

Oppidan Investment Company

Oppidan Online Ordering Grocery Store Project

Sunnyvale, CA

Air Quality Study

August 2015





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August 31, 2015
Project No. 15-01896

Roger Bernstein
Oppidan Investment Company
5125 County Road 101
Minnetonka, MN 55345
Via email: roger@Oppidan.com

**RE: Air Quality Study for an Online Ordering Grocery Store Project
in Sunnyvale, California**

Dear Mr. Bernstein:

Rincon Consultants, Inc. is pleased to submit the attached Air Quality Study for the proposed Online Ordering Grocery Store project in Sunnyvale, California. The proposed project includes operational controls that would prevent significant localized air quality impacts, including scheduling to limit vehicle queueing and discouraging vehicle idling on site.

Project construction would be required to comply with all required BAAQMD construction control measures. Compliance with applicable BAAQMD requirements as well as the proposed operational controls would ensure that the project would not result in any short-term construction impacts or long-term regional impacts to air quality. In addition, it is recommended that the project incorporate signage discouraging patrons from idling their vehicles while waiting in order to further minimize pollutant emissions. The project would not result in exposure of any nearby receptors to substantial concentrations of toxic air contaminants or odors, and would not conflict with the BAAQMD's 2010 Clean Air Plan.

If you have any questions regarding this study or if we can provide you with other environmental consulting services, please feel free to contact us.

Sincerely,

RINCON CONSULTANTS, INC.

A handwritten signature in blue ink, appearing to read "CB", with a long horizontal flourish extending to the right.

Chris Bersbach, MESM
Technical Services Program Manager

A handwritten signature in blue ink, appearing to read "Abe Leider", with a stylized, cursive script.

Abe Leider, AICP CEP
Senior Project Manager

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CalEEMod version 2013.2.2 - Summer, Winter, and Annual Results



1.0 INTRODUCTION

This report is an air quality analysis of the Online Ordering Grocery Store Project in the City of Sunnyvale. The report has been prepared by Rincon Consultants, Inc. under contract to Oppidan Investment Company. The purpose of this analysis is to provide an evaluation of the potential air quality impacts on the air basin and on nearby sensitive receptors.

2.0 PROJECT DESCRIPTION

The project site is located at 777 Sunnyvale-Saratoga Road, approximately 500 feet north of the S. Mathilda Avenue and Sunnyvale-Saratoga Road intersection in the City of Sunnyvale, California. The site comprises one parcel with an existing lumber pick-up building and parking area. The property is directly north of the Fall River Terrace residential development, directly east of S. Mathilda Avenue, and directly south of the West Sunnyvale Shopping Center and Cherry Orchard Apartments. The site is designated and zoned Highway/Central Business under the City of Sunnyvale General Plan and Zoning Code.

The project involves construction of an 11,600 square foot building on the 1.6-acre project site that would be operated as a take-out grocery store with nine parking stalls designated for customers waiting for their orders to be brought to their vehicle. The take-out grocery store would operate by having customers place their order in advance; drive to the site; and park in the on-site parking stalls to have their order brought out to their vehicle. Vehicle idling would be discouraged during wait time and scheduling would aim to avoid queuing beyond five cars in each of the nine provided spaces. The grocery store would be open from 7:00 AM to 10:00 PM daily, and the project applicant estimates serving a maximum of 40 cars per hour during peak hours (expected to be 3:00 PM to 7:00 PM on weekdays).

Access to the project site would be via driveways along S. Mathilda Avenue and Sunnyvale-Saratoga Road.

Construction of the project would require demolition of the existing 7,600 square foot lumber pick-up building on the project site. The site is generally level, and soils are anticipated to be balanced on the project site during construction. Therefore, transportation of cut and fill soil is not expected to be required.

3.0 SETTING

3.1 Air Quality

a. Criteria Air Pollutant Regulation. The federal and state governments have been empowered by the federal and state Clean Air Acts to regulate emissions of airborne pollutants and have established ambient (outdoor) air quality standards for the protection of public health. The U.S. Environmental Protection Agency (U.S. EPA) is the federal agency designated to administer air quality regulation, while the California Air Resources Board (ARB) is the state equivalent in California. Federal and state standards have been established for six criteria pollutants, including ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulates less than 10 and 2.5 microns in diameter (PM₁₀ and PM_{2.5}), and lead (Pb).



California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. Table 1 lists the current federal and state standards for each of these pollutants. California standards are more restrictive than federal standards for each of these pollutants except lead and the eight-hour average for CO.

Table 1
Current Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standards	California Standard
Ozone (O ₃)	1-Hour	---	0.09 ppm
	8-Hour	0.075 µg/m ³	0.070 µg/m ³
PM ₁₀	24-Hour	150 µg/m ³	50 µg/m ³
	Annual	---	20 µg/m ³
PM _{2.5}	24-Hour	35 µg/m ³	---
	Annual	15 µg/m ³	12 µg/m ³
Carbon Monoxide (CO)	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide (NO ₂)	Annual	0.053 ppm	0.030 ppm
	1-Hour	0.100 ppm	0.18 ppm
Sulfur Dioxide (SO ₂)	24-Hour	0.14 ppm	0.04 ppm
	3-Hour	0.5 ppm (secondary)	---
	1-Hour	0.075 ppm (primary)	0.25 ppm
Lead (Pb)	30-Day Average	---	1.5 µg/m ³
	3-Month Average	0.15 µg/m ³	---

ppm = parts per million

µg/m³ = micrograms per cubic meter

Source: California Air Resources Board, <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>, last updated June 4, 2013.

Local control in air quality management is provided by ARB through county-level or regional (multi-county) air pollution control districts (APCDs). ARB establishes statewide air quality standards and is responsible for control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. ARB has established 15 air basins statewide. The City of Sunnyvale is located within the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). BAAQMD is required to monitor air pollutant levels to ensure that air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the local air basin is classified as being in "attainment" or "non-attainment."

The SFBAAB is designated in non-attainment for the federal 8-hour ozone standard and the federal PM_{2.5} standard. The San Francisco Bay Area is also a maintenance area for the federal carbon monoxide (CO) standards and is designated in attainment or unclassified for the other federal ambient air quality standards. SFBAAB is also designated in non-attainment for the state standards for ozone, PM₁₀, and PM_{2.5}, and in attainment or unclassified for the other state



ambient air quality standards. Characteristics of ozone, carbon monoxide, nitrogen dioxide, and suspended particulates are described below.

Ozone. Ozone is produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NO_x) and reactive organic gases (ROG). Nitrogen oxides are formed during the combustion of fuels, while reactive organic compounds are formed during combustion and evaporation of organic solvents. Because ozone requires sunlight to form, it mostly occurs in concentrations considered serious between the months of April and October. Ozone is a pungent, colorless, toxic gas with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to ozone include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

Carbon Monoxide. CO is a local pollutant that is found in high concentrations only near the source. The major source of carbon monoxide, a colorless, odorless, poisonous gas, is automobile traffic. Elevated concentrations, therefore, are usually only found near areas of high traffic volumes. CO's health effects are related to its affinity for hemoglobin in the blood. At high concentrations, carbon monoxide reduces the amount of oxygen in the blood, causing heart difficulties in people with chronic diseases, reduced lung capacity and impaired mental abilities.

Nitrogen Dioxide. NO_2 is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts rapidly to form NO_2 , creating the mixture of NO and NO_2 commonly called NO_x . NO_2 is an acute irritant. A relationship between NO_2 and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur. NO_2 absorbs blue light and causes a reddish brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of PM_{10} and acid rain.

Particulate Matter. PM_{10} is particulate matter measuring no more than 10 microns in diameter, while $\text{PM}_{2.5}$ is fine particulate matter measuring no more than 2.5 microns in diameter. Suspended particulates are mostly dust particles, nitrates and sulfates. Both PM_{10} and $\text{PM}_{2.5}$ are by-products of fuel combustion and wind erosion of soil and unpaved roads, and are directly emitted into the atmosphere through these processes. Suspended particulates are also created in the atmosphere through chemical reactions. The characteristics, sources, and potential health effects associated with PM_{10} and $\text{PM}_{2.5}$ can be very different. The small particulates generally come from windblown dust and dust kicked up from mobile sources. The fine particulates are generally associated with combustion processes as well as being formed in the atmosphere as a secondary pollutant through chemical reactions. Fine particulate matter is more likely to penetrate deeply into the lungs and poses a health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. More than half of the small and fine particulate matter that is inhaled into the lungs remains there. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

Sulfur Dioxide. Sulfur dioxide (SO_2) is one of a group of highly reactive gasses known as "oxides of sulfur (SO_x)." SO_2 is a colorless, irritating gas with a pungent smell. The largest



sources of SO₂ emissions are from fossil fuel combustion at power plants (73%) and other industrial facilities (20%). Smaller sources of SO₂ emissions include industrial processes such as extracting metal from ore, and the burning of high sulfur containing fuels by locomotives, large ships, and non-road equipment.

Lead. Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. As a result of the U.S. EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector dramatically declined by 95% between 1980 and 1999, and levels of lead in the air decreased by 94% between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers.

b. Current Air Quality. California's weather is heavily influenced by a semi-permanent high-pressure system west of the Pacific. The City of Sunnyvale is located within the SFBAAB. Air quality in the SFBAAB is affected by the emission sources located in the region, as well as by natural factors. Atmospheric conditions such as wind speed and direction, air temperature gradients, and local and regional topography influence air quality. The SFBAAB is affected by a Mediterranean climate of warm, dry summers and cool, damp winters. During the summer, maximum temperatures are about 64°F along the coast, and about 88°F farther inland. In winter, average minimum temperatures are in the low to mid-40s along the coast and in the low to mid-30s inland (Life Science!, Inc., 2004).

Topographical features, the location of the Pacific high-pressure system, and varying circulation patterns resulting from temperature gradients affect the speed and direction of local winds. The winds play a major role in the dispersion of pollutants. Strong winds can carry pollutants far from their source; a lack of wind will allow pollutants to concentrate in an area (Life Science!, Inc., 2004).

Air dispersion also affects pollutant concentrations. As altitude increases, air temperature normally decreases. Inversions occur when colder air becomes trapped below warmer air, restricting the air masses' ability to mix. Pollutants also become trapped, which promotes the production of secondary pollutants. Subsidence inversions, which can occur during the summer in the SFBAAB, result from high-pressure cells that cause the local air mass to sink, compress, and become warmer than the air closer to the earth. Pollutants accumulate as this stagnating air mass remains in place for 1 or more days (Life Science!, Inc., 2004).

BAAQMD is the public agency responsible for air quality management in the nine Bay Area counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, southwestern Solano, and southern Sonoma. The Air District operates air monitoring stations in each of these nine counties. The Air District began measuring air quality in the San Francisco Bay Area in 1957. In 2014 there were 32 air monitoring stations in operation within the Air District (BAAQMD, 2015).

The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the California and federal standards. The air quality monitoring station located nearest to the project site is the Cupertino - Voss Avenue station in Cupertino, located approximately 3.9 miles southwest of the project site. The second-



closest station is the San Jose – Jackson Street monitoring station, located approximately 7.7 miles east of the project site. Table 2 lists the number of days that each of the standards has been exceeded at the closest monitoring station. Data presented are from the Cupertino – Voss Avenue monitoring station.

Table 2
Ambient Air Quality Data

Pollutant	2011	2012	2013	2014
Ozone, ppm - Worst Hour	0.086	0.083	0.091	*
Number of days of State exceedances (>0.09 ppm)	0	0	0	*
Number of days of Federal exceedances (>0.12 ppm)	0	0	0	*
Carbon Monoxide, ppm - Worst 8 Hours	0.95	0.73	*	*
Number of days of State/Federal exceedances (>9.0 ppm)	0	0	0	0
Nitrogen Dioxide, ppm - Worst Hour	42.5	44.7	41.9	*
Number of days of State exceedances (>0.25 ppm)	0	0	0	0
Particulate Matter <10 microns, $\mu\text{g}/\text{m}^3$ Worst 24 Hours	28.9	41.5	33.5	*
Number of samples of State exceedances (>50 $\mu\text{g}/\text{m}^3$)	0	0	0	0
Number of samples of Federal exceedances (>150 $\mu\text{g}/\text{m}^3$)	0	0	0	0
Particulate Matter <2.5 microns, $\mu\text{g}/\text{m}^3$ Worst 24 Hours	30.5	27.5	38.9	*
Number of samples of Federal exceedances (>35 $\mu\text{g}/\text{m}^3$)	*	*	*	0

Source: California Air Resources Board, 2011-2014 Annual Air Quality Data Summaries available at <http://www.arb.ca.gov/adam/topfour/topfour1.php>
Cupertino – Voss Avenue Monitoring Station
*insufficient data available to determine the value

As shown in Table 2, there were no exceedances of state or federal standards for any of the monitored air pollutants in 2011, 2012, 2013, and 2014.

c. Clean Air Plan. Under State law, BAAQMD is required to prepare an overall plan for air quality improvement for the SFBAAB, known as the Clean Air Plan. BAAQMD has adopted a Clean Air Plan (CAP) that provides a strategy for the attainment of state and federal air quality standards. To comply with the California Clean Air Act, BAAQMD and its cooperating partners adopted the 2005 Ozone Strategy. BAAQMD has made updates to the 2005 Ozone Strategy and included those updates in the 2010 Clean Air Plan. The 2010 CAP defines a control strategy that the Air District and its partners will implement to: (1) reduce emissions and decrease ambient concentrations of harmful pollutants; (2) safeguard public health by reducing exposure to air pollutants that pose the greatest health risk, with an emphasis on protecting the communities most heavily impacted by air pollution; and (3) reduce greenhouse gas (GHG) emissions to protect the climate.



d. Sensitive Receptors. Ambient air quality standards have been established to represent the levels of air quality considered sufficient, with an adequate margin of safety, to protect public health and welfare. They are designed to protect that segment of the public most susceptible to respiratory distress, such as children under 14; the elderly over 65; persons engaged in strenuous work or exercise; and people with cardiovascular and chronic respiratory diseases. The majority of sensitive receptor locations are therefore residences (including short-term residences, such as hotels), schools, and hospitals. The nearest potential sensitive receptors include the Cherry Orchard Apartments located immediately north and the Fall River Terrace residences located immediately south of the project site. Additionally, Cumberland Elementary School is located approximately 0.5 miles west and Valley Health Center hospital is located approximately 0.6 miles east of the project site.

4.0 IMPACT ANALYSIS

4.1 Methodology and Significance Thresholds

On March 5, 2012 the Alameda County Superior Court issued a judgment finding that BAAQMD had failed to comply with CEQA when it adopted the air quality thresholds contained in BAAQMD's 2010 CEQA Guidelines. As such, lead agencies need to determine appropriate air quality thresholds of significance based on substantial evidence in the record. Lead agencies may rely on BAAQMD's CEQA Guidelines (updated May 2012) for assistance in calculating air pollution emissions, obtaining information regarding the health impacts of air pollutants, and identifying potential mitigation measures. However, BAAQMD has been ordered to set aside the thresholds and is no longer recommending that these thresholds be used as a general measure of a project's significant air quality impacts. According to BAAQMD, lead agencies may continue to rely on the Air District's 1999 Thresholds of Significance and to make determinations regarding the significance of an individual project's air quality impacts based on substantial evidence in the record for that project.

Methodology. The regional construction emissions associated with development of the project were calculated using the California Emissions Estimator Model (CalEEMod) version 2013.2.2 software by estimating the types and number of pieces of equipment that would be used on-site throughout the construction period. Based on BAAQMD methodology, the significance of construction emissions is analyzed using the construction control measures from the BAAQMD's 1999 CEQA Guidelines.

Operational emissions associated with existing and future on-site development were also estimated using CalEEMod. Operational emissions include mobile source emissions, area source emissions, and emissions from energy use. Mobile source emissions would be generated by the increase in motor vehicle trips to and from the project site associated with operation of the project. This analysis used daily trip generation rates from the Institute of Transportation Engineers' *Trip Generation Manual 9th Edition* for drive-through restaurants. This represent one of the most similar land-use-types available in the Trip Generation Manual, but includes peak hour trip generation characteristics that substantially exceed the project applicant's estimate of 40 vehicles per hour during peak hours for the project. Therefore, this estimate of peak hour and daily project-generated traffic represents an extremely conservative estimate of the potential vehicle emissions that would result from operation of the project in terms of overall trip generation. Area source emissions are generated by landscape maintenance equipment,



consumer products, and architectural coating. Emissions attributed to energy use include natural gas consumption for space and water heating. To determine whether a significant regional air quality impact would occur, the increase in emissions is compared with regional thresholds for operational emissions from the BAAQMD's 1999 CEQA Guidelines.

Significance Thresholds. According to Appendix G of the *CEQA Guidelines*, a project would have a significant impact on local or regional air quality if it would:

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

For the project, BAAQMD's significance thresholds in the 1999 CEQA Guidelines for project construction and operations within the SFBAAB are the most appropriate thresholds for use to determine air quality impacts of the project and are considered reasonable for use in this analysis. According to the 1999 CEQA Guidelines, a project that generates criteria air pollutant emissions in excess of the following annual or daily thresholds would be considered to have a significant air quality impact:

- *80 pounds per day or 15 tons per year of ROG*
- *80 pounds per day or 15 tons per year of NO_x*
- *80 pounds per day or 15 tons per year of PM₁₀*

According to BAAQMD's 1999 CEQA Guidelines, the determination of significance with respect to construction emissions is based on a consideration of the emissions control measures to be implemented during construction of the project. Implementation of required BAAQMD control measures (as appropriate, depending on the size of the project area) would ensure that air pollutant emissions from construction activities would be considered a less than significant local and regional impact. For projects less than four acres in area, applicable BAAQMD control measures include:

- *Water all active construction areas at least twice daily.*
- *Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.*
- *Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.*
- *Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.*
- *Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.*



According to BAAQMD’s 1999 CEQA Guidelines, localized carbon monoxide concentrations should be estimated for projects in which:

1. *Vehicle emissions of CO would exceed 550 lbs/day,*
2. *Project traffic would impact intersections or roadway links operating at Level of Service (LOS) D, E, or F or would cause LOS to decline to D, E or F, or*
3. *Project traffic would increase traffic volumes on nearby roadways by 10% or more.*

4.2 Impacts

a. Short-Term Construction Impacts. Construction activities would generate fugitive dust, ozone precursors, and diesel exhaust that could result in a short-term increase in criteria pollutants and may contribute to the existing non-attainment status for ozone and PM₁₀. ROG would be released during drying of architectural coatings. Site preparation and grading would involve the greatest amount of heavy equipment and would therefore result in the most substantial generation of fugitive dust. Potential construction emissions were estimated using CalEEMod. Table 3 summarizes the total maximum daily project emissions generated from construction activities during project construction.

Table 3
Online Ordering Grocery Store Project Maximum Daily Construction Emissions

Construction Year	ROG + NO _x (lbs/day)	Fugitive PM ₁₀ (lbs/day)	Exhaust PM ₁₀ (lbs/day)
2016	57.4	5.3	1.8
<i>BAAQMD Threshold</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<i>Threshold Exceeded?</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>

Source: CalEEMod winter output provided in Appendix.

Construction of the project would generate a maximum of 57.4 lbs/day of ozone precursors (ROG + NO_x), 5.3 lbs/day of fugitive PM₁₀, and 1.8 lbs/day of exhaust PM₁₀ in the construction year (assumed in the CalEEMod emissions estimate to be year 2016). As described above, BAAQMD does not have quantitative emissions thresholds for short-term construction emissions. During the construction phase, the project would be required to comply with BAAQMD dust control measures discussed above to reduce short-term emissions at sensitive receptors, such as the Cherry Orchard Apartments located immediately north of the project site, the Fall River Terrace residences located immediately south of the project site, the Cumberland Elementary School located approximately 0.5 miles west of the project site, and the Valley Health Center hospital located approximately 0.6 miles east of the project site. Compliance with these standard BAAQMD dust control measures would reduce the project’s short-term ozone precursor and particulate emissions, and the project’s short-term construction impacts would be less than significant. **[Checklist Item 4].**

Mitigation Measures

No mitigation would be required. However, the project would be required to comply with BAAQMD dust control measures described above during project construction activity, including demolition.



b. Long-Term Regional Impacts. The majority of project-related operational emissions would be due to vehicle trips to and from the site. Potential operational emissions were estimated using CalEEMod for the project. Table 4 summarizes the total estimated emissions associated with operation of the project.

Table 4
Online Ordering Grocery Store Project Operational Emissions

Emissions Source	Estimated Emissions (lbs/day)				
	ROG	NO _x	PM ₁₀	CO	SO _x
Maximum (lbs/day)	26.1	25.2	17.1	203.4	0.2
BAAQMD Threshold (lbs/day)	80			N/A	N/A
Threshold Exceeded?	NO			NO	NO

See Appendix for CalEEMod computer model output (winter).

As shown in Table 4, project-generated emissions would not exceed applicable BAAQMD thresholds for any criteria pollutant. Consistent with the BAAQMD methodology for localized carbon monoxide concentrations, the project would not require further quantification of localized CO concentrations because it would not result in mobile emissions greater than 550 pounds per day. Therefore, air quality impacts associated with operation of the project would be less than significant [**Checklist Item 2**].

Mitigation Measures

No mitigation would be required. However, it is recommended that the project incorporate signage discouraging patrons from idling their vehicles while waiting in order to further minimize pollutant emissions.

c. Toxic Air Contaminants. The California Air Resources Board's (ARB's) *Air Quality and Land Use Handbook: A Community Health Perspective* (April 2005) recommends against siting sensitive receptors near potential sources of toxic air contaminants (TACs), including freeways and high volume roadways, distribution centers, rail yards, ports, refineries, chrome platers, dry cleaners, or gasoline stations. The majority of sensitive receptor locations are residences, schools, and hospitals. Although there are sensitive receptors (residences located to the immediate north and south) near the project site, the project does not involve the construction of any new sources of TACs, and would not locate new residences or any other sensitive receptor near a source of TACs. Therefore, the project would not result in exposure of any of the existing nearby sensitive receptors to new sources of TACs and would not exceed any of the health risk screening criteria identified by BAAQMD or in the ARB *Air Quality and Land Use Handbook* (April 2005). [**Checklist Item 4**].

Mitigation Measures

No mitigation would be required.



d. Objectionable Odors. The project does not include any uses identified in ARB's *Air Quality and Land Use Handbook* (April 2005) or BAAQMD's 1999 CEQA Guidelines as common sources of odor complaints. Development of the proposed grocery store is not expected to generate objectionable odors which may result in potentially significant impacts. Therefore, this impact would be less than significant. **[Checklist Item 5].**

Mitigation Measures

No mitigation would be required.

f. Clean Air Plan Consistency. According to BAAQMD's *CEQA Air Quality Guidelines* (2011), an air quality plan refers to clean air plans, state implementation plans (SIPS), ozone plans, and other potential air quality plans developed by BAAQMD. To date, BAAQMD's most current air quality plan is the 2010 CAP. The consistency analysis should evaluate whether the project is consistent with the goals, control measures, and strategies outlined in the CAP. If the project is consistent with these components, it would be considered consistent with the CAP. Goals of the CAP include: attainment of air quality standards and reduction of population exposure and protecting public health in the Bay Area. As described above, the project would not exceed any of the quantitative air quality standards established for BAAQMD and would not present any local risks to public health associated with air pollutants emissions.

The 2010 CAP includes 55 control measures aimed at reducing air pollution in the Bay Area. Along with the traditional stationary, area, mobile source, and transportation control measures, the 2010 CAP contains Land Use and Local Impact (LUM) measures and Energy and Climate measures (ECM) designed to promote mixed use and compact development to reduce vehicle emissions and exposure to pollutants from stationary and mobile sources. BAAQMD encourages project developers and lead agencies to incorporate these measures into project designs and plan elements. If approval of a project would not cause the disruption, delay, or otherwise hinder the implementation of any air quality plan control measure, it would be considered consistent with the 2010 CAP. As described above, the project would be required to comply with basic and optional control measures which would reduce air pollution resulting from construction activities. The following elements of the project would assist in the implementation of applicable measures included in the 2010 CAP:

1. *Provision of a dedicated high-efficiency vehicle parking space in the parking lot area – 2010 CAP Mobile source measure A-1: Promote Clean, Fuel Efficient Light & Medium-Duty Vehicles;*
2. *Provision of a dedicated carpool parking space in the parking lot area – 2010 CAP Transportation control measure TCM C-3: Promote Rideshare Services and Incentives; and*
3. *Provision of new bicycle parking stalls – 2010 CAP Transportation control measure TCM D-1: Improve Bicycle Access and Facilities.*
4. *Provision of a new accessible path of travel through project site for pedestrians – 2010 CAP Transportation control measure TCM D-2: Improve Pedestrian Access and Facilities*

In addition to the components of the project that aid in the implementation of the 2010 CAP control measures, the project would not result in long-term emissions which exceed BAAQMD's operational emissions thresholds. For these reasons, the project would not conflict with or obstruct continued implementation of the Clean Air Plan. This impact would be less than significant **[Checklist Item 1].**



Based on BAAQMD guidance for Clean Air Plan consistency, the determination that the project would not conflict with or obstruct continued implementation of the 2010 CAP means that the project would not have a cumulatively considerable contribution to regional air quality impacts. Therefore, cumulative impacts to air quality would be less than significant [**Checklist Item 3**].

Mitigation Measures

No mitigation would be required.



5.0 REFERENCES

Association of Environmental Professionals. *California Environmental Quality Act (CEQA) Statute and Guidelines*. 2012

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Appendix

CalEEMod version 2013.2.2

Summer, Winter, and Annual Results



**Online Ordering Grocery Store Project
San Francisco Bay Area Air Basin, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant with Drive Thru	11.60	1000sqft	1.19	11,600.00	0
Parking Lot	45.00	Space	0.41	18,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - project site area= apprx 1.6 acres based on site plans

Grading - project site area= apprx 1.6 acres based on site plans

Demolition -

Table Name	Column Name	Default Value	New Value
tblGrading	AcresOfGrading	1.50	1.60
tblGrading	AcresOfGrading	1.00	0.00
tblLandUse	LotAcreage	0.27	1.19
tblProjectCharacteristics	OperationalYear	2014	2017

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					
2016	28.5110	28.8257	22.6062	0.0273	5.3448	1.7523	6.7439	2.9165	1.6399	4.2036	0.0000	2,746.3095	2,746.3095	0.6363	0.0000	2,759.6712
Total	28.5110	28.8257	22.6062	0.0273	5.3448	1.7523	6.7439	2.9165	1.6399	4.2036	0.0000	2,746.3095	2,746.3095	0.6363	0.0000	2,759.6712

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					
2016	28.5110	28.8257	22.6062	0.0273	5.3448	1.7523	6.7439	2.9165	1.6399	4.2036	0.0000	2,746.3095	2,746.3095	0.6363	0.0000	2,759.6712
Total	28.5110	28.8257	22.6062	0.0273	5.3448	1.7523	6.7439	2.9165	1.6399	4.2036	0.0000	2,746.3095	2,746.3095	0.6363	0.0000	2,759.6712

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	0.7111	6.0000e-005	5.8900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0131
Energy	0.0723	0.6576	0.5523	3.9500e-003		0.0500	0.0500		0.0500	0.0500		789.0617	789.0617	0.0151	0.0145	793.8638
Mobile	23.7412	31.3180	154.0644	0.2556	16.6193	0.3801	16.9994	4.4459	0.3496	4.7955		21,645.0618	21,645.0618	0.9652		21,665.3315
Total	24.5246	31.9756	154.6226	0.2596	16.6193	0.4301	17.0494	4.4459	0.3995	4.8455		22,434.1359	22,434.1359	0.9804	0.0145	22,459.2085

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	0.7111	6.0000e-005	5.8900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0131
Energy	0.0723	0.6576	0.5523	3.9500e-003		0.0500	0.0500		0.0500	0.0500		789.0617	789.0617	0.0151	0.0145	793.8638
Mobile	23.7412	31.3180	154.0644	0.2556	16.6193	0.3801	16.9994	4.4459	0.3496	4.7955		21,645.0618	21,645.0618	0.9652		21,665.3315
Total	24.5246	31.9756	154.6226	0.2596	16.6193	0.4301	17.0494	4.4459	0.3995	4.8455		22,434.1359	22,434.1359	0.9804	0.0145	22,459.2085

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2016	1/28/2016	5	20	
2	Site Preparation	Site Preparation	1/29/2016	2/1/2016	5	2	
3	Grading	Grading	2/2/2016	2/5/2016	5	4	
4	Building Construction	Building Construction	2/6/2016	11/11/2016	5	200	
5	Paving	Paving	11/12/2016	11/25/2016	5	10	
6	Architectural Coating	Architectural Coating	11/26/2016	12/9/2016	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.6

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 18,210; Non-Residential Outdoor: 6,070 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	6.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	35.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	12.00	5.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3741	0.0000	0.3741	0.0566	0.0000	0.0566			0.0000			0.0000
Off-Road	2.9066	28.2579	21.4980	0.0245		1.7445	1.7445		1.6328	1.6328		2,487.1296	2,487.1296	0.6288		2,500.3343
Total	2.9066	28.2579	21.4980	0.0245	0.3741	1.7445	2.1186	0.0566	1.6328	1.6894		2,487.1296	2,487.1296	0.6288		2,500.3343

3.2 Demolition - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0378	0.5047	0.3703	1.3100e-003	0.0305	6.8100e-003	0.0373	8.3500e-003	6.2600e-003	0.0146		132.4659	132.4659	9.8000e-004		132.4864
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0527	0.0631	0.7379	1.5100e-003	0.1226	9.9000e-004	0.1236	0.0325	9.0000e-004	0.0334		126.7140	126.7140	6.5000e-003		126.8504
Total	0.0905	0.5678	1.1082	2.8200e-003	0.1531	7.8000e-003	0.1609	0.0409	7.1600e-003	0.0480		259.1799	259.1799	7.4800e-003		259.3369

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3741	0.0000	0.3741	0.0566	0.0000	0.0566			0.0000			0.0000
Off-Road	2.9066	28.2579	21.4980	0.0245		1.7445	1.7445		1.6328	1.6328	0.0000	2,487.1296	2,487.1296	0.6288		2,500.3343
Total	2.9066	28.2579	21.4980	0.0245	0.3741	1.7445	2.1186	0.0566	1.6328	1.6894	0.0000	2,487.1296	2,487.1296	0.6288		2,500.3343

3.2 Demolition - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0378	0.5047	0.3703	1.3100e-003	0.0305	6.8100e-003	0.0373	8.3500e-003	6.2600e-003	0.0146		132.4659	132.4659	9.8000e-004		132.4864
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0527	0.0631	0.7379	1.5100e-003	0.1226	9.9000e-004	0.1236	0.0325	9.0000e-004	0.0334		126.7140	126.7140	6.5000e-003		126.8504
Total	0.0905	0.5678	1.1082	2.8200e-003	0.1531	7.8000e-003	0.1609	0.0409	7.1600e-003	0.0480		259.1799	259.1799	7.4800e-003		259.3369

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.2693	0.0000	5.2693	2.8965	0.0000	2.8965			0.0000			0.0000
Off-Road	2.4428	25.7718	16.5144	0.0171		1.3985	1.3985		1.2866	1.2866		1,781.087 2	1,781.087 2	0.5372		1,792.369 3
Total	2.4428	25.7718	16.5144	0.0171	5.2693	1.3985	6.6678	2.8965	1.2866	4.1830		1,781.087 2	1,781.087 2	0.5372		1,792.369 3

3.3 Site Preparation - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	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	0.0325	0.0389	0.4541	9.3000e-004	0.0754	6.1000e-004	0.0761	0.0200	5.6000e-004	0.0206		77.9778	77.9778	4.0000e-003			78.0618
Total	0.0325	0.0389	0.4541	9.3000e-004	0.0754	6.1000e-004	0.0761	0.0200	5.6000e-004	0.0206		77.9778	77.9778	4.0000e-003			78.0618

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					5.2693	0.0000	5.2693	2.8965	0.0000	2.8965			0.0000			0.0000	
Off-Road	2.4428	25.7718	16.5144	0.0171		1.3985	1.3985		1.2866	1.2866	0.0000	1,781.087 2	1,781.087 2	0.5372			1,792.369 3
Total	2.4428	25.7718	16.5144	0.0171	5.2693	1.3985	6.6678	2.8965	1.2866	4.1830	0.0000	1,781.087 2	1,781.087 2	0.5372			1,792.369 3

3.3 Site Preparation - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.0325	0.0389	0.4541	9.3000e-004	0.0754	6.1000e-004	0.0761	0.0200	5.6000e-004	0.0206		77.9778	77.9778	4.0000e-003		78.0618
Total	0.0325	0.0389	0.4541	9.3000e-004	0.0754	6.1000e-004	0.0761	0.0200	5.6000e-004	0.0206		77.9778	77.9778	4.0000e-003		78.0618

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9408	0.0000	4.9408	2.5285	0.0000	2.5285			0.0000			0.0000
Off-Road	1.9908	21.0361	13.6704	0.0141		1.1407	1.1407		1.0494	1.0494		1,462.8468	1,462.8468	0.4413		1,472.1130
Total	1.9908	21.0361	13.6704	0.0141	4.9408	1.1407	6.0815	2.5285	1.0494	3.5779		1,462.8468	1,462.8468	0.4413		1,472.1130

3.4 Grading - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.0325	0.0389	0.4541	9.3000e-004	0.0754	6.1000e-004	0.0761	0.0200	5.6000e-004	0.0206		77.9778	77.9778	4.0000e-003		78.0618
Total	0.0325	0.0389	0.4541	9.3000e-004	0.0754	6.1000e-004	0.0761	0.0200	5.6000e-004	0.0206		77.9778	77.9778	4.0000e-003		78.0618

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9408	0.0000	4.9408	2.5285	0.0000	2.5285			0.0000			0.0000
Off-Road	1.9908	21.0361	13.6704	0.0141		1.1407	1.1407		1.0494	1.0494	0.0000	1,462.8468	1,462.8468	0.4413		1,472.1130
Total	1.9908	21.0361	13.6704	0.0141	4.9408	1.1407	6.0815	2.5285	1.0494	3.5779	0.0000	1,462.8468	1,462.8468	0.4413		1,472.1130

3.4 Grading - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.0325	0.0389	0.4541	9.3000e-004	0.0754	6.1000e-004	0.0761	0.0200	5.6000e-004	0.0206		77.9778	77.9778	4.0000e-003		78.0618
Total	0.0325	0.0389	0.4541	9.3000e-004	0.0754	6.1000e-004	0.0761	0.0200	5.6000e-004	0.0206		77.9778	77.9778	4.0000e-003		78.0618

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176		2,046.9432	2,046.9432	0.4499		2,056.3913
Total	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176		2,046.9432	2,046.9432	0.4499		2,056.3913

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0565	0.4846	0.5781	1.1900e-003	0.0332	7.4400e-003	0.0407	9.4900e-003	6.8400e-003	0.0163		119.5765	119.5765	9.5000e-004			119.5964
Worker	0.0487	0.0583	0.6811	1.3900e-003	0.1132	9.1000e-004	0.1141	0.0300	8.3000e-004	0.0309		116.9668	116.9668	6.0000e-003			117.0927
Total	0.1052	0.5428	1.2593	2.5800e-003	0.1464	8.3500e-003	0.1548	0.0395	7.6700e-003	0.0472		236.5433	236.5433	6.9500e-003			236.6892

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176	0.0000	2,046.9432	2,046.9432	0.4499			2,056.3913
Total	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176	0.0000	2,046.9432	2,046.9432	0.4499			2,056.3913

3.5 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0565	0.4846	0.5781	1.1900e-003	0.0332	7.4400e-003	0.0407	9.4900e-003	6.8400e-003	0.0163		119.5765	119.5765	9.5000e-004			119.5964
Worker	0.0487	0.0583	0.6811	1.3900e-003	0.1132	9.1000e-004	0.1141	0.0300	8.3000e-004	0.0309		116.9668	116.9668	6.0000e-003			117.0927
Total	0.1052	0.5428	1.2593	2.5800e-003	0.1464	8.3500e-003	0.1548	0.0395	7.6700e-003	0.0472		236.5433	236.5433	6.9500e-003			236.6892

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.2872	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438		1,368.4366	1,368.4366	0.4053			1,376.9473
Paving	0.1074					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.3946	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438		1,368.4366	1,368.4366	0.4053			1,376.9473

3.6 Paving - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.0527	0.0631	0.7379	1.5100e-003	0.1226	9.9000e-004	0.1236	0.0325	9.0000e-004	0.0334		126.7140	126.7140	6.5000e-003		126.8504
Total	0.0527	0.0631	0.7379	1.5100e-003	0.1226	9.9000e-004	0.1236	0.0325	9.0000e-004	0.0334		126.7140	126.7140	6.5000e-003		126.8504

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2872	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438	0.0000	1,368.4366	1,368.4366	0.4053		1,376.9473
Paving	0.1074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3946	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438	0.0000	1,368.4366	1,368.4366	0.4053		1,376.9473

3.6 Paving - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.0527	0.0631	0.7379	1.5100e-003	0.1226	9.9000e-004	0.1236	0.0325	9.0000e-004	0.0334		126.7140	126.7140	6.5000e-003		126.8504
Total	0.0527	0.0631	0.7379	1.5100e-003	0.1226	9.9000e-004	0.1236	0.0325	9.0000e-004	0.0334		126.7140	126.7140	6.5000e-003		126.8504

3.7 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	28.1345					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	28.5029	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449

3.7 Architectural Coating - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	8.1100e-003	9.7100e-003	0.1135	2.3000e-004	0.0189	1.5000e-004	0.0190	5.0000e-003	1.4000e-004	5.1400e-003		19.4945	19.4945	1.0000e-003		19.5155
Total	8.1100e-003	9.7100e-003	0.1135	2.3000e-004	0.0189	1.5000e-004	0.0190	5.0000e-003	1.4000e-004	5.1400e-003		19.4945	19.4945	1.0000e-003		19.5155

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	28.1345					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	28.5029	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449

3.7 Architectural Coating - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	8.1100e-003	9.7100e-003	0.1135	2.3000e-004	0.0189	1.5000e-004	0.0190	5.0000e-003	1.4000e-004	5.1400e-003		19.4945	19.4945	1.0000e-003		19.5155
Total	8.1100e-003	9.7100e-003	0.1135	2.3000e-004	0.0189	1.5000e-004	0.0190	5.0000e-003	1.4000e-004	5.1400e-003		19.4945	19.4945	1.0000e-003		19.5155

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	23.7412	31.3180	154.0644	0.2556	16.6193	0.3801	16.9994	4.4459	0.3496	4.7955		21,645.0618	21,645.0618	0.9652		21,665.3315
Unmitigated	23.7412	31.3180	154.0644	0.2556	16.6193	0.3801	16.9994	4.4459	0.3496	4.7955		21,645.0618	21,645.0618	0.9652		21,665.3315

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	5,754.99	8,375.55	6,295.55	5,798,963	5,798,963
Parking Lot	0.00	0.00	0.00		
Total	5,754.99	8,375.55	6,295.55	5,798,963	5,798,963

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.546114	0.062902	0.174648	0.122995	0.034055	0.004856	0.015640	0.024397	0.002087	0.003279	0.006673	0.000688	0.001667

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	0.0723	0.6576	0.5523	3.9500e-003		0.0500	0.0500		0.0500	0.0500		789.0617	789.0617	0.0151	0.0145	793.8638
NaturalGas Unmitigated	0.0723	0.6576	0.5523	3.9500e-003		0.0500	0.0500		0.0500	0.0500		789.0617	789.0617	0.0151	0.0145	793.8638

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					
Fast Food Restaurant with Drive Thru	6707.02	0.0723	0.6576	0.5523	3.9500e-003		0.0500	0.0500		0.0500	0.0500		789.0617	789.0617	0.0151	0.0145	793.8638
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0723	0.6576	0.5523	3.9500e-003		0.0500	0.0500		0.0500	0.0500		789.0617	789.0617	0.0151	0.0145	793.8638

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					
Fast Food Restaurant with Drive Thru Parking Lot	6.70702	0.0723	0.6576	0.5523	3.9500e-003		0.0500	0.0500		0.0500	0.0500		789.0617	789.0617	0.0151	0.0145	793.8638
	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		0.0723	0.6576	0.5523	3.9500e-003		0.0500	0.0500		0.0500	0.0500		789.0617	789.0617	0.0151	0.0145	793.8638

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	0.7111	6.0000e-005	5.8900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0131
Unmitigated	0.7111	6.0000e-005	5.8900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0131

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6334					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.7000e-004	6.0000e-005	5.8900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0131
Total	0.7111	6.0000e-005	5.8900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0131

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6334					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.7000e-004	6.0000e-005	5.8900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0131
Total	0.7111	6.0000e-005	5.8900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0131

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Online Ordering Grocery Store Project
San Francisco Bay Area Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant with Drive Thru	11.60	1000sqft	1.19	11,600.00	0
Parking Lot	45.00	Space	0.41	18,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - project site area= apprx 1.6 acres based on site plans

Grading - project site area= apprx 1.6 acres based on site plans

Demolition -

Table Name	Column Name	Default Value	New Value
tblGrading	AcresOfGrading	1.50	1.60
tblGrading	AcresOfGrading	1.00	0.00
tblLandUse	LotAcreage	0.27	1.19
tblProjectCharacteristics	OperationalYear	2014	2017

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					
2016	28.5111	28.8679	22.7527	0.0272	5.3448	1.7524	6.7439	2.9165	1.6399	4.2036	0.0000	2,736.2030	2,736.2030	0.6363	0.0000	2,749.5649
Total	28.5111	28.8679	22.7527	0.0272	5.3448	1.7524	6.7439	2.9165	1.6399	4.2036	0.0000	2,736.2030	2,736.2030	0.6363	0.0000	2,749.5649

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					
2016	28.5111	28.8679	22.7527	0.0272	5.3448	1.7524	6.7439	2.9165	1.6399	4.2036	0.0000	2,736.2030	2,736.2030	0.6363	0.0000	2,749.5649
Total	28.5111	28.8679	22.7527	0.0272	5.3448	1.7524	6.7439	2.9165	1.6399	4.2036	0.0000	2,736.2030	2,736.2030	0.6363	0.0000	2,749.5649

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	0.7111	6.0000e-005	5.8900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0131
Energy	0.0723	0.6576	0.5523	3.9500e-003		0.0500	0.0500		0.0500	0.0500		789.0617	789.0617	0.0151	0.0145	793.8638
Mobile	25.3577	34.5709	202.8311	0.2410	16.6193	0.3845	17.0038	4.4459	0.3536	4.7995		20,378.2178	20,378.2178	0.9671		20,398.5268
Total	26.1412	35.2285	203.3894	0.2450	16.6193	0.4345	17.0538	4.4459	0.4036	4.8495		21,167.2919	21,167.2919	0.9823	0.0145	21,192.4038

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	0.7111	6.0000e-005	5.8900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0131
Energy	0.0723	0.6576	0.5523	3.9500e-003		0.0500	0.0500		0.0500	0.0500		789.0617	789.0617	0.0151	0.0145	793.8638
Mobile	25.3577	34.5709	202.8311	0.2410	16.6193	0.3845	17.0038	4.4459	0.3536	4.7995		20,378.2178	20,378.2178	0.9671		20,398.5268
Total	26.1412	35.2285	203.3894	0.2450	16.6193	0.4345	17.0538	4.4459	0.4036	4.8495		21,167.2919	21,167.2919	0.9823	0.0145	21,192.4038

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2016	1/28/2016	5	20	
2	Site Preparation	Site Preparation	1/29/2016	2/1/2016	5	2	
3	Grading	Grading	2/2/2016	2/5/2016	5	4	
4	Building Construction	Building Construction	2/6/2016	11/11/2016	5	200	
5	Paving	Paving	11/12/2016	11/25/2016	5	10	
6	Architectural Coating	Architectural Coating	11/26/2016	12/9/2016	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.6

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 18,210; Non-Residential Outdoor: 6,070 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	6.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	35.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	12.00	5.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3741	0.0000	0.3741	0.0566	0.0000	0.0566			0.0000			0.0000
Off-Road	2.9066	28.2579	21.4980	0.0245		1.7445	1.7445		1.6328	1.6328		2,487.1296	2,487.1296	0.6288		2,500.3343
Total	2.9066	28.2579	21.4980	0.0245	0.3741	1.7445	2.1186	0.0566	1.6328	1.6894		2,487.1296	2,487.1296	0.6288		2,500.3343

3.2 Demolition - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0454	0.5319	0.5336	1.3100e-003	0.0305	6.8300e-003	0.0373	8.3500e-003	6.2800e-003	0.0146		132.1566	132.1566	9.9000e-004		132.1774
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0530	0.0781	0.7211	1.3900e-003	0.1226	9.9000e-004	0.1236	0.0325	9.0000e-004	0.0334		116.9168	116.9168	6.5000e-003		117.0533
Total	0.0984	0.6100	1.2547	2.7000e-003	0.1531	7.8200e-003	0.1609	0.0409	7.1800e-003	0.0481		249.0734	249.0734	7.4900e-003		249.2307

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3741	0.0000	0.3741	0.0566	0.0000	0.0566			0.0000			0.0000
Off-Road	2.9066	28.2579	21.4980	0.0245		1.7445	1.7445		1.6328	1.6328	0.0000	2,487.1296	2,487.1296	0.6288		2,500.3343
Total	2.9066	28.2579	21.4980	0.0245	0.3741	1.7445	2.1186	0.0566	1.6328	1.6894	0.0000	2,487.1296	2,487.1296	0.6288		2,500.3343

3.2 Demolition - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0454	0.5319	0.5336	1.3100e-003	0.0305	6.8300e-003	0.0373	8.3500e-003	6.2800e-003	0.0146		132.1566	132.1566	9.9000e-004		132.1774
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0530	0.0781	0.7211	1.3900e-003	0.1226	9.9000e-004	0.1236	0.0325	9.0000e-004	0.0334		116.9168	116.9168	6.5000e-003		117.0533
Total	0.0984	0.6100	1.2547	2.7000e-003	0.1531	7.8200e-003	0.1609	0.0409	7.1800e-003	0.0481		249.0734	249.0734	7.4900e-003		249.2307

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.2693	0.0000	5.2693	2.8965	0.0000	2.8965			0.0000			0.0000
Off-Road	2.4428	25.7718	16.5144	0.0171		1.3985	1.3985		1.2866	1.2866		1,781.087 2	1,781.087 2	0.5372		1,792.369 3
Total	2.4428	25.7718	16.5144	0.0171	5.2693	1.3985	6.6678	2.8965	1.2866	4.1830		1,781.087 2	1,781.087 2	0.5372		1,792.369 3

3.3 Site Preparation - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.0326	0.0481	0.4438	8.6000e-004	0.0754	6.1000e-004	0.0761	0.0200	5.6000e-004	0.0206		71.9488	71.9488	4.0000e-003		72.0328
Total	0.0326	0.0481	0.4438	8.6000e-004	0.0754	6.1000e-004	0.0761	0.0200	5.6000e-004	0.0206		71.9488	71.9488	4.0000e-003		72.0328

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.2693	0.0000	5.2693	2.8965	0.0000	2.8965			0.0000			0.0000
Off-Road	2.4428	25.7718	16.5144	0.0171		1.3985	1.3985		1.2866	1.2866	0.0000	1,781.087 2	1,781.087 2	0.5372		1,792.369 3
Total	2.4428	25.7718	16.5144	0.0171	5.2693	1.3985	6.6678	2.8965	1.2866	4.1830	0.0000	1,781.087 2	1,781.087 2	0.5372		1,792.369 3

3.3 Site Preparation - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.0326	0.0481	0.4438	8.6000e-004	0.0754	6.1000e-004	0.0761	0.0200	5.6000e-004	0.0206		71.9488	71.9488	4.0000e-003		72.0328
Total	0.0326	0.0481	0.4438	8.6000e-004	0.0754	6.1000e-004	0.0761	0.0200	5.6000e-004	0.0206		71.9488	71.9488	4.0000e-003		72.0328

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9408	0.0000	4.9408	2.5285	0.0000	2.5285			0.0000			0.0000
Off-Road	1.9908	21.0361	13.6704	0.0141		1.1407	1.1407		1.0494	1.0494		1,462.8468	1,462.8468	0.4413		1,472.1130
Total	1.9908	21.0361	13.6704	0.0141	4.9408	1.1407	6.0815	2.5285	1.0494	3.5779		1,462.8468	1,462.8468	0.4413		1,472.1130

3.4 Grading - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.0326	0.0481	0.4438	8.6000e-004	0.0754	6.1000e-004	0.0761	0.0200	5.6000e-004	0.0206		71.9488	71.9488	4.0000e-003		72.0328
Total	0.0326	0.0481	0.4438	8.6000e-004	0.0754	6.1000e-004	0.0761	0.0200	5.6000e-004	0.0206		71.9488	71.9488	4.0000e-003		72.0328

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9408	0.0000	4.9408	2.5285	0.0000	2.5285			0.0000			0.0000
Off-Road	1.9908	21.0361	13.6704	0.0141		1.1407	1.1407		1.0494	1.0494	0.0000	1,462.8468	1,462.8468	0.4413		1,472.1130
Total	1.9908	21.0361	13.6704	0.0141	4.9408	1.1407	6.0815	2.5285	1.0494	3.5779	0.0000	1,462.8468	1,462.8468	0.4413		1,472.1130

3.4 Grading - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.0326	0.0481	0.4438	8.6000e-004	0.0754	6.1000e-004	0.0761	0.0200	5.6000e-004	0.0206		71.9488	71.9488	4.0000e-003		72.0328
Total	0.0326	0.0481	0.4438	8.6000e-004	0.0754	6.1000e-004	0.0761	0.0200	5.6000e-004	0.0206		71.9488	71.9488	4.0000e-003		72.0328

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176		2,046.9432	2,046.9432	0.4499		2,056.3913
Total	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176		2,046.9432	2,046.9432	0.4499		2,056.3913

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0717	0.5074	0.8974	1.1900e-003	0.0332	7.5200e-003	0.0408	9.4900e-003	6.9100e-003	0.0164		118.6622	118.6622	9.7000e-004			118.6825
Worker	0.0489	0.0721	0.6656	1.2800e-003	0.1132	9.1000e-004	0.1141	0.0300	8.3000e-004	0.0309		107.9232	107.9232	6.0000e-003			108.0492
Total	0.1207	0.5795	1.5631	2.4700e-003	0.1464	8.4300e-003	0.1548	0.0395	7.7400e-003	0.0473		226.5853	226.5853	6.9700e-003			226.7317

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176	0.0000	2,046.9432	2,046.9432	0.4499			2,056.3913
Total	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176	0.0000	2,046.9432	2,046.9432	0.4499			2,056.3913

3.5 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0717	0.5074	0.8974	1.1900e-003	0.0332	7.5200e-003	0.0408	9.4900e-003	6.9100e-003	0.0164		118.6622	118.6622	9.7000e-004		118.6825
Worker	0.0489	0.0721	0.6656	1.2800e-003	0.1132	9.1000e-004	0.1141	0.0300	8.3000e-004	0.0309		107.9232	107.9232	6.0000e-003		108.0492
Total	0.1207	0.5795	1.5631	2.4700e-003	0.1464	8.4300e-003	0.1548	0.0395	7.7400e-003	0.0473		226.5853	226.5853	6.9700e-003		226.7317

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2872	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438		1,368.4366	1,368.4366	0.4053		1,376.9473
Paving	0.1074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3946	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438		1,368.4366	1,368.4366	0.4053		1,376.9473

3.6 Paving - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.0530	0.0781	0.7211	1.3900e-003	0.1226	9.9000e-004	0.1236	0.0325	9.0000e-004	0.0334		116.9168	116.9168	6.5000e-003		117.0533
Total	0.0530	0.0781	0.7211	1.3900e-003	0.1226	9.9000e-004	0.1236	0.0325	9.0000e-004	0.0334		116.9168	116.9168	6.5000e-003		117.0533

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2872	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438	0.0000	1,368.4366	1,368.4366	0.4053		1,376.9473
Paving	0.1074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3946	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438	0.0000	1,368.4366	1,368.4366	0.4053		1,376.9473

3.6 Paving - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.0530	0.0781	0.7211	1.3900e-003	0.1226	9.9000e-004	0.1236	0.0325	9.0000e-004	0.0334		116.9168	116.9168	6.5000e-003		117.0533
Total	0.0530	0.0781	0.7211	1.3900e-003	0.1226	9.9000e-004	0.1236	0.0325	9.0000e-004	0.0334		116.9168	116.9168	6.5000e-003		117.0533

3.7 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	28.1345					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	28.5029	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449

3.7 Architectural Coating - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	8.1600e-003	0.0120	0.1109	2.1000e-004	0.0189	1.5000e-004	0.0190	5.0000e-003	1.4000e-004	5.1400e-003		17.9872	17.9872	1.0000e-003		18.0082
Total	8.1600e-003	0.0120	0.1109	2.1000e-004	0.0189	1.5000e-004	0.0190	5.0000e-003	1.4000e-004	5.1400e-003		17.9872	17.9872	1.0000e-003		18.0082

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	28.1345					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	28.5029	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449

3.7 Architectural Coating - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	8.1600e-003	0.0120	0.1109	2.1000e-004	0.0189	1.5000e-004	0.0190	5.0000e-003	1.4000e-004	5.1400e-003		17.9872	17.9872	1.0000e-003		18.0082
Total	8.1600e-003	0.0120	0.1109	2.1000e-004	0.0189	1.5000e-004	0.0190	5.0000e-003	1.4000e-004	5.1400e-003		17.9872	17.9872	1.0000e-003		18.0082

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	25.3577	34.5709	202.8311	0.2410	16.6193	0.3845	17.0038	4.4459	0.3536	4.7995		20,378.2178	20,378.2178	0.9671		20,398.5268
Unmitigated	25.3577	34.5709	202.8311	0.2410	16.6193	0.3845	17.0038	4.4459	0.3536	4.7995		20,378.2178	20,378.2178	0.9671		20,398.5268

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	5,754.99	8,375.55	6,295.55	5,798,963	5,798,963
Parking Lot	0.00	0.00	0.00		
Total	5,754.99	8,375.55	6,295.55	5,798,963	5,798,963

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.546114	0.062902	0.174648	0.122995	0.034055	0.004856	0.015640	0.024397	0.002087	0.003279	0.006673	0.000688	0.001667

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	0.0723	0.6576	0.5523	3.9500e-003		0.0500	0.0500		0.0500	0.0500		789.0617	789.0617	0.0151	0.0145	793.8638
NaturalGas Unmitigated	0.0723	0.6576	0.5523	3.9500e-003		0.0500	0.0500		0.0500	0.0500		789.0617	789.0617	0.0151	0.0145	793.8638

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					
Fast Food Restaurant with Drive Thru	6707.02	0.0723	0.6576	0.5523	3.9500e-003		0.0500	0.0500		0.0500	0.0500		789.0617	789.0617	0.0151	0.0145	793.8638
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0723	0.6576	0.5523	3.9500e-003		0.0500	0.0500		0.0500	0.0500		789.0617	789.0617	0.0151	0.0145	793.8638

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					
Fast Food Restaurant with Drive Thru Parking Lot	6.70702	0.0723	0.6576	0.5523	3.9500e-003		0.0500	0.0500		0.0500	0.0500		789.0617	789.0617	0.0151	0.0145	793.8638
	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		0.0723	0.6576	0.5523	3.9500e-003		0.0500	0.0500		0.0500	0.0500		789.0617	789.0617	0.0151	0.0145	793.8638

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	0.7111	6.0000e-005	5.8900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0131
Unmitigated	0.7111	6.0000e-005	5.8900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0131

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6334					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.7000e-004	6.0000e-005	5.8900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0131
Total	0.7111	6.0000e-005	5.8900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0131

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6334					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.7000e-004	6.0000e-005	5.8900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0131
Total	0.7111	6.0000e-005	5.8900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0124	0.0124	3.0000e-005		0.0131

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

**Online Ordering Grocery Store Project
San Francisco Bay Area Air Basin, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant with Drive Thru	11.60	1000sqft	1.19	11,600.00	0
Parking Lot	45.00	Space	0.41	18,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - project site area= apprx 1.6 acres based on site plans

Grading - project site area= apprx 1.6 acres based on site plans

Demolition -

Table Name	Column Name	Default Value	New Value
tblGrading	AcresOfGrading	1.50	1.60
tblGrading	AcresOfGrading	1.00	0.00
tblLandUse	LotAcreage	0.27	1.19
tblProjectCharacteristics	OperationalYear	2014	2017

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					
2016	0.5263	2.5461	1.9390	2.8500e-003	0.0354	0.1636	0.1990	0.0130	0.1570	0.1700	0.0000	243.7890	243.7890	0.0505	0.0000	244.8504
Total	0.5263	2.5461	1.9390	2.8500e-003	0.0354	0.1636	0.1990	0.0130	0.1570	0.1700	0.0000	243.7890	243.7890	0.0505	0.0000	244.8504

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					
2016	0.5263	2.5461	1.9390	2.8500e-003	0.0354	0.1636	0.1990	0.0130	0.1570	0.1700	0.0000	243.7888	243.7888	0.0505	0.0000	244.8501
Total	0.5263	2.5461	1.9390	2.8500e-003	0.0354	0.1636	0.1990	0.0130	0.1570	0.1700	0.0000	243.7888	243.7888	0.0505	0.0000	244.8501

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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	0.1297	1.0000e-005	5.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0100e-003	1.0100e-003	0.0000	0.0000	1.0700e-003
Energy	0.0132	0.1200	0.1008	7.2000e-004		9.1200e-003	9.1200e-003		9.1200e-003	9.1200e-003	0.0000	250.9602	250.9602	7.9400e-003	3.5200e-003	252.2184
Mobile	3.1245	4.4872	23.7937	0.0327	2.1574	0.0515	2.2089	0.5790	0.0473	0.6263	0.0000	2,510.658 2	2,510.658 2	0.1181	0.0000	2,513.137 3
Waste						0.0000	0.0000		0.0000	0.0000	27.1237	0.0000	27.1237	1.6030	0.0000	60.7859
Water						0.0000	0.0000		0.0000	0.0000	1.1171	5.7713	6.8884	0.1150	2.7600e-003	10.1597
Total	3.2675	4.6073	23.8950	0.0334	2.1574	0.0606	2.2180	0.5790	0.0564	0.6354	28.2407	2,767.390 7	2,795.631 4	1.8439	6.2800e-003	2,836.302 4

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	0.1297	1.0000e-005	5.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0100e-003	1.0100e-003	0.0000	0.0000	1.0700e-003
Energy	0.0132	0.1200	0.1008	7.2000e-004		9.1200e-003	9.1200e-003		9.1200e-003	9.1200e-003	0.0000	250.9602	250.9602	7.9400e-003	3.5200e-003	252.2184
Mobile	3.1245	4.4872	23.7937	0.0327	2.1574	0.0515	2.2089	0.5790	0.0473	0.6263	0.0000	2,510.6582	2,510.6582	0.1181	0.0000	2,513.1373
Waste						0.0000	0.0000		0.0000	0.0000	27.1237	0.0000	27.1237	1.6030	0.0000	60.7859
Water						0.0000	0.0000		0.0000	0.0000	1.1171	5.7713	6.8884	0.1150	2.7600e-003	10.1580
Total	3.2675	4.6073	23.8950	0.0334	2.1574	0.0606	2.2180	0.5790	0.0564	0.6354	28.2407	2,767.3907	2,795.6314	1.8439	6.2800e-003	2,836.3006

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2016	1/28/2016	5	20	
2	Site Preparation	Site Preparation	1/29/2016	2/1/2016	5	2	
3	Grading	Grading	2/2/2016	2/5/2016	5	4	
4	Building Construction	Building Construction	2/6/2016	11/11/2016	5	200	
5	Paving	Paving	11/12/2016	11/25/2016	5	10	
6	Architectural Coating	Architectural Coating	11/26/2016	12/9/2016	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.6

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 18,210; Non-Residential Outdoor: 6,070 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	6.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	35.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	12.00	5.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.7400e-003	0.0000	3.7400e-003	5.7000e-004	0.0000	5.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0291	0.2826	0.2150	2.4000e-004		0.0175	0.0175		0.0163	0.0163	0.0000	22.5629	22.5629	5.7000e-003	0.0000	22.6827
Total	0.0291	0.2826	0.2150	2.4000e-004	3.7400e-003	0.0175	0.0212	5.7000e-004	0.0163	0.0169	0.0000	22.5629	22.5629	5.7000e-003	0.0000	22.6827

3.2 Demolition - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.1000e-004	5.2400e-003	4.5200e-003	1.0000e-005	2.9000e-004	7.0000e-005	3.6000e-004	8.0000e-005	6.0000e-005	1.4000e-004	0.0000	1.2005	1.2005	1.0000e-005	0.0000	1.2007
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9000e-004	7.1000e-004	6.9200e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0702	1.0702	6.0000e-005	0.0000	1.0714
Total	9.0000e-004	5.9500e-003	0.0114	2.0000e-005	1.4700e-003	8.0000e-005	1.5500e-003	3.9000e-004	7.0000e-005	4.6000e-004	0.0000	2.2707	2.2707	7.0000e-005	0.0000	2.2721

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.7400e-003	0.0000	3.7400e-003	5.7000e-004	0.0000	5.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0291	0.2826	0.2150	2.4000e-004		0.0175	0.0175		0.0163	0.0163	0.0000	22.5628	22.5628	5.7000e-003	0.0000	22.6826
Total	0.0291	0.2826	0.2150	2.4000e-004	3.7400e-003	0.0175	0.0212	5.7000e-004	0.0163	0.0169	0.0000	22.5628	22.5628	5.7000e-003	0.0000	22.6826

3.2 Demolition - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.1000e-004	5.2400e-003	4.5200e-003	1.0000e-005	2.9000e-004	7.0000e-005	3.6000e-004	8.0000e-005	6.0000e-005	1.4000e-004	0.0000	1.2005	1.2005	1.0000e-005	0.0000	1.2007
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9000e-004	7.1000e-004	6.9200e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0702	1.0702	6.0000e-005	0.0000	1.0714
Total	9.0000e-004	5.9500e-003	0.0114	2.0000e-005	1.4700e-003	8.0000e-005	1.5500e-003	3.9000e-004	7.0000e-005	4.6000e-004	0.0000	2.2707	2.2707	7.0000e-005	0.0000	2.2721

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					5.2700e-003	0.0000	5.2700e-003	2.9000e-003	0.0000	2.9000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4400e-003	0.0258	0.0165	2.0000e-005		1.4000e-003	1.4000e-003		1.2900e-003	1.2900e-003	0.0000	1.6158	1.6158	4.9000e-004	0.0000	1.6260
Total	2.4400e-003	0.0258	0.0165	2.0000e-005	5.2700e-003	1.4000e-003	6.6700e-003	2.9000e-003	1.2900e-003	4.1900e-003	0.0000	1.6158	1.6158	4.9000e-004	0.0000	1.6260

3.3 Site Preparation - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	3.0000e-005	4.0000e-005	4.3000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0659	0.0659	0.0000	0.0000	0.0659
Total	3.0000e-005	4.0000e-005	4.3000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0659	0.0659	0.0000	0.0000	0.0659

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					5.2700e-003	0.0000	5.2700e-003	2.9000e-003	0.0000	2.9000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4400e-003	0.0258	0.0165	2.0000e-005		1.4000e-003	1.4000e-003		1.2900e-003	1.2900e-003	0.0000	1.6158	1.6158	4.9000e-004	0.0000	1.6260
Total	2.4400e-003	0.0258	0.0165	2.0000e-005	5.2700e-003	1.4000e-003	6.6700e-003	2.9000e-003	1.2900e-003	4.1900e-003	0.0000	1.6158	1.6158	4.9000e-004	0.0000	1.6260

3.3 Site Preparation - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	3.0000e-005	4.0000e-005	4.3000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0659	0.0659	0.0000	0.0000	0.0659
Total	3.0000e-005	4.0000e-005	4.3000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0659	0.0659	0.0000	0.0000	0.0659

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					9.8800e-003	0.0000	9.8800e-003	5.0600e-003	0.0000	5.0600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9800e-003	0.0421	0.0273	3.0000e-005		2.2800e-003	2.2800e-003		2.1000e-003	2.1000e-003	0.0000	2.6541	2.6541	8.0000e-004	0.0000	2.6710
Total	3.9800e-003	0.0421	0.0273	3.0000e-005	9.8800e-003	2.2800e-003	0.0122	5.0600e-003	2.1000e-003	7.1600e-003	0.0000	2.6541	2.6541	8.0000e-004	0.0000	2.6710

3.4 Grading - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	6.0000e-005	9.0000e-005	8.5000e-004	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1317	0.1317	1.0000e-005	0.0000	0.1319
Total	6.0000e-005	9.0000e-005	8.5000e-004	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1317	0.1317	1.0000e-005	0.0000	0.1319

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					9.8800e-003	0.0000	9.8800e-003	5.0600e-003	0.0000	5.0600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9800e-003	0.0421	0.0273	3.0000e-005		2.2800e-003	2.2800e-003		2.1000e-003	2.1000e-003	0.0000	2.6541	2.6541	8.0000e-004	0.0000	2.6710
Total	3.9800e-003	0.0421	0.0273	3.0000e-005	9.8800e-003	2.2800e-003	0.0122	5.0600e-003	2.1000e-003	7.1600e-003	0.0000	2.6541	2.6541	8.0000e-004	0.0000	2.6710

3.4 Grading - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	6.0000e-005	9.0000e-005	8.5000e-004	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1317	0.1317	1.0000e-005	0.0000	0.1319
Total	6.0000e-005	9.0000e-005	8.5000e-004	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1317	0.1317	1.0000e-005	0.0000	0.1319

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.3292	2.0546	1.4707	2.2000e-003		0.1366	0.1366		0.1318	0.1318	0.0000	185.6956	185.6956	0.0408	0.0000	186.5527
Total	0.3292	2.0546	1.4707	2.2000e-003		0.1366	0.1366		0.1318	0.1318	0.0000	185.6956	185.6956	0.0408	0.0000	186.5527

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.3600e-003	0.0501	0.0740	1.2000e-004	3.2200e-003	7.5000e-004	3.9700e-003	9.2000e-004	6.9000e-004	1.6100e-003	0.0000	10.8130	10.8130	9.0000e-005	0.0000	10.8148
Worker	4.5500e-003	6.5900e-003	0.0639	1.3000e-004	0.0109	9.0000e-005	0.0110	2.9000e-003	8.0000e-005	2.9800e-003	0.0000	9.8783	9.8783	5.4000e-004	0.0000	9.8897
Total	0.0109	0.0567	0.1378	2.5000e-004	0.0141	8.4000e-004	0.0150	3.8200e-003	7.7000e-004	4.5900e-003	0.0000	20.6913	20.6913	6.3000e-004	0.0000	20.7045

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.3292	2.0546	1.4707	2.2000e-003		0.1366	0.1366		0.1318	0.1318	0.0000	185.6954	185.6954	0.0408	0.0000	186.5525
Total	0.3292	2.0546	1.4707	2.2000e-003		0.1366	0.1366		0.1318	0.1318	0.0000	185.6954	185.6954	0.0408	0.0000	186.5525

3.5 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.3600e-003	0.0501	0.0740	1.2000e-004	3.2200e-003	7.5000e-004	3.9700e-003	9.2000e-004	6.9000e-004	1.6100e-003	0.0000	10.8130	10.8130	9.0000e-005	0.0000	10.8148
Worker	4.5500e-003	6.5900e-003	0.0639	1.3000e-004	0.0109	9.0000e-005	0.0110	2.9000e-003	8.0000e-005	2.9800e-003	0.0000	9.8783	9.8783	5.4000e-004	0.0000	9.8897
Total	0.0109	0.0567	0.1378	2.5000e-004	0.0141	8.4000e-004	0.0150	3.8200e-003	7.7000e-004	4.5900e-003	0.0000	20.6913	20.6913	6.3000e-004	0.0000	20.7045

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	6.4400e-003	0.0660	0.0454	7.0000e-005		4.0400e-003	4.0400e-003		3.7200e-003	3.7200e-003	0.0000	6.2071	6.2071	1.8400e-003	0.0000	6.2457
Paving	5.4000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.9800e-003	0.0660	0.0454	7.0000e-005		4.0400e-003	4.0400e-003		3.7200e-003	3.7200e-003	0.0000	6.2071	6.2071	1.8400e-003	0.0000	6.2457

3.6 Paving - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	2.5000e-004	3.6000e-004	3.4600e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5351	0.5351	3.0000e-005	0.0000	0.5357
Total	2.5000e-004	3.6000e-004	3.4600e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5351	0.5351	3.0000e-005	0.0000	0.5357

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	6.4400e-003	0.0660	0.0454	7.0000e-005		4.0400e-003	4.0400e-003		3.7200e-003	3.7200e-003	0.0000	6.2071	6.2071	1.8400e-003	0.0000	6.2457
Paving	5.4000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.9800e-003	0.0660	0.0454	7.0000e-005		4.0400e-003	4.0400e-003		3.7200e-003	3.7200e-003	0.0000	6.2071	6.2071	1.8400e-003	0.0000	6.2457

3.6 Paving - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	2.5000e-004	3.6000e-004	3.4600e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5351	0.5351	3.0000e-005	0.0000	0.5357
Total	2.5000e-004	3.6000e-004	3.4600e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5351	0.5351	3.0000e-005	0.0000	0.5357

3.7 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1407					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8400e-003	0.0119	9.4200e-003	1.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	1.2766	1.2766	1.5000e-004	0.0000	1.2798
Total	0.1425	0.0119	9.4200e-003	1.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	1.2766	1.2766	1.5000e-004	0.0000	1.2798

3.7 Architectural Coating - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	5.0000e-005	5.3000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0823	0.0823	0.0000	0.0000	0.0824
Total	4.0000e-005	5.0000e-005	5.3000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0823	0.0823	0.0000	0.0000	0.0824

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1407					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8400e-003	0.0119	9.4200e-003	1.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	1.2766	1.2766	1.5000e-004	0.0000	1.2798
Total	0.1425	0.0119	9.4200e-003	1.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	1.2766	1.2766	1.5000e-004	0.0000	1.2798

3.7 Architectural Coating - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	5.0000e-005	5.3000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0823	0.0823	0.0000	0.0000	0.0824
Total	4.0000e-005	5.0000e-005	5.3000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0823	0.0823	0.0000	0.0000	0.0824

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	3.1245	4.4872	23.7937	0.0327	2.1574	0.0515	2.2089	0.5790	0.0473	0.6263	0.0000	2,510.658 2	2,510.658 2	0.1181	0.0000	2,513.137 3
Unmitigated	3.1245	4.4872	23.7937	0.0327	2.1574	0.0515	2.2089	0.5790	0.0473	0.6263	0.0000	2,510.658 2	2,510.658 2	0.1181	0.0000	2,513.137 3

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	5,754.99	8,375.55	6,295.55	5,798,963	5,798,963
Parking Lot	0.00	0.00	0.00		
Total	5,754.99	8,375.55	6,295.55	5,798,963	5,798,963

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.546114	0.062902	0.174648	0.122995	0.034055	0.004856	0.015640	0.024397	0.002087	0.003279	0.006673	0.000688	0.001667

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	120.3222	120.3222	5.4400e-003	1.1300e-003	120.7854
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	120.3222	120.3222	5.4400e-003	1.1300e-003	120.7854
NaturalGas Mitigated	0.0132	0.1200	0.1008	7.2000e-004		9.1200e-003	9.1200e-003		9.1200e-003	9.1200e-003	0.0000	130.6380	130.6380	2.5000e-003	2.4000e-003	131.4331
NaturalGas Unmitigated	0.0132	0.1200	0.1008	7.2000e-004		9.1200e-003	9.1200e-003		9.1200e-003	9.1200e-003	0.0000	130.6380	130.6380	2.5000e-003	2.4000e-003	131.4331

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					
Fast Food Restaurant with Drive Thru	2.44806e+006	0.0132	0.1200	0.1008	7.2000e-004		9.1200e-003	9.1200e-003		9.1200e-003	9.1200e-003	0.0000	130.6380	130.6380	2.5000e-003	2.4000e-003	131.4331
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0132	0.1200	0.1008	7.2000e-004		9.1200e-003	9.1200e-003		9.1200e-003	9.1200e-003	0.0000	130.6380	130.6380	2.5000e-003	2.4000e-003	131.4331

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					
Fast Food Restaurant with Drive Thru	2.44806e+006	0.0132	0.1200	0.1008	7.2000e-004		9.1200e-003	9.1200e-003		9.1200e-003	9.1200e-003	0.0000	130.6380	130.6380	2.5000e-003	2.4000e-003	131.4331
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0132	0.1200	0.1008	7.2000e-004		9.1200e-003	9.1200e-003		9.1200e-003	9.1200e-003	0.0000	130.6380	130.6380	2.5000e-003	2.4000e-003	131.4331

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	397764	115.7141	5.2300e-003	1.0800e-003	116.1596
Parking Lot	15840	4.6080	2.1000e-004	4.0000e-005	4.6258
Total		120.3222	5.4400e-003	1.1200e-003	120.7854

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	15840	4.6080	2.1000e-004	4.0000e-005	4.6258
Fast Food Restaurant with Drive Thru	397764	115.7141	5.2300e-003	1.0800e-003	116.1596
Total		120.3222	5.4400e-003	1.1200e-003	120.7854

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	0.1297	1.0000e-005	5.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0100e-003	1.0100e-003	0.0000	0.0000	1.0700e-003
Unmitigated	0.1297	1.0000e-005	5.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0100e-003	1.0100e-003	0.0000	0.0000	1.0700e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0141					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1156					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0000e-005	1.0000e-005	5.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0100e-003	1.0100e-003	0.0000	0.0000	1.0700e-003
Total	0.1297	1.0000e-005	5.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0100e-003	1.0100e-003	0.0000	0.0000	1.0700e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0141					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1156					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0000e-005	1.0000e-005	5.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0100e-003	1.0100e-003	0.0000	0.0000	1.0700e-003
Total	0.1297	1.0000e-005	5.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0100e-003	1.0100e-003	0.0000	0.0000	1.0700e-003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.8884	0.1150	2.7600e-003	10.1580
Unmitigated	6.8884	0.1150	2.7600e-003	10.1597

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	3.52099 / 0.224744	6.8884	0.1150	2.7600e-003	10.1597
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		6.8884	0.1150	2.7600e-003	10.1597

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	3.52099 / 0.224744	6.8884	0.1150	2.7600e-003	10.1580
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		6.8884	0.1150	2.7600e-003	10.1580

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	27.1237	1.6030	0.0000	60.7859
Unmitigated	27.1237	1.6030	0.0000	60.7859

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	133.62	27.1237	1.6030	0.0000	60.7859
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		27.1237	1.6030	0.0000	60.7859

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	133.62	27.1237	1.6030	0.0000	60.7859
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		27.1237	1.6030	0.0000	60.7859

9.0 Operational Offroad

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