-003	0.0436	0.1032	1.7000e-004		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004	0.0000	14.6812	14.6812	5.4000e-004	0.0000	14.6926
Total	**16.8964**	**0.0436**	**0.1032**	**1.7000e-004**		**5.7000e-004**	**5.7000e-004**		**5.7000e-004**	**5.7000e-004**	**0.0000**	**14.6812**	**14.6812**	**5.4000e-004**	**0.0000**	**14.6926**

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
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
Worker					0.2875	0.0000	0.2875	0.0706	0.0000	0.0706	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**0.2875**	**0.0000**	**0.2875**	**0.0706**	**0.0000**	**0.0706**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Architectural Coating - 2039

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	31.5763					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.0815	0.1929	3.2000e-004		1.0600e-003	1.0600e-003		1.0600e-003	1.0600e-003	0.0000	27.4475	27.4475	1.0100e-003	0.0000	27.4688
Total	**31.5890**	**0.0815**	**0.1929**	**3.2000e-004**		**1.0600e-003**	**1.0600e-003**		**1.0600e-003**	**1.0600e-003**	**0.0000**	**27.4475**	**27.4475**	**1.0100e-003**	**0.0000**	**27.4688**

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
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
Worker					0.5375	0.0000	0.5375	0.1319	0.0000	0.1319	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**0.5375**	**0.0000**	**0.5375**	**0.1319**	**0.0000**	**0.1319**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Architectural Coating - 2039

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	31.5763					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.0815	0.1929	3.2000e-004		1.0600e-003	1.0600e-003		1.0600e-003	1.0600e-003	0.0000	27.4475	27.4475	1.0100e-003	0.0000	27.4687
Total	**31.5890**	**0.0815**	**0.1929**	**3.2000e-004**		**1.0600e-003**	**1.0600e-003**		**1.0600e-003**	**1.0600e-003**	**0.0000**	**27.4475**	**27.4475**	**1.0100e-003**	**0.0000**	**27.4687**

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
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
Worker					0.5375	0.0000	0.5375	0.1319	0.0000	0.1319	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**0.5375**	**0.0000**	**0.5375**	**0.1319**	**0.0000**	**0.1319**	**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	24.8681	52.1850	248.1034	0.6641	45.5879	0.7658	46.3537	12.1925	0.7066	12.8991	0.0000	46,096.4775	46,096.4775	1.7928	0.0000	46,134.1270
Unmitigated	24.8681	52.1850	248.1034	0.6641	45.5879	0.7658	46.3537	12.1925	0.7066	12.8991	0.0000	46,096.4775	46,096.4775	1.7928	0.0000	46,134.1270

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	35,880.00	35,880.00	35880.00	102,448,285	102,448,285
City Park	728.36	728.36	728.36	1,554,950	1,554,950
Elementary School	1,782.00	0.00	0.00	2,806,572	2,806,572
Strip Mall	9,368.28	9,368.28	9368.28	14,427,464	14,427,464
Total	47,758.65	45,976.65	45,976.65	121,237,271	121,237,271

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513300	0.073549	0.191092	0.130830	0.036094	0.005140	0.012550	0.022916	0.001871	0.002062	0.006564	0.000586	0.003446

5.0 Energy Detail

4.4 Fleet Mix

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	5,853.2465	5,853.2465	0.2356	0.0487	5,873.3046
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,853.2465	5,853.2465	0.2356	0.0487	5,873.3046
NaturalGas Mitigated	0.1368	1.1716	0.5145	7.4600e-003		0.0945	0.0945		0.0945	0.0945	0.0000	1,354.1225	1,354.1225	0.0260	0.0248	1,362.3635
NaturalGas Unmitigated	0.1368	1.1716	0.5145	7.4600e-003		0.0945	0.0945		0.0945	0.0945	0.0000	1,354.1225	1,354.1225	0.0260	0.0248	1,362.3635

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					
City Park	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
Elementary School	466507	2.5200e-003	0.0229	0.0192	1.4000e-004		1.7400e-003	1.7400e-003		1.7400e-003	1.7400e-003	0.0000	24.8946	24.8946	4.8000e-004	4.6000e-004	25.0461
Strip Mall	319913	1.7300e-003	0.0157	0.0132	9.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	17.0718	17.0718	3.3000e-004	3.1000e-004	17.1757
Apartments Mid Rise	2.45889e+007	0.1326	1.1330	0.4821	7.2300e-003		0.0916	0.0916		0.0916	0.0916	0.0000	1,312.1562	1,312.1562	0.0252	0.0241	1,320.1417
Total		**0.1368**	**1.1716**	**0.5145**	**7.4600e-003**		**0.0945**	**0.0945**		**0.0945**	**0.0945**	**0.0000**	**1,354.1225**	**1,354.1225**	**0.0260**	**0.0248**	**1,362.3635**

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					
Elementary School	466507	2.5200e-003	0.0229	0.0192	1.4000e-004		1.7400e-003	1.7400e-003		1.7400e-003	1.7400e-003	0.0000	24.8946	24.8946	4.8000e-004	4.6000e-004	25.0461
Strip Mall	319913	1.7300e-003	0.0157	0.0132	9.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	17.0718	17.0718	3.3000e-004	3.1000e-004	17.1757
Apartments Mid Rise	2.45889e+007	0.1326	1.1330	0.4821	7.2300e-003		0.0916	0.0916		0.0916	0.0916	0.0000	1,312.1562	1,312.1562	0.0252	0.0241	1,320.1417
City Park	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		**0.1368**	**1.1716**	**0.5145**	**7.4600e-003**		**0.0945**	**0.0945**		**0.0945**	**0.0945**	**0.0000**	**1,354.1225**	**1,354.1225**	**0.0260**	**0.0248**	**1,362.3635**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.55005e+007	5,065.6908	0.2039	0.0422	5,083.0501
City Park	0	0.0000	0.0000	0.0000	0.0000
Elementary School	448448	146.5569	5.9000e-003	1.2200e-003	147.0591
Strip Mall	1.96139e+006	640.9988	0.0258	5.3400e-003	643.1954
Total		**5,853.2465**	**0.2356**	**0.0488**	**5,873.3046**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.55005e+007	5,065.6908	0.2039	0.0422	5,083.0501
City Park	0	0.0000	0.0000	0.0000	0.0000
Elementary School	448448	146.5569	5.9000e-003	1.2200e-003	147.0591
Strip Mall	1.96139e+006	640.9988	0.0258	5.3400e-003	643.1954
Total		**5,853.2465**	**0.2356**	**0.0488**	**5,873.3046**

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	311.5011	4.2046	380.0972	0.1372		48.8895	48.8895		48.8881	48.8881	4,632.8153	1,997.3517	6,630.1670	4.3284	0.3644	6,834.0295
Unmitigated	311.5011	4.2046	380.0972	0.1372		48.8895	48.8895		48.8881	48.8881	4,632.8153	1,997.3517	6,630.1670	4.3284	0.3644	6,834.0295

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	7.9715					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	21.0946					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	281.4167	3.8181	346.6751	0.1354		48.7058	48.7058		48.7043	48.7043	4,632.8153	1,942.9352	6,575.7505	4.2753	0.3644	6,778.4980
Landscaping	1.0184	0.3865	33.4221	1.7600e-003		0.1838	0.1838		0.1838	0.1838	0.0000	54.4165	54.4165	0.0531	0.0000	55.5315
Total	**311.5011**	**4.2046**	**380.0972**	**0.1372**		**48.8895**	**48.8895**		**48.8881**	**48.8881**	**4,632.8153**	**1,997.3517**	**6,630.1670**	**4.3284**	**0.3644**	**6,834.0295**

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	7.9715					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	21.0946					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	281.4167	3.8181	346.6751	0.1354		48.7058	48.7058		48.7043	48.7043	4,632.8153	1,942.9352	6,575.7505	4.2753	0.3644	6,778.4980
Landscaping	1.0184	0.3865	33.4221	1.7600e-003		0.1838	0.1838		0.1838	0.1838	0.0000	54.4165	54.4165	0.0531	0.0000	55.5315
Total	**311.5011**	**4.2046**	**380.0972**	**0.1372**		**48.8895**	**48.8895**		**48.8881**	**48.8881**	**4,632.8153**	**1,997.3517**	**6,630.1670**	**4.3284**	**0.3644**	**6,834.0295**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1,704.3299	8.0096	0.2011	1,934.8807
Unmitigated	2,175.4224	10.0138	0.2518	2,463.7652

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	292.216 / 184.223	2,005.0803	9.5988	0.2408	2,281.2904
City Park	0 / 19.1828	69.6500	2.8000e-003	5.8000e-004	69.8886
Elementary School	2.18182 / 5.61038	30.3471	0.0723	1.9300e-003	32.4621
Strip Mall	10.3479 / 6.34228	70.3451	0.3399	8.5200e-003	80.1240
Total		**2,175.4224**	**10.0138**	**0.2518**	**2,463.7652**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	233.773 / 147.378	1,569.5367	7.6777	0.1923	1,790.3865
City Park	0 / 15.3463	55.7200	2.2400e-003	4.6000e-004	55.9109
Elementary School	1.74545 / 4.48831	24.0199	0.0578	1.5400e-003	25.7110
Strip Mall	8.27834 / 5.07382	55.0534	0.2719	6.8100e-003	62.8723
Total		**1,704.3299**	**8.0096**	**0.2011**	**1,934.8807**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	482.1888	28.4965	0.0000	1,080.6162
Unmitigated	482.1888	28.4965	0.0000	1,080.6162

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	2063.1	418.7907	24.7498	0.0000	938.5369
City Park	1.38	0.2801	0.0166	0.0000	0.6278
Elementary School	164.25	33.3413	1.9704	0.0000	74.7199
Strip Mall	146.69	29.7767	1.7598	0.0000	66.7316
Total		**482.1888**	**28.4966**	**0.0000**	**1,080.6162**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	2063.1	418.7907	24.7498	0.0000	938.5369
City Park	1.38	0.2801	0.0166	0.0000	0.6278
Elementary School	164.25	33.3413	1.9704	0.0000	74.7199
Strip Mall	146.69	29.7767	1.7598	0.0000	66.7316
Total		**482.1888**	**28.4966**	**0.0000**	**1,080.6162**

9.0 Operational Offroad

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

10.0 Vegetation