Air Quality Impact Assessment

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Bakersfield, California

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1 EXECUTIVE SUMMARY

1.1 PURPOSE

WZI Inc. (WZI) was asked to prepare an air quality impact assessment for the Wible & Hosking Commercial Project, referred to within as the proposed project, on behalf of Porter & Associates, Inc. and Mike Henson. This assessment examines the potential impact on air quality resulting from the proposed project located in the South Central region of Bakersfield in Kern County, California. The property is within the City of Bakersfield limits. This document was prepared in accordance with the San Joaquin Valley Air Pollution Control District's *Guide for Assessing and Mitigating Air Quality Impacts* (GAMAQI)*, March 19, 2015 Revision*.

The proposed project is a proposed 10.1 Acre development comprised of (GC) 'General Commercial' in the City of Bakersfield. The proposed project is located at the northeast corner of the intersection of Wible Road and Hosking Road in the City of Bakersfield, California. More specifically, the proposed project will reside on the southwestern portion of Section 25, Township 30 South, Range 27 East (**Exhibit 1** "Project Location Map"). The project site is composed of five (5) parcels (APN Number(s): 515-110-03, -04, -05, -06 and -15). The current land use for the project site is (LMR) 'Low Medium Density Residential' and the zoning is (R-S) 'Residential Suburban' and (R-1) 'One Family Dwelling'; 515-110-04, -05, -15, and 515-110-03, -06, respectively. See **Exhibit 2** "Land Use Designations" and **Exhibit 3** "Zoning Map". The proposed land use is (GC) 'General Commercial' and zoning is (C-2) 'Commercial'. The project requires a zone change. This study is based on the following development scenario:

TABLE 1.1-1
Development Scenario

Current Zoning	Area Size or # of Units	Proposed Development
R-S	5.3 acres	Commercial (C-2)
R-1	4.8 acres	Commercial (C-2)

WZI is a professional consulting firm with experience in regulatory compliance, environmental engineering and geology. The members of WZI are State of California Registered Environmental Assessors, Geologists, and Environmental Engineers. WZI expresses no opinion as to disciplines, subjects and/or practices outside those specifically enumerated below. Further, WZI expresses no opinion herein as to any matters of California or federal law. This Air Quality Impact Assessment is based on the foregoing and subject to limitations, qualifications, exceptions and assumptions set forth herein.

1.2 RESULTS AND CONCLUSIONS

The project is located in the southern portion of the San Joaquin Valley Air Basin (SJVAB), in the City of Bakersfield, California. The SJVAB has an extensive set of laws, rules, and regulations, governing air pollution of all types, including mobile and stationary. During the last twenty years, the air quality has shown a steady trend of improvement as indicated by monitoring conducted by the San Joaquin Valley Air Pollution Control District (SJVAPCD) and the California Air Resources Board (CARB). This assessment identifies air impacts related to the project's construction and operation phases which are discussed in the sections to follow.

1.2.1 CONSTRUCTION AND OPERATIONS PHASE

The first construction phase of the proposed project is expected to begin in 2019 and end in 2020. The second phase of construction will begin in 2020 and end in 2021. The annual unmitigated and mitigated emissions during the construction phase are shown in **Table 1.2-1.**

TABLE 1.2-1
Construction Related Emissions (tons/year)

Year	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
	Unmitigated (Baseline)					
2019	0.3431	2.1309	1.7333	0.0033	0.1671	0.1260
2020	0.4146	3.8365	3.0118	0.0074	0.5307	0.2945
2021	0.6035	0.3771	0.3819	0.0008	0.0376	0.0212
	Mitigated					
2019	0.3431	2.1309	1.7333	0.0033	0.1583	0.1216
2020	0.4146	3.8365	3.0118	0.0074	0.4415	0.2482
2021	0.6035	0.3771	0.3819	0.0008	0.0376	0.0212

Operation of the project will begin in 2020. The project will be in full operation in year 2021 at its build out.

TABLE 1.2-2

Operational Emissions (tons/year)

Year	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
	Unmitigated (Baseline)					
2021	2.4610	5.4944	14.5013	0.0352	2.9239	0.8084
	Mitigated					
2021	2.4610	5.4944	14.5013	0.0352	2.9239	0.8084

The total project emissions for the year 2021 represents the project maximum year emissions[1]. The results are shown in **Table 1.2-3.**

TABLE 1.2-3
Total Project Maximum Year Emissions -2021 (tons/year)

Emissions	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
	Unmitigated (Baseline)					
Construction Emissions	0.6035	0.3771	0.3819	0.00084	0.0376	0.0212
Operational Emissions	1.41976	3.00394	8.58818	0.02466	2.19084	0.60354
Total Emissions-Unmitigated	**2.02326**	**3.38104**	**8.97008**	**0.0255**	**2.22844**	**0.62474**
	Mitigated					
Construction Emissions	0.6035	0.3771	0.3819	0.00084	0.0376	0.0212
Operational Emissions	1.39186	3.00394	8.58818	0.02466	2.19084	0.60354
Total Emissions-Mitigated	**1.99536**	**3.38104**	**8.97008**	**0.0255**	**2.22844**	**0.62474**
SJVAPCD Level of Significance	**10**	**10**	**100**	**27**	**15**	**15***

*USEPA specified interim use of PM_{10} threshold for $PM_{2.5}$

Based on the project criteria pollutant emissions shown in the above tables, the impacts of the project are considered to be *less than significant*.

1.2.2 CUMULATIVE IMPACTS

The cumulative analysis is based, in part, on a quantitative analysis of other projects in the vicinity of the proposed project. This analysis utilizes the State of California Department of Finance population projections, and the Kern Council of Governments' (Kern COG) adopted regional growth forecast used for the regional air quality conformity analysis required by the 1990 Federal Clean Air Act Amendments (CAAA).

An analysis was done of the existing and proposed projects within a six mile radius of the proposed project. Eleven (11) projects were identified and modeled using the CalEEMod Version 2016.3.2 computer model to predict the cumulative impacts. Emissions for the operational phase of the proposed projects were based on project acreage totals provided by the City of Bakersfield Planning Department. The predicted model outputs, including the proposed project, are summarized in **Table 1.2-4** and **1.2-5**.

TABLE 1.2-4
Cumulative Construction Emissions (tons/year)

Name	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
The Project	0.6035	0.3771	0.3819	0.00084	0.0376	0.0212
Cumulative Projects	71.2968	54.1138	38.7821	0.12247	7.819	4.1711
Total	71.9003	54.4909	39.164	0.12331	7.8566	4.1923

[1] The maximum year emissions are determined based on the sum of the project criteria pollutants ROG, NOx, PM10 and PM2.5 emissions.

TABLE 1.2-5
Cumulative Operational Emissions (tons/year)

Name	ROG	NO_X	CO	SOx	PM_{10}	$PM_{2.5}$
The Project	1.39186	3.00394	8.58818	0.02466	2.19084	0.60354
Cumulative Projects	148.4595	1084.334	903.9304	4.05024	224.3022	63.1126
Total	149.8514	1087.33794	912.51858	4.0749	226.49304	63.71614

Kern COG Analysis

Utilization of Kern Council of Governments (Kern COG) data provided a framework for assistance in determining the cumulative significance of a project. A project is said to be in conformance cumulatively when it is in line with regional, state, and federal emissions budgets and air quality improvement goals. Through the demonstration that a project's emissions are less than, or consistent with projected growth in a particular local area, linked to a regional air basin projection, which then ties to federal requirements, cumulative compliance can be determined.

A project area and regional conformity analysis was conducted focusing on job projection. A comparison was done between Kern COG's data and the project Traffic Analysis Zone Analysis (TAZ Analysis) which is based on the active tracts information obtained from the City, the proposed project and the potential growth based on land use.

Kern COG's data indicates no job growth projected in Traffic Analysis Zone (TAZ) #340 by the year 2042. The project will increase the number of jobs in TAZ #340 above the Kern COG projections.

Regional TAZ Analysis results are based on the project TAZs and the abutting TAZs. Kern COG's adjacent TAZs show an increase in jobs in the year 2035.

The proposed project development is consistent with the projected growth for the local and regional traffic analysis zones; therefore it has been accounted for within the Air Quality Attainment Plan.

It is recommended that the next scheduled Kern COG modeling analysis include this proposed project to ensure that emissions budgets are not exceeded. The Kern COG conformity analysis identifies areas that may require transportation improvements to ensure smooth traffic flow thereby reducing potential air emissions resulting from idling which will be addressed as the proposed project progresses.

Projections Analysis

The Air Quality Attainment Plans[2] recognized growth of the population and economy within the SJVAB. The plans predicted the workforce in Kern County to increase along with a 2.2 percent population increase annually from 2002 to 2030 (i.e., 62% total increase uncompounded for 28 years). The project is consistent with the Air Quality Attainment Plan. Therefore, the cumulative impact of this project, when considered with all projects in the areas of the San Joaquin Valley Air Basin, is considered *less than significant*.

[2] 2007 PM10 Maintenance Plan, 2004 Extreme Ozone Attainment Demonstration Plan, and the 2007 Ozone Attainment Plan, San Joaquin Valley Air Pollution Control District

1.2.3 CONCLUSIONS

Based on the analysis presented in this study, the impacts of the project are summarized as follows:

Project Impacts (Construction and Operational)

No Impacts were found to be Significant and Unavoidable:

Greenhouse gases from the proposed development are considered to be *less than significant.* ERCs are not required to be purchase to offset the GHG produced by this project.

The project specific Criteria Pollutant impacts based on Criteria Pollutant Modeling and SJVAPCD Operational Thresholds are considered to be *less than significant*.

The project specific visibility impacts based on the San Joaquin Valley Air Pollution Control District's *Guide for Assessing and Mitigating Air Quality Impact* ("GAMAQI"), Criteria Pollutant Modeling and SJVAPCD Operational Thresholds are considered to be *less than significant.*

The project specific health risks impacts based on modeling and the San Joaquin Valley Air SJVAPCD standards are considered to be *less than significant*.

The project specific CO health risk impact based on modeling is considered to be *less than significant*.

The project specific impact of Valley Fever based on the location of the project is considered *less than significant*.

Cumulative Impacts

Impacts found to be Significant and Unavoidable:

No Criteria Pollutant air impacts are considered significant and unavoidable after mitigation.

Impacts Found to be Less than Significant:

The cumulative Criteria Pollutant impacts based on Criteria Pollutant Modeling and San Joaquin Valley Air Pollution Control District (SJVAPCD) Operational Thresholds are considered to be *less than significant*.

The cumulative visibility impacts based on the San Joaquin Valley Air Pollution Control District's *Guide for Assessing and Mitigating Air Quality Impacts* ("GAMAQI"), Criteria Pollutant Modeling and SJVAPCD Operational Thresholds are considered to be *less than significant.*

The cumulative health risks impacts based on modeling and the SJVAPCD standards are considered to be *less than significant*.

The cumulative CO health risk impact based on modeling is considered to be *less than significant*.

The cumulative impact of Valley Fever based on the location of the project is considered to be *less than significant*.

The Kern Council of Government Conformity Analysis shows the project's impacts as being *less than significant*.

The cumulative impacts from greenhouse gases from the proposed development are considered to be *less than significant.*

2 INTRODUCTION

The Wible & Hosking Commercial Project is a proposed 10.1 Acre development comprised of (GC) 'General Commercial' in the City of Bakersfield. The proposed project is located at the northeast corner of the intersection of Wible Road and Hosking Road in the City of Bakersfield, California. More specifically,

the proposed project will reside on the southwestern portion of Section 25, Township 30 South, Range 27 East (**Exhibit 1** "Project Location Map"). The project site is composed of five (5) parcels (APN Number(s): 515-110-03, -04, -05, -06 and -15). The current land use for the project site is (LMR) 'Low Medium Density Residential' and the zoning is (R-S) 'Residential Suburban' and (R-1) 'One Family Dwelling'; 515-110-04, -05, -15, and 515-110-03, -06, respectively. See **Exhibit 2** "Land Use Designations" and **Exhibit 3** "Zoning Map". The proposed land use is (GC) 'General Commercial' and zoning is (C-2) 'Commercial'. This study is based on the following development scenario:

TABLE 2.0-1
Development Scenario

Current Zoning	Quantity	Proposed Development
Current Zoning	**Area Size or # of Units**	**Proposed Development**
R-S	5.3 acres	Commercial (C-2)
R-1	4.8 acres	Commercial (C-2)

The project is located in close proximity to existing residential developments.

3 ENVIRONMENTAL SETTING

3.1 CLIMATE

The San Joaquin Valley lies in the central region of the State of California; it is bounded to the east by the Sierra Nevada Mountain Range, bounded to the west by the Coastal Mountain Range and to the south by the Tehachapi Mountains. The proposed project site is located in the southern portion of the valley.

The climate of the southern San Joaquin Valley is classified as a Dry–Summer Subtropical type, and is characterized by hot summers, mild winters, and minimal amounts of precipitation. The major climatic controls in the SJVAB are the surrounding mountains and the Pacific High pressure system over the ocean. The Great Basin High pressure system to the east also affects the valley, primarily during winter months. These influences result in distinct seasonal weather characteristics.

The Pacific High is a semi–permanent, subtropical, high-pressure system located off the Pacific Coast. The Pacific High tends to migrate seasonally. During the summer, it moves northward and dominates the regional climate. This high produces persistent temperature inversions and a predominantly northwest airflow. Clear skies, high temperature, low humidity, and relatively good air circulation characterize this season. The Pacific High blocks migrating extra-tropical storms, therefore very little precipitation occurs in the summer months. Occasionally, tropical air moves into the area and thunderstorms may occur over the adjacent mountains.

As the Pacific High shifts southward during the fall, its dominance is diminished in the San Joaquin Valley. During this transition period, the storm belt and zone of strong westerly winds also shifts southward, into California. Three weather regimes generally prevail during winter: (1) storm periods which are usually characterized by cloudiness, precipitation, and shifting, gusty winds; (2) clear weather associated with either a buildup of pressure through the interior of California following these storms or the influence of a well–developed Great Basin High pressure system; and (3) persistent fog or stratus clouds and temperature inversions associated with a weak influence of the Great Basin High trapping a layer of cool, moist air in the San Joaquin Valley. Thus sky, temperature, and humidity conditions are much more

variable during winter. Air movement is also variable, with stagnant conditions occurring more frequently than during summer.

The nearby Temblor Range to the west and its foothills modify the local climate of the project area. Radiative cooling at night, especially during clear conditions, results in a distinct down slope drainage flow. Thus, the mountains provide a distinct diurnal wind pattern of generally northerly winds during the day and a westerly drainage flow at night.

The western side of the San Joaquin Valley experiences fewer days of fog and less dense fog than does the eastern side at comparable elevations. Thunderstorms tend to be less frequent, probably averaging less than one per year.

Diurnal wind regimes markedly affect the horizontal transport of air in the project area. During the summer, northeast winds dominate the daytime regime. These winds, generated by the Pacific High offshore, are enhanced by the San Joaquin Valley orientation and by the thermal low that develops in the central valley during this season. In response to this thermal low, air moves inland through passes in the coastal ranges, principally the Carquinez Strait near San Francisco, and flows to the south in the San Joaquin Valley as an up–valley northwesterly wind. This general northwest flow in the San Joaquin Valley is expressed locally as a more northeasterly wind under the influence of local terrain on the west–side of the valley.

Dominant nighttime wind directions during summer are markedly different from those of the daytime. Winds with a northerly component have a low frequency of occurrence at night. The high frequency of west to southwest winds at night is due primarily to down slope drainage flow.

During the winter months, northerly to northeasterly winds remain dominant in the daytime. However, winds are more variable than during summer, due in part to: (1) the southward migration of the Pacific High and resultant storm passages; (2) the absence of a strong thermal trough; and (3) the varied influence of the Great Basin High. As in summer, winds during winter nights are predominantly from the west to southwest and are associated with drainage flow. Wind speeds are generally higher in summer than in winter in the project area. Calm conditions occur most often in winter but are relatively infrequent during either season.

The mountains to the east, south and west essentially block the region from transport of very cold air from the mid–continent in winter, and the relatively cool, marine air from the Pacific Ocean during summer. Transport of marine air through the Carquinez Strait during summer has a moderating effect on northern portions of the San Joaquin Valley, but this effect is not great in the southern portion of the valley. In this area, temperature regimes are influenced primarily by topography, the higher elevations generally experiencing cooler temperatures.

About 90 percent of the precipitation in the San Joaquin Valley occurs from November through April, generally in association with storms that move eastward from the Pacific Ocean during this period. Precipitation is low because the mountains to the west and south produce a rain shadow effect by intercepting prefrontal, moisture–laden west and south winds. The southern San Joaquin Valley receives precipitation primarily from cold, unstable, northwesterly flow that usually follows a frontal passage. **Table 3.1-1** presents climate data representative of the project area.

TABLE 3.1-1
Representative Temperature, Relative Humidity and Precipitation Data from Bakersfield, California[3]

Month	Average Daily Temperature (°F)		Relative Humidity (%)		Average Rainfall(inches)
	Maximum	Minimum	Morning	Afternoon	
January	56.2	39.3	84	62	1.16
February	62.8	42.4	80	51	1.24
March	68.7	46.5	74	42	1.21
April	75	50.2	67	33	0.52
May	83.5	57.5	57	26	0.18
June	90.9	64.2	51	23	0.08
July	97.1	70.5	48	21	0
August	95.8	69	54	24	0.04
September	90	64	58	29	0.08
October	79.4	55	63	34	0.3
November	65.7	44.6	76	50	0.64
December	56.6	39	84	62	1.02
Annual	*76.9*	*53.6*	*66*	*38*	*6.47*

3.2 DESCRIPTION OF POLLUTANTS

The following is a general description of the sources of pollutants, and the physical effects and health effects of air pollutants expected to be present in the project vicinity.

Ozone[4]

Ozone occurs in two layers of the atmosphere. The layer surrounding the earth's surface is the troposphere. Ground level or "bad" ozone is an air pollutant that damages human health, vegetation, and many common materials. It is a key ingredient to urban smog. The troposphere extends to a level about 10 miles above ground level where it meets the second layer, the stratosphere. The stratospheric or "good" ozone layer extends upward from about 10 to 30 miles and protects life on earth from the sun's harmful ultraviolet rays (UV-B).

"Bad" ozone is known as a photochemical pollutant. It needs ROG, NO_X, and sunlight. ROG and NO_X are emitted from various sources throughout Kern County. In order to reduce ozone concentrations, it is necessary to control the emissions of these ozone precursors.

Significant ozone formation generally requires an adequate amount of precursors in the atmosphere and several hours in a stable atmosphere with strong sunlight.

Ozone is a regional air pollutant. It is generated over a large area and is transported and spread by wind. Ozone, the primary constituent of smog, is the most complex, difficult to control, and pervasive of the criteria pollutants. Unlike other pollutants, ozone is not emitted directly into the air by specific sources.

[3] Western Regional Climate Center, Bakersfield WSO ARPT, California (040442) 1981-2010 Monthly Climate Summary

[4] "Air Quality Criteria for Ozone and Related Photochemical Oxidants", Vol. II EPA 600/R-05/004bF, US EPA (February 2006).

Ozone is created by sunlight acting on other air pollutants (called precursors), specifically oxides of nitrogen (NO_X) and reactive organic gases (ROGs). Sources of precursor gases to the photochemical reaction that form ozone number in the thousands. Common sources include consumer products, gasoline vapors, chemical solvents, and combustion products of various fuels. Originating from gas stations, large industrial facilities, and small businesses such as bakeries and dry cleaners, the ozone-forming chemical reactions often take place in another location, catalyzed by sunlight and heat. High ozone concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins. Approximately 50 million people lived in counties with air quality levels above U.S. EPA's health-based national air quality standard in 1994. The highest levels of ozone were recorded in Los Angeles. High levels also persist in other heavily populated areas including the Texas Gulf Coast and much of the Northeast.[5]

While the ozone in the upper atmosphere absorbs harmful ultraviolet light, ground-level ozone is damaging to the tissues of plants, animals, and humans, as well as to a wide variety of inanimate materials such as plastics, metals, fabrics, rubber, and paints. Societal costs from ozone damage include increased medical costs, the loss of human and animal life, accelerated replacement of industrial equipment, and reduced crop yields.

An evaluation of California's Health–based ambient air quality standards was mandated by the Children's Environmental Health Protection Act (CEHPA).

Health Effects

While ozone in the upper atmosphere protects the earth from harmful ultraviolet radiation, high concentrations of ground level ozone can adversely affect the human respiratory system. Many respiratory ailments, as well as cardiovascular diseases, are aggravated by exposure to high ozone levels. Ozone also damages natural ecosystems such as forests and foothill communities, and damages agricultural crops and some man-made materials, such as rubber, paint, and plastics.[6]

Symptoms from ground-level ozone include cough, chest tightness, pain upon taking a deep breath, worsening of wheezing and other asthma symptoms, stuffy nose, eye irritation, reduced resistance to colds and other infections.[7] High levels of ozone may negatively impact immune systems making people more susceptible to respiratory illnesses including bronchitis and pneumonia. Ozone also accelerates aging and exacerbates pre-existing asthma and bronchitis and in cases of high concentrations can lead to the development of asthma in active children.[8] Active people, both children and adults, appear to be more at risk from ozone exposure than those with a low level of activity. Children appear to be at greater risk since they spend more time outdoors and have lower body mass. Additionally, the elderly and those with respiratory disease are also considered sensitive populations for ozone.[9]

[5] http://www.arb.ca.gov/homepage.htm

[6] "Final Environmental Impact Report, Revised Update of the Kern County General Plan, SCH# 2002071027," County of Kern. (2007).

[7] "Ozone and Air Quality Standards," CARB (2002).

[8] "Extreme Ozone Attainment Demonstration Plan-San Joaquin Valley Air Basin Plan Demonstrating Attainment of Federal 1-hour Ozone Standard," San Joaquin Valley Air Pollution Control District (October 2004).

[9] Ibid

Reactive Organic Gases and Volatile Organic Compounds [10]

Hydrocarbons are organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases including Volatile Organic Compounds (VOCs) and Reactive Organic Gases (ROGs). ROGs include all hydrocarbons except those exempted by the California Air Resources Board (CARB). Therefore, ROGs are a set of organic gases based on state rules and regulations. VOCs are similar to ROGs in that they include all organic gases except those exempted by federal law. The list of compounds exempt from the definition of VOC is included by the SJVAPCD and is presented in SJVAPCD Rule 1020 Definitions. VOCs are therefore a set of organic gases based on federal rules and regulations. Both VOCs and ROGs are emitted from incomplete combustion of hydrocarbons or other carbon-based fuels. Combustion engine exhaust, oil refineries, and oil-fueled power plants are the primary sources of hydrocarbons. Another source of hydrocarbons is evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint. Both ROG and VOC terminology will be used in this analysis.

Health Effects

The primary health effects of hydrocarbons result from the formation of ozone and its related health effects. High levels of hydrocarbons in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons are considered Toxic Air Contaminants, or air toxics. There are no health standards for ROG separately. In addition, some compounds that make up ROG are also toxic. An example is benzene, which is a carcinogen.

Carbon Monoxide [11]

Carbon monoxide (CO) is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. CO is an odorless, colorless, poisonous gas that is highly reactive.

CO is a byproduct of motor vehicle exhaust, which contributes more than two-thirds of all CO emissions nationwide. In cities, automobile exhaust can cause as much as 95% of all CO emissions. These emissions can result in high concentrations of CO, particularly in local areas with heavy traffic congestion. Other sources of CO emissions include industrial processes and fuel combustion in sources such as boilers and incinerators. Despite an overall downward trend in concentrations and emissions of CO, some metropolitan areas still experience high levels of CO.

Health Effects

CO enters the bloodstream and binds more readily to hemoglobin than oxygen, reducing the oxygen-carrying capacity of blood, thus reducing oxygen delivery to organs and tissues. The health threat from CO is most serious for those who suffer from cardiovascular disease. Healthy individuals are also affected, but only at higher levels of exposure. Carbon monoxide binds strongly to hemoglobin, the oxygen-carrying protein in blood, and thus reduces the blood's capacity for carrying oxygen to the heart, brain, and other parts of the body. At high concentrations, CO can cause heart difficulties in people with chronic diseases, and can impair mental abilities. Exposure to elevated CO levels is associated with visual impairment, reduced work capacity, reduced manual dexterity, poor learning ability, difficulty performing complex tasks, and death.

[10] "Air Quality Criteria for Ozone and Related Photochemical Oxidants Vol. I and Vol. II," EPA 600/R-05/004aF and EPA 600/R-05/004bF US, EPA (February 2006).

[11] "Air Quality Criteria for Carbon Monoxide," EPA/600/P-99/001F, U.S. EPA (June 2000).

Nitrogen Oxides [12]

Nitrogen oxides (NO_X) are a family of highly reactive gases that are a primary precursor to the formation of ground-level ozone, and react in the atmosphere to form acid rain. NO_X is emitted from the use of solvents and combustion processes in which fuel is burned at high temperatures, principally from motor vehicle exhaust and stationary sources such as electric utilities and industrial boilers. A brownish gas, nitrogen dioxide is a strong oxidizing agent that reacts in the air to form corrosive nitric acid, as well as toxic organic nitrates.

Health Effects

NO_X can irritate the lungs, cause lung damage, and lower resistance to respiratory infections such as influenza. The effects of short-term exposure are still unclear, but continued or frequent exposure to concentrations that are typically much higher than those normally found in the ambient air may cause increased incidence of acute respiratory illness in children. Health effects associated with NO_X are an increase in the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO_2 may lead to eye and mucus membrane aggravation, along with pulmonary dysfunction. NO_X can cause fading of textile dyes and additives, deterioration of cotton and nylon, and corrosion of metals due to production of particulate nitrates. Airborne NO_X can also impair visibility. NO_X is a major component of acid deposition in California. NO_X may affect both terrestrial and aquatic ecosystems. NO_X in the air is a potentially significant contributor to a number of environmental effects such as acid rain and eutrophication in coastal waters. Eutrophication occurs when a body of water suffers an increase in nutrients that reduce the amount of oxygen in the water, producing an environment that is destructive to fish and other animal life.

Particulate Matter

Particulate matter[13,14,15,16] pollution consists of very small liquid and solid particles floating in the air. Some particles are large or dark enough to be seen as soot or smoke. Others are so small they can be detected only with an electron microscope. Particulate matter is a mixture of materials that can include smoke, soot, dust, salt, acids, and metals. Particulate matter also forms when gases emitted from motor vehicles and industrial sources undergo chemical reactions in the atmosphere. PM_{10} refers to particles less than or equal to 10 microns in aerodynamic diameter. $PM_{2.5}$ refers to particles less than or equal to 2.5 microns in aerodynamic diameter and are a subset, or portion of PM_{10}.

In the Western United States, there are sources of PM_{10} in both urban and rural areas. PM_{10} and $PM_{2.5}$ are emitted from stationary and mobile sources, including diesel trucks and other motor vehicles, power plants, industrial processing, wood burning stoves and fireplaces, wildfires, dust from roads, construction, landfills, and agriculture, and fugitive windblown dust. Because particles originate from various sources, their chemical and physical compositions vary widely

[12] "Air Quality Criteria for Ozone and Related Photochemical Oxidants Vol. I and Vol. II," EPA 600/R-05/004aF and EPA 600/R-05/004bF, US EPA (February 2006).

[13] "Review of the National Air Quality Standards for Particulate Matter: Assessment of Scientific and Technical Information," EPA-450/5-82-001, U.S. EPA (July 1996).

[14] "PM_{10} Attainment Demonstration Plan," San Joaquin Valley Air Pollution Control District (2003).

[15] "Public Hearing to Consider Amendments to the Ambient Air Quality Standards for Particulate Matter and Sulfates," Cal EPA ARB (May 2005).

[16] Sulfates and SOx also create fine particulate matter. Their health effects are related to the particulate matter.

Health Effects

PM_{10} and $PM_{2.5}$ particles are small enough – about $1/7^{th}$ the thickness of a human hair – to be inhaled into, and lodge in, the deepest parts of the lung, evading the respiratory system's natural defenses. Health problems begin as the body reacts to these foreign particles. Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases, heart and lung disease, and coughing, bronchitis, and respiratory illnesses in children. Recent mortality studies have shown a statistically significant direct association between mortality and daily concentrations of particulate matter in the air. Non health-related effects include reduced visibility and soiling of buildings. PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. PM_{10} and $PM_{2.5}$ can aggravate respiratory disease, and cause lung damage, cancer, and premature death.

Although particulate matter can cause health problems for everyone, certain people are especially vulnerable to adverse health effects of PM_{10} and $PM_{2.5}$. These "sensitive populations" include children, the elderly, exercising adults, and those suffering from chronic lung disease such as asthma or bronchitis. Of greatest concern are recent studies that link PM_{10} and $PM_{2.5}$ exposure to the premature death of people who already have heart and lung disease, especially the elderly. Acidic PM_{10} and $PM_{2.5}$ can also damage manmade materials and is a major cause of reduced visibility in many parts of the U.S.

Sulfur Oxides [17]

Sulfur dioxide is a colorless, pungent gas belonging to the family of sulfur oxide gases (SO_X), formed primarily by combustion of sulfur-containing fossil fuels (mainly coal and oil), and during metal smelting and other industrial processes. Sulfur oxides can react to form sulfates, which significantly reduce visibility. SO_X is a precursor to particulate matter formation.

Health Effects

The major health concerns associated with exposure to high concentrations of SO_X include effects on breathing, respiratory illness, alterations in pulmonary defenses, and aggravation of existing cardiovascular disease. Major subgroups of the population that are most sensitive to SO_X include individuals with cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) as well as children and the elderly. Emissions of SO_X also can damage the foliage of trees and agricultural crops. Together, SO_X and NO_X are the major precursors to acid rain, which is associated with the acidification of lakes and streams, and accelerated corrosion of buildings and monuments.

Toxic Air Contaminants[18,19]

According to Section 39655 of the California Health and Safety Code, a toxic air contaminant (TAC) is "an air pollutant which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health." In addition, 189 substances which have been listed as federal hazardous air pollutants (HAPs) pursuant to Section 7412 of Title 42 of the

[17] "Public Hearing to Consider Amendments to the Ambient Air Quality Standards for Particulate Matter and Sulfates," Cal EPA ARB (May 2003).

[18] "Toxic Air Contaminant Emissions, Air Quality, and Health Risk," ARB Almanac, Ch. 5, California Air Resources Board (2008)

[19] "Guidance Manual for the Preparation of Health Risk Assessment and Part II: Technical Support Document for Describing Available Cancer Potency Factors," Air Toxics Hot Spots Program Risk Assessment Guidelines, Cal EPA (Aug. 2003 and Dec. 2002).

United States Code are TACs under the state's air toxics program pursuant to Section 39657 (b) of the California Health and Safety Code.[20]

Health Effects

The TACS can cause various cancers depending on the particular chemicals, type and duration of exposure. Additionally, some of the TACs may cause short-term and/or long-term health effects. The ten TACs posing the greatest health risk in California are: acetaldehyde; benzene; 1, 3-butadiene; carbon tetrachloride; chromium (hexavalent); para-dichlorobenzene; formaldehyde, methylene chloride; perchloroethylene; and diesel particulate matter (diesel PM).[21] A description of these pollutants, their sources and health effects are contained in "ARB Almanac, Chapter 5: Toxic Air contaminant Emissions, Air Quality and Health Risk." Health risk guidelines are developed by the Office of Environmental Health Hazard Assessment for the list of chemicals regulated as toxic.[22]

Vinyl Chloride [23]

The project does not emit vinyl chloride, therefore, it will not be discussed further in this report. Vinyl chloride monomer is a sweet smelling, colorless gas at ambient temperature. Landfills, publicly owned treatment works and PVC production are the major identified sources of vinyl chloride emissions in California. Polyvinyl chloride (PVC) can be fabricated into several products such as PVC pipes, pipefitters, and plastics.

Health Effects

In humans, epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers.

Lead[24]

The project does not emit lead, therefore, it will not be discussed further in this report. Lead is a metal that is a natural constituent of air, water, and the biosphere. Lead is neither created nor destroyed in the environment, so it essentially persists forever. Lead, which was used to increase the octane rating in auto fuel, was phased out of gasoline starting in 1973 and banned completely in a final EPA ruling in 1996. Since gasoline-powered automobile engines were a major source of airborne lead through the use of leaded fuels and the use of leaded fuel has been mostly phased out, the ambient concentrations of lead have dropped dramatically.

Health Effects

Short-term exposure to high levels of lead can cause vomiting, diarrhea, convulsions, coma or even death. However, even small amounts of lead can be harmful, especially to infants, young children and pregnant women. Symptoms of long-term exposure to lower lead levels may be less noticeable but are still serious. Anemia is common and damage to the nervous system may cause impaired mental function. Other

[20] State of California, Office of Environmental Health Hazard Assessment website

[21] "Toxic Air Contaminant Emissions, Air Quality, and Health Risk," ARB Almanac, Ch. 5, California Air Resources Board (2008)

[22] "Guidance Manual for the Preparation of Health Risk Assessment and Part II: Technical Support Document for Describing Available Cancer Potency Factors," Air Toxics Hot Spots Program Risk Assessment Guidelines, Cal EPA (Aug. 2003 and Dec. 2002). Air Toxics Hot Spots Program Risk Assessment Guidelines, OEHHA, (2003)

[23] "Final Environmental Impact Report, Revised Update of the Kern County General Plan, SCH# 2002071027," County of Kern.

[24] Ibid

symptoms are appetite loss, abdominal pain, constipation, fatigue, sleeplessness, irritability and headache. Continued excessive exposure, as in an industrial setting, can affect the kidneys.

Lead exposure is most serious for young children because they absorb lead more easily than adults and are more susceptible to its harmful effects. Even low-level exposure may harm the intellectual development, behavior, size and hearing of infants. During pregnancy, especially in the last trimester, lead can cross the placenta and affect the fetus. Female workers exposed to high levels of lead have more miscarriages and stillbirths.[25]

Hydrogen Sulfide

The project does not emit hydrogen sulfide, therefore it will not be discussed further in this report. Hydrogen sulfide (H_2S) gas is produced during the anaerobic decomposition of manure as a byproduct of bacterial reduction of sulfur-containing compounds, including proteins. H_2S is colorless, with a characteristic odor of rotten eggs. Atmospheric H_2S is primarily oxidized to SO_2, which is eventually converted into sulfate, then sulfuric acid. When sulfuric acid is transported back to the earth through "acid rain", it can damage plant tissue and aquatic ecosystems.

While no federal standard exists for H_2S, a California standard exists. H_2S is primarily associated with geothermal activity and oil production activities, and is not monitored in the SJVAB because no geothermal sites exist. The San Joaquin Valley Air Basin is unclassified for H_2S attainment.

Health Effects

It can cause dizziness, irritation to eyes, mucous membranes, and the respiratory tract, nausea, and headaches at low concentrations. Exposure to higher concentrations (above 100 ppm), can cause olfactory fatigue, respiratory paralysis, and death. H_2S can be detected by the nose at extremely low concentrations, as low as 1/400 the threshold for harmful human health effects. H_2S does not accumulate in the body, but is quickly excreted at normal exposure concentrations. Acute health effects don't occur until the exposure is greater than the body's ability to excrete the excess sulfur. Hydrogen sulfide can present a workplace hazard in confined spaces.

3.3 PROJECT SITE CONDITIONS

Existing Conditions

The project site is located within the City of Bakersfield. Currently, the majority of the site is vacant excluding a number of single-family residences and varying storage yards located throughout the property.

Sensitive Receptors

The SJVAPCD identifies a sensitive receptor as a location where human populations, especially children, senior citizens, and sick persons are present, and where there is a reasonable expectation of continuous human exposure to pollutants, according to the averaging period for ambient air quality standards, such as 24-hour, 8-hour or 1-hour. Examples of sensitive receptors include residences, hospitals, and schools.[26] Industrial and commercial uses are not considered sensitive receptors.

Within a one-mile radius of the project site there are various residential developments surrounding the project and two (2) schools that are considered sensitive receptors.

[25] http://www.hc-sc.gc.ca/english/iyh/environment/lead.html
[26] GAMAQI.

TABLE 3.3-1
Sensitive Receptors within One-Mile Radius

Sensitive Receptors	Direction from Project Boundary
Various Residences	Surrounding
Elementary School	Northeast
High School	West

4 REGULATORY SETTING

Regulatory oversight for air quality in the San Joaquin Valley Air Basin rests at the regional level with the San Joaquin Valley Air Pollution Control District (SJVAPCD), the California Air Resources Board (CARB) at the state level, and the U.S. Environmental Protection Agency (U.S. EPA) Region IX office at the federal level.

4.1 U.S. ENVIRONMENTAL PROTECTION AGENCY

The Federal Clean Air Act (CAA), in particular the 1990 amendments to the Federal Clean Air Act (CAA) provides the principal framework for national, state and local efforts to protect air quality. The Clean Air Act designates the Office of Air Quality Planning & Standards (OAQPS) as responsible for setting and enforcing the standards known as national ambient air quality standards (NAAQS), for pollutants which are considered harmful to people and the environment. OAQPS is also responsible for ensuring that these air quality standards are met, or attained (in cooperation with state, Tribal and local governments) through national standards and strategies to control pollutant emissions from automobiles, factories and other sources.

OAQPS is responsible for setting the National Ambient Air Quality Standards (NAAQS), which control pollutants harmful to people and the environment. There are two types of standards, primary and secondary. Primary standards protect against adverse health effects; secondary standards protect against welfare effects, such as damage to farm crops and vegetation and damage to buildings. The six criteria pollutants addressed in the NAAQS are Carbon Monoxide, Nitrogen Dioxide, Lead, Ozone (smog), Particulate Matter and Sulfur Dioxide. If the levels of these pollutants are higher than what is considered acceptable by EPA, then the area in which the level is too high is called a nonattainment area. OAQPS monitors very closely many areas for criteria pollutants and attainment.

These standards promulgated by the CAA identify levels of air quality for "criteria" pollutants that are considered the maximum levels of ambient (background) air pollutants considered safe, over a given averaging period with an adequate margin of safety, to protect the public health and welfare. Averaging periods vary by pollutant and range from 1-hour standards to annual standards. Units of measure for the standards are in parts per million (ppm) by volume, milligrams per cubic meter of air (mg/m^3), and micrograms per cubic meter of air ($\mu g/m^3$). The criteria pollutants include ozone, carbon monoxide (CO), nitrogen dioxide (NO_2 is a form of NO_X), sulfur oxides (SO_2 is a form of SO_X), particulate matter less than 10 and 2.5 microns in diameter (PM_{10} and $PM_{2.5}$, respectively) and lead. The U.S. EPA also has regulatory and enforcement jurisdiction over emission sources beyond state waters (outer continental shelf), and those that are under the exclusive authority of the federal government, such as aircraft, locomotives, and interstate trucking.

Based on monitoring data recorded throughout the country, the U.S. EPA identifies air sheds that are achieving the NAAQS and designates them as being in attainment. Other regions may also be designated as non-attainment or unclassified based on available data and because they have levels above the NAAQS

or have not been classified and are treated as attainment. Areas designated non-attainment are further defined by classifications ranging from sub marginal to extreme. The year in which the attainment is reached determines the non-attainment classification, i.e., serious, severe, and extreme. Each specific classification has defined time periods for reaching attainment and various sanctions for failure to make progress. The SJVAB is designated non-attainment for the ozone 8-hour standard, and is designated as a serious non-attainment area for $PM_{2.5}$.[27] In September 2008, SJVAPCD was determined to be in attainment for PM_{10}.

Through various programs, OAQPS monitors for criteria pollutants. One program is the Ambient Air Monitoring Program. Through this program, air quality samples are collected to judge attainment of ambient air quality standards, to prevent or alleviate air pollution emergencies, to observe pollution trends throughout regions and to evaluate the effects of urban, land-use and transportation planning relating to air pollution. There are other important types of pollution monitoring programs; two of which are Enhanced Ozone Monitoring and Air Pollution Monitoring.

The Enhanced Ozone Monitoring Program goes one step further. The chief objective of the enhanced ozone monitoring program is to provide an air quality database that will assist air pollution control agencies in evaluating, tracking the progress of, and, if necessary, refining control strategies for attaining the ozone NAAQS. EPA has required more extensive monitoring of ozone and its precursors in areas with persistently high ozone levels (mostly large metropolitan areas).

In order to work towards attainment, OAQPS requires that each state containing nonattainment areas to develop a written plan for cleaning the air in those areas. The plans developed are called State Implementation Plans (SIPS). Through these plans, the states outline efforts that they will make to try to correct the levels of air pollution and bring their areas back into attainment.

4.2 CALIFORNIA AIR RESOURCES BOARD

The California Air Resources Board (CARB), a department of the California Environmental Protection Agency, oversees air quality planning and control throughout California. It is primarily responsible for ensuring implementation of the 1989 amendments to the California Clean Air Act (CCAA), responding to the Federal CAA requirements, and regulating emissions from motor vehicles sold in California and emissions from various types of equipment available commercially. It also sets fuel specifications to further reduce vehicular emissions.

The amendments to the CCAA establish ambient air quality standards for the state, California Ambient Air Quality Standards, (CAAQS), and a legal mandate to achieve these standards by the earliest practicable date. These standards apply to the same criteria pollutants as the Federal CAA, and also include sulfate, visibility, hydrogen sulfide, and vinyl chloride. They are also more stringent than the federal standards and, in the case of PM_{10}, far more stringent.

The San Joaquin Valley Air Basin is designated as non-attainment area according to the state standards for Ozone, and $PM_{2.5}$. Concentrations of all other pollutants meet state standards.

CARB is also responsible for regulations pertaining to Toxic Air Contaminants (TACs)[28]. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly) was enacted in 1987 as a means to establish a formal air toxics emission inventory risk quantification program. The Act, as amended, establishes a process that requires stationary sources to report the type and quantities of certain

[27] San Joaquin Valley Air Pollution Control District, 2006 PM_{10} Plan – San Joaquin Valley Plan to Attain Federal Standards for Particulate Matter 10 Microns and Smaller. 2006.

[28] http://www.arb.ca.gov/homepage.htm

substances their facilities routinely release into the air basin. The goal of the Act is to collect emission data, identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce the potential health risk to below a level of significance. Owners of facilities found to pose significant risks by an air district must prepare and implement risk reduction audit plans within 6 months of the determination. Each air pollution control district ranks the data for purposes of risk assessment into high, intermediate, and low priority categories. When considering the ranking, the potency, toxicity, quantity, volume of hazardous materials released from the facility, and the proximity of the facility to receptors, all are in consideration by an air district.

CARB is also responsible for regulation of Global Climate Change emissions. This will be discussed in Section 8**,** "Global Climate Change**"** of this report.

4.3 SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT (SJVAPCD)

Air districts have the primary responsibility of air pollution control from all stationary source emissions. SJVAPCD has implemented the Indirect Source Rule (ISR) 9510 which allows the district to assess fees based on mobile source emissions related to new development projects and to utilize a portion of the collected fees on air emission reduction projects. Air districts adopt and enforce rules and regulations to achieve state and federal ambient air quality standards and enforce applicable state and federal law.

State law recognized that air pollution does not respect political boundaries and therefore required CARB to divide the state into separate air basins that each have similar geographical and meteorological conditions [California Health and Safety Code Section 39606 (a)]. Originally, air pollution was regulated separately by county Air Pollution Control Districts (APCDs). Although this is still the practice in most counties in California, many county agencies began to realize that air quality problems are best managed on a regional basis and began to combine their regulatory agencies into regional agencies. This was the case for the San Joaquin Valley Air Basin, where until 1991 each county operated a local APCD, at that time the San Joaquin Valley Unified Air Pollution Control District (currently named San Joaquin Valley Air Pollution Control District) was formed. The SJVAPCD boundaries and monitoring station locations are shown on **Exhibit 4** "SJVAPCD Monitoring Station Locations."

SJVAPCD Environmental Review Guidelines state that CEQA applies to projects that have the potential for causing a significant effect on the environment.[29]

In August of 1998, the San Joaquin Valley Air Pollution Control District, (SJVAPCD) prepared its *Guide for Assessing and Mitigating Air Quality Impacts* (GAMAQI). GAMAQI is an advisory document that provides lead agencies, consultants, and project applicants with analysis guidance and uniform procedures for addressing air quality in environmental documents. Local jurisdictions are not required to utilize the methodology outlined therein. This document describes the criteria that the District uses when reviewing and commenting on the adequacy of environmental documents. It recommends thresholds for use in determining whether or not projects would have significant adverse environmental impacts, identifies methodologies for predicting project emissions and impacts, and identifies measures that can be used to avoid or reduce air quality impacts. An update of the GAMAQI was approved on January 10, 2002 and will be used as a guidance document for this study. According to the GAMAQI, the project is under the size thresholds and it is considered as Small Project Analysis Level (SPAL).

The San Joaquin Valley Air Pollution Control District Rules and Regulations contain several rules which may apply to the proposed project.

[29] San Joaquin Valley Air Pollution Control District, Environmental Review Guidelines, 2000.

Regulation II (Permits) - Regulation II (Rules 2010-2550) is a series of rules covering permitting requirements within the air basin. SJVAPCD regulations require any person constructing, altering, replacing or operating any source operation which emits, may emit, or may reduce emissions to obtain an Authority to Construct or a Permit to Operate. Most new stationary sources, if they emit over 2 pounds of pollutants per day, will be subject to Best Available Control Technology in accordance with the SJVAPCD's New Source Review Rule and to the New Source Review Rule.[30]

Regulation VIII (Fugitive PM_{10} Prohibitions)- Regulation VIII (Rules 8011-8081) is a series of rules designed to reduce non-exhaust specific PM_{10} emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and track out, etc. If a construction project is 10.0 or more acres in area or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials on at least three days, a Dust Control Plan must be submitted as specified in Section 6.3.1 of Rule 8021. Construction activities shall not commence until the SJVAPCD has approved the Dust Control Plan. The project could also be subject to provisions within Rule 8021 (Construction, Demolition, Excavation, Extraction and Other Earthmoving Activities), Rule 8031 (Bulk Materials), Rule 8041 (Carryout and Track Out), Rule 8051 (Open Areas), Rule 8061 (Paved and Unpaved Roads), and Rule 8071 (Unpaved Vehicle/Equipment Traffic Areas). Rule 8061 places thresholds and requirements on limiting Visible Dust Emissions (VDE) from unpaved road segments. Rule 8071 also contains thresholds and requirements.

Rule 3135 (Dust Control Plan Fee) requires the applicant to submit a fee in addition to a Dust Control Plan. The purpose of this fee is to recover the SJVAPCD's cost for reviewing these plans and conducting compliance inspections.

Rule 4002 (National Emission Standards for Hazardous Air Pollutants) In the event that any portion of an existing building will be renovated, partially demolished or removed, the project will be subject to SJVAPCD Rule 4002. Prior to any demolition activity, an asbestos survey of existing structures on the project site may be required to identify the presence of any asbestos containing building material (ACBM). Any identified ACBM having the potential for disturbance must be removed by a certified asbestos contractor in accordance with CAL-OSHA requirements.

Rule 4102 (Nuisance) applies to any source operation that emits or may emit air contaminants or other materials. In the event that the project or construction of the project creates a public nuisance, it could be in violation and be subject to SJVAPCD enforcement action.

Rule 4601 (Architectural Coatings) limits volatile organic compounds from architectural coatings. This rule specifies architectural coatings storage, clean up and labeling requirements.

Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations) Asphalt paving operations associated with this project will be subject to Rule 4641. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations.

Rule 9510 (Indirect Source Review) This rule requires the applicants of certain development projects to submit an application to the SJVAPCD when applying for the development's last discretionary approval. Projects subject to the rule are required to quantify indirect emissions (mobile source emissions), area source emissions and construction exhaust emissions and to mitigate a portion of these emissions. The ISR rule became effective March 1, 2006. Rule 9510 was adopted to reduce the impacts of growth in emissions from all new development in the San Joaquin Valley.

[30] SJVAPCD Rules and Regulations, October, 2010.

The emission reductions expected from the rule allow the SJVAPCD to achieve attainment of the federal air quality standards for ozone by 2023[31].

In the context of toxic air contaminants, to meet the requirements of federal and State law, the SJVAPCD has created an Integrated Air Toxic Program. This program serves as a tool for implementation of the requirements outlined in Title III of the 1990 Federal Clean Air Act Amendments. The goals of SJVAPCD risk management efforts are to: 1) minimize increases in toxic emissions associated with new and modified sources of air pollution; and 2) ensure that new and modified sources of air pollution do not pose unacceptable health risks at nearby residences and businesses. In order to achieve these goals, the SJVAPCD reviews the risk associated with each permitting action where there is an increase in emissions of Toxic Air Contaminants. SJVAPCD staff, as part of the engineering evaluation for these projects, performs this risk management review. The risk management review is performed concurrently with other project review functions necessary to process permit applications with the SJVAPCD. Under the SJVAPCD's risk management policy, Best Available Control Technology must be applied to all units that, based on their potential emissions may pose greater than *de minimus* risks. Facilities that pose health risks above SJVAPCD action levels are required to submit plans to reduce their risk. Action levels for risk were established in the SJVAPCD's Board-Approved Risk Reduction policy. The action level for cancer risk is 10 cases per million exposed persons, based on the maximum exposure beyond facility boundaries at a residence or business. The action level for non-cancer risk is a hazard index of 1.0 at any point beyond the facility boundary where a person could reasonable experience exposure to such risk.

The SJVAPCD has an extensive stationary source permitting program[32] that includes New Source Review Rules, which are in the approved State Implementation Plan. These rules require offsets of emissions of ozone and particulates precursors at a ratio of greater than one to one, when ten tons and fifteen tons are exceeded. The rules also require that each new stationary source, which exceeds two pounds per day of pollutants, shall install Best Available Control Technology.

4.4 CITY OF BAKERSFIELD

The City of Bakersfield Metropolitan General Plan Conservation Element (Air Quality) contains goals, policies, objectives, and implementation measures that comprehensively address general conditions and site specific circumstances that may affect air quality.[33] The policies are listed below.

Policy 3	Require dust abatement measures during significant grading and construction operations.
Policy 11	Improve the capacity of the existing road system through improved signalization, more right turn lanes and traffic control systems.
Policy 12	Encourage the use of mass transit, carpooling, and other transportation options to reduce vehicle miles traveled.
Policy 13	Consider establishing priority parking areas for carpoolers in projects with relatively large numbers of employees to reduce vehicle miles traveled and improve air quality.
Policy 15	Promote the use of bicycles by providing attractive bicycle paths and requiring provision of storage facilities in commercial and industrial projects.

[31]San Joaquin Valley Air Pollution Control District Ozone Attainment Plan, 2007
[32] SJVAPCD Rules and Regulations, October, 2010.
[33] Metropolitan Bakersfield General Plan, 2002, Chapter V- Conservation Element, E. Air Quality

Policy 16 Cooperate with Golden Empire Transit and Kern Regional Transit to provide a comprehensive mass transit system for Bakersfield; require large-scale new development to provide related improvements, such as bus stop shelters and turnouts.

Policy 18 Encourage walking for short distance trips through the creation of pedestrian friendly sidewalks and street crossings.

Policy 19 Promote a pattern of land uses which locates residential uses in close proximity to employment and commercial services to minimize vehicular travel.

Policy 22 Require the provision of secure, convenient bike storage racks at shopping centers, office buildings, and other places of employment in the Bakersfield Metropolitan area.

Policy 23 Encourage the provision of shower and locker facilities by employers, for employees who bicycle or jog to work.

4.5 NATIONAL AND CALIFORNIA AMBIENT AIR QUALITY STANDARDS

Ambient air quality standards are regulatory levels of ambient pollutant concentrations which, when exceeded, may adversely impact the health and welfare of the public. National Ambient Air Quality Standards (NAAQS) were established as a result of the provisions of the Federal Clean Air Act (CAA) of 1970. The national standards are divided into primary standards, designed to protect public health, and secondary standards intended to protect the public from any known or anticipated adverse effects of a pollutant. The national standards may be equaled continuously and exceeded once per year. National standards have been established for ozone, nitrogen dioxide, carbon monoxide, particulate matter less than 10 microns, particulate matter less than 2.5 microns, sulfur dioxide, and lead.

California Ambient Air Quality Standards (CAAQS) were established in 1969 as a result of the Mulford-Carrell Act. In addition to the national standards, California also established standards for visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. California standards for ozone, nitrogen dioxide, carbon monoxide, particulate matter less than 10 microns in aerodynamic diameter, and sulfur dioxide are not to be exceeded. The pollutants and their corresponding national and state ambient air quality standards are shown in **Table 4.5-1**.

TABLE 4.5-1
Ambient Air Quality Standards[34]

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration[3]	Method[4]	Primary [3, 5]	Secondary [3, 6]	Method [7]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[8]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 pg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[9]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 pg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[10,11]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[12]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No National Standards**		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[10]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

[34] California Air Resources Board, http://www.arb.ca.gov/research/aaqs/aaqs2.pdf, 05/04/2016.

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Footnotes to Table 4.5-1

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 μg/m3 is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 μg/m3 to 12.0 μg/m3 . The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 μg/m3 , as was the annual secondary standard of 15 μg/m3 . The existing 24-hour PM10 standards (primary and secondary) of 150 μg/m3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 μg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

The Federal Clean Air Act Amendments made in 1977 require each state to identify geographic areas in compliance with the national standards as well as those areas that are not in compliance. These designations are known as the "attainment" status designations. Areas not in compliance with the national standards are termed "nonattainment" and are subject to New Source Review (NSR) regulations. Areas meeting the national standards are referred to as "attainment" and are subject to Prevention of Significant Deterioration (PSD) and NSR regulations. Areas with insufficient data to make a determination are "unclassified" but are treated as "attainment" areas until proven otherwise. The designation of an area is made on a pollutant-specific basis. Therefore, it is possible to be located in an area designated nonattainment for one pollutant, but attainment or unclassified for other pollutants.

The California Air Resources Board (CARB) coordinates and oversees state air quality management districts and air pollution control districts. CARB has retained authority over mobile sources but has delegated much of the control of stationary sources to local agencies. They, much like the federal program, designate areas as "attainment", "non-attainment", or "unclassified" based on ambient air data that has been collected in the applicable area. **Table 4.5-2** is a listing of the State and Federal attainment status for the Kern County portion of the San Joaquin Valley Air Basin.

TABLE 4.5-2
Kern County –SJVAPCD Portion Attainment Status

Pollutant	Designation/Classification	
	Federal Standards[a]	State Standards[b]
Ozone – 1 hour	No Federal Standard[f]	Nonattainment/Severe
Ozone – 8 hour	Nonattainment/ Extreme[e]	Nonattainment
PM_{10}	Attainment[c]	Nonattainment
$PM_{2.5}$	Nonattainment[d]	Nonattainment
Carbon Monoxide	Attainment /Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead (Particulate)	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

[a] See 40 CFR Part 81
[b] See CCR Title 17 Sections 60200-60210
[c] On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM10 National Ambient Air Quality Standard (NAAQS) and approved the PM10 Maintenance Plan.
[d] The Valley is designated nonattainment for the 1997 PM2.5 NAAQS. EPA designated the Valley as nonattainment for the 2006 PM2.5 NAAQS on November 13, 2009 (effective December 14, 2009).
[e] Though the Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).
[f] Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the SJVAB as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

The urbanized areas of Fresno, Bakersfield, Stockton, and Modesto are designated as attainment and all of the non-urbanized areas of the San Joaquin Valley Basin are designated as unclassified for the federal CO standards.

In July 1997, the U.S. EPA announced new health-based standards for ozone and $PM_{2.5}$. $PM_{2.5}$ is a subset of PM_{10} and a microscopic form of particle pollution primarily composed of diesel soot and other

combustion by-products. Previously, the NAAQS for particulate matter applied to the highest 24-hour or annual averages measured within a monitoring planning area. Monitoring networks were often designed to measure the highest values, even though these networks did not necessarily represent the overall exposure of populations to excessive particulate concentrations. Some data from these networks were disregarded by epidemiologists as being unrelated to health indicators such as hospital admissions and death. The new forms for these standards are intended to provide more robust measures for the particulate matter indicator. While PM_{10} network design and siting criteria are unchanged, new $PM_{2.5}$ monitoring networks to determine compliance or non-compliance are intended to best represent the exposure of populations that might be affected by elevated $PM_{2.5}$ concentrations.

$PM_{2.5}$ measurements from central California indicate that the annual 15 mg/m^3 standard is exceeded in several populated areas, specifically in the central and southern San Joaquin Valley (where the Proposed Project is located). These high annual averages are dominated by elevated concentrations in the cities and in non-urban locations during winter and fall. $PM_{2.5}$ constitutes approximately 80% of PM_{10} during winter and approximately 50% of PM_{10} during the rest of the year. Other $PM_{2.5}$ exceedances have occurred as isolated events at one or two locations when a nearby activity contributed a large bolus of fugitive dust, or when wind typically dominated by the coarse particle fraction. Windblown dust excursions have been most often found in the southern San Joaquin Valley and in the high desert, especially in the vicinity of Owens Lake.

4.6 AIR QUALITY DESIGNATION CLASSIFICATIONS[35]

4.6.1 NATIONAL DESIGNATION CATEGORIES

Non-Attainment Area: Any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant.

Unclassified/Attainment Area: Any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant or meets the national primary or secondary ambient air quality standard for the pollutant.

Ozone Classifications:

Marginal	Primary standard, attainment date of 3 years after enactment
Moderate	Primary standard, attainment date 6 years after enactment
Serious	Primary standard, attainment date 9 years after enactment
Severe 15	Primary standard, attainment date 15 years after enactment
Severe 17	Primary standard, attainment date 17 years after enactment
Extreme	Primary standard attainment date 20 years after enactment

Incomplete (or No) Data: An area designated as an ozone non-attainment area as of the date of enactment of the Clean Air Act Amendments of 1990 and did not have sufficient data to determine if it is meeting or is not meeting the ozone standard.

[35] "Final Environmental Impact Report, Revised Update of the Kern County General Plan, SCH# 2002071027," County of Kern.

Carbon Monoxide Classifications:

Serious: A design value of 16.5 ppm and above and a primary standard attainment date of December 21, 2000.

Moderate: A design value of 9.1 up to 16.4 ppm and a primary standard attainment date of December 31, 1995.

Not Classified: An area designated as a carbon monoxide non-attainment area as of the date of enactment of the Clean Air Act Amendments of 1990 and did not have sufficient data to determine if it is meeting or is not meeting the carbon monoxide standard.

4.6.2 STATE DESIGNATION CLASSIFICATIONS

Unclassified: A pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or non-attainment.

Attainment: A pollutant is designated attainment if the State standard for that pollutant was not violated at any site in the area during a three-year period.

Non-attainment: A pollutant is designated non-attainment if there was at least one violation of a State standard for that pollutant in the area.

Non-attainment/Transitional: A subcategory of the non-attainment designation. An area is designated non-attainment/transitional to signify that the area is close to attaining the standard for that pollutant.

As part of the 1990 Federal CAA Amendments, 189 substances commonly used in many businesses, including manufacturing and industrial processes, were identified as Toxic Air Contaminants (TACs). The amendments required the U.S. EPA to establish a 10-year schedule for developing new regulations for controlling these pollutants using maximum achievable control technology (MACT). Under Title III to the 1990 Federal Clean Air Act Amendments, the U.S. EPA was also required to develop regulations to address urban area risk, residual risk, and accidental releases of Toxic Air Contaminants.

Pursuant to the CAA, states may develop a State Implementation Plan (SIP) to explain how they will achieve the CAA standards within the state. If the SIP is deemed acceptable, the U.S. EPA will delegate responsibility for implementation pursuant to the SIP. California has an approved SIP. These implementation plans are updated and revised periodically based on changes in conditions, and revision in standards.

4.6.3 EXISTING AIR QUALITY IN THE SAN JOAQUIN VALLEY BASIN [36]

The San Joaquin Valley Air Basin (SJVAB) consists of eight counties: Fresno, Kern (western and central), Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare. Cumulatively, these counties make up about 16% of California's geographic area, making the SJVAB the second largest air quality basin delineated by the California Air Resources Board. The SJVAB consists of a continuous intermountain valley approximately 250 miles long and averaging 80 miles wide. The geography of mountainous areas to the east, west and south, in combination with long summers and relatively short winters, contributes to local climate episodes that prevent dispersion of pollutants. Although marine air generally flows into the SJVAB from the San Joaquin River Delta, the region's topographic features restrict air movement through and out of the valley. Additionally the surrounding mountainous areas are generally higher in elevation

[36] California Air Resources Board, http://www.arb.ca.gov/adam/welcome.html.

than the summer inversion layers. As a result, the SJVAB is highly susceptible to pollutant accumulation over time.

Monitoring Stations

The SJVAB has 33 monitoring stations to measure air quality, 21 operated by the SJVAPCD, 2 by the National Park Service, 1 by Tachi-Yokut, 8 by the California Air Resources Board and 2 jointly operated by the SJVAPCD and CARB. **Exhibit 4** "SJVAPCD Monitoring Station Locations" shows the location of these monitoring stations. By using the data collected at these stations the attainment status and the progress towards attainment is measured.

REGIONAL AMBIENT AIR QUALITY[37]

Ozone

The long-term trends in the SJVAB for the number of days over the federal 1-hour ozone standard has decreased basin-wide from a peak of 80 days in the late 1970's to 28 days in 2016. Short-term trends show a decrease in the number of days over the standard basin-wide from below 94 days in 1999 to 28 days in 2016. On July 18, 2016, the EPA published in the Federal Register a final action determining the SJVAB has attained the 1-hour ozone national standard.

Particulate

The air quality data shows an overall improvement in PM_{10} and $PM_{2.5}$. The peak 24-hour PM_{10} exceedance was 439 micrograms per cubic meter in 1990 and only 132.5 micrograms per cubic meter in 2016. The peak 24-hour $PM_{2.5}$ exceedance was 23.4 micrograms per cubic meter in 1999 and only 15.6 micrograms per cubic meter in 2016. As of October 2006, the San Joaquin Valley had attained the federal PM_{10} and $PM_{2.5}$ standard and had received approval as an attainment basin for this pollutant. The number of days of exceedance has decreased over time from 59 in 1990 to 5 in 2004-2006. The District adopted the 2016 Moderate Area Plan for the 2012 PM2.5 Standard on September 15, 2016. This plan addresses the EPA federal annual PM2.5 standard of 12 μg/m3, established in 2012. This plan includes an attainment impracticability demonstration and request for reclassification of the Valley from Moderate nonattainment to Serious nonattainment.[38]

All Other Pollutants

The remaining federal criteria pollutants (NO_X, SO_X, CO) that are measured by the monitoring stations have been shown to be in attainment.

Toxic Air Contaminants

Toxics have been monitored at four sites in the SJVAB as shown on **Exhibit 4 "**SJVAPCD Monitoring Station Locations." The toxic air contaminants are: acetaldehyde; benzene; 1, 3-butadiene; carbon tetrachloride; chromium (hexavalent); para-dichlorobenzene; formaldehyde, methylene chloride; perchloroethylene; and diesel particulate matter (diesel PM). These are the TACs that are considered to pose the greatest health risk in SJVAB. **Table 4.6-1** on the following page demonstrates that in general since 1992 the volume of toxics in the SJVAB and the health risk posed by these toxics has decreased.

[37] "Extreme Ozone Attainment Demonstration Plan-San Joaquin Valley Air Basin Plan Demonstrating Attainment of Federal 1-hour Ozone Standard," San Joaquin Valley Air Pollution Control District (October 8, 2004).

[38] http://www.valleyair.org/Air_Quality_Plans/PM_Plans.htm

TABLE 4.6-1[39]

San Joaquin Valley Air Basin Annual Average Toxic Air Contaminant Concentration and Health Risk

TAC*	Conc[1]./Risk[2]	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Acetaldehyde	Annual Avg	1.38	1.73	1.29	0.54	1.28	1.19	1.30	1.56	1.09	1.15	1.24	1.34	1.14	1.42	1.33	1.15
	Health Risk	7	8	6	3	6	6	6	8	5	6	6	7	6	7	6	6
Benzene	Annual Avg	1.36	1.32	1.33	1.16	0.73	0.71	0.76	0.69	0.63	0.538	0.552	0.463	0.372	0.374	0.362	0.318
	Health Risk	126	122	123	107	68	66	71	64	58	50	51	43	34	35	34	29
1,3-Butadiene	Annual Avg	0.236	0.339	0.323	0.264	0.222	0.195	0.233	0.177	0.158	0.15	0.146	0.095	0.08	0.082	0.069	0.065
	Health Risk	89	127	121	99	83	73	88	67	59	56	55	36	30	31	26	24
Carbon Tetrachloride	Annual Avg		0.109		0.098	0.077		0.114		0.096	0.086	0.091	0.097				
	Health Risk		29		26	20		30		25	23	24	26				
Chromium, Hexavalent	Annual Avg	0.23	0.21	0.19	0.28	0.13	0.11	0.10	0.10	0.12		0.086	0.078	0.083	0.076	0.05	0.083
	Health Risk	34	31	29	42	20	16	15	15	18		13	12	13	11	8	12
Para-Dichlorobenzene	Annual Avg	0.11	0.13	0.11	0.11	0.10	0.13			0.11	0.13	0.15	0.15	0.15	0.15	0.15	
	Health Risk	7	9	7	8	7	9			7	9	10	10	10	10	10	
Formaldehyde	Annual Avg	1.46	1.67	1.80	2.10	2.96	2.77	2.86	3.44	2.61	3.08	3.13	3.02	2.27	2.52	2.78	2.51
	Health Risk	11	12	13	15	22	20	21	25	19	23	23	22	17	19	20	18
Methylene Chloride	Annual Avg	0.55	0.76	0.59	0.61	0.54	0.53	0.52	0.50	0.53	0.27	0.16	0.14	0.11	0.12	0.11	0.1
	Health Risk	2	3	2	2	2	2	2	2	2	<1	<1	<1	<1	<1	<1	<1
Perchloroethylene	Annual Avg	0.104	0.473	0.067	0.068	0.068	0.056	0.039		0.076	0.052	0.039	0.033	0.027	0.032	0.032	0.026
	Health Risk	4	19	3	3	3	2	2		3	2	2	1	1	1	1	1
Diesel PM[3]	Annual Avg				(1.7)					(1.3)							
	Health Risk				(510)					(390)							
Average Basin Risk	w/o Diesel PM	280	360	304	305	231	194	235	181	196	169	184	157	111	114	105	90
	w/ Diesel PM				(815)					(586)							

1. Concentrations for Hexavalent chromium are expressed as ng/m3 and concentrations for diesel PM are expressed as ug/m3. Concentrations for all other TACs are expressed as parts per billion.
2. Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. It reflects only those compounds listed in this table and only those with data for that year. There may be other significant compounds for which we do not monitor or have health risk information. Additional information about interpreting the toxic air contaminant air quality trends can be found in Chapter 1, Interpreting the Emission and Air Quality Statistics.
3. Diesel PM estimates are based on receptor modeling techniques, and the estimates are available only for selected years. Currently, the estimates are being reviewed.

[39]"Toxic Air Contaminant Emissions, Air Quality, and Health Risk," ARB Almanac, Ch. 5, California Air Resources Board (2009)

4.6.4 CRITERIA POLLUTANTS

The California Air Resources Board (CARB) operates several meteorological and air quality monitoring stations in the San Joaquin Valley area. **Tables 4.6-2** through **4.6-8** present the most recent summaries of the monitored air quality for ozone (O_3), Particulate Matter less than 10 microns in aerodynamic diameter (PM_{10}), Particulate Matter less than 2.5 microns in aerodynamic diameter ($PM_{2.5}$), Carbon Monoxide (CO), and Nitrogen Dioxide (NO_X). No data is available for Sulfur Dioxide (SO_2), Lead (Pb), Hydrogen Sulfide (H_2S) or Vinyl Chloride (C_2H_3Cl) in Kern County. **Exhibit 4,** "SJVAPCD Monitoring Station Locations" shows the locations of the various monitoring stations in the area surrounding the SJVAB.

For the purposes of background data and air quality assessment, this analysis will rely on data collected in the past years for the CARB monitoring stations that are closest in proximity to the proposed development.

TABLE 4.6-2
Background Ambient Air Quality Data for 1-Hour Ozone

CARB Air Monitoring Station	Number of Days* Exceeding 1-Hour NAAQS			Number of Days Exceeding 1-Hour CAAQS (0.09 ppm)			Maximum 1-Hour Concentration (ppm)		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
Bakersfield – California Ave.	0	0	0	6	0	11	0.104	0.092	0.122
Bakersfield –Municipal Airport	-	-	-	23	8	9	0.118	0.102	0.118

*NAAQS 1-Hour standard has been rescinded and replaced with an 8-Hour standard which is more restrictive.
- = No reported data

TABLE 4.6-3
Background Ambient Air Quality Data for 8-Hour Ozone

CARB Air Monitoring Station	Number of Days Exceeding 8-Hour NAAQS (0.075 ppm)			Number of Days Exceeding 8-Hour CAAQS (0.070 ppm)			Maximum 8-Hour Concentration (ppm)		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
Bakersfield – California Ave.	28	30	47	54	63	87	0.097	0.086	0.104
Bakersfield –Municipal Airport	55	41	26	73	66	57	0.106	0.093	0.101

- = No reported data

TABLE 4.6-4
Background Ambient Air Quality Data for PM_{10} - National

CARB Air Monitoring Station	Annual Average ($\mu g/m^3$)			Days Exceeding NAAQS (>150 $\mu g/m^3$)			Maximum National 24-Hour Concentration NAAQS (150 $\mu g/m^3$)		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
Bakersfield – California Ave.	44.5	41.2	42.6	0	0	0	104.7	90.9	138.0
Oildale – Manor Street	36.5	41.6	19.3	-	0	-	98.5	89.1	59.4

- = No reported data

TABLE 4.6-5
Background Ambient Air Quality Data for PM_{10} - State

CARB Air Monitoring Station	Annual Average ($\mu g/m^3$)			Days Exceeding CAAQS (>50 $\mu g/m^3$)			Maximum California 24-Hour Concentration CAAQS (50 $\mu g/m^3$)		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
Bakersfield – California Ave.	44.1	40.9	42.6	121.4	121.4	98.7	103.6	92.2	143.6
Oildale – Manor Street	-	-	-	-	-	-	104.4	88.4	210.0

- = No reported data

TABLE 4.6-6
Background Ambient Air Quality Data for $PM_{2.5}$ - National

CARB Air Monitoring Station	Annual Average ($\mu g/m^3$)			Days Exceeding NAAQS (>35 $\mu g/m^3$)			Maximum 24-Hour Concentration NAAQS (35 $\mu g/m^3$)		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
Bakersfield – California Ave.	16.3	14.8	15.9	32.3	25.5	30.2	107.8	66.4	101.8
Bakersfield – Golden St. Hwy.	16.7	14.8	16.2	30.8	21.8	29.7	91.1	53.9	74.3

- = No reported data

TABLE 4.6-7
Background Ambient Air Quality Data for $PM_{2.5}$ - State

CARB Air Monitoring Station	Annual Average ($\mu g/m^3$)			Days Exceeding NAAQS (>35 $\mu g/m^3$)			Maximum 24-Hour Concentration NAAQS (35 $\mu g/m^3$)		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
Bakersfield – California Ave.	16.6	14.5	15.9	32.3	25.5	30.2	111.9	66.4	101.8
Bakersfield – Golden St. Hwy.	16.7	14.8	16.2	30.8	21.8	29.7	91.1	53.9	74.3

- = No reported data

TABLE 4.6-8
Background Ambient Air Quality Data for NO_X

CARB Air Monitoring Station	Annual Average (0.03 ppm)			Days Exceeding CAAQS (0.18 ppm)			Maximum 1-Hour Concentration CAAQS (0.18 ppm)		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Bakersfield – California Ave.	0.014	0.015	0.015	0	0	0	0.079	0.064	0.064
Bakersfield – Golden St. Hwy.	0.019	-	-	0	-	-	0.033	-	-

- = No reported data

TABLE 4.6-9
Background Ambient Air Quality Data for CO

CARB Air Monitoring Station	Days Exceeding NAAQS (>9.0 ppm)			Days Exceeding CAAQS (>9.0 ppm)			Maximum 8-Hour Concentration NAAQS (9.0 ppm) CAAQS (9.0 ppm)		
	2008	2009	2010	2008	2009	2010	2008	2009	2010
Bakersfield – Golden State Hwy.	0	0	0	0	0	0	2.17	1.51	1.34

Existing Conditions at Project Site

The project site is located within the City of Bakersfield. No onsite data exists for criteria pollutants or toxics. However, using the highest background concentration from the surrounding monitors over the past years will conservatively represent the background concentrations at the site.

5 THRESHOLDS OF SIGNIFICANCE

Criteria Pollutants

For the purposes of this air quality analysis and consistent with SJVAPCD guidance documents,[40] actions that violate federal standards[41] for criteria pollutants (i.e., primary standards designed to safeguard the health of people considered to be sensitive receptors while outdoors and secondary standards designed to safeguard human welfare) are considered significant impacts. Additionally, actions that violate state standards developed by the California Air Resources Board (CARB) or criteria developed by the SJVAPCD including thresholds for criteria pollutants are considered significant impacts.[42] Projects that would generate 10 tons per year of either ROG or NO_X are considered to have a potentially significant air quality impact.[43,44] This includes both direct and indirect emissions combined.

Visibility [45]

The California State Ambient Air Quality Standard for Visibility Reducing Particles (VRP) represents a policy judgment that a certain minimum degree of visibility is conducive to public welfare, regardless of location. This policy is manifested as a State wide minimum dry air particle extinction limit of 0.23/km (230 Mm^{-1}) averaged from 9 AM to 5 PM (PST) when Relative Humidity (RH) is less than 70 percent. This is roughly equivalent to V_r= 10 miles. The standard is 0.07/km (70Mm^{-1})

[40] SJVAPCD Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI), March 19, 2015 Revision
[41] Federal Clean Air Act, as amended (42 U.S.C. 7401 et seq.)., Title I – Air Pollution Control and Prevention.
[42] California Health and Safety Code, Division 26, Air Resources §39000 et seq.
[43] California Health and Safety Code, §40920.
[44] San Joaquin Valley Air Pollution Control District Rule 2201, §4.2.3.
[45] Cal EPA Air Resources Board and Office of Environmental Health Hazard Assessment, Staff Report: Public Hearing to Consider Amendments to the Ambient Air Quality Standards for Particulate Matter and Sulfates; May 2003.

for the Lake Tahoe Air Basin (roughly equivalent to V_r – 30 miles). Equivalent PM_{10} concentrations when this standard is just met range from about 50μg/m^3 for a fine particle dominated urban setting (e.g., Sacramento in the winter) to 90 or more μg/m^3 for a mixture of coarse and fine particles (e.g., Central Valley summer). The Lake Tahoe VRP limit equates to PM_{10} concentrations ranging from about 16 to 25 μg/m^3 over a similar range of aerosol characteristics.

Health Risk-Based Thresholds [46,47]

The California Office of Environmental Health Hazard Assessment (OEHHA) is responsible for setting health risk thresholds for air toxics. These thresholds include Reference Exposure Levels (RELs) for non-carcinogenic toxins that pose potential acute and/or chronic health risks and Unit Risk Factors (URFs) for carcinogens. The RELs and URFs represent exposure levels that OEHHA deems not likely to cause adverse effects in a human population, including sensitive receptors. These thresholds are based on the most recent scientific data and are designed to protect the most sensitive individuals in the population by inclusion of margins of safety. The thresholds approved by the SJVAPCD are a potential to increase cancer risk for the person with maximum exposure potential by 20 in one million or a non-cancer Hazard Index greater than 1 for both acute and chronic exposure.

There are no thresholds of significance for Valley Fever that have been adopted by the state or by the County of Kern. However, the likelihood of its occurrence can be determined based on the proposed project location.

Odor-based Thresholds [48]

Projects that would potentially generate objectionable odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate could constitute a significant air quality impact to existing uses. Also, residential or other sensitive receptor projects built for the intent of attracting people locating near existing odor sources could also cause a significant air quality impact for the proposed uses. The SJVAPCD suggests a threshold based on the distance of the odor source from the project and complaint records for a facility or similar facility. If there is one confirmed complaint per year averaged over a three-year period, or three unconfirmed complaints per year averaged over a three-year period[49], the odor impact is considered significant.

The air contaminants which may be emitted at the proposed project have no known odors associated with them.

[46] See GAMAQI and OEHHA, Air Toxics "Hot Spots" Program.

[47] Cal EPA Air Toxics Hot Spots Program Risk Assessment Guidelines, Guidance Manual, and Part II: Technical Support Document for Describing Available Cancer Potency Factors.

[48] GAMAQI. March 19, 2015 Revision

[49] Ibid

Construction Specific Thresholds [50]

The SJVAPCD approach to analyses of construction impacts is to require implementation of effective and comprehensive control measures rather than to require detailed quantification of emission concentrations for modeling of direct impacts. PM_{10} emitted during construction can vary greatly depending on the level of activity, the specific operations taking place, the equipment being operated, local soils, weather conditions, and other factors, making quantification difficult. Despite this variability in emissions, experience has shown that there are a number of feasible control measures that can be reasonably implemented to significantly reduce PM_{10} emissions from construction. The SJVAPCD has determined that compliance with Regulation VIII for all sites and implementation of all other control measures indicated in Tables 6-2 and 6-3 of the GAMAQI (as appropriate, depending on the size and location of the project site) could constitute sufficient mitigation to reduce non-exhaust specific fugitive emission impacts to a reduced level of significance. Additionally, SJVAPCD has adopted Rule 9510, the Indirect Source Review Rule, which is designed to reduce the construction PM_{10} by 50% and the construction NO_X by 20%.

Certain mitigation measures will be required during the construction phase of the project as described in Section 6. While implementation of these mitigation measures could further reduce the project's construction emissions to a level that is below significance according to the SJVAPCD. The project specific construction emissions were quantified, modeled, and compared along with the operational emissions against the NAAQS and CAAQS in order to determine local impact significance.

General Thresholds [51]

As provided in CEQA, CEQA states that a project could have a potentially significant air quality impact on the environment if it would:

- Conflict with or obstruct implementation of air quality plans;
- Violate ambient air quality standards or contribute to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under Federal or State standards;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors.

[50] See GAMAQI and district recommendations at http://www.valleyair.org/.
[51] CEQA Guidelines.

6 PROJECT IMPACTS

The Project Specific Impact Analyses are broken into the following sub elements:

- Criteria Pollutants impact
- Visibility Impacts
- Public Health/Hazards Impacts
- Mobile Source – Carbon Monoxide Hotspot Impacts

The Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI) considers construction emissions (short term emissions) and operational emissions (long term emissions) separately.

CalEEMod [52] **and GAMAQI** [53]

For this project, California Emissions Estimator Model (CalEEMod) is used to estimate the criteria pollutant emissions for both construction and operation.

Construction emissions are considered short-term impacts and are temporary in nature. CalEEMod estimates construction related emission based on the size of the project, construction time, and construction equipment etc.

CalEEMod operational emissions are comprised of two separate sources: area and mobile sources. Area sources generate emissions from activities like space heating and landscape maintenance while mobile sources result from vehicular travel with vehicles travelling throughout the city and county. These emissions are calculated for the build out period and take into account future fleet mixes and emission controls.[54] Emissions from area sources and mobile sources are depicted as long-term impacts.

CalEEMod typically analyzes construction and operational emissions separately. For project build-outs longer than 5 years, an interim year analysis is recommended by GAMAQI.[55]

CalEEMod was developed to provide meaningful analysis of both short and long term urban impacts, and to encourage mitigations such as trip reduction during project planning. Discrete CalEEMod analysis is limited to annual periods. GAMAQI recommends that the short-term construction output from the model not be combined with the operational model without creating a new combinatorial model. CalEEMod uses a simplified set of emission factors to estimate impacts separately for predetermined construction periods and for operational periods as independent events and does not factor in: small discrete periods of project overlap, incremental periods smaller than one year, individual build out rates for each particular element of construction, schedule utilization of individual pieces of equipment, pro-ration for occupancy rate, retrofit technology over

[52] California Emissions Estimator Model, developed by ENVIRON International Corporation with SCAQMD and other California Districts

[53] GAMAQI. March 19, 2015 Revision

[54] Used SJVAPCD residential fleet mix. https://www.valleyair.org/ISR/Documents/Accepted%20URBEMIS%20default%20values%20012909.xls

[55] GAMAQI. March 19, 2015 Revision

the life of equipment, pollutant reactivity, pollutant transport, adjustments for construction program constraints due to localized conflicts between both resident's quiet enjoyment and the construction effort. Other than the Conformity Analysis discussed below, no models have been developed that can reliably perform these adjustments. CalEEMod results are provided in quantity form, i.e., tons/year. This model is used for project related impacts analysis.

Where site specific or project specific data was available, CalEEMod 2016.3.2 factors were modified to fit with the information. Where little or no information was available for a project, default values were selected.

6.1 PROJECT SHORT-TERM EMISSIONS

Short-term impacts from the project will primarily result in fugitive particulate matter emissions during construction. Grading, excavation, trenching, filling, and other construction activities result in increased dust emissions. Regulation VIII of the San Joaquin Valley Air Pollution Control District specifies control measures for specified outdoor sources of non-exhaust specific fugitive particulate matter emissions. Rule 8011 contains administrative requirements, Rule 8021 applies to construction activities, and Rule 8071 applies to vehicle and equipment parking, fueling, and service areas. The San Joaquin Valley Air Pollution Control District does not require a permit for these activities, but does impose measures to control fugitive dust, such as the application of water or a chemical dust suppressant.

SJVAPCD's *Guide for Assessing and Mitigating Air Quality Impacts* (GAMAQI), does not necessarily require a quantification of construction emissions for all projects. Quantification is generally only required at the request of the lead agency. In general, the SJVAPCD assumes that implementation of these measures will bring the construction impacts to a reduced level of significance. For this project, the construction emissions were quantified in order to demonstrate that the impacts from the project would be below the applicable thresholds.

Construction will also result in exhaust emissions (not reduced by District Regulation VII) from diesel-powered heavy equipment. Exhaust emissions from construction include emissions associated with the transport of machinery and supplies to and from the site, emissions produced onsite as the equipment is used and emissions from trucks transporting excavated materials from the site and fill soils to the site. Examples of these emissions include CO, ROG, NO_X, and PM_{10}.

Exhaust emission factors for typical diesel-powered heavy equipment are based on U.S. EPA AP-42 emissions factors. Actual exhaust emissions will vary substantially from day to day. Numerous variables factored into estimating total construction emissions include: level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, weather conditions, number of construction personnel, and amount of materials to be transported onsite or offsite. Additional exhaust emissions would be associated with the transport of workers and materials. Because the specific mix of construction equipment in a build-out period is not presently known for this project, specific equipment emissions on a yearly basis are estimated.

Using the emissions rates from CalEEMod Version 2016.3.2 and the recommended construction fleet provided in **Appendix I** "San Joaquin Valley Air Pollution Control District's Recommended

Vehicle Fleet," the construction emissions for this project were quantified. The table below shows the annual construction emissions after mitigation.

TABLE 6.1-1
Construction Related Emissions (tons/year)

Year	ROG	NO_X	CO	SOx	PM_{10}	$PM_{2.5}$
2019	0.3431	2.1309	1.7333	0.0033	0.1583	0.1216
2020	0.4146	3.8365	3.0118	0.0074	0.4415	0.2482
2021	0.6035	0.3771	0.3819	0.0008	0.0376	0.0212

The expected construction related mitigation measures used in the CalEEMod modeling include the following: Low VOC paints, water exposed areas twice (2) daily, and reduce vehicle speeds on unpaved roads to fifteen (15) miles per hour to reduce particulate matter generation from vehicle travel and wind.

The San Joaquin Valley Air Basin is designated non-attainment for particulates for both state and federal standards. Although the proposed land uses are not considered a potential source for significant particulate emissions, fugitive particulate emissions will occur during construction. Control measures are required and enforced by the San Joaquin Valley Air Pollution Control District under Regulation VIII. As stated in GAMAQI, the SJVAPCD guidance document, implementation of these control measures will result in short-term emissions that are lower in level of significance or considered *less than significant*. The following three rules related to fugitive dust control apply to this project:

Rule 8011 Fugitive dust administrative requirements for control of fine particulate matter.

Rule 8021 Fugitive dust requirements for control of fine particulate matter from construction, demolition, excavation, extraction, and earthmoving activities.

Rule 8071 Fugitive dust requirements for control of fine particulate matter from vehicle and/or equipment parking, shipping, receiving, transfer, fueling and service areas one acre or larger.

In addition, the project should include the following as requirements of the local municipal code:

> Water sprays or chemical suppressants must be used in all unpaved areas to control fugitive emissions. All access roads and parking areas must be covered with asphalt-concrete paving.

Compliance with Regulation VIII of the San Joaquin Valley Air Pollution Control District and the local municipal code would reduce particulate emission impacts to reduced levels of significance or *less than significant*.

6.2 PROJECT LONG-TERM EMISSIONS

Long-term emissions are caused by mobile sources (vehicle emissions), stationary source, and other area source energy consumption (heating and cooling) emissions. The major long-term impacts to air quality would be emissions caused by motor vehicles traveling to and from the area.

Operational Emissions Quantification

The proposed project operational emissions would be generated by area sources and mobile sources as a result of normal day-to-day activities on the project site after occupation. These emissions would be generated during the operation of landscape maintenance equipment, and from consumer products. Mobile emissions would be generated by the motor vehicles traveling to and from the project site, including heavy-duty diesel trucks.[56]

Area Source Emissions

The area source emissions have been quantified utilizing the CalEEMod Version 2016.3.2 computer model. This model is a land use and transportation based computer model designed to estimate regional air emissions from new development projects. While previous versions were only designed to estimate emissions from motor vehicle trips, CalEEMod Version 2016.3.2 can estimate emissions from such sources as gas heaters, furnaces or blowers, and landscape maintenance equipment. The model accounts for specific meteorological conditions and topography that characterize each specific air basin in California.

The CalEEMod inputs and outputs along with the assumptions and CalEEMod default changes are provided in **Appendix I** "CalEEMod Specific Inputs and Outputs" in the PDF version of this document.

The project area source emissions for the year 2020-2021 are presented in **Table 6.2-1**.

TABLE 6.2-1
Project Area Source Emissions by Sub Category (tons/year)

Category	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$	SO_X
Architectural Coating	0.0307	-	-	-	-	-
Consumer Products	0.3216	-	-	-	-	-
Landscaping	0.00044	0.00005	0.00476	0.00001	0.00001	-

Mobile Source Emissions

Build-out of the proposed project will result in increased vehicle trips in the San Joaquin Valley. The vehicles associated with these trips will emit criteria pollutants including NO_X and ROG, which are considered ozone precursors. Kern County is a non-attainment area for federal air quality standards for ozone and particulates. Nitrogen oxides and reactive organic gases are regulated as

[56] Jones and Stokes, Software User's Guide; CalEEMod 2016.3.2, Emission Estimation for Land Use Development Projects, November 2017.

ozone precursors. A precursor is defined by the SJVAPCD as "a directly emitted air contaminant that, when released into the atmosphere forms or causes to be formed or contributes to the formation of a secondary air contaminant for which an ambient air quality standard has been adopted…"

The SJVAPCD regulates air quality in Kern County. The predicted emissions associated with vehicular traffic (mobile sources) are not subject to the SJVAPCD permit requirements. However, the SJVAPCD is responsible for overseeing efforts to improve air quality within the San Joaquin Valley. The SJVAPCD has prepared an Air Quality Attainment Plan to bring the San Joaquin Valley into compliance with the California Ambient Air Quality Standard for ozone. The SJVAPCD reviews land use changes to evaluate the potential impact on air quality. The SJVAPCD has established a significance level for ROG and NO_X of 10 tons per year each and 15 tons per year for PM_{10}.[57] US EPA has recommended the use of the PM_{10} standards as the interim standard for $PM_{2.5}$.

Vehicle emissions have been estimated using the CalEEMod Version 2016.3.2 computer model. CalEEMod predicts carbon monoxide, reactive organic gases, nitrogen oxides, oxides of sulfur, and particulate matter emissions from motor vehicle traffic associated with new or modified land uses. Trip generation rates were obtained from the traffic study provided by Ruettgers & Schuler Civil Engineering. (see **Appendix II** "Traffic Study" in PDF). Average trip length was calculated from intersection traffic volumes obtained from projections in the traffic study. The modeling results can be viewed in **Appendix I** "Project Specific CalEEMod Inputs and Outputs" in the PDF version of this document..

The project mobile source emissions and the total operational Emissions are presented in **Table 6.2-2** and **6.2-3** respectively. These values reflect the cumulative emissions from both phases of the project.

TABLE 6.2-2
Project Mobile Source Emissions (tons/year)

	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Unmitigated	2.0708	5.4330	14.4451	0.0348	2.9192	0.8037
Mitigated	2.0708	5.4330	14.4451	0.0348	2.9192	0.8037

TABLE 6.2-3
Operational Emissions by Category (tons/year)

Category	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area	0.3528	0.00005	0.00476	-	0.00001	0.00001
Energy	0.0067	0.0613	0.05144	0.00036	0.00465	0.00465
Mobile	2.0708	5.433	14.4451	0.0348	2.9192	0.8037
Waste	-	-	-	-	-	-
Water	-	-	-	-	-	-

[57] GAMAQI. March 19, 2015 Revision

The project maximum emissions occur in year 2021 and the results are shown in **Table 6.2-4.**

TABLE 6.2-4
Total Project Maximum Year Emissions 2021 (tons/year)

Project	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Construction Emissions	0.6035	0.3771	0.3819	0.00084	0.0376	0.0212
Operational Emissions	1.39186	3.00394	8.58818	0.02466	2.19084	0.60354
Project Emissions	**1.99536**	**3.38104**	**8.97008**	**0.0255**	**2.22844**	**0.62474**
SJVAPCD Level of Significance	**10**	**10**	**100**	**27**	**15**	**15***

*USEPA specified interim use of PM_{10} threshold for $PM_{2.5}$

None of the predicted criteria emissions exceed the applicable significance level. Therefore, the impacts from project sources are considered to be *less than significant*.

Ambient Air Quality Modeling-Construction Phase

Emissions from construction operations were modeled using AERMOD and the San Joaquin Valley approved meteorological data for the years of 2013 to 2017, to investigate the impact of the project (**Appendix III** "AERMOD Criteria Pollutant Impacts"). The maximum impacts from the models are shown in **Table 6.2-5.**

TABLE 6.2-5
Project Criteria Pollutant[58] Impact Model Results
Construction Impacts

Pollutant	Averaging period	Project Impact ($\mu g/m^3$)	PSD SIL ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)	CAAQS ($\mu g/m^3$)
NO_X	1 – hour[59]	151.01538		188	339
	Annual	10.59897			
SO_X	1-hour	0.19818	--	196	655
	3-hour	0.11730	--	1,300	--
	24-hour	0.04727	--	365	105
	Annual	0.01391			
CO	1-hour	120.55335	--	40,000	23,000
	8-hour	48.68663	--	10,000	10,000
PM_{10}	24-hour	2.93501	5	150	50
	Annual	0.86316	1		
$PM_{2.5}$	24-hour	1.88570	5	35	--
	Annual	0.69447	1	15	12

[58] No hydrogen sulfide, vinyl chloride, or SO_X is expected to be emitted from the proposed facility during construction and therefore was not modeled or listed in this table

[59] Tier-I approach was used to compare with the new Federal one-hour NOx standard. Project's maximum 1 hour modeling concentration was combined with the background for the nearest monitoring site (California Avenue)

The maximum predicted impacts were compared to the California and National Ambient Air Quality Standards (CAAQS and NAAQS) and PSD SIL. The short term impacts from construction of the project are below the applicable standards, therefore, the impacts are considered *less than significant*.

Ambient Air Quality Modeling-Operation Phase

There are no potential stationary sources in the project; therefore ambient air impact modeling for operations of stationary source is not modeled.

6.3 VISIBILITY IMPACTS

An analysis was conducted of the potential project-related impacts to visibility, including Class I areas[60] located within 100 kilometers of the project site (**Exhibit 5**, "Site Location-100 Kilometer Radius"). The following section describes the analysis methodology and results.

Models and Modeling Techniques

The U.S.EPA model VISCREEN was used with default screening values to estimate impacts to visibility at the Class I areas nearest to the project site. There are two Class I areas located within an approximate 100-kilometer boundary that are administrated by National Park Service (NPS): Domeland Wilderness Area and San Rafael Wilderness Area.

Historically, a representative of NPS, as well as meteorologists at the military site, were contacted for guidance regarding the Air Quality Related Values (AQRVs) of the Class I areas. Additionally, two guidance documents, *Guidelines for Evaluating Pollution Impacts on Class I Wilderness Areas in California*[61], and *Assessment of Air Quality and Air Pollutant Impacts in Class I National Parks of California*[62], were used in this analysis.

TABLE 6.3-1
Class I Areas in the Vicinity of the Project

	PSD Class	Administering Agency
National Parks/Monuments		
Domeland Wilderness	I	NPS
San Rafael Wilderness	I	NPS

[60] Lands designated as ***Class I Areas*** under the Clean Air Act Amendments of 1977 are afforded the highest level of protection from air pollutants in the nation. These lands consist of national wildernesses (Forest Service), parks (National Park Service) and wildlife refuges (U.S. Fish & Wildlife Service) in existence at the time the amendment was passed (http://www.fs.fed.us/outernet/r6/aq/natarm/c1info.htm).

[61] USDA Forest Service, Guidelines for Evaluating Pollution Impacts on Class I Wilderness Areas in California.

[62] National Park Service, Assessment of Air Quality and Air Pollutant Impacts in Class I National Parks of California.

VISCREEN uses two scattering angles to calculate potential plume visual impacts for cases where the plume is likely to be the brightest (i.e. 10 degree azimuth for the forward scatter case) and the darkest (i.e. 140 degree for the backward scatter case). The forward scatter case produces a very bright plume when the sun is placed directly in front of the observer, while the backward scatter case produces a dark plume when the sun is directly behind the observer. For viewing backgrounds, the terrain is assumed to be black and located as close to the observer and the plume as possible. This assumption yields the darkest possible background against which plumes are the most likely to be visible. However, actual viewing backgrounds would be much lighter and located much further away from the observer.

Distances from each site to the closest and most distant borders, as well as the standard visual range of each Class I area evaluated are presented in **Table 6.3-2** below.

TABLE 6.3-2
Distances and Visual Ranges for Nearby Class I Areas

	Distance to Closest Boundary (km)	Distance to Farthest Boundary (km)	Standard Visual Range (km)
National Parks/Monuments			
Domeland Wilderness	83.1	116.1	249
San Rafael Wilderness	78.8	106.7	243

Level 1 Screening Analysis Results

A Level 1 screening analysis of the visibility impacts was conducted using the default settings as indicated in **Table 6.3-3** below.

TABLE 6.3-3
Level 1 Default VISCREEN Settings

Transport Scenario Specifications		
Plume–Source–Observer Angle	11.25	degrees
Stability Class	6 (F)	
Wind Speed	1.00	m/s
Ambient Pollutant Concentrations		
Ozone	0.04	ppm
Particle Characteristics		
Particle Type	**Mass Flow (lb/hr)**	
Primary (NO_2)	0.0	
Soot	0.0	
Sulfate	0.0	

The Level 1 analysis was conducted using pollutant emissions presented in **Table 6.2-1**. In accordance with U.S.EPA VISCREEN guidance, primary NO_2 was assumed to be zero, while PM_{10} emissions from diesel combustion sources were assumed to be particulate. The VISCREEN results are presented in **Appendix IV**, "Project Specific U.S.EPA VISCREEN Model Results."

The emission rates used in the VISCREEN model are based on the area source emissions. The indirect source operational emissions will not occur onsite and therefore cannot contribute to a visible plume originating from the site. Since the sources onsite will be spread out and will not contribute to a single plume, like the one being considered in the model, the analysis is conservative.

TABLE 6.3-4
Level 1 Visibility Screening Analysis
Worst–Case Facility Emissions Inputs

Pollutant	Emissions (tons/yr)
Particulate	0.00001
NO_X (as NO_2)	0.00005
Primary NO_2	0.00
Soot	0.00
Primary SO_4	0.00

TABLE 6.3-5
Level 1 Results for the Project at Domeland Wilderness
Screening Criteria INSIDE Class I Area ARE NOT Exceeded

Back ground	Theta	Azimuth	Distance	Alpha	Delta E Criteria	Delta E Plume	Contrast Criteria	Contrast Plume
Sky	10	144	116.1	25	2	0.000	0.05	0.000
Sky	140	144	116.1	25	2	0.000	0.05	0.000
Terrain	10	144	116.1	25	2	0.000	0.05	0.000
Terrain	140	144	116.1	25	2	0.000	0.05	0.000

TABLE 6.3-6
Level 1 Results for the Project at San Rafael Wilderness
Screening Criteria INSIDE Class I Area ARE NOT Exceeded

Back ground	Theta	Azimuth	Distance	Alpha	Delta E Criteria	Delta E Plume	Contrast Criteria	Contrast Plume
Sky	10	141	106.7	28	2	0.000	0.05	0.000
Sky	140	141	106.7	28	2	0.000	0.05	0.000
Terrain	10	141	106.7	28	2	0.000	0.05	0.000
Terrain	140	141	106.7	28	2	0.000	0.05	0.000

It can be seen from the results that the proposed project will not exceed the standards for visibility at sensitive receptors within 100 km.

Visibility was evaluated in proximity to the project in accordance with the California visibility standard.[63] The California Ambient Air Quality Standard for Visibility Reducing Particles policy is a statewide minimum dry air particle extinction limit of 0.23/km averaged from 9 a.m. to 5 p.m. (PSI) when relative humidity is less than 70 percent. Equivalent PM_{10} concentrations when this standard is just met range from about 50µg/m^3 for a fine particle dominated setting (e.g. Sacramento in winter) to 90 or more µg/m^3 for a mixture of coarse and fine particles (e.g. Central Valley summer). The maximum modeled PM_{10} project impact is shown on **Table 6.2-5**. This impact is less than the 90 µg/m^3 limit, therefore is considered to be *less than significant*.

6.4 PROJECT SPECIFIC PUBLIC HEALTH/HAZARDS IMPACTS

6.4.1 HEALTH RISK ASSESSMENT

Toxic Air Contaminants

The analysis is used to determine if the operation of the project would have a significant health risk on the nearby sensitive receptors. The toxic air containments for each source are located in **Appendix V** "AERMOD/HARP Health Risk Impacts."

Health Risk to the Project from Existing Industrial Activities

The project site does not contain existing oil production facilities. The project is located in an area surrounded by suburban developments with sparse commercial and vacant land and farmland approximately one (1) kilometer to the south in the City of Bakersfield. Most of the sensitive receptors consist of the surrounding residences that extend from the project boundary up to, and exceeding, the two (2) kilometer radius used in the analysis. Within the two (2) kilometer radius there are six (6) schools that were modeled using receptor placement in varying densities depending on the distance from the project as shown in the set of exhibits included in **Exhibit 10a-d**. There are no industrial projects within a close radius of the project which may significantly impact the project's sensitive receptors.

Health Risk Analysis of Operation of the Project on Existing Sensitive Receptors

The SJVAPCD identifies a sensitive receptor as a location where human populations, especially children, senior citizens, and sick persons, are present, and where there is a reasonable expectation of continuous human exposure to pollutants, according to the averaging period for ambient air quality standards, such as 24-hour, 8-hour or 1-hour. Examples of sensitive receptors include residences, hospitals, and schools.[64] Industrial and commercial uses are not considered sensitive receptors.

[63] Cal EPA, Public Hearing to Consider Amendments to the Ambient Air Quality Standards for Particulate Matter and Sulfates, 2003 .

[64] GAMAQI. March 19, 2015 Revision

Exposure Assessment[65]

The purpose of the exposure assessment is to estimate the extent of public exposure to each substance for which cancer risk will be quantified or non-cancer effects evaluated. This involves emission quantification, modeling of environmental transport, evaluation of environmental fate, identification of exposure routes, identification of exposed populations, and estimating short-term and long-term exposure levels.

Emissions Quantification

For this risk assessment, air toxics emissions from the project were quantified based on the design specifications described above, and analytical sample analyses. Emission estimates were based on hourly and annual emission calculations.

Peak hourly emissions are in units of grams per second (g/s).

Annual emissions (g/s) = (Peak Hourly - g/s) x Operating Schedule (hr/day) x days per year (day/yr) / (8,760 hr/yr)

This results in an annualized emission rate of the pollutant expressed on a short-term basis.

Modeling of Environmental Transport

The Hot Spots Analysis and Reporting Program - Version 18159[66] (HARP-2) model was utilized for the air toxics exposure assessment. HARP is a computer software package that combines the tools of emission inventory database, facility prioritization calculation, air dispersion modeling, and risk assessment analysis. All of these tools are tied to a single database allowing information to be shared and utilized.
Model control parameters were identical to those utilized for the criteria pollutant impact analysis described above.

AMS/EPA Regulatory Model Improvement Committee, AERMIC Model (AERMOD) atmospheric dispersion model is used for modeling the potential impacts of area sources in simple (i.e., flat) and complex (i.e., hilly) terrain. This program uses Gaussian dispersion to determine concentration of pollutants from sources. It is an accepted mathematical estimate of pollutant levels based on distance from a point source and physical conditions of equipment, site and weather conditions. The model is limited to approximately a 50 kilometer radius; however this analysis reports the impacts at their maximum location. The units of output are micrograms per cubic meter. This model is used for both project specific long term and short term impacts and cumulative impacts.

Identification of Exposure Routes

The exposure analysis included the five pathways including those recommended by the OEHHA (inhalation, dermal exposure, soil ingestion, and mother's milk) and homegrown produce.

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[65] U.S. EPA, User's Guide for the Industrial Source Complex (ISC3) Dispersion Models, EPA-454/B-95-003a and EPA-454/B-95003b, including Addendum dated 2002.

[66] California ARB 'Air Dispersion Modeling & Risk Tool' (HARP-2) latest update February 21, 2017.

Identification of Exposed Populations

For this assessment, the entire surrounding area within a two (2) kilometer radius was reviewed for potential sensitive receptors. There are residences surrounding the project and several scattered commercial developments within a two-kilometer radius. Receptors were placed in a polar grid using the SJVAPCD's modeling guidance on all of the residences and a Cartesian grid was used to model potential worksite receptors, including farmland, commercial. All potential existing sensitive populations to include residences, schools, hospitals, churches, etc. were screened. The receptor grid does not represent actual persons, but rather, was utilized to determine the locality of the maximum predicted impacts to neighboring receptors.

Estimated Short- and Long-Term Exposure Levels

The HARP-2 model was used to estimate the acute non-carcinogenic health risk impacts of the project. HARP-2 is a multi-source, multi-pollutant, multi-pathway risk assessment model.

Risk Characterization

Risk characterization is the process of evaluating the risks due to facility emissions. As explained above, the HARP-2 model calculates the estimated cancer and non-cancer health risk based on the predicted short-term and long-term exposure levels for each air toxic at each model receptor. This section presents the total predicted individual cancer risk for residential and working populations and the total population excess cancer burden. It also evaluates the predicted non-cancer health hazards from the proposed project.

CARB generally considers a potential cancer risk of twenty in a million (i.e., 20×10^{-6}) as significant. For acute or chronic non-cancer health impacts, the significance threshold is 1.0.

Excess Cancer Risk:	20.0×10^{-6}
Non-Cancer Health Hazard Indices:	1.0

Construction Phase Direct Toxic Impacts

Health risk analysis was performed for construction activity. The area of the project was modeled as a source of construction emission and maximum annual diesel particulate matter emission from construction activities was used to estimate the health impacts

Operation Phase Direct Toxic Impacts

Health risk analysis was performed for operation activity. Delivery truck travel paths were modeled using line-volume sources, point-sources were used to model restaurant, fast food, truck idling and refrigeration units, and gasoline dispensing operation (GDO) loading and breathing related emissions. GDO refill and spillage were modeled using volume sources.

Cancer Impacts

The total individual excess cancer risk is defined as the cancer risk a hypothetical individual faces if exposed to carcinogenic emissions from a particular facility continuously, 24 hours a day, 261 days a year, for the four year life of the project. This risk is defined as an excess risk because it is above and beyond the background cancer risk to the population.

Since the modeled maximum cancer risk is lower than the 20E-06 threshold, the impact is considered *less than significant*. Regarding the worker screening; there were no apparent worker receptors in the area, therefore, the entire two-kilometer radius was treated as being all sensitive receptors. Therefore, the entire area was screened in the most stringent possible way with the Health Risk Analysis model (70-year exposure with full time screening at each receptor). The detailed model results are contained in **Appendix V**.

The health risk associated with these criteria pollutant impacts are discussed in **Section 3.2,** "Description of Pollutants."

Chronic Non-Cancer Health Impacts

Scientists at OEHHA have established No Adverse Effect Level (NAEL) concentrations for non-carcinogenic chemicals. In determining these thresholds, OEHHA has assumed continuous exposure, 24 hours a day, 365 days a year, with a 70-year exposure. According to OEHHA, exposure to non-carcinogens at or below the chronic NAEL will not result in adverse chronic non-cancer health effects to the public.

TABLE 6.4-1
Maximum Exposed Residential & Worker Receptors
Cancer Risk

Residential Receptor				
Emissions Source	#	**UTM Easting (meters)**	**UTM Northing (meters)**	**Maximum Risk***
Construction	3618	314604	3906316	3.08E-06
Operation	3630	314632	3906157	1.78E-07
			Cumulative Risk:	3.25E-06

Worker Receptor				
Emissions Source	#	**UTM Easting (meters)**	**UTM Northing (meters)**	**Maximum Risk***
Construction	31	314604	3906316	2.05E-07
Operation	43	314632	3906157	1.12E-08

			Cumulative Risk:	2.16E-07

* 2 year construction period screening beginning at the earliest possible age group: third trimester

Since the modeled maximum cumulative cancer risk is lower than the 20E-06 threshold, the impact is considered *less than significant*. Regarding the worker screening; there were no apparent worker receptors in the area, therefore, the entire two-kilometer radius was treated as being all sensitive receptors. Therefore, the entire area was screened in the most stringent possible way with the Health Risk Analysis model (70-year exposure with full time screening at each receptor). The detailed model results are contained in **Appendix V**.

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TABLE 6.4-2
Maximum Exposed Residential & Worker Receptors
Chronic Non-Cancer Risk

Residential Receptor				
Emissions Source	#	**UTM Easting (meters)**	**UTM Northing (meters)**	**Maximum Risk***
Construction	3618	314604	3906316	6.25E-04
Operation	3630	314632	3906157	4.76E-04
			Cumulative Risk:	1.10E-03

Worker Receptor				
Emissions Source	#	**UTM Easting (meters)**	**UTM Northing (meters)**	**Maximum Risk***
Construction	31	314604	3906316	6.61E-04
Operation	43	314632	3906157	4.76E-04
			Cumulative Risk:	1.14E-03

* 2 year construction period screening beginning at the earliest possible age group: third trimester

Since the modeled maximum cumulative chronic hazard index is lower than 1, the impact is considered *less than significant*. Similar to the cancer risk screening, there were no apparent worker

receptors in the area, therefore, the entire two-kilometer radius was treated as being all sensitive receptors. Therefore, the entire area was screened in the most stringent possible way with the Health Risk Analysis model (70-year exposure with full time screening at each receptor). The model results are contained in **Appendix V**.

The health risk associated with these criteria pollutant impacts are discussed in **Section 3.2,** "Description of Pollutants."

Acute Non-Cancer Health Impacts

Scientists at OEHHA believe that one-hour average exposures at or below the acute NAEL will not result in acute adverse health effects to the public. OEHHA only considers the inhalation exposure pathway for acute health effects.

TABLE 6.4-3
Maximum Exposed Residential & Worker Receptors
Acute Non-Cancer Risk

Residential Receptor				
Emissions Source	#	**UTM Easting (meters)**	**UTM Northing (meters)**	**Maximum Risk***
Construction	N/A**	N/A**	N/A**	N/A**
Operation	3629	314610	3906157	5.22E-04
			Cumulative Risk:	5.22E-04

Worker Receptor				
Emissions Source	#	**UTM Easting (meters)**	**UTM Northing (meters)**	**Maximum Risk***
Construction	N/A**	N/A**	N/A**	N/A**
Operation	42	314610	3906157	5.22E-04
			Cumulative Risk:	5.22E-04

* 2 year construction period screening beginning at the earliest possible age group: third trimester
** No detectible acute (non-cancer) health risk from diesel emissions during construction.

The toxic emissions from construction of the project involve diesel exhaust. Diesel exhaust does not have an acute Reference Exposure Limit (REL) for short term inhalation, therefore, construction acute non-cancer risk is not applicable. Since the modeled maximum cumulative chronic non-cancer hazard index is lower than 1, the impact is considered *less than significant*. The model results are contained in **Appendix V**.

The health risk associated with these criteria pollutant impacts are discussed in **Section 3.2,** "Description of Pollutants."

Uncertainty in Impact Assessment[67]

Predictions of future health risks include substantial uncertainties. There are model and data uncertainties with respect to the assumed emissions, dispersion modeling and toxicological factors, and uncertainties with respect to the characteristics of the potentially exposed population. For example, possible exposure scenarios can be based on the assumption that a person resides in the same location for the average period in U.S. residency (approximately 9 years), or for the 90th percentile of residency (approximately 30 years), or for an entire lifetime (approximately 70 years). Further, that exposure may be assumed at the highest modeled concentration, or some average, or a modestly high concentration representative of the exposed population.

Because risk assessments are often performed to limit impacts to public health, the assumptions used in assessments are typically conservative in nature. The risk assessment methodology described above followed the CAPCOA and OEHHA guidelines, which are specified by regulators with a conservative bias. The following discussion provides qualitative assessments of the uncertainty associated with three major areas of the health risk assessment.

Air Dispersion Modeling

In general, U.S.EPA-approved dispersion models such as AERMOD tend to over-predict concentrations rather than under-predict. For example, the model algorithms assume chemical emissions are not transformed in the atmosphere into other chemical compounds. For certain pollutants, conversion may occur quickly enough to reduce concentrations from the conservative model predictions.

Exposure Assessment

The most important uncertainties related to exposure include the definitions of exposed populations and their exposure characteristics. The choice of a "residential" maximally exposed individual is very conservative in the sense that no real person is likely to spend 24 hours a day, 365 days a year over a 70-year period at exactly the point of highest toxicity-weighted annual average air concentration. The greatest true exposure is likely to be at least 10 times lower than that calculated for the maximum exposed individual (MEI).

Toxicity Assessment

The use of toxicity data in risk estimation is also uncertain. Estimates of toxicity for this risk assessment were obtained from the *Air Toxics Hot Spots Program Risk Assessment Guidelines* (OEHHA, 2015), which is among the most conservative compilations of toxicity information. Toxicity estimates are derived either from observations in humans or from projections derived from experiments with laboratory animals. Human data are obviously more relevant for health risk assessments, but are often uncertain because of: 1) difficulty of estimating exposures associated with the health effect of interest; 2) insufficient study populations; 3) relatively high occupational

[67] OEHHA, Air Toxics "Hot Spots" Program.

exposures (the source of human data) that are extrapolated and applied to low environmental exposures; or 4) variations in the susceptibility of different populations when compared to the population as a whole. Cancer risk coefficients from human data are typically considered proportional to pollutant concentration at any level of exposure (i.e., a linear, no-threshold model), which is conservative at low environmental doses. For non-cancer effects, the lowest exposure known to cause effects in humans is usually divided by uncertainty or safety factors to account for variations in receptor susceptibility and other factors. When toxicity estimates are derived from animal data, they usually involve extra safety factors to account for the possibility of greater sensitivity in humans, and the less-than-human-lifetime observations in animals. Overall, the toxicity assumptions and criteria used in the proposed project's risk assessment tend to over-estimate the risks.

Odor Impacts

Odor is strongest at its source and dissipates with increasing distance. The offensiveness and degree of odor is ultimately dependent on the sensitivity of the receptors exposed to the odor.

Temperature, wind, dust conditions, topography, and the presence of physical obstructions affect the degree of odor impacts on nearby sensitive receptors. The maximum summer temperature in the southern San Joaquin Valley is above 90ºF (**Table 3.1-1**). Odor compounds travel further in warm climates than in relatively cooler climates. During windy conditions, odor compounds are diluted with fresh air and, consequently, disperse more quickly and are less noticeable at a distance. However, wind direction also defines the direction of travel for odors. Physical obstructions, such as windbreaks, cause more rapid dilution of odorous compounds and also capture odor-containing fugitive dust.

Historical wind data from the nearby National Weather Service (NWS) station at the Bakersfield/Kern County – Meadows Field Airport was examined to determine wind patterns in the project area. In the project area, winds generally blow from the northwest or southeast, depending on the time of day and season.

Compounds associated with this project are not known to contribute to odors. The odor impacts are therefore considered *less than significant*.

6.4.2 MOBILE SOURCE CARBON MONOXIDE HOTSPOT IMPACTS

California LINE Source Dispersion Model (CALINE4) [68]

CALINE-4 is an offsite consequence model used in conjunction with traffic related information. This program allows micro scale CO concentrations to be estimated along each roadway corridor or near intersections. This model is designed to identify localized concentrations of carbon monoxide, often termed "hot spots." GAMAQI requires that a CO hotspot analysis be performed if the results of the

[68] Caltrans User's Guide for CL-4: A User Friendly Interface for the CALINE-4 Model for Transportation project Impact Assessments, 1998.

traffic study show a reduction in level of service to "E" or "F" or worsen an existing level of service "F".[69] A Hotspot analysis provides an estimate of localized concentration (i.e., micrograms per cubic meter) of CO related to mobile sources. This model is used for cumulative traffic related impacts.

Carbon monoxide emissions are a function of vehicle idling time and, thus, under normal meteorological conditions, depend on traffic flow conditions. Carbon monoxide transport is extremely limited; it disperses rapidly with distance from the source. Under certain extreme meteorological conditions, however, CO concentrations close to a congested roadway or intersection may reach unhealthful levels, affecting sensitive receptors (residents, school children, hospital patients, the elderly, etc.). Typically, high CO concentrations are associated with roadways or intersections operating at an unacceptable Level of Service (LOS).

A traffic study was prepared by Ruettgers & Schuler Civil Engineers. Mitigation is typically required for intersections which are projected to have a LOS of D or worse by the year 2035. Mitigation ensures the LOS is D or C. Based on the study, a hot spot analysis is not required.

Therefore, the project-specific CO health risks from the surrounding intersections are considered *less than significant*.

7 CUMULATIVE IMPACTS

The Cumulative Impact Analyses are broken into five sub-elements:

- Cumulative Criteria Air Pollutant Impacts
- Cumulative Carbon Monoxide Hot Spots Impacts
- Cumulative Visibility Impacts
- Cumulative Public Health/Hazards Impacts
- TCAG Conformity Analysis
- Triennial Plan Projections Approach

This Air Quality Impact Assessment considered the effects of the project with the cumulative impacts of growth in the area. The *Guide for Assessing and Mitigating Air Quality Impacts*[70] under CEQA defines cumulative impacts as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The document also states, "any proposed project that would individually have a significant air quality impact… would also be considered to have a significant cumulative air quality impact. Impacts of local pollutants (CO, TACs) are cumulatively significant when modeling shows that the combined emissions from the project and other existing and planned projects will exceed air quality standards."[71] If a project related air quality impact is individually less than significant, the impacts

[69] GAMAQI. March 19, 2015 Revision
[70] GAMAQI. March 19, 2015 Revision
[71] Ibid.

of reasonably anticipated future activities, probable future projects and past projects are included based on similar air quality impacts, transport considerations and geographic location.

This project is fully mitigated or is mitigated to less than significant. Cumulative impacts of the proposed project when considered together with past, existing and reasonably foreseeable future projects are not cumulatively considerable and are less than significant. A cumulative impact analysis has been included in this study. This analysis considered the following cumulative impacts:

Cumulative Ozone Impacts - Ozone impacts are the result of the cumulative emissions from numerous sources in the region and transport from outside the region. Ozone is produced in chemical reactions involving ROG, NO_X, and sunlight.

Cumulative PM_{10} and $PM_{2.5}$ Impacts - PM_{10} and $PM_{2.5}$ has the potential to cause significant local problems during periods of dry conditions accompanied by high winds, and during periods of heavy earth disturbing activities. PM_{10} and $PM_{2.5}$ may have cumulative local impacts, if, for example, several unrelated grading or earth-moving projects are underway simultaneously at nearby sites.

Cumulative CO Impacts – Cumulative carbon monoxide impacts are accounted for in the CO "Hot Spot" screening analysis described earlier in this document.

Cumulative Hazardous Air Pollutant (TAC) Impacts – Cumulative analysis for TACs focused on local impacts on sensitive receptors. The SJVAPCD recommends screening a radius of 1 mile for TAC cumulative impacts.

Cumulative Odor Impacts – Cumulative analysis for odors focused on local impacts on sensitive receptors.

The Lead Agency has determined that a quantitative cumulative analysis needs to be prepared when the proposed project will be individually significant or when a zone change or general plan amendment is required.

The cumulative analysis is based, in part, on a quantitative analysis of projects in the vicinity of the proposed project, and is supplemented with the State of California Department of Finance population projections, and an analysis of data utilized by the Kern Council of Governments' (Kern COG) adopted regional growth forecast used for the regional air quality conformity analysis required by the 1990 Federal Clean Air Act Amendments (CAAA).[72] The nearby project analysis quantifies operational project impacts along with all identified projects in the vicinity of the proposed site for comparison with San Joaquin Valley Air Basin and the basin's Kern County portion totals for NO_X and ROG. The Kern COG analysis confirms whether the proposed project, when added to existing and proposed development and compared with local and regional growth forecasts,[73]

[72] Kern Council of Governments, Final Conformity Analysis for the 2007 Federal Transportation Improvement Program, Amendment #6 and the 2007 Regional Transportation Plan (RTP), October 18, 2007.

[73] This regional approach includes all aspects of growth within the San Joaquin Valley Air Basin including distribution centers, industrial uses, housing, and infrastructure development.

are in line with those forecasts, and therefore, in conformance with SIP emission budgets or baseline emissions for NO_X, ROG, CO and PM_{10}. Along with CO "Hot Spot" analysis and TACs, the combined analyses provide a detailed description of the project's overall cumulative impact on air quality.

7.1 CUMULATIVE CRITERIA POLLUTANTS

Regional Analysis

An analysis was made of the existing and proposed projects within a two (2) kilometer radius of the project. Eleven (11) development projects have been identified and modeled using the CalEEMod Version 2016.3.2 computer model to predict cumulative impacts. The cumulative projects identified were determined based on a Kern County Cumulative GIS map (See **Exhibit 6 "**Cumulative Projects Radius Map"). Some projects that have not yet been approved may not appear in this study. Emissions for the operational phase of the proposed projects were based on housing lot totals and commercial acreage totals provided by the City of Bakersfield Planning Department. Building square footages were estimated where information was not available. In accordance with SJVAPCD guidance, fireplaces were not considered.

Tables 7.1-1 and **7.1-2** show the projects construction and operational emissions prior to imposition of mandatory new indirect source offsets or discounting of design benefits or other mitigations which may be imposed on the projects which are in the review cycle versus those that are entitled and not yet constructed or operational. Cumulative Construction Emissions represent an average annual emission rate associated with construction compared to the average annual construction related emissions associated with the proposed project. Operational emissions were calculated for the year 2021 for the proposed and cumulative projects; a construction schedule was generated by CalEEMod. Due to CalEEMod's limitations of handling multiple projects at once individual runs were performed for each project and mitigated results summed. In subsequent years vehicle emissions calculated by the model decrease due to the imposition of scheduled mobile source regulatory requirements. The predicted model outputs, including the proposed project, are summarized in **Tables 7.1-1 and 7.1-2**, and attached in **Appendix VII** "CalEEMod Cumulative Impact Modeling."

TABLE 7.1-1
Cumulative Construction Emissions (tons/year)

Name	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
This Project	0.6035	3.8365	3.0118	0.00742	0.4415	0.2482
Cumulative Projects	71.2968	54.1138	38.7821	0.12247	7.819	4.1711
Total	71.9003	57.9503	41.7939	0.12989	8.2605	4.4193

TABLE 7.1-2
Cumulative Emissions -Operational Sources (tons/year)

Name	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
This Project	1.39186	3.00394	8.58818	0.02466	2.19084	0.60354
Cumulative Projects	148.4595	1084.334	903.9304	4.05024	224.3022	63.1126
Total	149.85136	1087.33794	912.51858	4.0749	226.49304	63.71614

Cumulative Emissions – Construction & Operational Sources (tons/year)

Name	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Total	221.75	1145.29	954.31	4.20	234.75	68.14

These emissions may be overstated due to the fact that the list includes discretionary projects that are subject to mitigation measures which have yet to be determined. Additionally, emissions modeling used conservative assumptions and default values extensively, this tends to cause significant overstatement of emissions values.

The San Joaquin Valley Air Basin has been designated as a non-attainment area for the ozone standards, both federal and state. A quantitative modeling analysis was conducted to address potential cumulative criteria pollutant impacts in the project area. The modeling approach employed is consistent with federal, state and SJVAPCD guidance for considering the impacts from various stationary sources.

Under federal modeling guidance, "nearby" sources are considered to determine cumulative ambient impacts. The federal *Guideline on Air Quality Models*[74] defines a "nearby" source as any source expected to cause a significant concentration gradient in the vicinity of the proposed new source. Vicinity is defined as the "impact area," which is a circular area with a radius extending from the source to the most distant point where the model predicts an impact in excess of the significance threshold.[75] Under federal guidance, no additional modeling would be required if the maximum impacts do not exceed the significance threshold.

The initial model indicated that the PSD SIL shown in **Table 6.2-5** has not been exceeded at the limits of the proposed project's fence line; therefore in accordance with New Source Review (NSR) regulations and PSD guidelines issued by U.S. EPA, the project will not conflict with or obstruct implementation of SJVAPCD's air quality plan, cause a violation of the CO standard, or impact the attainment status of SJVAPCD. Additionally, since the project is below the PSD SIL, the cumulative impact will be *less than significant*.

[74] U.S. EPA, 2003.
[75] Ibid

7.2 CUMULATIVE VISIBILITY

As discussed in the thresholds section of this study the threshold for the California visibility is correlated to the standard Extinction Coefficient of 0.23 per kilometer. This equates to 90 μg/m^3 of PM_{10}. There is no modeled PM_{10} impact for the project. Due to this fact, the project is considered *less than significant.*

7.3 CUMULATIVE OPERATIONAL EMISSIONS

Long-Term Operational Emissions differ from Cumulative Criteria Pollutant Impacts in that Long-Term Operational impacts are based on contributions to the surrounding inventory. In contrast, Criteria Pollutant impacts are based on concentration related impacts to the immediate surroundings within the limits of the model. The long-term emissions from similar past, present and future foreseeable related projects in the SJVAB south of the project are combined to consider the cumulative impacts. All other known and reasonably foreseeable projects in the SJVAB are assumed to be in the Conformity Analysis discussed below in the regional analysis, Kern COG Conformity Analysis.

7.4 CUMULATIVE PUBLIC HEALTH/HAZARDS

There are no impacted sensitive receptors within the project; therefore the cumulative projects would not pose any public health hazards to the proposed project.

7.5 CONFORMITY ANALYSIS[76] AND DEPARTMENT OF FINANCE PROJECTIONS

7.5.1 KERN COG CONFORMITY ANALYSIS

Utilization of Kern COG data provides a framework for assistance in determining the cumulative significance of a project. Through the demonstration that a project's emissions are less than or consistent with projected growth in a particular local area, linked to a regional air basin projection, which ties to federal requirements, then that project could be said to be *in conformance* cumulatively as it is in line with regional, state and federal emissions budgets and air quality improvement goals.

The Final Conformity Analysis for Amendment #2 to the 2009 Interim Federal Transportation Improvement Program and the 2007 Regional Transportation Plan Amendment #1 complies fully with the July 1, 2004, EPA final rule that amended the transportation conformity rule to include criteria and procedures for the new 8-hour ozone and fine particulate matter ($PM_{2.5}$) national ambient air quality standards.

CEQA guidelines 15064(h)(3) states, "A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific

[76] KCOG, Final Conformity Analysis for Amendment #2 to the 2009 Interim Federal Transportation Improvement Program, and 2007 Regional Transportation Plan, Amendment #1, January 15, 2009.

requirements that will avoid or substantially lessen the cumulative problem (e.g. water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency."

It is important to note that the Kern COG conformity analysis highlights a project's conformance with existing local planning and does not serve as a determinant of a single project's impact.

7.5.2 CUMULATIVE CONFORMITY ANALYSIS

The proposed project is located in TAZ #340. This project is General Commercial. The project will increase the number of jobs in TAZ #340 above the Kern COG projections.

A regional analysis was made covering TAZ #340 and the abutting TAZs (**Exhibit 7 "**Regional Traffic Analysis Zone Map"). Results are attached in **Exhibit 8**: **"**Regional Traffic Analysis Zone - Jobs Projected Growth" job growth chart. This chart shows the Kern County job projection with job growth as a result of this project.

7.5.3 CONSISTENCY WITH THE AIR QUALITY ATTAINMENT PLAN

The California Clean Air Act requires non-attainment districts with severe air SJVAPCD prepared an Air Quality Attainment Plan for the San Joaquin Valley Air Basin in compliance with the requirements of the Act. The plan requires best available retrofit technology on specific types of stationary sources to reduce emissions. The California Clean Air Act and the Air Quality Attainment Plan also identify transportation control measures as methods of reducing emissions from mobile sources. The California Clean Air Act defines transportation control measures as "any strategy to reduce vehicle trips, vehicle use, vehicle miles traveled, and vehicle idling or traffic congestion for the purpose of reducing motor vehicle emissions." The Air Quality Attainment Plan for the San Joaquin Valley Air Basin identifies the provisions to accommodate the use of bicycles, public transportation, and traffic flow improvements as transportation control measures.

The Air Quality Attainment Plan recognized growth of the population and economy within the SJVAB. The plan predicted the workforce in Kern County to increase along with a 2.2 percent population increase annually from 2002 to 2030 (i.e., 62% total increase uncompounded for 28 years). The project is consistent with the Air Quality Attainment Plan. Therefore, this project when considered with all projects in the proximity transportation analysis zones and in the context of the implementation plans to attain and maintain attainment is considered *less than significant*.

8 GREENHOUSE GASES

GHGs trap heat in the atmosphere and contribute to global climate change, which is defined by the U.S. EPA as any significant change in the measures of climate lasting for an extended period of time, including major changes in temperature, precipitation, wind patterns and other effects.

The principal GHGs[77] resulting from human activity that enter and accumulate in the atmosphere are:

- **CO_2**: Carbon dioxide enters the atmosphere through the burning of fossil fuels (oil, natural gas, coal, etc.), solid waste, trees and wood products, and also as a result of other chemical reactions (e.g., manufacture of cement). Carbon dioxide is also removed from the atmosphere (or sequestered) when it is absorbed by plants as part of the biological carbon cycle.
- **Methane (CH_4)**: Methane is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.
- **Nitrous Oxide (N_2O)**: Nitrous oxide is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.
- **Fluorinated Gases:** Hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride are synthetic, powerful GHGs that are emitted from a variety of industrial processes. Fluorinated gases are often used as substitutes for ozone-depleting substances (i.e., CFCs, HCFCs, and halons). These gases are typically emitted in smaller quantities; but, because they are potent GHGs, they are sometimes referred to as High Global Warming Potential[78] (GWP) gases.

9 GREENHOUSE GASES: REGULATORY SETTING

9.1 FEDERAL

Clean Air Act

In *Massachusetts v. Environmental Protection Agency* (2007) 549 U.S. 497, the U.S. Supreme Court held that the U.S. EPA has authority under the CAA to regulate CO_2 emissions if those emissions pose an endangerment to the public health or welfare.

In 2009, the U.S. EPA issued an endangerment finding under the CAA, concluding that GHGs threaten the public health and welfare of current and future generations and that motor vehicles contribute to GHG pollution. These findings provide the basis for adopting national regulations to mandate GHG emission reductions under the CAA.

Of relevance to the proposed project, to date, the U.S. EPA has exercised its authority to regulate mobile sources that reduce GHG emissions via the control of vehicle manufacturers, as discussed immediately below.

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77 U.S. EPA. Greenhouse Gas (GHG) Emissions. Available at: http://www.epa.gov/climatechange/emissions/index.html. Accessed: September 2016.

78 High GWP gases are non-CO_2 gases that cause the atmosphere to heat faster than CO_2. Specifically, GWPs compare the radiative forcing or ability to trap heat of one metric ton of a GHG to a metric ton of CO_2.

Federal Vehicle Standards

In response to the U.S. Supreme Court ruling discussed above, the Bush Administration issued Executive Order 13432 in 2007 directing the U.S. EPA, the Department of Transportation (DOT), and the DOE to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the National Highway Traffic Safety Administration (NHTSA) issued a final rule regulating fuel efficiency for and GHG emissions from cars and light-duty trucks for model Year 2011; and, in 2010, the U.S. EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, President Obama issued a memorandum directing the DOT, DOE, U.S. EPA and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the U.S. EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams/mile of CO_2 in model Year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon (mpg) if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the U.S. EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the U.S. EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23% over the 2010 baselines.[79]

Recently, the U.S. EPA and NHTSA finalized the next phase (Phase 2) of the fuel economy and GHG standards for medium- and heavy-duty trucks, which will apply to vehicles with model Year 2018 and later. CARB staff plan to propose a Phase 2 program for California in response to completion of the federal rulemaking.[80]

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (EISA) facilitates the reduction of national GHG emissions by requiring the following:

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard that requires fuel producers to use at least 36 billion gallons of biofuel in 2022;
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency

[79] The emission reductions attributable to the regulations for medium- and heavy-duty trucks were not included in the project's emissions inventory due to the difficulty in quantifying the reductions. Excluding these reductions results in a more conservative (i.e., higher) estimate of emissions for the project.

[80] CARB, CA Phase 2 GHG. Available at: http://www.arb.ca.gov/msprog/onroad/caphase2ghg/caphase2ghg.htm. Accessed: September 2016.

labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;

- Requiring approximately 25% greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200% greater efficiency for light bulbs, or similar energy savings, by 2020; and,
- While superseded by the U.S. EPA and NHTSA actions described above, (i) establishing MPG targets for cars and light trucks and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs.

9.2 CALIFORNIA

Executive Order S-3-05

In 2005, former Governor Schwarzenegger signed Executive Order S-3-05, which established the following GHG emission reduction targets for California: (1) by 2010, reduce GHG emissions to 2000 levels; (2) by 2020, reduce GHG emissions to 1990 levels; and (3) by 2050, reduce GHG emissions to 80% below 1990 levels.

Assembly Bill 32

AB 32, the California Global Warming Solutions Act of 2006, was enacted after considerable study and expert testimony before the Legislature. The heart of AB 32 is the requirement that statewide GHG emissions be reduced to 1990 levels by 2020 (Health & Safety Code, §38550). In order to achieve this reduction mandate, AB 32 requires CARB to adopt rules and regulations in an open public process that achieve the maximum technologically feasible and cost-effective GHG reductions.

Of relevance to this analysis, in 2007, CARB approved a statewide limit on the GHG emissions level for Year 2020 consistent with the determined 1990 baseline: 427 million MT CO_2e. CARB's adoption of this limit is in accordance with Health & Safety Code Section 38550.

Further, in 2008, CARB adopted the *Climate Change Scoping Plan: A Framework for Change* (Scoping Plan) in accordance with Health & Safety Code Section 38561. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020.

In the Scoping Plan, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 28.5% from the otherwise projected 2020 emissions level; i.e., those emissions that would occur in 2020, absent GHG-reducing laws and

regulations (referred to as Business-As-Usual [BAU]).[81] For example, in further explaining CARB's BAU methodology, CARB assumed that all new electricity generation would be supplied by natural gas plants, no further regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at 2005 standards.

The Scoping Plan identified a Cap-and-Trade program as one of the strategies California will employ to reduce GHG emissions. The adopted Cap-and-Trade program is implemented by CARB and caps GHG emissions from the industrial, utility, and transportation fuels sectors – which account for roughly 85% of the State's GHG emissions.[82]

In the 2011 Final Supplement to the Scoping Plan's Functional Equivalent Document, CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG reduction regulations. Based on the new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7% (down from 28.5%) from the BAU conditions. When the 2020 emissions level projection also was updated to account for newly implemented regulatory measures, including the Pavley standards (model years 2009–2016) and the Renewable Portfolio Standard (12% to 20%), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16% (down from 28.5%) from the BAU conditions.

Most recently, in 2014, CARB adopted the *First Update to the Climate Change Scoping Plan: Building on the Framework* (First Update).[83] The First Update found that California is on track to meet the 2020 emissions reduction mandate established by AB 32, and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80% below 1990 levels by 2050 if the State realizes the expected benefits of existing policy goals.

As part of the First Update, CARB recalculated the State's 1990 emissions level using more recent GWPs identified by the International Panel on Climate Change (IPCC). Using the recalculated 1990 emissions level and the revised 2020 emissions level projection identified in the 2011 Final Supplement, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of approximately 15% (instead of 28.5% or 16%) from the BAU conditions.

The First Update also includes a strong recommendation from CARB for setting a mid-term statewide GHG emissions reduction target. CARB specifically recommended that the mid-term target be consistent with: (i) the United States' pledge to reduce emissions 42% below 2005 levels (which translates to a 35% reduction from 1990 levels in California); and (ii) the long-term policy goal of reducing emissions to 80% below 1990 levels by 2050. However, to date, there is no legislative authorization for a post-2020 GHG reduction target.

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[81] CARB, (December 2008), "*Climate Change Scoping Plan,*" pg. 12. Available at: https://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed: September 2016.

[82] CARB (May 2014), "*First Update to the Climate Change Scoping Plan,*" p. 85. Available at: https://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf. Accessed: September 2016.

[83] Health & Safety Code §38561(h) requires CARB to update the Scoping Plan every five years.

Governor's Climate Change Pillars

In his January 2015 inaugural address, Governor Brown provided the framework for a California Climate Strategy, consisting of six key pillars[84]:

- Increase the percentage of renewable energy in the statewide portfolio to 50% by 2030.
- Reduce the use of petroleum fuels in vehicles by 50% by 2030.
- Double energy efficiency savings of existing buildings by 50% by 2030.
- Manage natural and working land to increase carbon sequestration.
- Reduce short-lived climate pollutants, mainly black carbon, fluorinated gases, and CH_4.
- Implement a Safeguarding California plan to provide adaptive management of climate related issues.

On April 29, 2015, Governor Brown issued Executive Order B-30-15, which includes the goal of reducing statewide GHG emissions 40% below 1990 levels by 2030, and reaffirms the goal of reducing statewide GHG emissions 80% below 1990 levels by 2050.

Senate Bill 32

Enacted in 2016, Senate Bill (SB) 32 codifies the 2030 emissions reduction goal of Executive Order B-30-15 by required CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. Relatedly, CARB currently is preparing an update to its Scoping Plan that will present the State's framework for achievement of the 2030 reduction target.

Energy-Related Sources

As amended by SB 350 (De León, 2015), California's Renewables Portfolio Standard requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33% of total retail sales by 2020, and 50% of total retail sales by 2030.

Mobile Sources

In 2004, and pursuant to AB 1493 (the Pavley standards), CARB adopted regulations to reduce GHG emissions from passenger vehicles and light-duty trucks with model years 2009–2016. In 2012, CARB approved the Advanced Clean Cars program, a new emissions-control program for passenger vehicles and light-duty trucks with model years 2017–2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of zero-emission vehicles. By 2025, when the rules will be fully implemented, new automobiles will emit 34% fewer global warming gases and 75% fewer smog-forming emissions.

Executive Order S-1-07 requires a 10% or greater reduction in the average fuel carbon intensity for transportation fuels in California regulated by CARB by 2020.[85] In 2009, CARB approved the LCFS

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[84] CARB, The Governor's Climate Change Pillars: 2030 Greenhouse Gas Reduction Goals. Available at: http://www.arb.ca.gov/cc/pillars/pillars.htm. Accessed: September 2016..

[85] Carbon intensity is a measure of the GHG emissions associated with the various production, distribution and use steps in the "lifecycle" of a transportation fuel.

regulations, which became fully effective in April 2010. The LCFS regulations were re-adopted by CARB in September 2015 in response to related litigation.

The Sustainable Communities and Climate Protection Act of 2008, or SB 375, coordinates land use planning, RTPs, and funding priorities to help California meet the GHG reduction mandates established in AB 32.[86] As specifically codified in Government Code Section 65080, SB 375 requires the Metropolitan Planning Organization relevant to the project area (here, the TCAG) to include a Sustainable Communities Strategy in its RTP that will achieve GHG emission reduction targets set by CARB by reducing VMT from light-duty vehicles (i.e., passenger vehicles and light-duty trucks) through the development of more compact, complete, and efficient communities. For the area under TCAG's jurisdiction, including the project site, CARB adopted regional targets for reduction of mobile source-related GHG emissions by 5% for 2020 and by 10% for 2035.

Building Standards

Title 24, Part 6 of the California Code of Regulations regulates the design of building shells and building components. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. The 2013 Building Energy Efficiency Standards (2013 Building Standards), effective July 1, 2014, are the currently applicable building standards. However, the California Energy Commission (CEC) has adopted the 2016 Building Energy Efficiency Standards (2016 Building Standards), and those standards will become effective on January 1, 2017, prior the commencement of the project's building construction activities.

Relatedly, the California Public Utilities Commission, CEC, and CARB have a shared, established goal of achieving Zero Net Energy (ZNE) for new construction in California. The key policy timelines include: (1) all new residential construction in California will be ZNE by 2020, and (2) all new commercial construction in California will be ZNE by 2030.

The CEC also periodically amends and enforces Appliance Efficiency Regulations contained in Title 20 of the California Code of Regulations. The regulations establish water and energy efficiency standards for both federally-regulated appliances and non-federally regulated appliances. The most current Appliance Efficiency Regulations, dated July 2015, cover 23 categories of appliances (e.g., refrigerators; plumbing fixtures; dishwashers; clothes washer and dryers; televisions) and apply to appliances offered for sale in California.

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen, and establishes voluntary and mandatory standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. CALGreen is periodically amended; the 2016 CALGreen standards will become effective on January 1, 2017.

[86] The Scoping Plan and subsequent First Update, as adopted by CARB in December 2008 and May 2014, respectively, rely on the requirements of SB 375 to secure GHG emission reductions from local land use decisions.

Solid Waste Diversion

The California Integrated Waste Management Act of 1989 (AB 939), as modified by AB 341, requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows: (1) diversion of 25% of all solid waste by January 1, 1995, through source reduction, recycling, and composting activities; (2) diversion of 50% of all solid waste on and after January 1, 2000; and (3) diversion of 75% of all solid waste on or after 2020, and annually thereafter. The California Department of Resources Recycling and Recovery (CalRecycle) is required to develop strategies, including source reduction, recycling, and composting activities, to achieve the 2020 goal.

CalRecycle published a discussion document, entitled *California's New Goal: 75 Percent Recycling,* which identified concepts that would assist the State in reaching the 75% goal by 2020. Subsequently, in August 2015, CalRecycle released the *AB 341 Report to the Legislature*, which identifies five priority strategies for achievement of the 75% goal: (1) moving organics out of landfills; (2) expanding recycling/manufacturing infrastructure; (3) exploring new approaches for State and local funding of sustainable waste management programs; (4) promoting State procurement of post-consumer recycled content products; and, (5) promoting extended producer responsibility.

9.3 SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

CEQA-Based Guidance

In December 2009, the SJVAPCD published its report entitled, *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* in which the district, among other things, provides guidance on (i) assessing the significance of project-specific GHG impacts, (ii) identifying and quantifying GHG emission reduction measures for development projects and (iii) providing tools to streamline evaluation of project-specific GHG effects. The SJVAPCD suggests that projects exempt from the requirements of CEQA, and projects complying with an approved plan or mitigation program be determined to have a less than significant cumulative impact. Where projects are not exempt from CEQA and in the absence of an approved plan or mitigation program, projects complying with Best Performance Standards do not require specific quantification of GHG emissions. Projects not fitting any of the described standards, programs or exemptions require quantification of GHG emissions and demonstration that GHG emissions have been reduced or mitigated by 29% from the State's projected 2020 BAU emissions. In addition, where a lead agency has determined that an EIR is required, regardless of whether the project incorporates Best Performance Standards, quantification of GHG emissions is required.

In their document, the SJVAPCD proposes quantitative thresholds including mass of GHG emissions generated per unit of activity, GHG emissions per capita, and percent reduction compared to BAU.

In June 2014, the SJVAPCD published CEQA Determinations of Significance for Projects Subject to CARB's GHG Cap-and Trade Regulation (APR-2025). The SJVAPCD concluded that all GHG emission increases resulting from the combustion of any fuel produced, imported and/or delivered in California are mitigated under Cap-and-Trade. Therefore, GHG emission increases caused by fuel use (other than jet fuels) are determined to have a less than significant impact on global climate change under CEQA.

9.4 KERN COUNTY COUNCIL OF GOVERNMENTS

2014 Sustainable Communities Strategy

As previously discussed, SB 375 requires KCOG to incorporate a Sustainable Communities Strategy into its RTP that achieves the GHG emission reduction targets set by CARB. KCOG's Sustainable Communities Strategy is included in the 2014-2040 Regional Transportation Plan & Sustainable Communities Strategy (RTP/SCS), which was adopted by KCOG in June 2014.

KCOG has released its preliminary Sustainable Communities Strategy (SCS) within the Preliminary 2014 Regional Transportation Plan. The intent of the SCS is to achieve the state's emissions reduction targets for automobiles and light trucks, by better coordinating transportation expenditures with forecasted development patterns. The SCS will also provide opportunities for a stronger economy, healthier environment and safer quality of life for community members in Kern County.

9.5 KERN COUNTY

Regional Transportation Plan

The City of Bakersfield falls within Kern County, which has adopted a Regional Transportation Plan (RTP), a copy of which is available at https://www.arb.ca.gov/cc/sb375/kerncog_2014_rtp.pdf. This plan serves to create progress towards statewide GHG reduction and sustainability goals. As provided on page ES-4 of the County's CAP:

> *Land use is one of the most important elements of effective transportation planning. Kern COG does not have jurisdiction over land use planning, but the agency does advise and encourage dialogue among those involved in the decision making process. The RTP/SCS was developed in consultation with local jurisdictions and is consistent with existing adopted General Plans and Zoning. Kern COG will continue to use the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) to communicate with Kern cities and the county on issues of land use, transportation and air quality, to ensure that land use projects are environmentally sound. At the core of the 2014 RTP are seven goals:*
>
> *1. Mobility – Improve the mobility of people and freight;*
> *2. Accessibility – Improve accessibility to major employment and other regional activity centers;*
> *3. Reliability – Improve the reliability and safety of the transportation system;*
> *4. Efficiency – Maximize the efficiency of the existing and future transportation system;*
> *5. Livability – Promote livable communities;*
> *6. Sustainability – Minimize effects on the environment; and*
> *7. Equity – Ensure an equitable distribution of the benefits among various demographic and user groups.*

The RTP further provides:

The 2014 Regional Transportation Plan (RTP) is a 26-year blueprint that establishes a set of regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation systems in Kern County. It has been developed through a continuing, comprehensive, and cooperative planning process, and provides for effective coordination between local, regional, state, and federal agencies. The Congestion Management Program (CMP) is designed to ensure that a balanced transportation system is developed, relating population and traffic growth, land use decisions, performance standards, and air quality improvements. New to the 2014 RTP, California's Sustainable Communities and Climate Protection Act, or Senate Bill (SB) 375, calls for the Kern County RTP to include a Sustainable Communities Strategy (SCS) that reduces greenhouse gas (GHG) emissions from passenger vehicles and light-duty trucks by 5 percent per capita by 2020 and 10 percent per capita by 2035 as compared to 2005. The California Air Resources Board (ARB) set the emissions reduction target for Kern County (and other areas of the state). Targets are reflective of conditions in each area of the state and are tailored to address conditions in each area. As will be discussed in more detail below, SB 375 will help meet the State goals included in Assembly Bill 32, the Global Warming Solutions Act of 2006. Meeting these targets will point the County toward overall sustainability and will provide benefits beyond reducing carbon emissions.

The updated RTP includes a Sustainable Communities Strategy (SCS) that reduces greenhouse gas (GHG) emissions from passenger vehicles and light-duty trucks by 5 percent per capita by 2020 and 10 percent per capita by 2035 as compared to 2005. The SCS component of the RTP will work in tandem with other RTP policies to reduce not only CO2 emissions but also federal criteria pollutant emissions. We will achieve and exceed our CO2 emissions reduction target set by CARB by achieving more than a 5% reduction by 2020 and more than a 10% by 2035 compared to the 2005 16.7 lbs. per capita.

Based on the analysis of strategies included in the SCS, CO2 emissions are anticipated to be 14.1% lower than 2005 levels by 2020 and 16.6% lower by 2035, exceeding the targets established by CARB in 2010.

10 GREENHOUSE GASES: ENVIRONMENTAL SETTING

10.1 GREENHOUSE EFFECT

As described by the U.S. EPA, GHGs act like a blanket around Earth, trapping energy in the atmosphere and causing it to warm. This phenomenon is called the greenhouse effect and is natural and necessary to support life on Earth. However, the buildup of GHGs can change Earth's climate and result in dangerous effects to human health and welfare and to ecosystems.[87]

[87] See U.S. EPA. Climate Change: Basic Information. Available at: https://www3.epa.gov/climatechange/basics/. Accessed: September 2016.

10.2 CLIMATE CHANGE EFFECTS

Globally, climate change has the potential to impact numerous environmental resources through anticipated, though uncertain, impacts related to future air temperatures and precipitation patterns.

Scientific modeling predicts that the continued emission of GHGs at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. A warming of about 0.2 degree Celsius (°C, 0.36°F) per decade is projected, and there are identifiable signs that global warming is taking place, including substantial loss of ice in the Arctic.[88]

The understanding of the role that GHG emissions plays on global climate trends is complex and involves varying uncertainties and a balance of different effects. Acknowledging uncertainties regarding the rate at which anthropogenic (i.e., human caused) GHG emissions may continue to increase,[89] and the impact of such emissions on climate change, the IPCC devises emission scenarios that utilize various assumptions about the rates of economic development, population growth, and technological advancement over the course of the next century. While the projected effects of global warming on weather and climate are uncertain and likely to vary regionally, the following effects are expected by the IPCC.[90]

- It is very likely that the Arctic sea ice cover will continue to shrink and thin, with the Northern Hemisphere spring snow cover and global glacier volume also decreasing;
- It is virtually certain that there will be more frequent hot and fewer cold temperature extremes over most land areas on daily and seasonal timescales, with heat waves occurring at a higher frequency and duration;
- The global ocean will continue to warm during the 21st century, with heat penetrating from the surface to the deep ocean and affecting ocean circulation;
- Further uptake of carbon by the ocean will increase ocean acidification;
- Changes in the global water cycle in response to the warming over the 21st century will not be uniform. The contrast in precipitation between wet and dry regions and between wet and dry seasons will increase, although there may be regional exceptions;

Most aspects of climate change will persist for many centuries even if GHG emissions cease entirely.

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[88] IPCC (2013), "*Climate Change 2013 - The Physical Science Basis - Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.*" Available at: http://www.climatechange2013.org/images/report/WG1AR5_ALL_FINAL.pdf. Accessed: September 2016.

[89] These uncertainties are attributable to various factors under human control, such as future population growth and the locations of that growth; the amount, type, and locations of economic development; the amount, type, and locations of technological advancement; adoption of alternative energy sources; legislative and public initiatives to curb emissions; and public awareness and acceptance of methods for reducing emissions.

[90] IPCC (2013), "*Summary for Policymakers,*" Climate Change 2013 The Physical Science Basis Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Available at: http://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WG1AR5_SPM_FINAL.pdf. Accessed: September 2016.

Potential secondary effects from global warming also include a global rise in sea level, impacts to agriculture and water supply, changes in disease vectors, and changes in habitat and biodiversity.

According to CARB, some of the potential California-specific impacts of global warming may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. The California Climate Change Center has released three assessment reports on climate change in California, the most recent in 2012.[91] Per California's Third Climate Change Assessment, by 2050, the State is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century.

To protect the State's public health and safety, resources, and economy, the California Natural Resources Agency—in coordination with other State agencies — has updated the *2009 California Climate Adaptation Strategy* with the 2014 *Safeguarding California: Reducing Climate Risk* plan. Additionally, in March 2016, the California Natural Resources Agency released *Safeguarding California: Implementation Action Plans*, a document that shows how California is acting to convert the recommendations contained in the 2014 *Safeguarding California* plan into action. The 2016 *Action Plans* document is divided by ten sectors,[92] and shows the path forward by presenting the risks posed by climate change, the adaptation efforts underway, and the actions that will be taken to safeguard residents, property, communities and natural systems.

10.3 GHG EMISSIONS INVENTORIES

Because the effects of GHG emissions on global climate change extend well beyond the project vicinity, the following discussion provides context regarding global, national, statewide and countywide GHG emission levels. While annual emission inventories provide the basis for establishing historical emission trends, there are many factors affecting GHG emissions, including the state of the economy, changes in demography, improved efficiency, and changes in environmental conditions.

10.3.1 GLOBAL/INTERNATIONAL

The global GHG emissions total reported in 2016 was approximately 49,000 million metric tons (MMT) CO2e. Energy generation, including electricity and transportation, accounts for 24,010 MMT CO2e or 49% of the inventory total. And, CO2 emissions from the United States represent approximately 15% of the global CO2 emissions. [93]

[91] CEC (July 2012), "*Our Changing Climate 2012: Vulnerability and Adaptation to the Increasing Risks from Climate Change in California.*" Available at: http://www.energy.ca.gov/2012publications/CEC-500-2012-007/CEC-500-2012-007.pdf . Accessed: September 2016.

[92] The ten sectors include: agriculture; biodiversity and habitat; emergency management; energy; forestry; land use and community development; oceans and coastal resources and ecosystems; public health; transportation; and, water.

[93] U.S. EPA. Global Greenhouse Gas Emissions Data. Available at: https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data. Accessed: September 2016..

Table 10.3-1
Global CO_2e Emissions Inventory (2016)
(MMT CO_2e)

Sector	Emissions
Electricity and Heat Production (25%)	12,250
Industry (21%)	10,290
Agriculture, Forestry, and Other Land Use (24%)	11,760
Transportation (14%)	6,860
Buildings (6%)	2,940
Other Energy (10%)	4,900
Source: U.S. EPA (2018), *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2016* EPA 430-R-18-003. Available at: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks. Accessed: November 2018.	

10.3.2 UNITED STATES

In 2016, total U.S. GHG emissions were 6,511 MMT CO_2e.[94] The emission inventory by sector in the U.S. for the Year 2014 is shown in **Table 10.3-2** below.

Table 10.3-2
U. S. CO_2e Emissions Inventory (2014)
(MMT CO_2e)

Economic Sector	Emissions
Electricity Generation (28%)	1,823
Transportation (28%)	1,823
Industry (22%)	1,432
Agriculture (9%)	586
Commercial & Residential (11%)	716
Other Energy (2%)	131
Source: U.S. EPA(April 2016), *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2014* EPA 430-R-16-002. Available at: https://www3.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2016-Main-Text.pdf. Accessed: September 2016.	

Total U.S. emissions have increased by 2.4% from 1990 to 2016, and emissions increased from 2015 to 2016 by 1.9% (124 MM CO_2e). The decrease from 2015 to 2016 was due to a decrease in CO_2 emissions from fossil fuel combustion as a result from substitution from coal to natural gas and

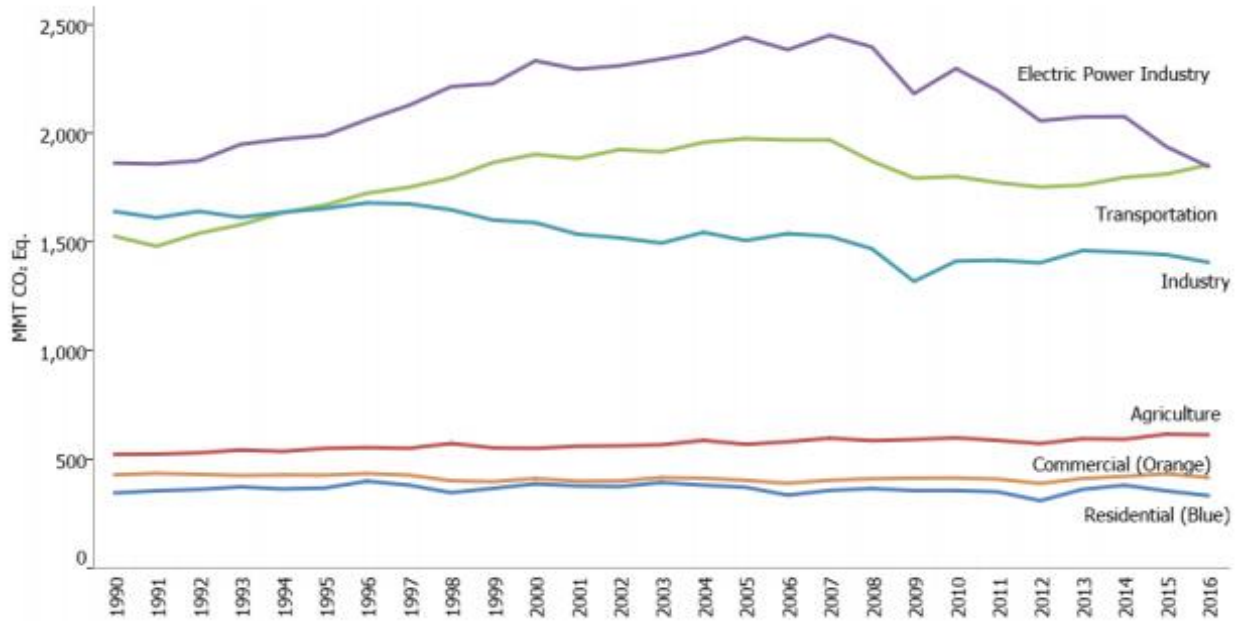
[94] U.S. EPA (April 2016), "*Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2014*" EPA 430-R-16-002. Available at: https://www3.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2016-Main-Text.pdf. Accessed: September 2016.

other non-fossil energy sources in the electric power sector and warmer winter conditions in 2016 resulting in a decreased demand for heating fuel in the residential and commercial sectors.

The primary GHG emitted by human activities in the United States was CO_2, representing approximately 82% of total GHG emissions. The largest source of CO_2 is the combustion of fossil fuels. Emissions resulting from fossil fuel combustion from transportation accounted for the largest portion (36%) of U.S. GHG emissions in 2016. Industrial activities accounted for the second largest portion (27%) and emissions from residential comprised the third largest portion. The commercial economic sector accounts for the remaining emissions generated by fossil fuel combustion.

CO_2e emissions by sector from 1990 through 2016 are shown in **Exhibit 22**. Transportation emissions have increased, electrical and industrial emissions have decreased and agricultural, commercial and residential emissions have remained nearly constant.

Exhibit 22
U. S. Emissions Allocated to Economic Sectors



Reference: Inventory Of U.S. Greenhouse Gas Emissions And Sinks:
1990-2016, USEPA #430-R-18-003

Sinks for GHGs include carbon sequestration in forests, trees in urban areas, agricultural soils, and land-filled yard trimmings and food scraps. These sinks, in aggregate, offset 11.5% of the total emissions in 2016.

10.3.3 CALIFORNIA

In 2016, California emitted approximately 429 MMT CO2e, a decrease of 12 MMT CO2e when compared to the 2015 inventory data (see Table 10.3-3).

Transportation is the source of approximately 39% of the State's GHG emissions, followed by electricity generation (both in-state and out-of-state) at 16%, and industrial sources at 21%. Agriculture and forestry is the source of approximately 8% of the State's GHG emissions. Residential and commercial activities also comprised approximately 9% of the inventory.

Table 10.3-3
California CO_2e Emissions Inventory (1990 to 2016)
(MMT CO_2e)

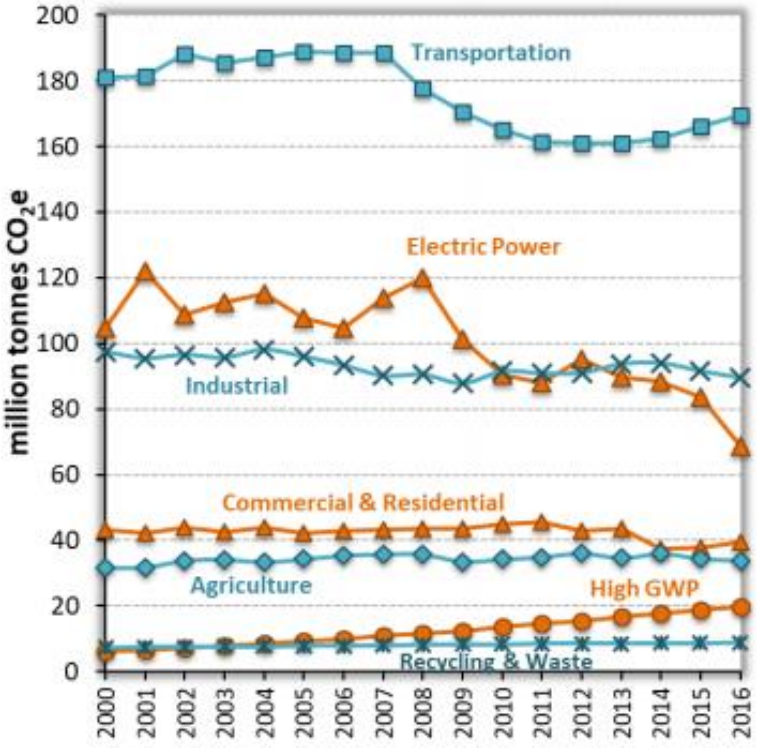
Categories included in the inventory	1990-1999[1]										2000-2016[2]																	
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electricity Generation (In State)	49	46	55	51	59	45	42	44	48	51	59	63	50	48	49	45	50	54	55	54	47	41	51	50	52	51	48
Electricity Generation (Imports)	62	57	50	56	56	54	50	56	58	56	46	59	59	65	66	63	55	60	66	48	44	47	44	40	37	34	26
Transportation	151	147	153	149	151	155	156	159	162	166	179	179	186	183	185	187	187	187	176	170	166	163	163	161	163	163	167
Industrial	103	100	97	95	94	96	98	104	105	102	104	103	104	103	106	104	102	99	99	97	101	101	101	104	104	93	90
Commercial	14	14	12	12	12	12	12	12	13	14	14	14	16	15	16	16	17	17	18	19	20	21	21	22	22	23	23
Residential	30	30	29	29	30	27	27	27	31	32	31	30	30	30	31	30	30	30	31	30	31	32	30	31	27	23	24
Agriculture & Forestry	24	22	23	23	23	24	23	24	24	25	32	32	34	34	34	34	36	36	36	34	35	36	37	35	36	35	34
Not Specified	1	1	1	2	3	5	6	7	8	10	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.7	0.7	0.7
Net California Emissions Inventory[3]	**427**	**410**	**412**	**409**	**422**	**411**	**409**	**428**	**444**	**451**	**466**	**480**	**480**	**480**	**488**	**480**	**477**	**484**	**481**	**452**	**445**	**442**	**448**	**444**	**442**	**441**	**429**

Notes:

1. CARB (2007), 1990 to 2004 Inventory Data and Documentation. Available at: http://www.arb.ca.gov/cc/inventory/1990level/1990data.htm. Accessed: September 2016.
2. CARB (June 2016), *0F1FCalifornia Greenhouse Gas Emissions for 2000 to 2016 – Trends of Emissions and Other Indicators.* Available at: http://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2014/ghg_inventory_trends_00-14_20160617.pdf. Accessed: September 2016.
3. All numbers are rounded to the nearest whole number.

The inventory for 1990 through 2016 is shown graphically in **Exhibit 23**. The transportation sector remains the largest source of GHG emissions in the State, accounting for 36% of the inventory, and shows a small increase in emissions in 2016. Emissions from the electricity sector continue to decline due to growing zero-GHG energy generation sources. Emissions from the remaining sectors have remained relatively constant.

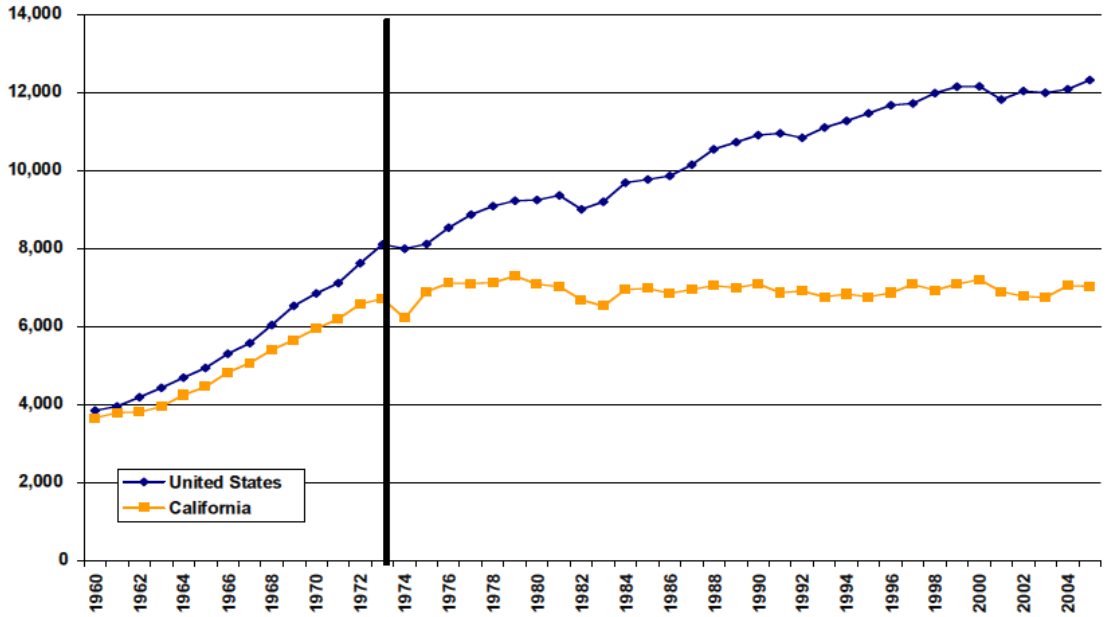
Exhibit 23
California GHG Emissions Trends by Sector (2000 to 2016)



Source: CARB, 2018, California Greenhouse Gas Emissions for 2000 to 2016

When compared to nationwide emissions inventory data, California's relative contribution is due primarily to the sheer size of California, as compared to other states. For example, Californians uses less electricity per person than the nationwide average. While per capita electricity consumption in the United States increased by nearly 50% over the past 30 years, California's per capita electricity use decreased, as shown in **Exhibit 24**, due in large part to cost-effective building and appliance efficiency standards and other energy efficiency programs. Another factor that has reduced California's fuel use and GHG emissions on a per capita basis is its mild climate, as compared to that of many other states.

Exhibit 24
California vs. U.S. Per Capita Electricity Use (1960 to 2005)
(Kilowatt Hours Per Person)



Source: California Energy Commission

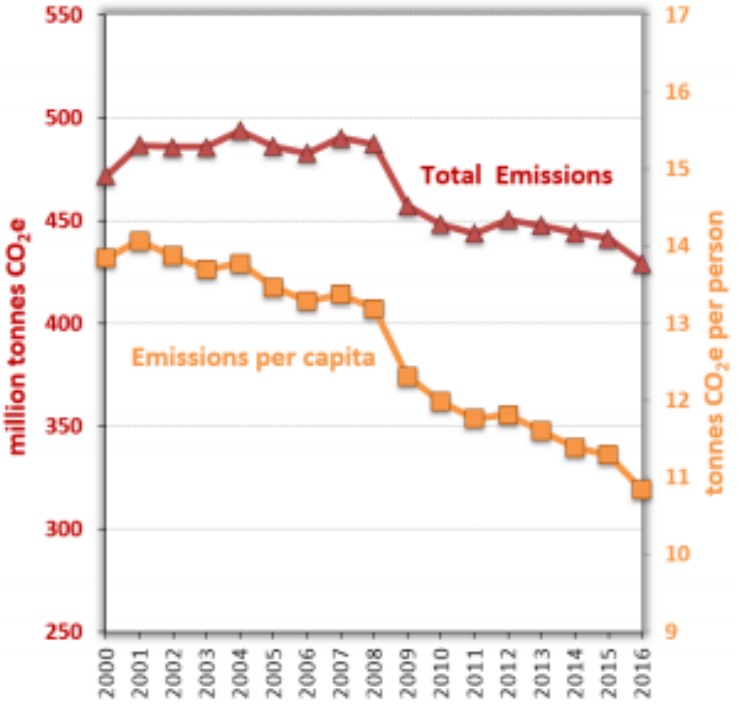
Per Capita Emissions[95]

As illustrated in **Exhibit 25**, in 2016, California had a gross per capita emissions level of 10.8 MT CO_2e/person. This compares favorably with a value of 14.5 MT CO_2e/person in 1990 and 13.9 MT CO_2e/person in 2000.

The per capita comparison is a useful metric for emissions evaluation because it shows that emissions have not grown consistently with population, indicating that various regulatory programs and policies have achieved emission reductions.

[95] CARB (June 2016), "*0F1FCalifornia Greenhouse Gas Emissions for 2000 to 2014 – Trends of Emissions and Other Indicators.*" Available at: http://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2014/ghg_inventory_trends_00-14_20160617.pdf. Accessed: September 2016.

Exhibit 25
Total California GHG Emissions and Emissions per Capita (2000 to 2016)



Source: CARB, 2018, California Greenhouse Gas Emissions for 2000 to 2016

11 GREENHOUSE GASES: THRESHOLDS OF SIGNIFICANCE

11.1 APPENDIX G OF THE CEQA GUIDELINES

Per Appendix G of the CEQA Guidelines, the thresholds of significance for GHGs are:

a) Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

11.2 STATE OF CALIFORNIA

11.2.1 2020 TARGET

As previously discussed, AB 32 requires the State to return to its 1990 emissions level by 2020. Based on CARB's evaluation in the First Update, the AB 32 mandate equates to a 15% reduction from the estimated BAU emissions. Therefore, the significance evaluation that follows considers whether the proposed project's emissions would achieve a 15% reduction from the estimated BAU emissions, pursuant to the same assumptions used by CARB.

11.2.2 POST-2020 TARGETS

As previously discussed, SB 32 requires a 40% reduction from 1990 levels by 2030, and Executive Order S-3-05 requires an 80% reduction from 1990 levels by 2050. Therefore, the significance evaluation that follows considers whether the proposed project's emissions would conflict with the emissions trends that need to be established to achieve these goals.

11.3 SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

11.3.1 CEQA GUIDANCE FOR LAND USE AGENCIES

In accordance with the SJVAPCD's *Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA*,[96] the significance evaluation that follows considers whether the proposed project's emissions would demonstrate a 29% reduction from the estimated BAU emissions.

Additionally, although not specifically issued to address GHGs, the SJVAPCD has published Air Quality Guidelines for General Plans that identify goals, policies and programs designed to reduce vehicle trips and miles traveled, as well as improve energy conservation. Projects with design features or mitigation measures that are consistent with these goals, policies and programs would reduce not only traditional air quality pollutants, but also GHGs. Therefore, the significance evaluation that follows considers whether the proposed project is consistent with the SJVAPCD's Air Quality Guidelines for General Plans.

11.4 KERN COUNCIL OF GOVERNMENTS

11.4.1 2014 SUSTAINABLE COMMUNITIES STRATEGY

The significance evaluation that follows considers whether the proposed project is consistent with the VMT-based metrics, trends and objectives of KCOG's 2014 Sustainable Communities Strategy. This evaluation uniquely focuses on the project's mobile source-related emissions from passenger cars and light-duty trucks.

11.5 KERN COUNTY

11.5.1 CLIMATE ACTION PLAN

The significance evaluation that follows considers whether the proposed project is consistent with the County's CAP, as provided by the Regional Transportation Plan and Sustainable Communities Strategy. The project will be part of the RTP area, and is expected to conform with RTP and SCS requirements.

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[96] SJVAPCD (December 2009), "*Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects Under CEQA.*" Available at: http://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf. Accessed: September 2016.

12 PROJECT IMPACTS

12.1 MODELS AND METHODS USED IN ANALYSIS

CalEEMod was used to estimate project-generated construction and operational GHG emissions. Operations emissions were estimated for the gas station's completion in the year 2020 and combined with the remaining buildout in the year 2021, when the project has its first full year of operations. Mobile, area, energy, water and solid waste source emissions were estimated based on regulatory requirements, PDFs, and mitigation measures. If no information was available, default values were used.

12.2 RELEVANT PROJECT DESIGN FEATURES AND ELEMENTS

The project does not have any GHG emissions-reducing design features.

12.3 PROJECT-SPECIFIC ANALYSIS

12.3.1 EXISTING CONDITIONS

The property is mainly vacant land except for a number of single-family residences located throughout the property and areas acting as a lot for storage. The surrounding land is primarily residential with sparse commercial developments throughout.

12.3.2 BUSINESS-AS-USUAL EMISSIONS

Business-As-Usual (BAU) is a term used by California agencies to describe the rate of greenhouse gas emissions assuming no climate regulations. It is a projection into the future of the greenhouse gases which could be emitted by projects based on current technologies and existing regulations in the absence of other reductions. BAU includes forecasted demographic and economic growth, whereas the historic CEQA baseline non- greenhouse gas impact analysis does not include any growth factors. Understanding this difference, between historic CEQA analyses and the Greenhouse Gas element of CEQA is critical to a reasoned analysis of Global Climate Change impacts. The baseline for greenhouse gases is BAU.

The Business-As-Usual emissions for the project are estimated assuming the same methodology used by CARB to forecast the state-wide emissions. This projection assumes no change in vehicle fleet mix over time, no intervening climate change reductions measures, strategies or actions, and no VMT reduction from the central location of the jobsite (see **Appendix IX**, "Greenhouse Gas Emission Calculations").

Table 12.3-1
Project GHG Emissions (Business-As-Usual)

Emission Source	Metric Tons/Year CO_2e
Area-Source Emissions	0.01
Energy-Source Emissions	369.44
Mobile-Source Emissions	5,955.68
Waste-Source Emissions	92.79
Water-Source Emissions	25.54
Total Emissions	6,443.46

12.3.2.1 PROJECT UNMITIGATED/ MITIGATED [97]

The project does not have any project specific mitigation measures, therefore the project's unmitigated greenhouse gas emissions are the same as the mitigated emissions. (See **Appendix VIII**, "Greenhouse Gas Emission Calculations")

By year 2020, the enforcement of the California Light-Duty Vehicle Greenhouse Gas Standards, Low Carbon Fuel Standard will reduce the greenhouse gas emissions from mobile sources by approximately 20%.[98] The reduction has been applied to the calculation of project emissions from mobile sources.

Table 12.3-2
Project GHG Emissions (2020)

Emission Source	Metric Tons/Year CO_2e
Area-Source Emissions	0.01
Energy-Source Emissions	369.44
Mobile-Source Emissions	3,423.39
Waste-Source Emissions	92.79
Water-Source Emissions	25.54
Total Emissions	3,911.16

The percent reduction between the project's mitigated emission and Business-As-Usual (BAU) emissions for the project should be equal to or greater than 16%[99] to conform with the goals of AB 32 as indicated in the Scoping Plan supplement; the percent reduction between the project's

[97] This "unmitigated" value is calculated using the CalEEmod program in its currently adopted form with default settings with the exception that WZI conforms to the project specific trip lengths; electricity use and water supply-related emissions are zero; the project is remote and does not require electricity and water is pumped from an existing well to be used for dust control. Since the project does not have mitigation measures, the unmitigated and mitigated are the same.

[98] California Air Resources Board, Climate Change Scoping Plan, May 2014

[99] California Air Resources Board, Aug, 2011, Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document

mitigated emission and 2008 Scoping Plan Baseline emissions should be equal to or greater than 15% to conform with the goals of AB32; the percent reduction between the project's mitigated emission and BAU should be equal to or greater than 29% to conform with the goals of AB 32 in the Climate Change Action Plan (CCAP) with SJVAPCD. Thereby BAU and 2008 Scoping Plan Baseline are both treated as a greenhouse gas baseline for the project level analysis[100].

Table 12.3-3 below illustrate the project's greenhouse gas emissions compared to BAU and 2008 scoping plan baseline emissions. The percentage reductions *does* meet the SJVAPCD required 29% from BAU, explained further in section 12.3.2.2.

TABLE 12.3-3
Comparison of Net BAU and Project Mitigated Emissions (MT-CO_2e)

Emission Source	Business-as-usual	Project Mitigated (2020)
Total Emissions	6,443.46	3,911.16
Percentage Reduction		39.3%

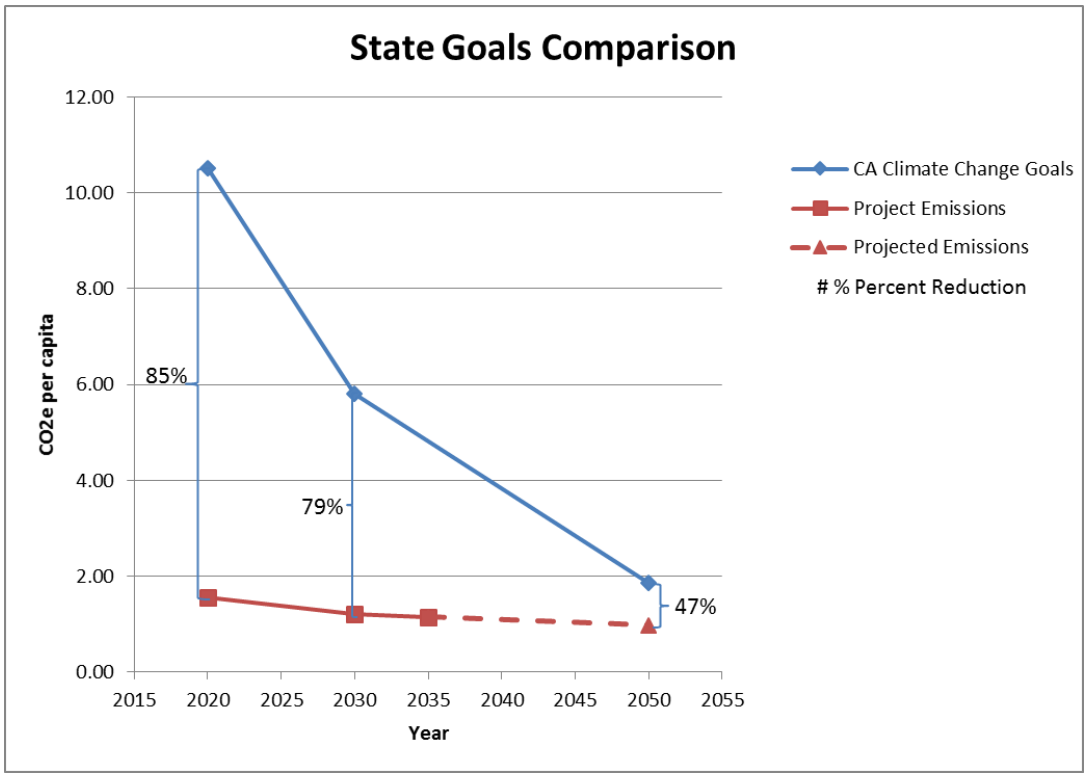
12.3.2.2 CONCLUSION REGARDING PROJECT SPECIFIC IMPACTS

The 29% GHG emission reduction compared to BAU has been met (**Table 12.3-3**). The required GHG reductions are an estimate. The project GHG impact is *less than significant*.

12.3.3 POST-2020 TARGETS

As illustrated in the chart below, the project's emissions trajectory is lower than the State's emissions trajectory on a per capita basis in 2020 and 2030. Specifically, as the chart below demonstrates, the project's per capita emissions remain below state goals through 2035, and if additional reductions from statewide efforts to reach the 2050 goal are applied, the project can be predicted to remain below statewide goals through 2050, and thereby would not obstruct the State's efforts to achieve its post-2020 goals. That being said, it should be noted that the State's inventory data includes sectors/sources not captured by this project.

[100] CARB, Climate Change Scoping Plan, Dec 2008, Pg 108



12.3.4 EVALUATION OF SIGNIFICANCE

Per Appendix G of the CEQA Guidelines, the thresholds of significance for GHGs, and project analysis for each are:

a) *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

As discussed in the analysis above, due to project features, and offsetting emissions through Emissions Reduction Credits, the project will not generate GHG emissions that may have a significant impact on the environment.

b) *Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?*

The project will conform with all applicable state and local plans, policies, and regulations.

Because the project does not exceed significance thresholds for either threshold, the Greenhouse Gas emissions impact of the project is *less than significant*.

13 VALLEY FEVER EXPOSURE

Coccidioidomycosis, more commonly known as "Valley Fever," is an infection caused by inhalation of the spores of the Coccidioides Immitis fungus, which grows in the soils of the southwestern United States. The fungus is very prevalent in the soils of California's San Joaquin Valley,

particularly in Kern County. The ecologic factors that appear to be most conducive to survival and replication of the spores are high summer temperatures, mild winters, sparse rainfall, and alkaline, sandy soils.

Based on skin test surveys, the incidence of Valley Fever is between 25,000 and 100,000 new infections per year, with 70 deaths annually in the United States. It is difficult to determine the exact number of primary pulmonary and disseminated (cases in which the spores spread throughout the body) cases contracted annually, since diagnosis and reporting of cases is very incomplete. In Kern County, data from laboratory test reports indicate the occurrence of about 270 symptomatic infections per year, including 12 disseminated cases with an average of 5 deaths annually.

At least 60 percent of primary coccidioidomycosis is acquired symptomatically, with a positive result on a skin test being the only manifestation of infection. Forty percent of the infections become symptomatic with a disease spectrum ranging from mild influenza-like illness to a fulminating dissemination resulting in death. Primary coccidioidomycosis is limited to the initial lesions in the lungs where symptoms typically include fever, which may be 99 to 104 degrees Fahrenheit, chills, profuse sweating at night, and chest pain, which may worsen to include coughing, loss of appetite, headache, generalized muscle and joint aches, and slight swelling and redness of the joints. The prognosis of primary coccidioidomycosis is usually reliable and symptoms generally clear within two or three weeks. Patients whose symptoms persist after 6 to 8 weeks may be considered to have persistent pulmonary coccidioidomycosis.

Dissemination of coccidioidomycosis to sites in the body other than the lungs usually occurs within the first or second month and can cause a variety of symptoms. Dissemination may involve any organ of the body, except those in the gastrointestinal tract. The skin, bones, joints, meninges, and genitourinary system are most commonly involved. Involvement of a vital organ may result in death. Meningitis occurs in one-third to one-half of all patients with disseminated disease. Untreated coccidioidal meningitis is usually fatal within less than two years.

The five major factors that have an effect on the susceptibility to coccidioidal dissemination are race, sex, pregnancy, age and immunosuppression. In a retrospective study of the Kern County Health Department records, 64 deaths were recorded for the period 1901 to 1936, when the County had a population of 82,570. According to this data, Mexicans were 3.4 times more likely than whites to develop coccidioidal dissemination; blacks were 13.7 times more likely; and Filipinos were 175.5 times more likely. Death due to the disease was five times greater for Mexicans, 23.3 times greater for blacks, and 191.4 times greater for Filipinos than for white patients. Adult white females are ordinarily quite resistant to dissemination of the disease, but if they acquire the infection during the last half of pregnancy, there is a risk that it will spread beyond the lungs. Children under five and older individuals, perhaps those above fifty, also appear to be more likely to undergo dissemination of the infection.

The highest incidence rates within Kern County have occurred in the areas of Northeast Bakersfield, Lamont-Arvin, Taft, and Edwards Air Force Base. New residents to the San Joaquin Valley have usually never been exposed to “Valley Fever,” and as a result are particularly susceptible to the infection. Many longtime residents of the area have at some time been exposed to the fungus, become infected, and have recovered, and are thus immune. However, occasionally, changes in the

person's immune system brought about by other diseases or treatments which lower or suppress the immune system can allow a reactivation or reinfection.[101]

The soils in the areas of Arvin and Lamont are derived from decomposing Quaternary alluvial fan deposits. These, however, are sourced from Mesozoic Sierran granitic rocks having a different mineralogical and consequent chemical content than the soil in the area of the project. The soils in the area of Edwards Air Force Base are composed of decomposed, reworked non-marine alluvium, evaporite playa, sand, and terrace deposits. These have been derived from various Mesozoic granitic rocks. The increased aridity and prevalence of evaporites would alter the chemical composition, as compared to the soil in the area of the project, which forms in a wetter environment. The soils in the Taft area are mainly sourced from the nearby outcropping marine Miocene Monterey Formation consisting mainly of sands, silts and diatomites. These again should form a somewhat dissimilar mineralogical and consequent chemical content than the soil in the area of the project. The soils in the area of Sharks Tooth Hill in Northeast Bakersfield which is endemic for San Joaquin Valley Fever, *Coccidioidomycosis,* is composed of the decomposed marine Round Mountain Silt Member of the Miocene Monterey Formation. The soil in the area of the project is derived from decomposing Quaternary fluvial deposits as sourced from the Sierra Nevada Mountains, composed of Cretaceous granites. This rock type would lead to similar soils based upon the similar mineralogical and consequent chemical content. [102, 103]

The subject project area is not underlain by the type of sediments that are known to contain Valley Fever spores. Considering the SJVAPCD Regulation VIII dust control measures, the risk of contracting Valley Fever in connection with the cumulative impact of the subject projects is considered to be unlikely.

[101] http://www.vfce.arizona.edu/FAQ.htm#howdoigetvelleyfever

[102] United States Department of Agriculture, Soil Survey of Kern County California Northwestern Part, "Sheet NO. 30, Kern County, California" (Rosedale Quadrangle). 1988.

[103] State of California, Department of Conservation, Division of Mines and Geology, "Geologic Map of California," Bakersfield Sheet. 1964.

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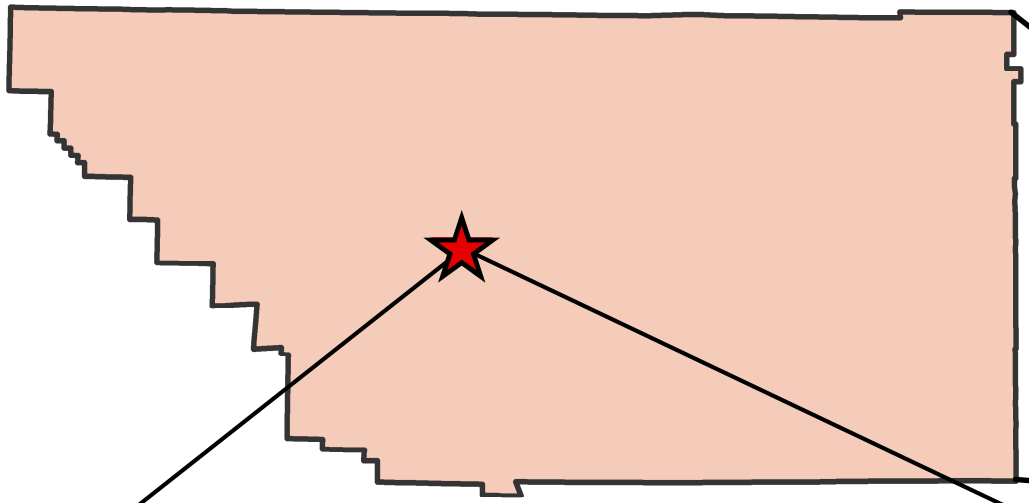
United States Environmental Protection Agency:
http://www.epa.gov/climatechange/policy/index.html

Western Climate Initiative: http://www.westernclimateinitiative.org

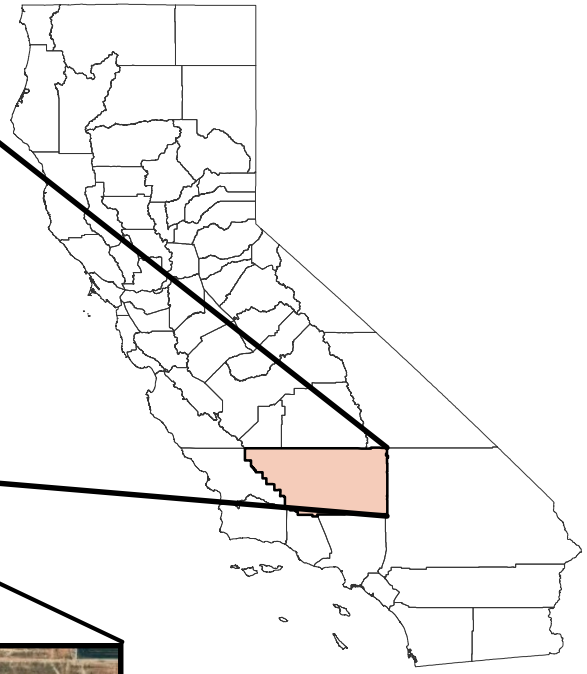
Exhibits

Exhibit 1

Project Location Map



Kern County, California





N

0 500 1,000 2,000

Feet

WZI INC.
BAKERSFIELD, CALIFORNIA

PORTER & ASSOCIATES, INC.

WIBLE-HOSKING
COMMERCIAL

PROJECT LOCATION MAP

DATE:	10/18		EXHIBIT:	1

Exhibit 2

Land Use Designations

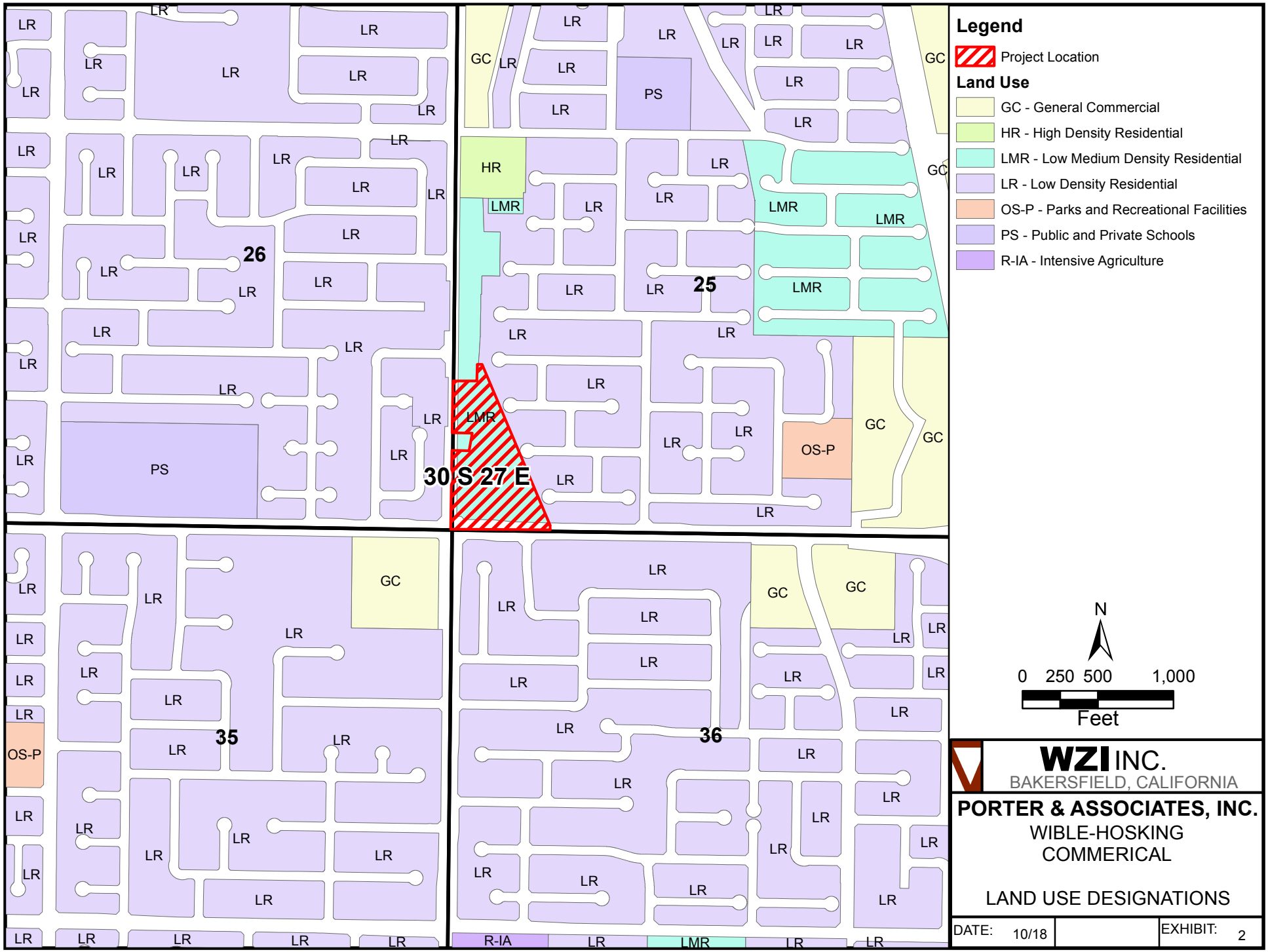
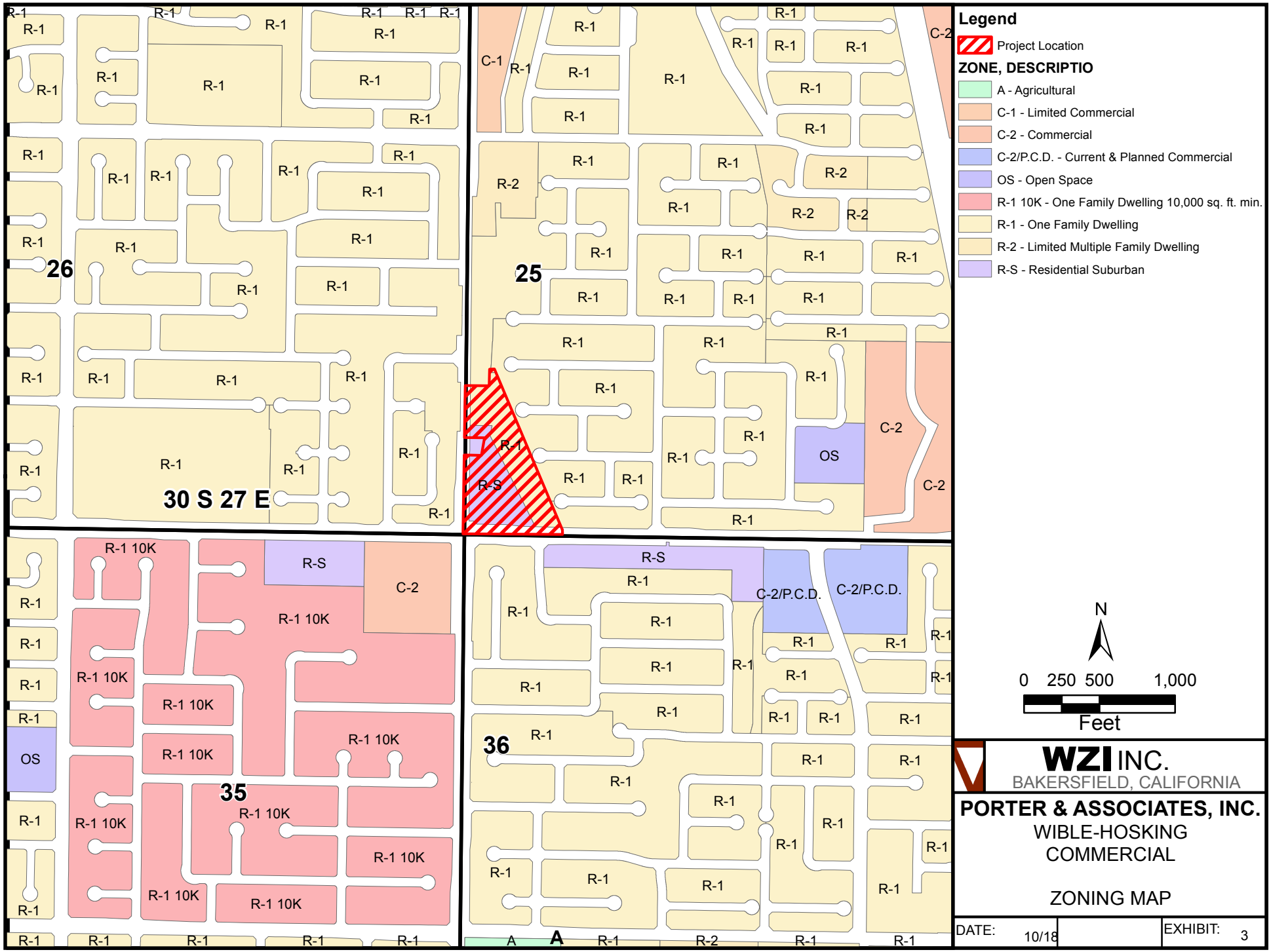

Legend
Project Location
Land Use
GC - General Commercial
HR - High Density Residential
LMR - Low Medium Density Residential
LR - Low Density Residential
OS-P - Parks and Recreational Facilities
PS - Public and Private Schools
R-IA - Intensive Agriculture
26
25
35
36
30 S 27 E
N
0 250 500 1,000
Feet
WZI INC.
BAKERSFIELD, CALIFORNIA
PORTER & ASSOCIATES, INC.
WIBLE-HOSKING
COMMERICAL
LAND USE DESIGNATIONS
DATE: 10/18
EXHIBIT: 2

Exhibit 3

Zoning Map



WZI INC.
BAKERSFIELD, CALIFORNIA

PORTER & ASSOCIATES, INC.
WIBLE-HOSKING
COMMERCIAL

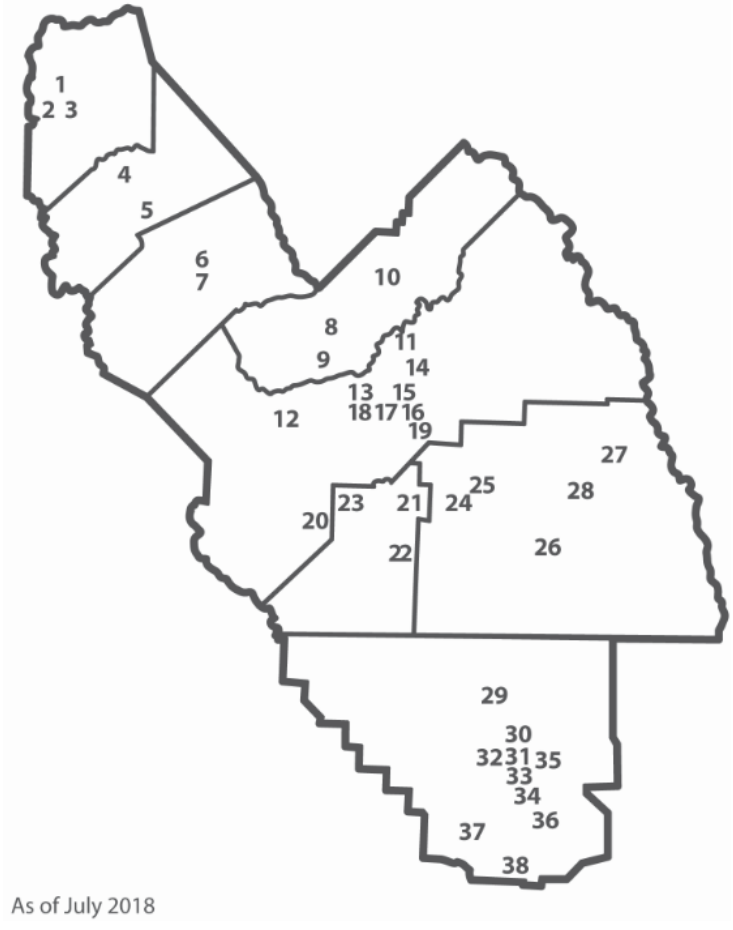
ZONING MAP

DATE:	10/18	EXHIBIT:	3

Exhibit 4

SJVAPCD Monitoring Station Locations

Air Monitoring Sites in Operation



As of July 2018

SAN JOAQUIN COUNTY
- ■ 1 Stockton-Hazelton: G, M, P, F, T
- ★ 2 Tracy-Airport: G, M, P, F
- ★ 3 Manteca: P, F, M

STANISLAUS COUNTY
- ■ 4 Modesto-14th St: G, M, P, F
- ★ 5 Turlock: G, M, P, F

MERCED COUNTY
- ★ 6 Merced-M St: P, F
- ★ 7 Merced-Coffee: G, F, M

MADERA COUNTY
- ★ 8 Madera City: G, P, F, M
- ★ 9 Madera-Pump Yard: G, M

Other[1]:
Chukchansi Indians
- ▲ 10 Picayune Rancheria: G, F, P, M

FRESNO COUNTY

Other[1]:
Monache Tribe/Foothill Yokut Indians
- ▲ 11 Table Mountain AMS+: G, F, P, M
- ★ 12 Tranquillity: G, F, M
- ★ 13 Fresno-Sky Park: G, M
- ★ 14 Clovis: G, M, P, F
- ■ 15 Fresno-Garland: G, M, P, F, T, N, L
- ★ 16 Fresno-Pacific: F
- ★ 17 Fresno-Drummond: G, P, M
- ★ 18 Fresno-Foundry: G, M
- ★ 19 Parlier: G, M
- ★ 20 Huron: F, M

KINGS COUNTY
- ★ 21 Hanford: G, F, M, P
- ★ 22 Corcoran: F, M, P

Other[1]:
Tachi Yokut Tribe
- ▲ 23 Santa Rosa Rancheria: G, M, P

TULARE COUNTY
- ★ 24 Visalia Airport: M
- ■ 25 Visalia-Church St: G, F, M, P
- ★ 26 Porterville: G, F, M

Other[2]:
- ▲ 27 Lower Kaweah: A, G, M
- ▲ 28 Ash Mountain: A, G, M, F

KERN COUNTY
- ● 29 Shafter: G, M
- ■ 30 Oildale: G, M, P
- ★ 31 Bakersfield-Golden/M St: F, P
- ■ 32 Bakersfield-Calif Ave: A, G, M, P, F, T
- ★ 33 Bakersfield-Muni: G, M
- ■ 34 Bakersfield-Airport (Planz): F
- ■ 35 Edison: G, M
- ■ 36 Arvin-Di-Giorgio: G, M
- ★ 37 Maricopa: G, M
- ★ 38 Lebec: F, M

MONITORING OPERATION
- ★ Sites operated by the District
- ● Sites operated by the District & CARB
- ■ Sites operated by CARB
- ▲ Sites operated by other agencies
  - Other[1] Tribal
  - Other[2] National Park Service
- + Air Monitoring Station (AMS)

MONITORING DESIGNATIONS

A	Acid Deposition	P	Particulate (PM10)
F	Fine Particulate (PM2.5)	N	National Core
G	Gaseous	T	Toxins
M	Meteorological	L	Lead

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

WZI INC.
BAKERSFIELD, CALIFORNIA

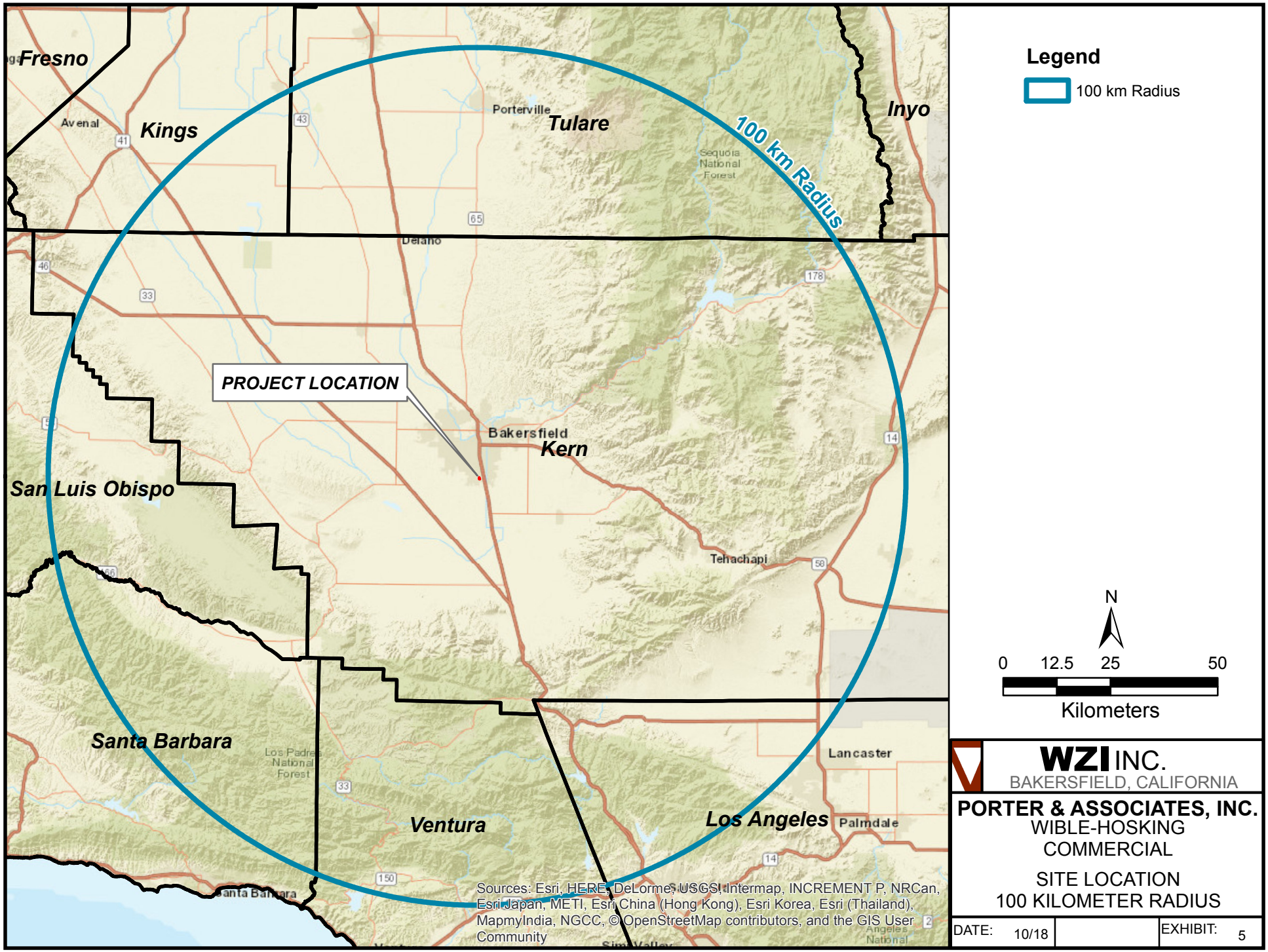
PORTER & ASSOCIATES, INC.
WIBLE-HOSKING
COMMERCIAL

SJVAPCD MONITORING STATION LOCATIONS

DATE: 10/18 | EXHIBIT: 4

Exhibit 5

Site Location-100 Kilometer Radius



Legend

100 km Radius

N

0 12.5 25 50

Kilometers

WZI INC.
BAKERSFIELD, CALIFORNIA

PORTER & ASSOCIATES, INC.
WIBLE-HOSKING
COMMERCIAL

SITE LOCATION
100 KILOMETER RADIUS

DATE:	10/18		EXHIBIT:	5

Exhibit 6

Cumulative Projects Radius Map

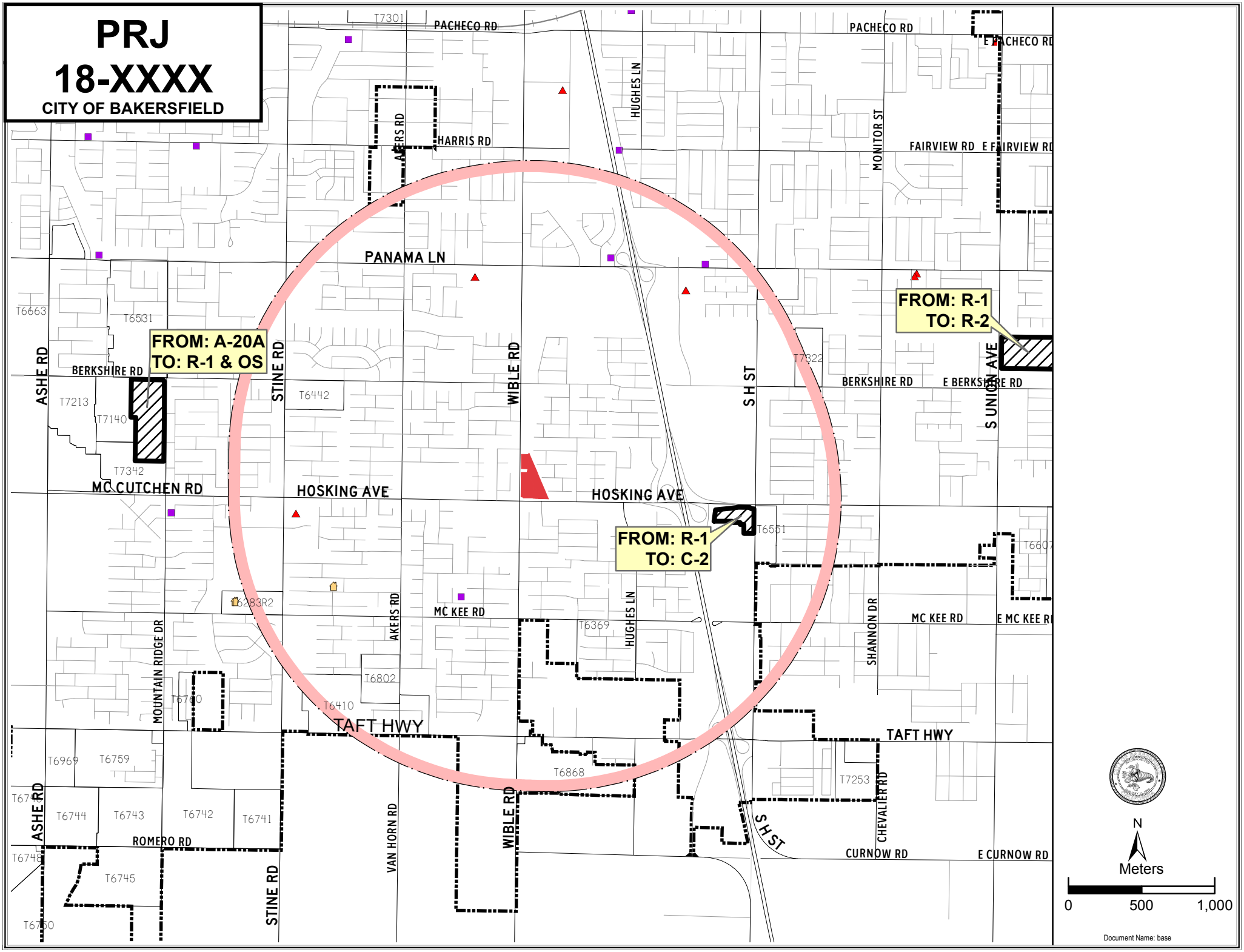

PRJ
18-XXXX
CITY OF BAKERSFIELD
FROM: A-20A
TO: R-1 & OS
FROM: R-1
TO: R-2
FROM: R-1
TO: C-2
PACHECO RD
HARRIS RD
PANAMA LN
BERKSHIRE RD
MC CUTCHEN RD
HOSKING AVE
MC KEE RD
TAFT HWY
ROMERO RD
CURNOW RD
ASHE RD
STINE RD
WIBLE RD
S H ST
AKERS RD
HUGHES LN
MONITOR ST
FAIRVIEW RD
S UNION AVE
SHANNON DR
MOUNTAIN RIDGE DR
VAN HORN RD
CHEVALIER RD
N
Meters
0
500
1,000
Document Name: base

Exhibit 7

Regional Traffic Analysis Zone Map

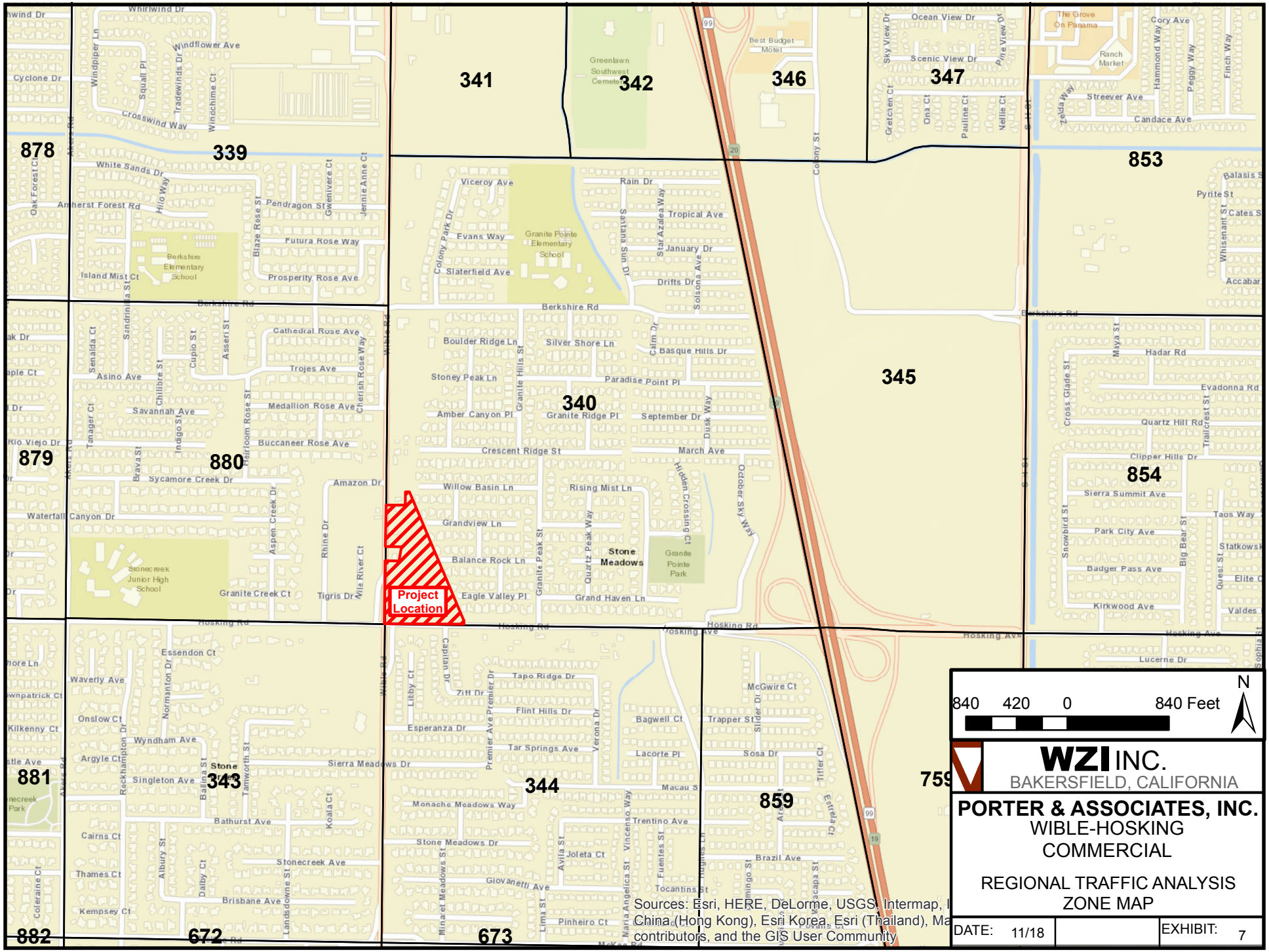
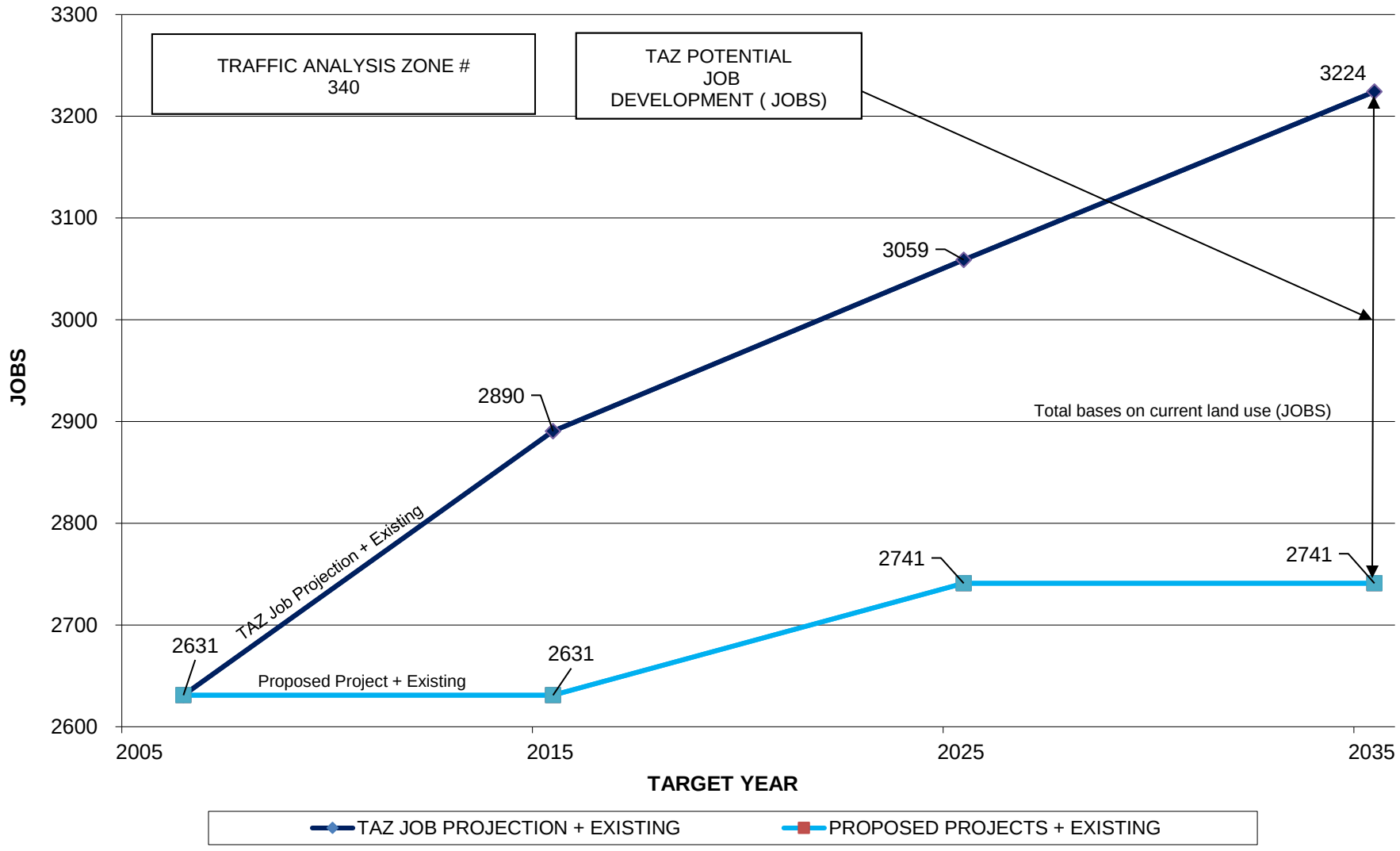

Project Location
878
339
341
342
346
347
853
879
880
340
345
854
881
343
344
859
882
672
673
Stone Meadows
Granite Pointe Elementary School
Berkshire Elementary School
Stonecreek Junior High School
Granite Pointe Park
Greenlawn Southwest Cemetery
Best Budget Motel
Ranch Market
The Grove On Panama
Whirlwind Dr
Windflower Ave
Crosswind Way
White Sands Dr
Amherst Forest Rd
Berkshire Rd
Cathedral Rose Ave
Trojes Ave
Medallion Rose Ave
Buccaneer Rose Ave
Sycamore Creek Dr
Amazon Dr
Waterfall Canyon Dr
Granite Creek Ct
Hosking Rd
Essendon Ct
Waverly Ave
Onslow Ct
Wyndham Ave
Argyle Ct
Singleton Ave
Sierra Meadows Dr
Bathurst Ave
Cairns Ct
Thames Ct
Stonecreek Ave
Brisbane Ave
Kempsey Ct
Viceroy Ave
Rain Dr
Tropical Ave
Evans Way
January Dr
Slaterfield Ave
Drifts Dr
Boulder Ridge Ln
Silver Shore Ln
Basque Hills Dr
Stoney Peak Ln
Paradise Point Pl
Amber Canyon Pl
Granite Ridge Pl
September Dr
Crescent Ridge St
March Ave
Willow Basin Ln
Rising Mist Ln
Grandview Ln
Balance Rock Ln
Eagle Valley Pl
Grand Haven Ln
Tapo Ridge Dr
Ziff Dr
Flint Hills Dr
Esperanza Dr
Tar Springs Ave
Lacorte Pl
Monache Meadows Way
Trentino Ave
Stone Meadows Dr
Joleta Ct
Giovanetti Ave
Pinheiro Ct
Tocantins St
Brazil Ave
Macau St
Bagwell Ct
Trapper Slider
Sosa Dr
McGwire Ct
Ocean View Dr
Scenic View Dr
Sky View Dr
Pine View Dr
Gretchen Ct
Ona Ct
Pauline Ct
Nellie Ct
Colony St
Streever Ave
Candace Ave
Cory Ave
Hammond Way
Peggy Way
Finch Way
Zelda Way
Pyrite St
Accabar
Hadar Rd
Evadonna Rd
Quartz Hill Rd
Clipper Hills Dr
Sierra Summit Ave
Park City Ave
Badger Pass Ave
Kirkwood Ave
Taos Way
Statkowski
Lucerne Dr
Hosking Ave
Cherish Rose Way
Jennie Anne Ct
Futura Rose Way
Prosperity Rose Ave
Island Mist Ct
Pendragon St
Gwenivere Ct
Blaze Rose St
Colony Park Dr
Satanas Sun Dr
Star Azalea Way
Solsona Ave
Calm Dr
Dusk Way
October Sky Way
Granite Hills St
Granite Peak St
Quartz Peak Way
Cross Glade St
Snowbird St
Big Bear St
Trailcrest St
Maya St
Whisenant St
Cates St
Palasis St
Rio Vista Dr
Senalda Ct
Asino Ave
Savannah Ave
Bravo St
Tanager Ct
Chilibre St
Indigo St
Cupio St
Asseri St
Sandrinia St
Heirloom Rose St
Aspen Creek Dr
Rhine Dr
Mile River Ct
Tigris Dr
Libby Ct
Premier Ave
Verona Dr
Slider Dr
Tiffler Ct
Vincenso Way
Avila St
Fuentes St
Hughes Ln
Flamingo St
Lima St
Maria Angelica St
Minaret Meadows St
Normanton Dr
Rockhampton Dr
Ballina St
Tamworth St
Koala Ct
Albury St
Dalby Ct
Landsdowne St
Coleraine Ct
Kilkenny Ct
Oak Forest Ct
Hilo Way
Windpiper Ln
Squall Pl
Tradewinds Dr
Windchime Ct
Cyclone Dr
Alder Rd
Whitney Rd
Stone
840 420 0 840 Feet
N
WZI INC.
BAKERSFIELD, CALIFORNIA
PORTER & ASSOCIATES, INC.
WIBLE-HOSKING
COMMERCIAL
REGIONAL TRAFFIC ANALYSIS
ZONE MAP
DATE: 11/18
EXHIBIT: 7
Sources: Esri, HERE, DeLorme, USGS, Intermap, I
China (Hong Kong), Esri Korea, Esri (Thailand), Ma
contributors, and the GIS User Community

Exhibit 8

Regional Traffic Analysis Zone – Jobs Projected Growth

EXHIBIT 8 - TRAFFIC ANALYSIS ZONE - JOBS PROJECTED GROWTH

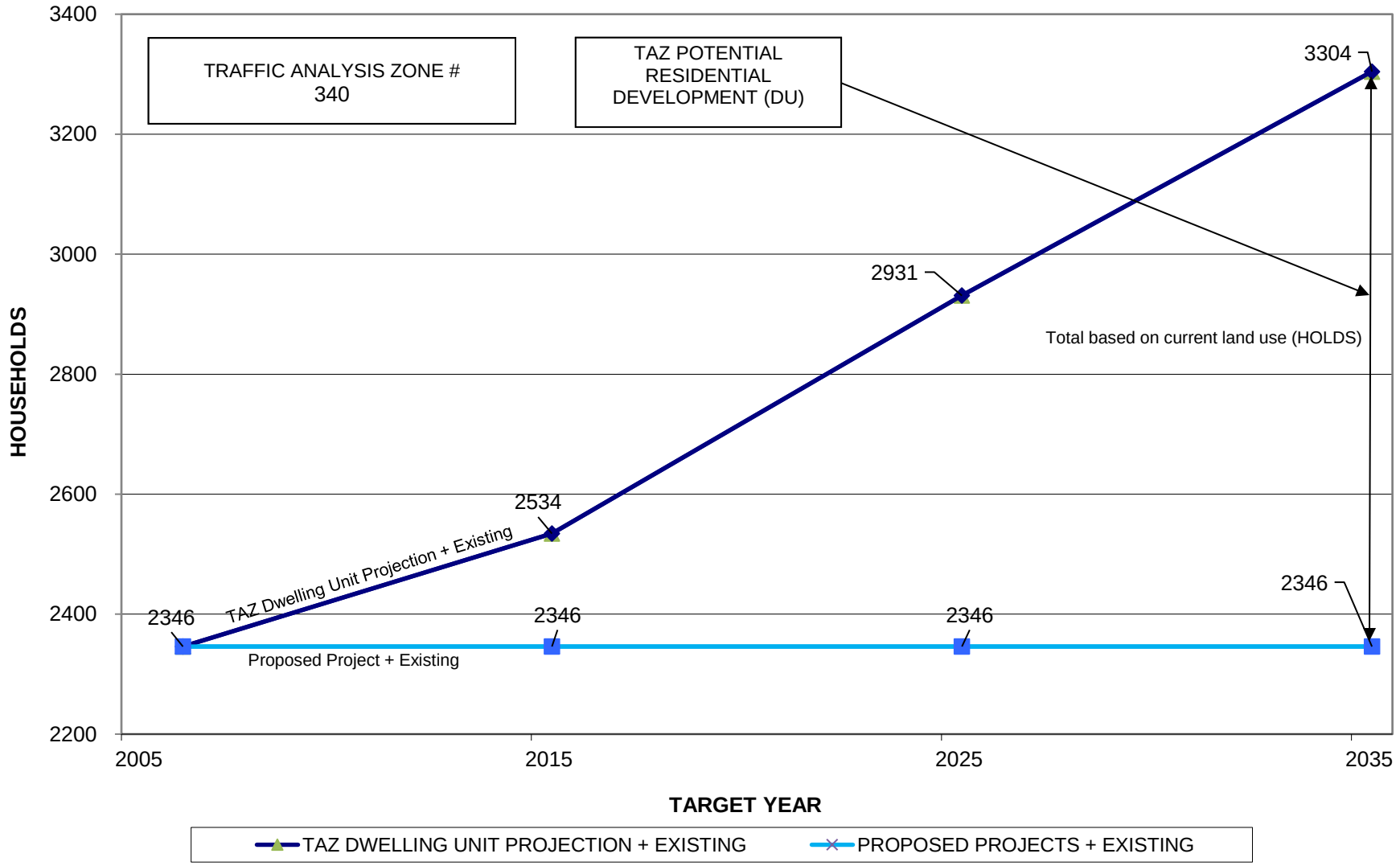


TAZ- Wible-Hosking.xlsxJOB CHART

Exhibit 9

Regional Traffic Analysis Zone – Household Projected Growth

EXHIBIT 9 - TRAFFIC ANALYSIS ZONE - HOUSEHOLDS PROJECTED GROWTH



TAZ- Wible-Hosking.xlsxHH CHART

Appendices

Appendix I

Project Specific CalEEMod 2016.3.2 Inputs and Outputs (included in PDF)

Wible-Hosking Commercial - Gas Station

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	14.75	1000sqft	0.34	14,751.00	0
Parking Lot	64.18	1000sqft	1.47	64,179.29	0
Convenience Market With Gas Pumps	5.73	1000sqft	0.13	5,726.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	7			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Wible-Hosking Commercial - Gas Station - San Joaquin Valley Air Basin, Annual

Project Characteristics -

Land Use - Other Non-Asphalt Surfaces: Pedestrian pavement, landscaping, cement pads.

Demolition -

Vehicle Trips - From Traffic Study.

Sequestration -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - Low VOC paints.

Fleet Mix - Commercial development serves surrounding residential.

Table Name	Column Name	Default Value	New Value
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tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	75
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tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	150	75
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	LDA	0.50	0.54
tblFleetMix	LDA	0.50	0.54
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tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT1	0.03	0.20

tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.6000e-003
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tblFleetMix	SBUS	9.8700e-004	1.1000e-003
tblFleetMix	SBUS	9.8700e-004	1.1000e-003

tblFleetMix	UBUS	1.6900e-003	4.4000e-003
tblFleetMix	UBUS	1.6900e-003	4.4000e-003
tblFleetMix	UBUS	1.6900e-003	4.4000e-003
tblLandUse	LandUseSquareFeet	14,750.00	14,751.00
tblLandUse	LandUseSquareFeet	64,180.00	64,179.29
tblLandUse	LandUseSquareFeet	5,730.00	5,726.00
tblSequestration	NumberOfNewTrees	0.00	35.00
tblVehicleTrips	ST_TR	1,448.33	624.20
tblVehicleTrips	SU_TR	1,182.08	624.20
tblVehicleTrips	WD_TR	845.60	624.20

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					
2019	0.3431	2.1309	1.7333	3.2800e-003	0.0554	0.1117	0.1671	0.0187	0.1073	0.1260	0.0000	281.9465	281.9465	0.0480	0.0000	283.1463
Maximum	**0.3431**	**2.1309**	**1.7333**	**3.2800e-003**	**0.0554**	**0.1117**	**0.1671**	**0.0187**	**0.1073**	**0.1260**	**0.0000**	**281.9465**	**281.9465**	**0.0480**	**0.0000**	**283.1463**

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					
2019	0.3431	2.1309	1.7333	3.2800e-003	0.0466	0.1117	0.1583	0.0143	0.1073	0.1216	0.0000	281.9463	281.9463	0.0480	0.0000	283.1460
Maximum	**0.3431**	**2.1309**	**1.7333**	**3.2800e-003**	**0.0466**	**0.1117**	**0.1583**	**0.0143**	**0.1073**	**0.1216**	**0.0000**	**281.9463**	**281.9463**	**0.0480**	**0.0000**	**283.1460**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**15.97**	**0.00**	**5.30**	**23.69**	**0.00**	**3.52**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Wible-Hosking Commercial - Gas Station - San Joaquin Valley Air Basin, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2019	3-31-2019	0.6993	0.6993
2	4-1-2019	6-30-2019	0.6645	0.6645
3	7-1-2019	9-30-2019	0.6718	0.6718
		Highest	0.6993	0.6993

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	0.0332	1.0000e-005	7.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Energy	1.8000e-004	1.6000e-003	1.3400e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	25.2338	25.2338	1.1000e-003	2.5000e-004	25.3362
Mobile	1.0079	2.4888	5.9110	0.0105	0.7203	0.0126	0.7329	0.1929	0.0117	0.2047	0.0000	965.2203	965.2203	0.1008	0.0000	967.7403
Waste						0.0000	0.0000		0.0000	0.0000	3.4955	0.0000	3.4955	0.2066	0.0000	8.6600
Water						0.0000	0.0000		0.0000	0.0000	0.1347	0.9330	1.0676	0.0139	3.4000e-004	1.5144
Total	**1.0413**	**2.4904**	**5.9131**	**0.0105**	**0.7203**	**0.0127**	**0.7330**	**0.1929**	**0.0119**	**0.2048**	**3.6302**	**991.3886**	**995.0187**	**0.3224**	**5.9000e-004**	**1,003.2525**

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	0.0304	1.0000e-005	7.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Energy	1.8000e-004	1.6000e-003	1.3400e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	25.2338	25.2338	1.1000e-003	2.5000e-004	25.3362
Mobile	1.0079	2.4888	5.9110	0.0105	0.7203	0.0126	0.7329	0.1929	0.0117	0.2047	0.0000	965.2203	965.2203	0.1008	0.0000	967.7403
Waste						0.0000	0.0000		0.0000	0.0000	3.4955	0.0000	3.4955	0.2066	0.0000	8.6600
Water						0.0000	0.0000		0.0000	0.0000	0.1347	0.9330	1.0676	0.0139	3.4000e-004	1.5144
Total	**1.0384**	**2.4904**	**5.9131**	**0.0105**	**0.7203**	**0.0127**	**0.7330**	**0.1929**	**0.0119**	**0.2048**	**3.6302**	**991.3886**	**995.0187**	**0.3224**	**5.9000e-004**	**1,003.2525**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.27**	**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**

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	24.7800
Total	**24.7800**

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	1/1/2019	1/28/2019	5	20	
2	Site Preparation	Site Preparation	1/29/2019	1/30/2019	5	2	
3	Grading	Grading	1/31/2019	2/5/2019	5	4	
4	Building Construction	Building Construction	2/6/2019	11/12/2019	5	200	
5	Paving	Paving	11/13/2019	11/26/2019	5	10	
6	Architectural Coating	Architectural Coating	11/27/2019	12/10/2019	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.81

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 8,589; Non-Residential Outdoor: 2,863; Striped Parking Area: 4,736 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	35.00	14.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.5000e-004	0.0000	4.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0230	0.2268	0.1489	2.4000e-004		0.0129	0.0129		0.0120	0.0120	0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total	**0.0230**	**0.2268**	**0.1489**	**2.4000e-004**	**4.5000e-004**	**0.0129**	**0.0133**	**7.0000e-005**	**0.0120**	**0.0121**	**0.0000**	**21.4161**	**21.4161**	**5.4500e-003**	**0.0000**	**21.5524**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.0000e-004	9.0000e-005	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1537	0.1537	1.0000e-005	0.0000	0.1540
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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-004	4.2000e-004	4.2700e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0500e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	0.9631	0.9631	3.0000e-005	0.0000	0.9639
Total	**6.2000e-004**	**1.0200e-003**	**4.3600e-003**	**1.0000e-005**	**1.0700e-003**	**1.0000e-005**	**1.0900e-003**	**2.9000e-004**	**1.0000e-005**	**2.9000e-004**	**0.0000**	**1.1169**	**1.1169**	**4.0000e-005**	**0.0000**	**1.1178**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					2.0000e-004	0.0000	2.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0230	0.2268	0.1489	2.4000e-004		0.0129	0.0129		0.0120	0.0120	0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total	**0.0230**	**0.2268**	**0.1489**	**2.4000e-004**	**2.0000e-004**	**0.0129**	**0.0131**	**3.0000e-005**	**0.0120**	**0.0121**	**0.0000**	**21.4161**	**21.4161**	**5.4500e-003**	**0.0000**	**21.5524**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.0000e-004	9.0000e-005	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1537	0.1537	1.0000e-005	0.0000	0.1540
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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-004	4.2000e-004	4.2700e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0500e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	0.9631	0.9631	3.0000e-005	0.0000	0.9639
Total	**6.2000e-004**	**1.0200e-003**	**4.3600e-003**	**1.0000e-005**	**1.0700e-003**	**1.0000e-005**	**1.0900e-003**	**2.9000e-004**	**1.0000e-005**	**2.9000e-004**	**0.0000**	**1.1169**	**1.1169**	**4.0000e-005**	**0.0000**	**1.1178**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0195	7.8900e-003	2.0000e-005		8.8000e-004	8.8000e-004		8.1000e-004	8.1000e-004	0.0000	1.5467	1.5467	4.9000e-004	0.0000	1.5589
Total	**1.7100e-003**	**0.0195**	**7.8900e-003**	**2.0000e-005**	**5.8000e-003**	**8.8000e-004**	**6.6800e-003**	**2.9500e-003**	**8.1000e-004**	**3.7600e-003**	**0.0000**	**1.5467**	**1.5467**	**4.9000e-004**	**0.0000**	**1.5589**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	3.0000e-005	2.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0593	0.0593	0.0000	0.0000	0.0593
Total	**4.0000e-005**	**3.0000e-005**	**2.6000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0593**	**0.0593**	**0.0000**	**0.0000**	**0.0593**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					2.6100e-003	0.0000	2.6100e-003	1.3300e-003	0.0000	1.3300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0195	7.8900e-003	2.0000e-005		8.8000e-004	8.8000e-004		8.1000e-004	8.1000e-004	0.0000	1.5467	1.5467	4.9000e-004	0.0000	1.5589
Total	**1.7100e-003**	**0.0195**	**7.8900e-003**	**2.0000e-005**	**2.6100e-003**	**8.8000e-004**	**3.4900e-003**	**1.3300e-003**	**8.1000e-004**	**2.1400e-003**	**0.0000**	**1.5467**	**1.5467**	**4.9000e-004**	**0.0000**	**1.5589**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	3.0000e-005	2.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0593	0.0593	0.0000	0.0000	0.0593
Total	**4.0000e-005**	**3.0000e-005**	**2.6000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0593**	**0.0593**	**0.0000**	**0.0000**	**0.0593**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8400e-003	0.0321	0.0132	3.0000e-005		1.4700e-003	1.4700e-003		1.3600e-003	1.3600e-003	0.0000	2.5336	2.5336	8.0000e-004	0.0000	2.5536
Total	**2.8400e-003**	**0.0321**	**0.0132**	**3.0000e-005**	**9.8300e-003**	**1.4700e-003**	**0.0113**	**5.0500e-003**	**1.3600e-003**	**6.4100e-003**	**0.0000**	**2.5336**	**2.5336**	**8.0000e-004**	**0.0000**	**2.5536**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	5.3000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1185	0.1185	0.0000	0.0000	0.1186
Total	**7.0000e-005**	**5.0000e-005**	**5.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1185**	**0.1185**	**0.0000**	**0.0000**	**0.1186**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					4.4200e-003	0.0000	4.4200e-003	2.2700e-003	0.0000	2.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8400e-003	0.0321	0.0132	3.0000e-005		1.4700e-003	1.4700e-003		1.3600e-003	1.3600e-003	0.0000	2.5336	2.5336	8.0000e-004	0.0000	2.5536
Total	**2.8400e-003**	**0.0321**	**0.0132**	**3.0000e-005**	**4.4200e-003**	**1.4700e-003**	**5.8900e-003**	**2.2700e-003**	**1.3600e-003**	**3.6300e-003**	**0.0000**	**2.5336**	**2.5336**	**8.0000e-004**	**0.0000**	**2.5536**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	5.3000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1185	0.1185	0.0000	0.0000	0.1186
Total	**7.0000e-005**	**5.0000e-005**	**5.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1185**	**0.1185**	**0.0000**	**0.0000**	**0.1186**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2272	1.5980	1.3487	2.2000e-003		0.0916	0.0916		0.0885	0.0885	0.0000	183.0719	183.0719	0.0352	0.0000	183.9518
Total	**0.2272**	**1.5980**	**1.3487**	**2.2000e-003**		**0.0916**	**0.0916**		**0.0885**	**0.0885**	**0.0000**	**183.0719**	**183.0719**	**0.0352**	**0.0000**	**183.9518**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	6.8400e-003	0.1867	0.0375	4.0000e-004	9.2800e-003	1.4100e-003	0.0107	2.6800e-003	1.3500e-003	4.0300e-003	0.0000	38.1255	38.1255	3.1800e-003	0.0000	38.2050
Worker	0.0163	0.0114	0.1149	2.9000e-004	0.0280	2.1000e-004	0.0282	7.4400e-003	1.9000e-004	7.6300e-003	0.0000	25.9301	25.9301	8.3000e-004	0.0000	25.9508
Total	**0.0231**	**0.1981**	**0.1524**	**6.9000e-004**	**0.0373**	**1.6200e-003**	**0.0389**	**0.0101**	**1.5400e-003**	**0.0117**	**0.0000**	**64.0556**	**64.0556**	**4.0100e-003**	**0.0000**	**64.1559**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2272	1.5980	1.3487	2.2000e-003		0.0916	0.0916		0.0885	0.0885	0.0000	183.0717	183.0717	0.0352	0.0000	183.9515
Total	**0.2272**	**1.5980**	**1.3487**	**2.2000e-003**		**0.0916**	**0.0916**		**0.0885**	**0.0885**	**0.0000**	**183.0717**	**183.0717**	**0.0352**	**0.0000**	**183.9515**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	6.8400e-003	0.1867	0.0375	4.0000e-004	9.2800e-003	1.4100e-003	0.0107	2.6800e-003	1.3500e-003	4.0300e-003	0.0000	38.1255	38.1255	3.1800e-003	0.0000	38.2050
Worker	0.0163	0.0114	0.1149	2.9000e-004	0.0280	2.1000e-004	0.0282	7.4400e-003	1.9000e-004	7.6300e-003	0.0000	25.9301	25.9301	8.3000e-004	0.0000	25.9508
Total	**0.0231**	**0.1981**	**0.1524**	**6.9000e-004**	**0.0373**	**1.6200e-003**	**0.0389**	**0.0101**	**1.5400e-003**	**0.0117**	**0.0000**	**64.0556**	**64.0556**	**4.0100e-003**	**0.0000**	**64.1559**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.5200e-003	0.0459	0.0445	7.0000e-005		2.6100e-003	2.6100e-003		2.4100e-003	2.4100e-003	0.0000	6.0105	6.0105	1.8700e-003	0.0000	6.0572
Paving	1.9300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.4500e-003**	**0.0459**	**0.0445**	**7.0000e-005**		**2.6100e-003**	**2.6100e-003**		**2.4100e-003**	**2.4100e-003**	**0.0000**	**6.0105**	**6.0105**	**1.8700e-003**	**0.0000**	**6.0572**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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-004	2.1000e-004	2.1300e-003	1.0000e-005	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4816	0.4816	2.0000e-005	0.0000	0.4819
Total	**3.0000e-004**	**2.1000e-004**	**2.1300e-003**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4816**	**0.4816**	**2.0000e-005**	**0.0000**	**0.4819**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.5200e-003	0.0459	0.0445	7.0000e-005		2.6100e-003	2.6100e-003		2.4100e-003	2.4100e-003	0.0000	6.0105	6.0105	1.8700e-003	0.0000	6.0572
Paving	1.9300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.4500e-003**	**0.0459**	**0.0445**	**7.0000e-005**		**2.6100e-003**	**2.6100e-003**		**2.4100e-003**	**2.4100e-003**	**0.0000**	**6.0105**	**6.0105**	**1.8700e-003**	**0.0000**	**6.0572**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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-004	2.1000e-004	2.1300e-003	1.0000e-005	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4816	0.4816	2.0000e-005	0.0000	0.4819
Total	**3.0000e-004**	**2.1000e-004**	**2.1300e-003**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4816**	**0.4816**	**2.0000e-005**	**0.0000**	**0.4819**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0563					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3300e-003	9.1800e-003	9.2100e-003	1.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2793
Total	**0.0576**	**9.1800e-003**	**9.2100e-003**	**1.0000e-005**		**6.4000e-004**	**6.4000e-004**		**6.4000e-004**	**6.4000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.1000e-004**	**0.0000**	**1.2793**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.6000e-004	1.1000e-004	1.1500e-003	0.0000	2.8000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.2593	0.2593	1.0000e-005	0.0000	0.2595
Total	**1.6000e-004**	**1.1000e-004**	**1.1500e-003**	**0.0000**	**2.8000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2593**	**0.2593**	**1.0000e-005**	**0.0000**	**0.2595**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0563					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3300e-003	9.1800e-003	9.2100e-003	1.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2793
Total	**0.0576**	**9.1800e-003**	**9.2100e-003**	**1.0000e-005**		**6.4000e-004**	**6.4000e-004**		**6.4000e-004**	**6.4000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.1000e-004**	**0.0000**	**1.2793**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.6000e-004	1.1000e-004	1.1500e-003	0.0000	2.8000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.2593	0.2593	1.0000e-005	0.0000	0.2595
Total	**1.6000e-004**	**1.1000e-004**	**1.1500e-003**	**0.0000**	**2.8000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2593**	**0.2593**	**1.0000e-005**	**0.0000**	**0.2595**

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	1.0079	2.4888	5.9110	0.0105	0.7203	0.0126	0.7329	0.1929	0.0117	0.2047	0.0000	965.2203	965.2203	0.1008	0.0000	967.7403
Unmitigated	1.0079	2.4888	5.9110	0.0105	0.7203	0.0126	0.7329	0.1929	0.0117	0.2047	0.0000	965.2203	965.2203	0.1008	0.0000	967.7403

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	3,576.67	3,576.67	3576.67	1,918,539	1,918,539
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	3,576.67	3,576.67	3,576.67	1,918,539	1,918,539

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100	0.001500
Other Non-Asphalt Surfaces	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100	0.001500
Parking Lot	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100	0.001500

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	23.4921	23.4921	1.0600e-003	2.2000e-004	23.5842
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	23.4921	23.4921	1.0600e-003	2.2000e-004	23.5842
NaturalGas Mitigated	1.8000e-004	1.6000e-003	1.3400e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521
NaturalGas Unmitigated	1.8000e-004	1.6000e-003	1.3400e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521

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					
Convenience Market With Gas Pumps	32638.2	1.8000e-004	1.6000e-003	1.3400e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**1.8000e-004**	**1.6000e-003**	**1.3400e-003**	**1.0000e-005**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**1.7417**	**1.7417**	**3.0000e-005**	**3.0000e-005**	**1.7521**

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					
Convenience Market With Gas Pumps	32638.2	1.8000e-004	1.6000e-003	1.3400e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**1.8000e-004**	**1.6000e-003**	**1.3400e-003**	**1.0000e-005**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**1.7417**	**1.7417**	**3.0000e-005**	**3.0000e-005**	**1.7521**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	58290.7	16.9574	7.7000e-004	1.6000e-004	17.0239
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	22462.8	6.5347	3.0000e-004	6.0000e-005	6.5603
Total		**23.4921**	**1.0700e-003**	**2.2000e-004**	**23.5842**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	58290.7	16.9574	7.7000e-004	1.6000e-004	17.0239
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	22462.8	6.5347	3.0000e-004	6.0000e-005	6.5603
Total		**23.4921**	**1.0700e-003**	**2.2000e-004**	**23.5842**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0304	1.0000e-005	7.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Unmitigated	0.0332	1.0000e-005	7.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-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	5.6300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0275					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Total	**0.0332**	**1.0000e-005**	**7.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.5100e-003**	**1.5100e-003**	**0.0000**	**0.0000**	**1.6100e-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	2.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0275					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Total	**0.0304**	**1.0000e-005**	**7.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.5100e-003**	**1.5100e-003**	**0.0000**	**0.0000**	**1.6100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.0676	0.0139	3.4000e-004	1.5144
Unmitigated	1.0676	0.0139	3.4000e-004	1.5144

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.424436 / 0.260138	1.0676	0.0139	3.4000e-004	1.5144
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.0676**	**0.0139**	**3.4000e-004**	**1.5144**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.424436 / 0.260138	1.0676	0.0139	3.4000e-004	1.5144
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.0676**	**0.0139**	**3.4000e-004**	**1.5144**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.4955	0.2066	0.0000	8.6600
Unmitigated	3.4955	0.2066	0.0000	8.6600

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	17.22	3.4955	0.2066	0.0000	8.6600
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**3.4955**	**0.2066**	**0.0000**	**8.6600**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	17.22	3.4955	0.2066	0.0000	8.6600
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**3.4955**	**0.2066**	**0.0000**	**8.6600**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	24.7800	0.0000	0.0000	24.7800

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	35	24.7800	0.0000	0.0000	24.7800
Total		**24.7800**	**0.0000**	**0.0000**	**24.7800**

Wible-Hosking Commercial - Remaining Buildout

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	238.33	1000sqft	5.47	238,329.00	0
Parking Lot	126.12	1000sqft	2.90	126,121.00	0
Fast Food Restaurant with Drive Thru	2.73	1000sqft	0.06	2,726.00	0
High Turnover (Sit Down Restaurant)	6.08	1000sqft	0.14	6,076.00	0
Strip Mall	60.47	1000sqft	1.39	60,474.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	7			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Wible-Hosking Commercial - Remaining Buildout - San Joaquin Valley Air Basin, Annual

Project Characteristics -

Land Use - Other Non-Asphalt Surfaces: Pedestrian pavement, landscaping, cement pad.

Construction Phase - Estimated excavation required for retention basin.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Estimated equipment for excavation of retention basin.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Estimate for required equipment to excavate retention basin.

Demolition -

Vehicle Trips - Values known from Traffic Study.

Sequestration -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - Low VOC paint.

Fleet Mix - Commercial development serves surrounding residential.

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	150	75
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.11	0.02

tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	LDA	0.52	0.54
tblFleetMix	LDA	0.52	0.54
tblFleetMix	LDA	0.52	0.54
tblFleetMix	LDA	0.52	0.54
tblFleetMix	LDA	0.52	0.54
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.4000e-003
tblFleetMix	LHD1	0.02	1.4000e-003
tblFleetMix	LHD1	0.02	1.4000e-003
tblFleetMix	LHD1	0.02	1.4000e-003
tblFleetMix	LHD1	0.02	1.4000e-003
tblFleetMix	LHD2	4.8400e-003	9.0000e-004
tblFleetMix	LHD2	4.8400e-003	9.0000e-004
tblFleetMix	LHD2	4.8400e-003	9.0000e-004

tblFleetMix	LHD2	4.8400e-003	9.0000e-004
tblFleetMix	LHD2	4.8400e-003	9.0000e-004
tblFleetMix	MCY	5.1460e-003	2.6000e-003
tblFleetMix	MCY	5.1460e-003	2.6000e-003
tblFleetMix	MCY	5.1460e-003	2.6000e-003
tblFleetMix	MCY	5.1460e-003	2.6000e-003
tblFleetMix	MCY	5.1460e-003	2.6000e-003
tblFleetMix	MDV	0.11	0.05
tblFleetMix	MDV	0.11	0.05
tblFleetMix	MDV	0.11	0.05
tblFleetMix	MDV	0.11	0.05
tblFleetMix	MDV	0.11	0.05
tblFleetMix	MH	6.9400e-004	1.6000e-003
tblFleetMix	MH	6.9400e-004	1.6000e-003
tblFleetMix	MH	6.9400e-004	1.6000e-003
tblFleetMix	MH	6.9400e-004	1.6000e-003
tblFleetMix	MH	6.9400e-004	1.6000e-003
tblFleetMix	MHD	0.02	9.0000e-003
tblFleetMix	MHD	0.02	9.0000e-003
tblFleetMix	MHD	0.02	9.0000e-003
tblFleetMix	MHD	0.02	9.0000e-003
tblFleetMix	MHD	0.02	9.0000e-003
tblFleetMix	OBUS	1.7920e-003	0.00
tblFleetMix	OBUS	1.7920e-003	0.00
tblFleetMix	OBUS	1.7920e-003	0.00
tblFleetMix	OBUS	1.7920e-003	0.00
tblFleetMix	OBUS	1.7920e-003	0.00

tblFleetMix	SBUS	9.3900e-004	9.0000e-004
tblFleetMix	SBUS	9.3900e-004	9.0000e-004
tblFleetMix	SBUS	9.3900e-004	9.0000e-004
tblFleetMix	SBUS	9.3900e-004	9.0000e-004
tblFleetMix	SBUS	9.3900e-004	9.0000e-004
tblFleetMix	UBUS	1.5070e-003	4.4000e-003
tblFleetMix	UBUS	1.5070e-003	4.4000e-003
tblFleetMix	UBUS	1.5070e-003	4.4000e-003
tblFleetMix	UBUS	1.5070e-003	4.4000e-003
tblFleetMix	UBUS	1.5070e-003	4.4000e-003
tblLandUse	LandUseSquareFeet	238,330.00	238,329.00
tblLandUse	LandUseSquareFeet	126,120.00	126,121.00
tblLandUse	LandUseSquareFeet	2,730.00	2,726.00
tblLandUse	LandUseSquareFeet	6,080.00	6,076.00
tblLandUse	LandUseSquareFeet	60,470.00	60,474.00
tblSequestration	NumberOfNewTrees	0.00	148.00
tblVehicleTrips	ST_TR	722.03	470.95
tblVehicleTrips	ST_TR	158.37	112.18
tblVehicleTrips	SU_TR	542.72	470.95
tblVehicleTrips	SU_TR	131.84	112.18
tblVehicleTrips	WD_TR	496.12	470.95
tblVehicleTrips	WD_TR	127.15	112.18

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.4146	3.8365	3.0118	7.4200e-003	0.3650	0.1657	0.5307	0.1394	0.1552	0.2945	0.0000	666.0091	666.0091	0.1039	0.0000	668.6065
2021	0.6035	0.3771	0.3819	8.4000e-004	0.0209	0.0167	0.0376	5.6500e-003	0.0156	0.0212	0.0000	74.9596	74.9596	0.0134	0.0000	75.2938
Maximum	**0.6035**	**3.8365**	**3.0118**	**7.4200e-003**	**0.3650**	**0.1657**	**0.5307**	**0.1394**	**0.1552**	**0.2945**	**0.0000**	**666.0091**	**666.0091**	**0.1039**	**0.0000**	**668.6065**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.4146	3.8365	3.0118	7.4200e-003	0.2758	0.1657	0.4415	0.0930	0.1552	0.2482	0.0000	666.0088	666.0088	0.1039	0.0000	668.6061
2021	0.6035	0.3771	0.3819	8.4000e-004	0.0209	0.0167	0.0376	5.6500e-003	0.0156	0.0212	0.0000	74.9596	74.9596	0.0134	0.0000	75.2938
Maximum	**0.6035**	**3.8365**	**3.0118**	**7.4200e-003**	**0.2758**	**0.1657**	**0.4415**	**0.0930**	**0.1552**	**0.2482**	**0.0000**	**666.0088**	**666.0088**	**0.1039**	**0.0000**	**668.6061**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**23.13**	**0.00**	**15.71**	**31.98**	**0.00**	**14.69**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2020	3-31-2020	1.1464	1.1464
2	4-1-2020	6-30-2020	1.0209	1.0209
3	7-1-2020	9-30-2020	1.0321	1.0321
4	10-1-2020	12-31-2020	1.0372	1.0372
5	1-1-2021	3-31-2021	0.9897	0.9897
		Highest	1.1464	1.1464

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	0.3503	4.0000e-005	3.9800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2600e-003
Energy	6.5600e-003	0.0597	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	342.6266	342.6266	0.0138	3.7900e-003	344.1005
Mobile	1.0629	2.9442	8.5341	0.0243	2.1656	0.0207	2.1863	0.5797	0.0192	0.5990	0.0000	2,229.6980	2,229.6980	0.1321	0.0000	2,232.9999
Waste						0.0000	0.0000		0.0000	0.0000	33.9584	0.0000	33.9584	2.0069	0.0000	84.1304
Water						0.0000	0.0000		0.0000	0.0000	2.2694	14.2292	16.4986	0.2337	5.6400e-003	24.0217
Total	**1.4197**	**3.0039**	**8.5882**	**0.0246**	**2.1656**	**0.0253**	**2.1908**	**0.5797**	**0.0238**	**0.6035**	**36.2278**	**2,586.5615**	**2,622.7893**	**2.3865**	**9.4300e-003**	**2,685.2608**

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	0.3224	4.0000e-005	3.9800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2600e-003
Energy	6.5600e-003	0.0597	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	342.6266	342.6266	0.0138	3.7900e-003	344.1005
Mobile	1.0629	2.9442	8.5341	0.0243	2.1656	0.0207	2.1863	0.5797	0.0192	0.5990	0.0000	2,229.6980	2,229.6980	0.1321	0.0000	2,232.9999
Waste						0.0000	0.0000		0.0000	0.0000	33.9584	0.0000	33.9584	2.0069	0.0000	84.1304
Water						0.0000	0.0000		0.0000	0.0000	2.2694	14.2292	16.4986	0.2337	5.6400e-003	24.0217
Total	**1.3918**	**3.0039**	**8.5882**	**0.0246**	**2.1656**	**0.0253**	**2.1908**	**0.5797**	**0.0238**	**0.6035**	**36.2278**	**2,586.5615**	**2,622.7893**	**2.3865**	**9.4300e-003**	**2,685.2608**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**1.96**	**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**

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	104.7840
Total	**104.7840**

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	1/1/2020	1/28/2020	5	20	
2	Site Preparation	Site Preparation	1/29/2020	2/11/2020	5	10	
3	Grading	Grading	2/12/2020	3/10/2020	5	20	
4	Excavating Retention Basin	Trenching	2/12/2020	2/13/2020	5	2	
5	Building Construction	Building Construction	3/11/2020	1/26/2021	5	230	
6	Paving	Paving	1/27/2021	2/23/2021	5	20	
7	Architectural Coating	Architectural Coating	2/24/2021	3/23/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 8.37

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 103,914; Non-Residential Outdoor: 34,638; Striped Parking Area: 21,867 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Excavating Retention Basin	Excavators	1	8.00	158	0.38
Excavating Retention Basin	Rubber Tired Dozers	1	8.00	247	0.40
Excavating Retention Basin	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	59.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Excavating Retention Basin	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	176.00	71.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.4600e-003	0.0000	6.4600e-003	9.8000e-004	0.0000	9.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386
Total	**0.0331**	**0.3320**	**0.2175**	**3.9000e-004**	**6.4600e-003**	**0.0166**	**0.0231**	**9.8000e-004**	**0.0154**	**0.0164**	**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2386**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.4000e-004	8.2200e-003	1.1900e-003	2.0000e-005	5.0000e-004	3.0000e-005	5.3000e-004	1.4000e-004	3.0000e-005	1.7000e-004	0.0000	2.2413	2.2413	1.3000e-004	0.0000	2.2445
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	4.3000e-004	4.3700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total	**8.7000e-004**	**8.6500e-003**	**5.5600e-003**	**3.0000e-005**	**1.7000e-003**	**4.0000e-005**	**1.7400e-003**	**4.6000e-004**	**4.0000e-005**	**5.0000e-004**	**0.0000**	**3.3182**	**3.3182**	**1.6000e-004**	**0.0000**	**3.3221**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					2.9100e-003	0.0000	2.9100e-003	4.4000e-004	0.0000	4.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385
Total	**0.0331**	**0.3320**	**0.2175**	**3.9000e-004**	**2.9100e-003**	**0.0166**	**0.0195**	**4.4000e-004**	**0.0154**	**0.0159**	**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2385**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.4000e-004	8.2200e-003	1.1900e-003	2.0000e-005	5.0000e-004	3.0000e-005	5.3000e-004	1.4000e-004	3.0000e-005	1.7000e-004	0.0000	2.2413	2.2413	1.3000e-004	0.0000	2.2445
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	4.3000e-004	4.3700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total	**8.7000e-004**	**8.6500e-003**	**5.5600e-003**	**3.0000e-005**	**1.7000e-003**	**4.0000e-005**	**1.7400e-003**	**4.6000e-004**	**4.0000e-005**	**5.0000e-004**	**0.0000**	**3.3182**	**3.3182**	**1.6000e-004**	**0.0000**	**3.3221**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total	**0.0204**	**0.2121**	**0.1076**	**1.9000e-004**	**0.0903**	**0.0110**	**0.1013**	**0.0497**	**0.0101**	**0.0598**	**0.0000**	**16.7153**	**16.7153**	**5.4100e-003**	**0.0000**	**16.8505**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	3.8000e-004	2.6000e-004	2.6200e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6461	0.6461	2.0000e-005	0.0000	0.6466
Total	**3.8000e-004**	**2.6000e-004**	**2.6200e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.6461**	**0.6461**	**2.0000e-005**	**0.0000**	**0.6466**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total	**0.0204**	**0.2121**	**0.1076**	**1.9000e-004**	**0.0407**	**0.0110**	**0.0516**	**0.0223**	**0.0101**	**0.0325**	**0.0000**	**16.7153**	**16.7153**	**5.4100e-003**	**0.0000**	**16.8505**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	3.8000e-004	2.6000e-004	2.6200e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6461	0.6461	2.0000e-005	0.0000	0.6466
Total	**3.8000e-004**	**2.6000e-004**	**2.6200e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.6461**	**0.6461**	**2.0000e-005**	**0.0000**	**0.6466**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0243	0.2639	0.1605	3.0000e-004		0.0127	0.0127		0.0117	0.0117	0.0000	26.0588	26.0588	8.4300e-003	0.0000	26.2694
Total	**0.0243**	**0.2639**	**0.1605**	**3.0000e-004**	**0.0655**	**0.0127**	**0.0783**	**0.0337**	**0.0117**	**0.0454**	**0.0000**	**26.0588**	**26.0588**	**8.4300e-003**	**0.0000**	**26.2694**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	6.3000e-004	4.3000e-004	4.3700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total	**6.3000e-004**	**4.3000e-004**	**4.3700e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0295	0.0000	0.0295	0.0152	0.0000	0.0152	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0243	0.2639	0.1605	3.0000e-004		0.0127	0.0127		0.0117	0.0117	0.0000	26.0587	26.0587	8.4300e-003	0.0000	26.2694
Total	**0.0243**	**0.2639**	**0.1605**	**3.0000e-004**	**0.0295**	**0.0127**	**0.0422**	**0.0152**	**0.0117**	**0.0269**	**0.0000**	**26.0587**	**26.0587**	**8.4300e-003**	**0.0000**	**26.2694**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	6.3000e-004	4.3000e-004	4.3700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total	**6.3000e-004**	**4.3000e-004**	**4.3700e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

3.5 Excavating Retention Basin - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5300e-003	0.0159	9.6800e-003	2.0000e-005		8.0000e-004	8.0000e-004		7.4000e-004	7.4000e-004	0.0000	1.4771	1.4771	4.8000e-004	0.0000	1.4891
Total	**1.5300e-003**	**0.0159**	**9.6800e-003**	**2.0000e-005**		**8.0000e-004**	**8.0000e-004**		**7.4000e-004**	**7.4000e-004**	**0.0000**	**1.4771**	**1.4771**	**4.8000e-004**	**0.0000**	**1.4891**

3.5 Excavating Retention Basin - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	2.0000e-005	2.3000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0574	0.0574	0.0000	0.0000	0.0575
Total	**3.0000e-005**	**2.0000e-005**	**2.3000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0574**	**0.0574**	**0.0000**	**0.0000**	**0.0575**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.5300e-003	0.0159	9.6800e-003	2.0000e-005		8.0000e-004	8.0000e-004		7.4000e-004	7.4000e-004	0.0000	1.4771	1.4771	4.8000e-004	0.0000	1.4891
Total	**1.5300e-003**	**0.0159**	**9.6800e-003**	**2.0000e-005**		**8.0000e-004**	**8.0000e-004**		**7.4000e-004**	**7.4000e-004**	**0.0000**	**1.4771**	**1.4771**	**4.8000e-004**	**0.0000**	**1.4891**

3.5 Excavating Retention Basin - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	2.0000e-005	2.3000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0574	0.0574	0.0000	0.0000	0.0575
Total	**3.0000e-005**	**2.0000e-005**	**2.3000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0574**	**0.0574**	**0.0000**	**0.0000**	**0.0575**

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2247	2.0337	1.7859	2.8500e-003		0.1184	0.1184		0.1113	0.1113	0.0000	245.5066	245.5066	0.0599	0.0000	247.0040
Total	**0.2247**	**2.0337**	**1.7859**	**2.8500e-003**		**0.1184**	**0.1184**		**0.1113**	**0.1113**	**0.0000**	**245.5066**	**245.5066**	**0.0599**	**0.0000**	**247.0040**

3.6 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0298	0.9161	0.1738	2.1400e-003	0.0499	5.0500e-003	0.0549	0.0144	4.8300e-003	0.0192	0.0000	203.2169	203.2169	0.0160	0.0000	203.6180
Worker	0.0789	0.0535	0.5440	1.4800e-003	0.1492	1.0600e-003	0.1502	0.0396	9.8000e-004	0.0406	0.0000	133.9372	133.9372	3.8400e-003	0.0000	134.0331
Total	**0.1087**	**0.9696**	**0.7178**	**3.6200e-003**	**0.1990**	**6.1100e-003**	**0.2052**	**0.0541**	**5.8100e-003**	**0.0599**	**0.0000**	**337.1541**	**337.1541**	**0.0199**	**0.0000**	**337.6511**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2247	2.0337	1.7859	2.8500e-003		0.1184	0.1184		0.1113	0.1113	0.0000	245.5063	245.5063	0.0599	0.0000	247.0037
Total	**0.2247**	**2.0337**	**1.7859**	**2.8500e-003**		**0.1184**	**0.1184**		**0.1113**	**0.1113**	**0.0000**	**245.5063**	**245.5063**	**0.0599**	**0.0000**	**247.0037**

3.6 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0298	0.9161	0.1738	2.1400e-003	0.0499	5.0500e-003	0.0549	0.0144	4.8300e-003	0.0192	0.0000	203.2169	203.2169	0.0160	0.0000	203.6180
Worker	0.0789	0.0535	0.5440	1.4800e-003	0.1492	1.0600e-003	0.1502	0.0396	9.8000e-004	0.0406	0.0000	133.9372	133.9372	3.8400e-003	0.0000	134.0331
Total	**0.1087**	**0.9696**	**0.7178**	**3.6200e-003**	**0.1990**	**6.1100e-003**	**0.2052**	**0.0541**	**5.8100e-003**	**0.0599**	**0.0000**	**337.1541**	**337.1541**	**0.0199**	**0.0000**	**337.6511**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0171	0.1569	0.1492	2.4000e-004		8.6300e-003	8.6300e-003		8.1100e-003	8.1100e-003	0.0000	20.8474	20.8474	5.0300e-003	0.0000	20.9731
Total	**0.0171**	**0.1569**	**0.1492**	**2.4000e-004**		**8.6300e-003**	**8.6300e-003**		**8.1100e-003**	**8.1100e-003**	**0.0000**	**20.8474**	**20.8474**	**5.0300e-003**	**0.0000**	**20.9731**

3.6 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0600e-003	0.0705	0.0129	1.8000e-004	4.2400e-003	2.0000e-004	4.4300e-003	1.2200e-003	1.9000e-004	1.4100e-003	0.0000	17.0940	17.0940	1.3100e-003	0.0000	17.1266
Worker	6.1700e-003	4.0400e-003	0.0419	1.2000e-004	0.0127	9.0000e-005	0.0128	3.3700e-003	8.0000e-005	3.4500e-003	0.0000	10.9767	10.9767	2.9000e-004	0.0000	10.9840
Total	**8.2300e-003**	**0.0745**	**0.0548**	**3.0000e-004**	**0.0169**	**2.9000e-004**	**0.0172**	**4.5900e-003**	**2.7000e-004**	**4.8600e-003**	**0.0000**	**28.0707**	**28.0707**	**1.6000e-003**	**0.0000**	**28.1106**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0171	0.1569	0.1492	2.4000e-004		8.6300e-003	8.6300e-003		8.1100e-003	8.1100e-003	0.0000	20.8473	20.8473	5.0300e-003	0.0000	20.9731
Total	**0.0171**	**0.1569**	**0.1492**	**2.4000e-004**		**8.6300e-003**	**8.6300e-003**		**8.1100e-003**	**8.1100e-003**	**0.0000**	**20.8473**	**20.8473**	**5.0300e-003**	**0.0000**	**20.9731**

3.6 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0600e-003	0.0705	0.0129	1.8000e-004	4.2400e-003	2.0000e-004	4.4300e-003	1.2200e-003	1.9000e-004	1.4100e-003	0.0000	17.0940	17.0940	1.3100e-003	0.0000	17.1266
Worker	6.1700e-003	4.0400e-003	0.0419	1.2000e-004	0.0127	9.0000e-005	0.0128	3.3700e-003	8.0000e-005	3.4500e-003	0.0000	10.9767	10.9767	2.9000e-004	0.0000	10.9840
Total	**8.2300e-003**	**0.0745**	**0.0548**	**3.0000e-004**	**0.0169**	**2.9000e-004**	**0.0172**	**4.5900e-003**	**2.7000e-004**	**4.8600e-003**	**0.0000**	**28.0707**	**28.0707**	**1.6000e-003**	**0.0000**	**28.1106**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0126	0.1292	0.1465	2.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving	3.8000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0164**	**0.1292**	**0.1465**	**2.3000e-004**		**6.7800e-003**	**6.7800e-003**		**6.2400e-003**	**6.2400e-003**	**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.7 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	3.8000e-004	3.9700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0395	1.0395	3.0000e-005	0.0000	1.0402
Total	**5.8000e-004**	**3.8000e-004**	**3.9700e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0395**	**1.0395**	**3.0000e-005**	**0.0000**	**1.0402**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0126	0.1292	0.1465	2.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving	3.8000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0164**	**0.1292**	**0.1465**	**2.3000e-004**		**6.7800e-003**	**6.7800e-003**		**6.2400e-003**	**6.2400e-003**	**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.7 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	3.8000e-004	3.9700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0395	1.0395	3.0000e-005	0.0000	1.0402
Total	**5.8000e-004**	**3.8000e-004**	**3.9700e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0395**	**1.0395**	**3.0000e-005**	**0.0000**	**1.0402**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5577					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	**0.5599**	**0.0153**	**0.0182**	**3.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.8 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3600e-003	8.9000e-004	9.2600e-003	3.0000e-005	2.8000e-003	2.0000e-005	2.8200e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.4254	2.4254	6.0000e-005	0.0000	2.4270
Total	**1.3600e-003**	**8.9000e-004**	**9.2600e-003**	**3.0000e-005**	**2.8000e-003**	**2.0000e-005**	**2.8200e-003**	**7.4000e-004**	**2.0000e-005**	**7.6000e-004**	**0.0000**	**2.4254**	**2.4254**	**6.0000e-005**	**0.0000**	**2.4270**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.5577					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	**0.5599**	**0.0153**	**0.0182**	**3.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.8 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3600e-003	8.9000e-004	9.2600e-003	3.0000e-005	2.8000e-003	2.0000e-005	2.8200e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.4254	2.4254	6.0000e-005	0.0000	2.4270
Total	**1.3600e-003**	**8.9000e-004**	**9.2600e-003**	**3.0000e-005**	**2.8000e-003**	**2.0000e-005**	**2.8200e-003**	**7.4000e-004**	**2.0000e-005**	**7.6000e-004**	**0.0000**	**2.4254**	**2.4254**	**6.0000e-005**	**0.0000**	**2.4270**

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	1.0629	2.9442	8.5341	0.0243	2.1656	0.0207	2.1863	0.5797	0.0192	0.5990	0.0000	2,229.6980	2,229.6980	0.1321	0.0000	2,232.9999
Unmitigated	1.0629	2.9442	8.5341	0.0243	2.1656	0.0207	2.1863	0.5797	0.0192	0.5990	0.0000	2,229.6980	2,229.6980	0.1321	0.0000	2,232.9999

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	1,285.69	1,285.69	1285.69	1,201,256	1,201,256
High Turnover (Sit Down Restaurant)	682.05	682.05	682.05	791,364	791,364
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	2,680.03	2,542.16	1235.40	3,779,178	3,779,178
Total	4,647.78	4,509.91	3,203.15	5,771,797	5,771,797

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.537300	0.200000	0.167100	0.054200	0.001400	0.000900	0.009000	0.020600	0.000000	0.004400	0.002600	0.000900	0.001600
High Turnover (Sit Down Restaurant)	0.537300	0.200000	0.167100	0.054200	0.001400	0.000900	0.009000	0.020600	0.000000	0.004400	0.002600	0.000900	0.001600
Other Non-Asphalt Surfaces	0.537300	0.200000	0.167100	0.054200	0.001400	0.000900	0.009000	0.020600	0.000000	0.004400	0.002600	0.000900	0.001600
Parking Lot	0.537300	0.200000	0.167100	0.054200	0.001400	0.000900	0.009000	0.020600	0.000000	0.004400	0.002600	0.000900	0.001600
Strip Mall	0.537300	0.200000	0.167100	0.054200	0.001400	0.000900	0.009000	0.020600	0.000000	0.004400	0.002600	0.000900	0.001600

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	277.6886	277.6886	0.0126	2.6000e-003	278.7766
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	277.6886	277.6886	0.0126	2.6000e-003	278.7766
NaturalGas Mitigated	6.5600e-003	0.0597	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	64.9380	64.9380	1.2400e-003	1.1900e-003	65.3239
NaturalGas Unmitigated	6.5600e-003	0.0597	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	64.9380	64.9380	1.2400e-003	1.1900e-003	65.3239

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	270119	1.4600e-003	0.0132	0.0111	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	14.4146	14.4146	2.8000e-004	2.6000e-004	14.5003
High Turnover (Sit Down Restaurant)	602071	3.2500e-003	0.0295	0.0248	1.8000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003	0.0000	32.1288	32.1288	6.2000e-004	5.9000e-004	32.3197
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	344702	1.8600e-003	0.0169	0.0142	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	18.3946	18.3946	3.5000e-004	3.4000e-004	18.5039
Total		**6.5700e-003**	**0.0597**	**0.0501**	**3.6000e-004**		**4.5300e-003**	**4.5300e-003**		**4.5300e-003**	**4.5300e-003**	**0.0000**	**64.9380**	**64.9380**	**1.2500e-003**	**1.1900e-003**	**65.3239**

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	270119	1.4600e-003	0.0132	0.0111	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	14.4146	14.4146	2.8000e-004	2.6000e-004	14.5003
High Turnover (Sit Down Restaurant)	602071	3.2500e-003	0.0295	0.0248	1.8000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003	0.0000	32.1288	32.1288	6.2000e-004	5.9000e-004	32.3197
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	344702	1.8600e-003	0.0169	0.0142	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	18.3946	18.3946	3.5000e-004	3.4000e-004	18.5039
Total		**6.5700e-003**	**0.0597**	**0.0501**	**3.6000e-004**		**4.5300e-003**	**4.5300e-003**		**4.5300e-003**	**4.5300e-003**	**0.0000**	**64.9380**	**64.9380**	**1.2500e-003**	**1.1900e-003**	**65.3239**

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	91293.7	26.5584	1.2000e-003	2.5000e-004	26.6625
High Turnover (Sit Down Restaurant)	203485	59.1962	2.6800e-003	5.5000e-004	59.4281
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	44142.3	12.8415	5.8000e-004	1.2000e-004	12.8918
Strip Mall	615625	179.0925	8.1000e-003	1.6800e-003	179.7942
Total		**277.6886**	**0.0126**	**2.6000e-003**	**278.7766**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	91293.7	26.5584	1.2000e-003	2.5000e-004	26.6625
High Turnover (Sit Down Restaurant)	203485	59.1962	2.6800e-003	5.5000e-004	59.4281
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	44142.3	12.8415	5.8000e-004	1.2000e-004	12.8918
Strip Mall	615625	179.0925	8.1000e-003	1.6800e-003	179.7942
Total		**277.6886**	**0.0126**	**2.6000e-003**	**278.7766**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.3224	4.0000e-005	3.9800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2600e-003
Unmitigated	0.3503	4.0000e-005	3.9800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2600e-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	0.0558					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2941					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.7000e-004	4.0000e-005	3.9800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2600e-003
Total	**0.3503**	**4.0000e-005**	**3.9800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.7500e-003**	**7.7500e-003**	**2.0000e-005**	**0.0000**	**8.2600e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0279					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2941					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.7000e-004	4.0000e-005	3.9800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2600e-003
Total	**0.3224**	**4.0000e-005**	**3.9800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.7500e-003**	**7.7500e-003**	**2.0000e-005**	**0.0000**	**8.2600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.4986	0.2337	5.6400e-003	24.0217
Unmitigated	16.4986	0.2337	5.6400e-003	24.0217

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	0.828647 / 0.0528924	1.6211	0.0271	6.5000e-004	2.4915
High Turnover (Sit Down Restaurant)	1.84548 / 0.117797	3.6105	0.0603	1.4500e-003	5.5488
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.47917 / 2.74529	11.2670	0.1464	3.5400e-003	15.9814
Total		**16.4986**	**0.2337**	**5.6400e-003**	**24.0217**

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	0.828647 / 0.0528924	1.6211	0.0271	6.5000e-004	2.4915
High Turnover (Sit Down Restaurant)	1.84548 / 0.117797	3.6105	0.0603	1.4500e-003	5.5488
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.47917 / 2.74529	11.2670	0.1464	3.5400e-003	15.9814
Total		**16.4986**	**0.2337**	**5.6400e-003**	**24.0217**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	33.9584	2.0069	0.0000	84.1304
Unmitigated	33.9584	2.0069	0.0000	84.1304

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	31.45	6.3841	0.3773	0.0000	15.8163
High Turnover (Sit Down Restaurant)	72.35	14.6864	0.8679	0.0000	36.3849
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	63.49	12.8879	0.7617	0.0000	31.9292
Total		**33.9584**	**2.0069**	**0.0000**	**84.1304**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	31.45	6.3841	0.3773	0.0000	15.8163
High Turnover (Sit Down Restaurant)	72.35	14.6864	0.8679	0.0000	36.3849
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	63.49	12.8879	0.7617	0.0000	31.9292
Total		**33.9584**	**2.0069**	**0.0000**	**84.1304**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	104.7840	0.0000	0.0000	104.7840

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	148	104.7840	0.0000	0.0000	104.7840
Total		**104.7840**	**0.0000**	**0.0000**	**104.7840**

Appendix II

Traffic Study (included in PDF)

Project No: 222-20

TRAFFIC STUDY

COMMERCIAL GPA & ZONE CHANGE
NORTHEAST CORNER OF HOSKING AVENUE & WIBLE ROAD
BAKERSFIELD, CALIFORNIA

Prepared for:

PORTER & ASSOCIATES, INC.

October 2018

Prepared by:

RUETTGERS & SCHULER
CIVIL ENGINEERS

1800 30th Street, Suite 260
Bakersfield, California 93301

DRAFT (10/16/18)

Ian J. Parks, RCE 58155

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INTRODUCTION

The purpose of this study is to evaluate the potential traffic impact of a proposed commercial General Plan Amendment (GPA) and Zone Change located on the northeast corner of Hosking Avenue and Wible Road in Bakersfield, California (see Figures 1 and 2 for Vicinity and Location maps).

A. Land Use, Site and Study Area Boundaries

The 10-acre site is currently zoned for single family residential. The proposed change is for 10-acres of retail commercial (GC & C-2), with 73,196 square feet of retail commercial buildings as shown on the current site plan (see Figure 3, Site Plan). As shown on the site plan, the retail commercial buildings include a 5,500 square foot convenience market with gas pumps, a 59,346 square foot shopping center, 5,850 square feet of high-turnover sit-down restaurant use, and 5,000 square feet of fast-food with drive-through restaurant use.

The site is bounded by Hosking Avenue to the south, Wible Road to the west, and residential development to the north and east.

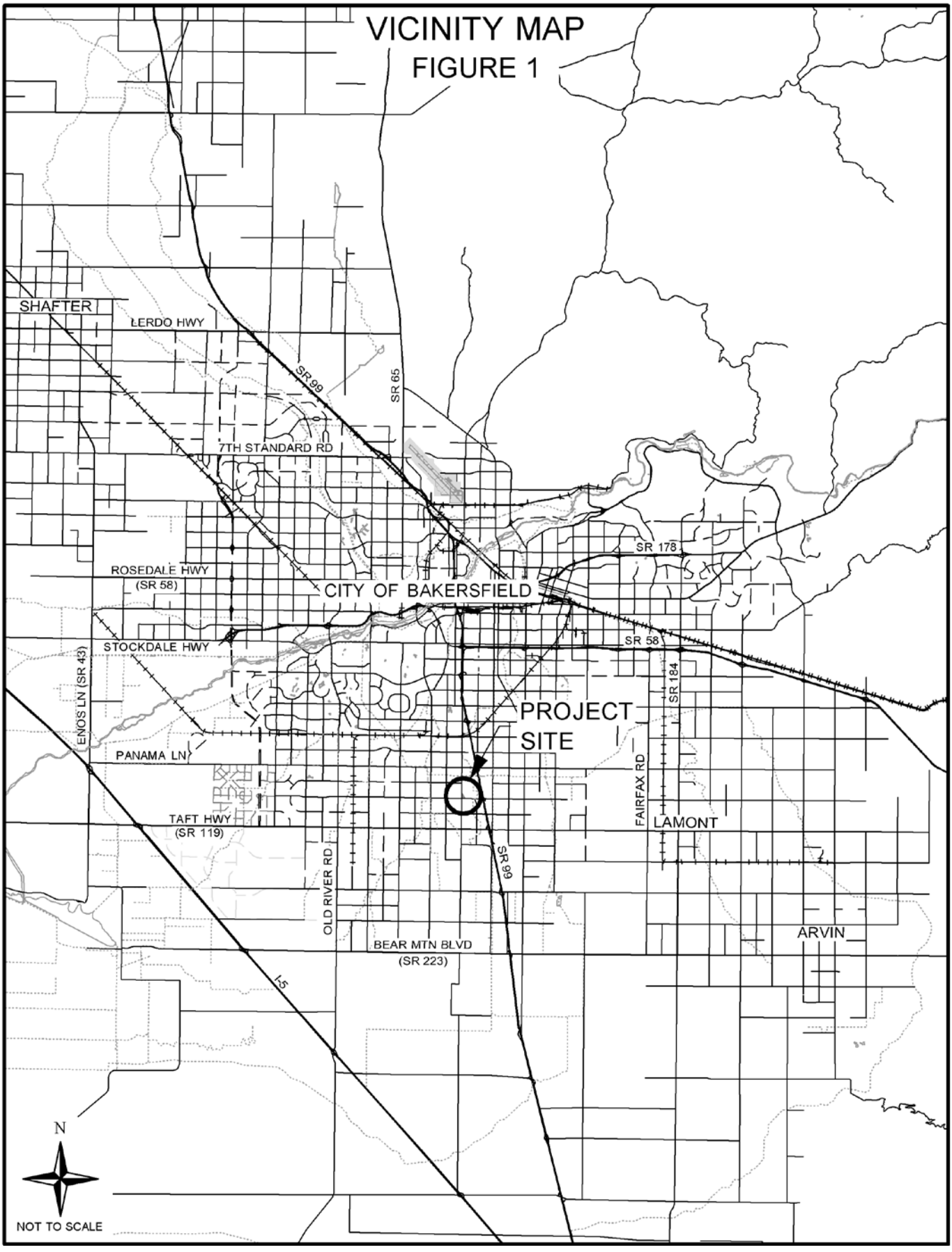
A total of 1 unsignalized intersection and 9 signalized intersections are included in the study. The scope of the study was developed in association with The City of Bakersfield Public Works Traffic Division, and Caltrans District 6.

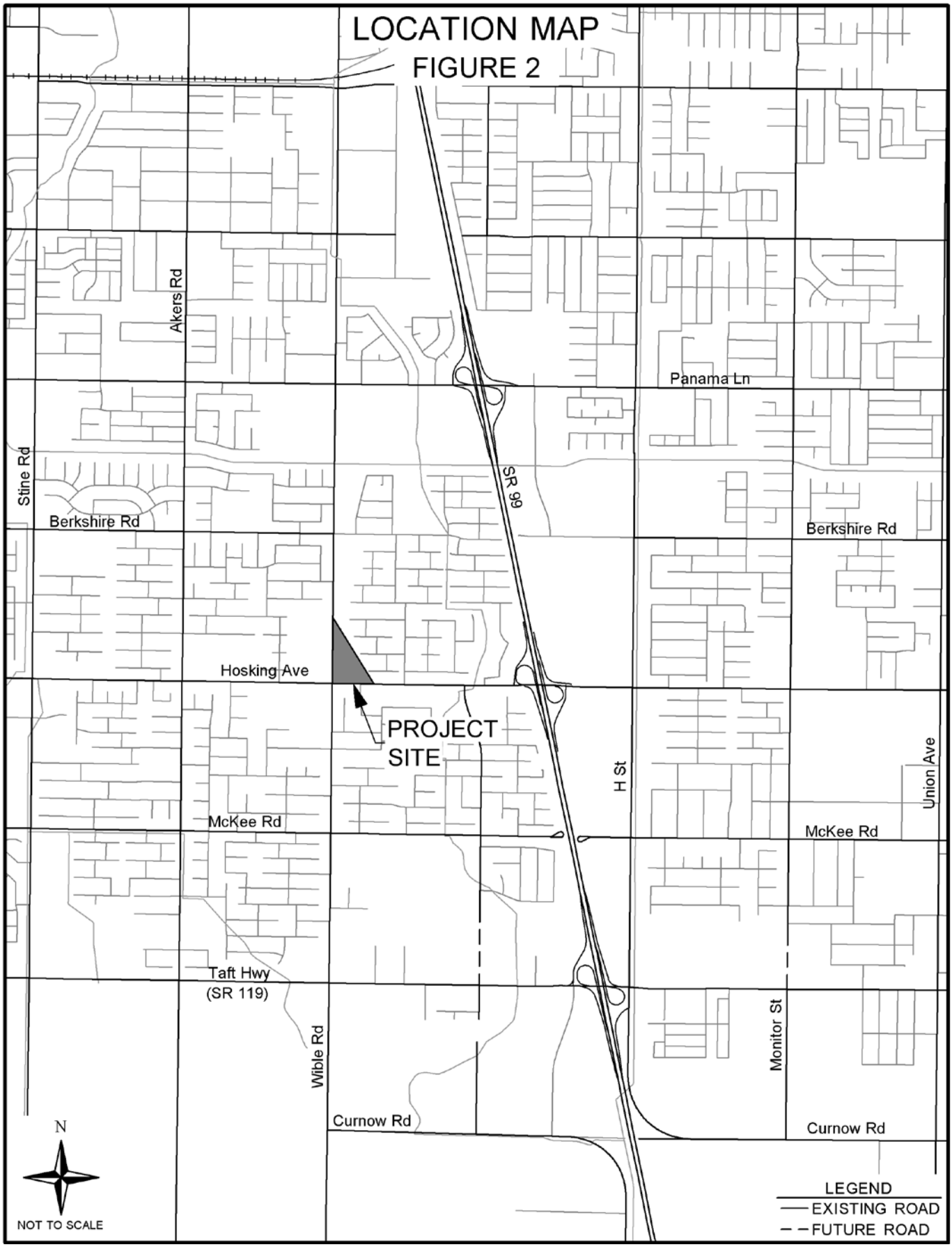
B. Existing Site Uses and Site Access

The project site currently includes two residences to the north as well as a residence to the east. There are also numerous vehicles and other small structures adjacent to the dividing wall between the project site and the residential community to the east. Access to the project is planned along Wible Road and Hosking Avenue.

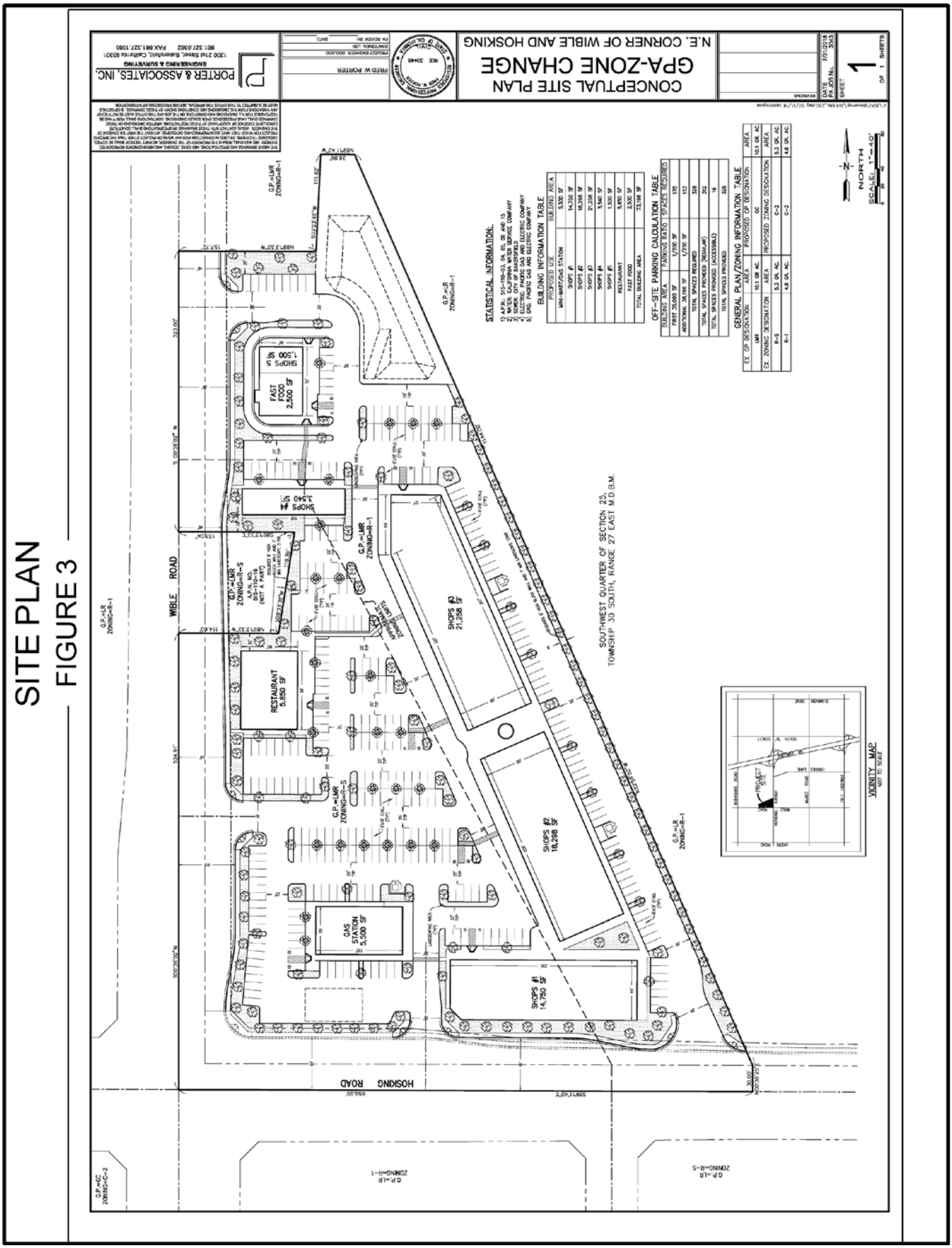
C. Existing Uses in the Vicinity of the Site

Existing land uses in the vicinity of the site include residential developments in all directions, Stonecreek Junior High School to the west, and a vacant lot directly south along the south side of Hosking Avenue.


VICINITY MAP
FIGURE 1
SHAFTER
LERDO HWY
SR 99
SR 65
7TH STANDARD RD
ROSEDALE HWY
(SR 58)
CITY OF BAKERSFIELD
SR 178
STOCKDALE HWY
SR 58
ENOS LN (SR 43)
SR 184
PROJECT
SITE
PANAMA LN
FAIRFAX RD
LAMONT
TAFT HWY
(SR 119)
OLD RIVER RD
SR 99
ARVIN
BEAR MTN BLVD
(SR 223)
I-5
N
NOT TO SCALE


LOCATION MAP
FIGURE 2
Akers Rd
Stine Rd
Berkshire Rd
Panama Ln
SR 99
Berkshire Rd
Hosking Ave
PROJECT SITE
H St
Union Ave
McKee Rd
McKee Rd
Taft Hwy
(SR 119)
Wible Rd
Monitor St
Curnow Rd
Curnow Rd
N
NOT TO SCALE
LEGEND
EXISTING ROAD
FUTURE ROAD

SITE PLAN
FIGURE 3



D. Roadway Descriptions

Akers Road is a north-south collector located midway between Stine Road and Wible Road. In the study area, Akers Road operates as a two-lane facility with a two-way left-turn lane. Akers Road provides access to residential land uses and some commercial land uses where it terminates at Ming Avenue.

Berkshire Road is an east-west collector located midway between Hosking Avenue and Panama Lane. It currently exists within the study area as a two-lane roadway at various stages of widening and improvement and provides access to residential land uses. Berkshire Road does not cross or connect with State Route 99.

Golden State Highway (State Route 99) is a north-south state highway that stretches almost the entire length of the Central Valley. Cities served include Bakersfield, Visalia, Fresno, Madera, Merced, Modesto, Stockton, and Sacramento. State Route 99 lies approximately two-thirds of a miles east of the project site where it operates as a 6-lane facility.

Hosking Avenue is an east-west arterial that operates as a two-to-four lane roadway at various stages of widening and improvement in the vicinity of the project. Hosking Avenue provides access primarily to residential and agricultural land uses, and has a recently constructed 5-lane interchange at State Route 99.

McKee Road is an east-west collector located midway between Taft Highway and Hosking Avenue. It currently exists within the study area as a two-lane roadway at various stages of widening and provides access primarily to residential land uses. McKee Road does not cross or connect with State Route 99.

Monitor Street is a north-south collector located midway between South H Street and South Union Avenue. It extends north from Hosking Avenue at Shannon Drive and provides access primarily to residential land uses. Monitor Street exists within the study area as a two-or-three lane roadway with improvements.

Panama Lane is designated as an arterial. It extends east from State Route 43 near Interstate 5 through the southern metropolitan Bakersfield area. It currently exists within the study area as a four-to-six lane roadway at various stages of widening and improvement and provides access to agricultural, residential and commercial land uses.

Taft Highway, an east-west roadway, is designated as an expressway west of State Route 99 (State Route 119) and as an arterial east of State Route 99. It currently exists as a two-lane roadway at various stages of widening adjacent to development between State Route 99 and South Union Avenue. Taft Highway continues as a two-lane roadway with graded shoulders east of South Union Avenue along the Panama Road alignment. Within the project vicinity, Taft Highway provides access from the communities of Greenfield, Weedpatch and Lamont to State Route 99.

PROJECT TRIP GENERATION AND DESIGN HOUR VOLUMES

The trip generation and design hour volumes shown in Table 1 were calculated using the Institute of Transportation Engineers (ITE) Trip Generation, 10th Edition, as well as data provided in the project proposal. The AM/PM rates and directional splits for ITE Land Use Codes 853 (Convenience Market with Gasoline Pumps), 820 (Shopping Center), 932 (High-Turnover Site-Down Restaurant), and 934 (Fast-Food Restaurant w/Drive-Thru) were used to estimate trip generation for weekday peak hour of adjacent street traffic.

Table 1
Project Trip Generation

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
853	Convenience Market with Gasoline Pumps	5.5 1000 sq ft GFA	624.2	3433	40.59	50% 112	50% 112	49.29	50% 136	50% 136
820	Shopping Center	59.346 1000 sq ft GLA	eq	4216	eq	62% 113	38% 69	eq	48% 177	52% 192
932	High-Turnover (Sit-Down) Restaurant	5.85 1000 sq ft GFA	112.18	656	9.94	55% 32	45% 26	9.77	62% 35	38% 22
934	Fast-Food Restaurant w/Drive-Thru	5 1000 sq ft GFA	470.95	2355	40.19	51% 102	49% 98	32.67	52% 85	48% 78
sub-total				10,660		359	305		433	428
Capture[1]		5%		533		18	15		22	21
Pass-by[2]		15%		731		22	14		32	32
Pass-by[3]		40%		2,315		86	84		88	86
Total				7,081		233	192		291	289

[1]Capture rate of 5%, per COB Subdivision & Design Manual, applied to all land uses.

[2]Pass-by rate of 15% applied to High-Turnover Restaurant and Shopping Center land uses only.

[3]Pass-by rate of 40% applied to Fast Food & Service Station land uses per COB Subdivision & Design Manual.

A pass-by rate of 15% was applied to the high-turnover restaurant and shopping center, and a pass-by rate of 40% was applied to the fast food restaurant and the service station, to account for trips which are made as intermediate stops between trip origin and ultimate destination. Pass-by trips are drawn from traffic passing the site, and therefore, do not add trips to the adjacent street system. The pass-by rates used for this study were based on City of Bakersfield guidelines.

A capture rate of 5% was applied to all land uses to account for trips between multiple land uses within the project. The capture rate used for this study was also developed based on City of Bakersfield guidelines.

TRIP DISTRIBUTION AND ASSIGNMENT

The trip distribution shown in Table 2 represents the likely movement of traffic accessing the project site by direction. Project traffic distribution was estimated based on a review of the proposed project land use and potential draw from population centers, as well as input from the City of Bakersfield's Traffic Division. Assignments of project peak hour traffic to the study intersections are shown in Figure 4.

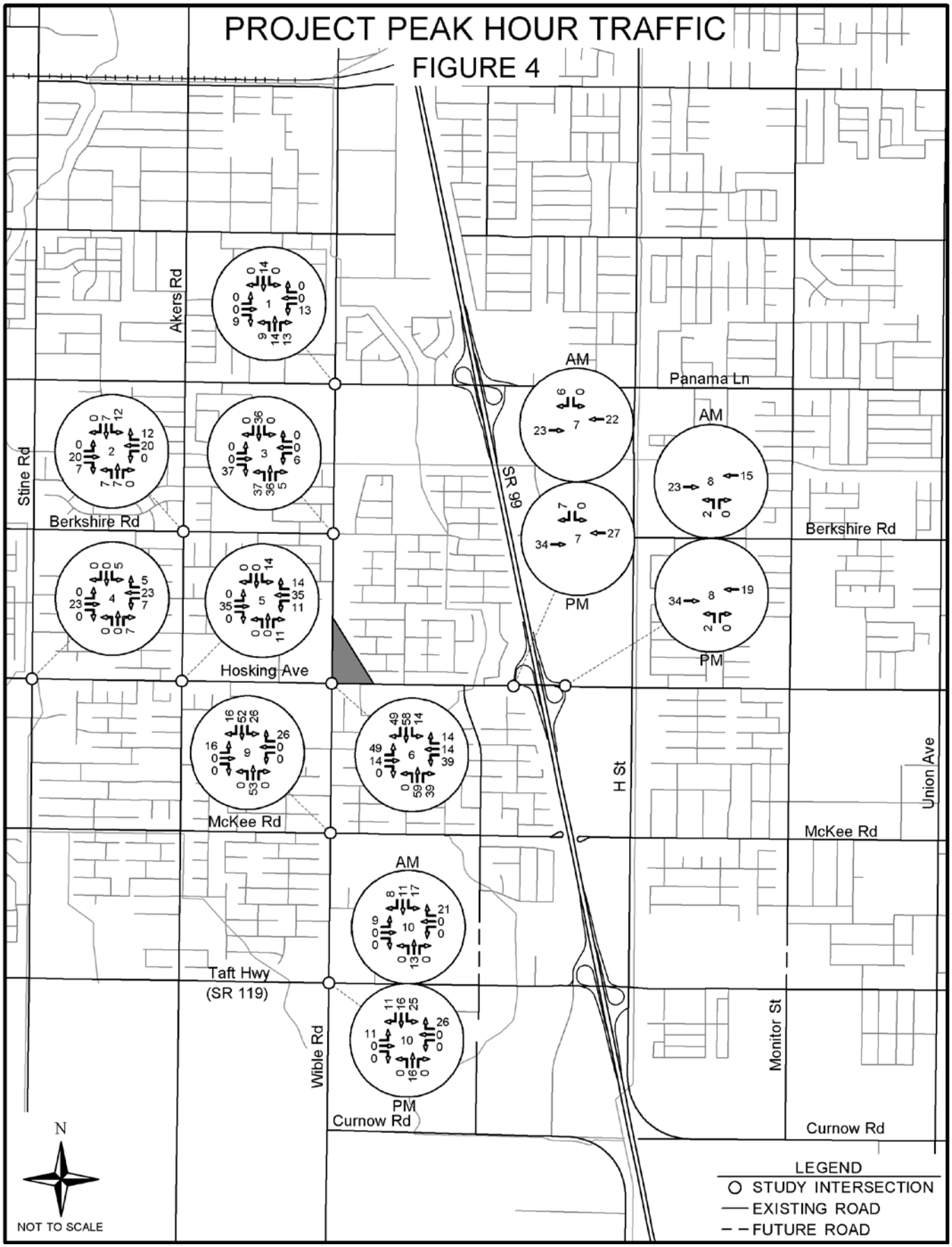
Table 2
Project Trip Distribution

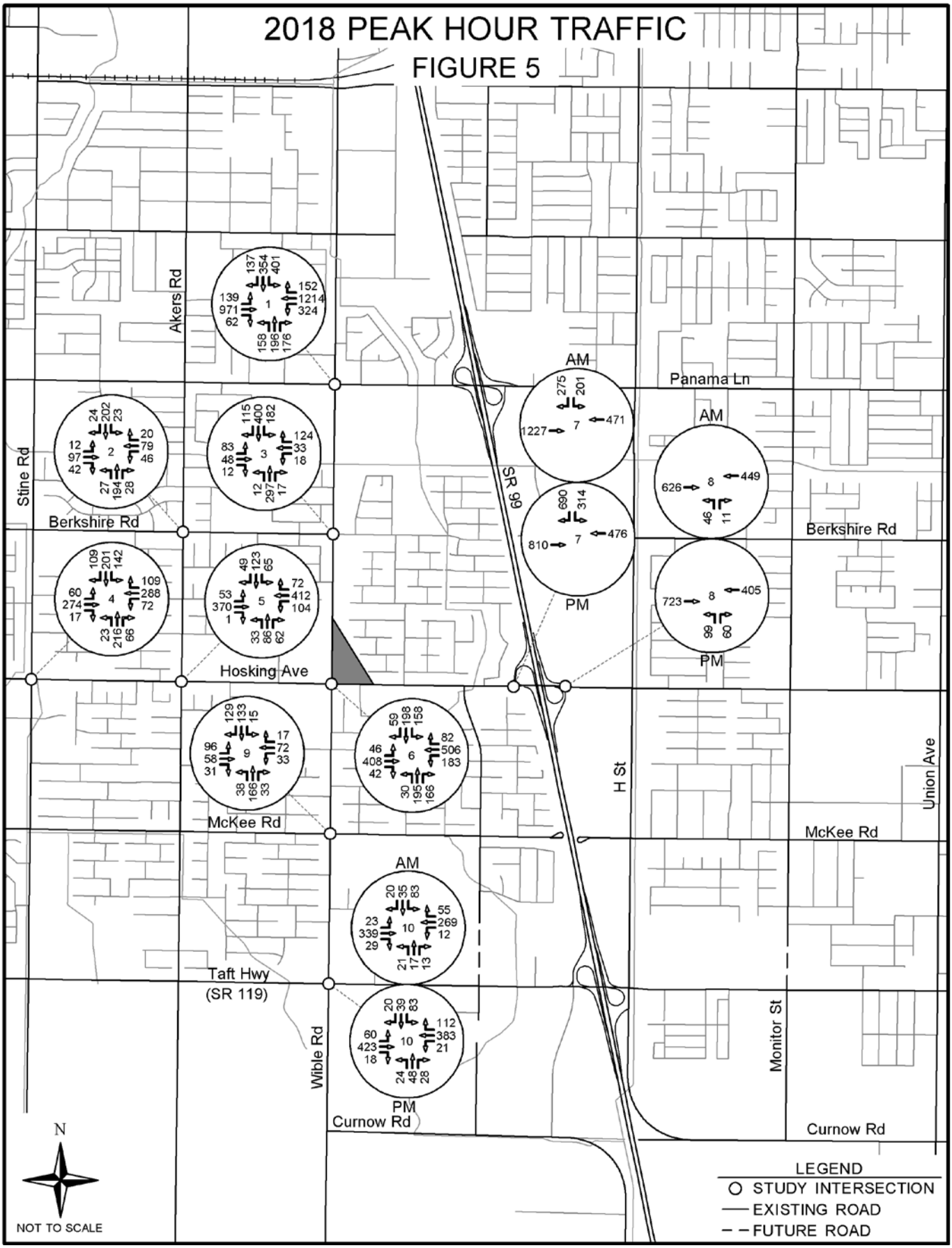
Direction	Percent	Roadway
North	25	Wible Road
South	20	Wible Road
East	25	Hosking Avenue
West	30	Hosking Avenue

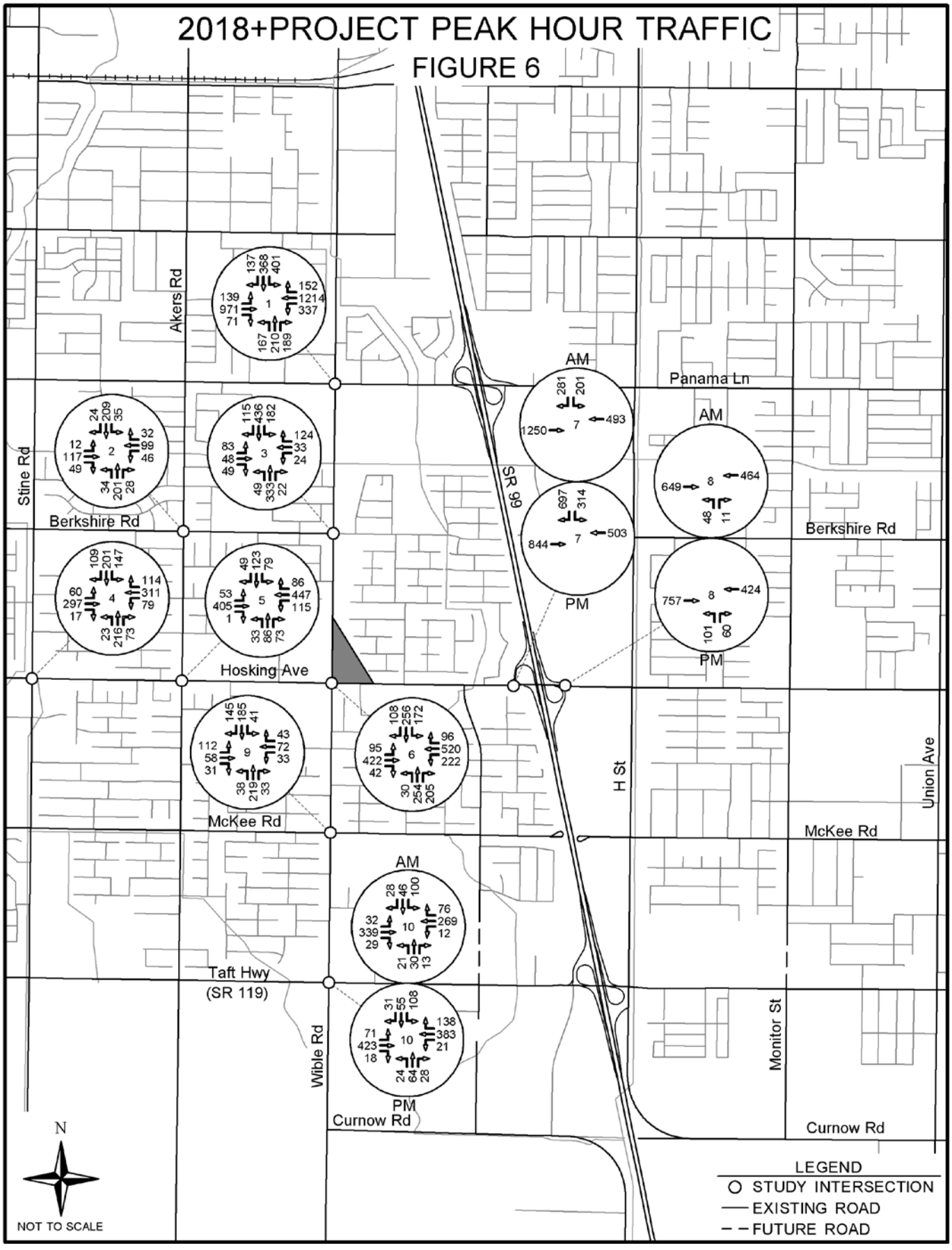
EXISTING AND FUTURE TRAFFIC

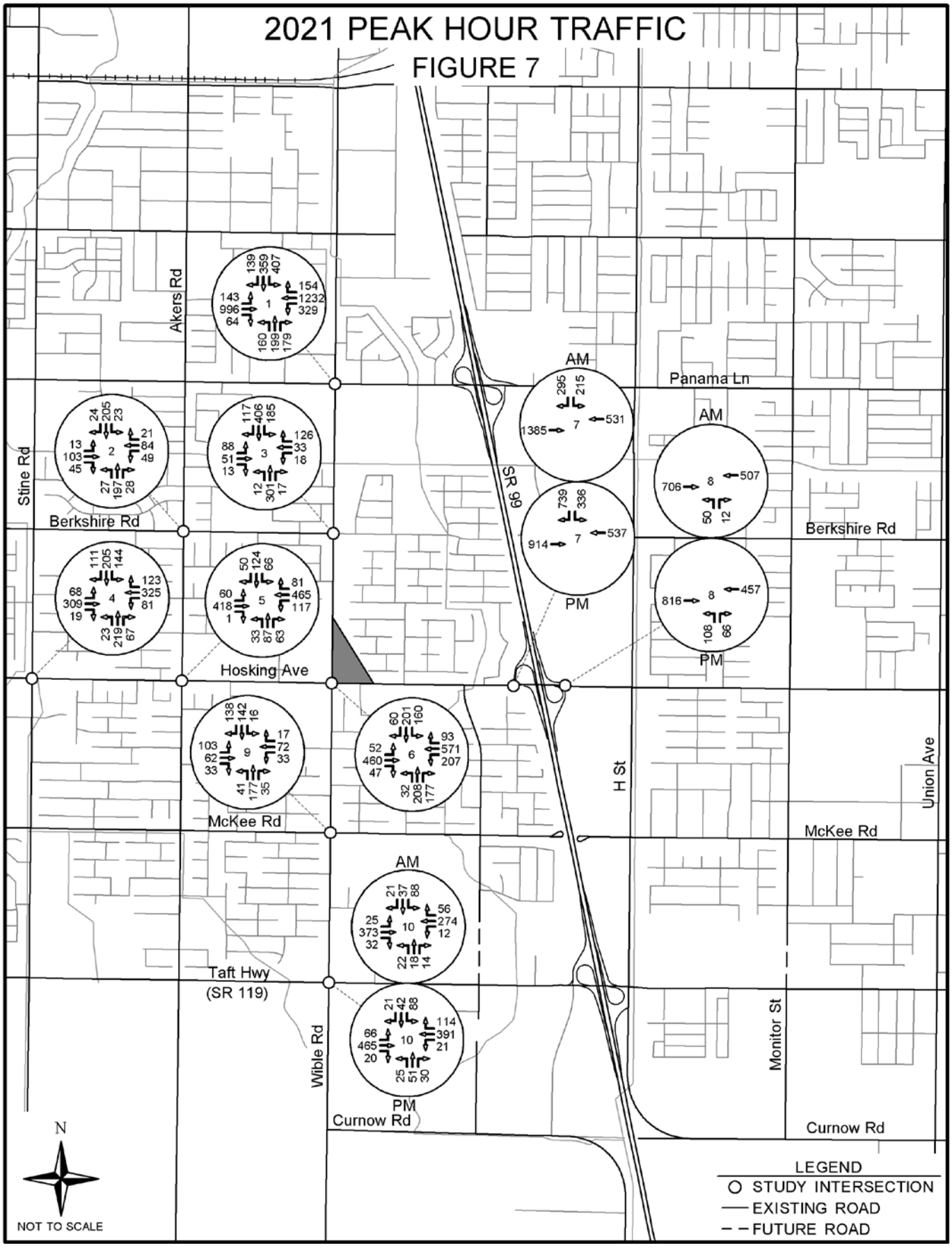
Existing weekday AM and PM peak hour volumes and turning movements were field measured at the study intersections in September 2018 (AM counts for state facilities only). Existing volumes are shown in Figure 5, and existing plus project volumes are presented in Figure 6. Figures 7 and 8 represent the build year (2021) and build year (2021) plus project traffic volumes.

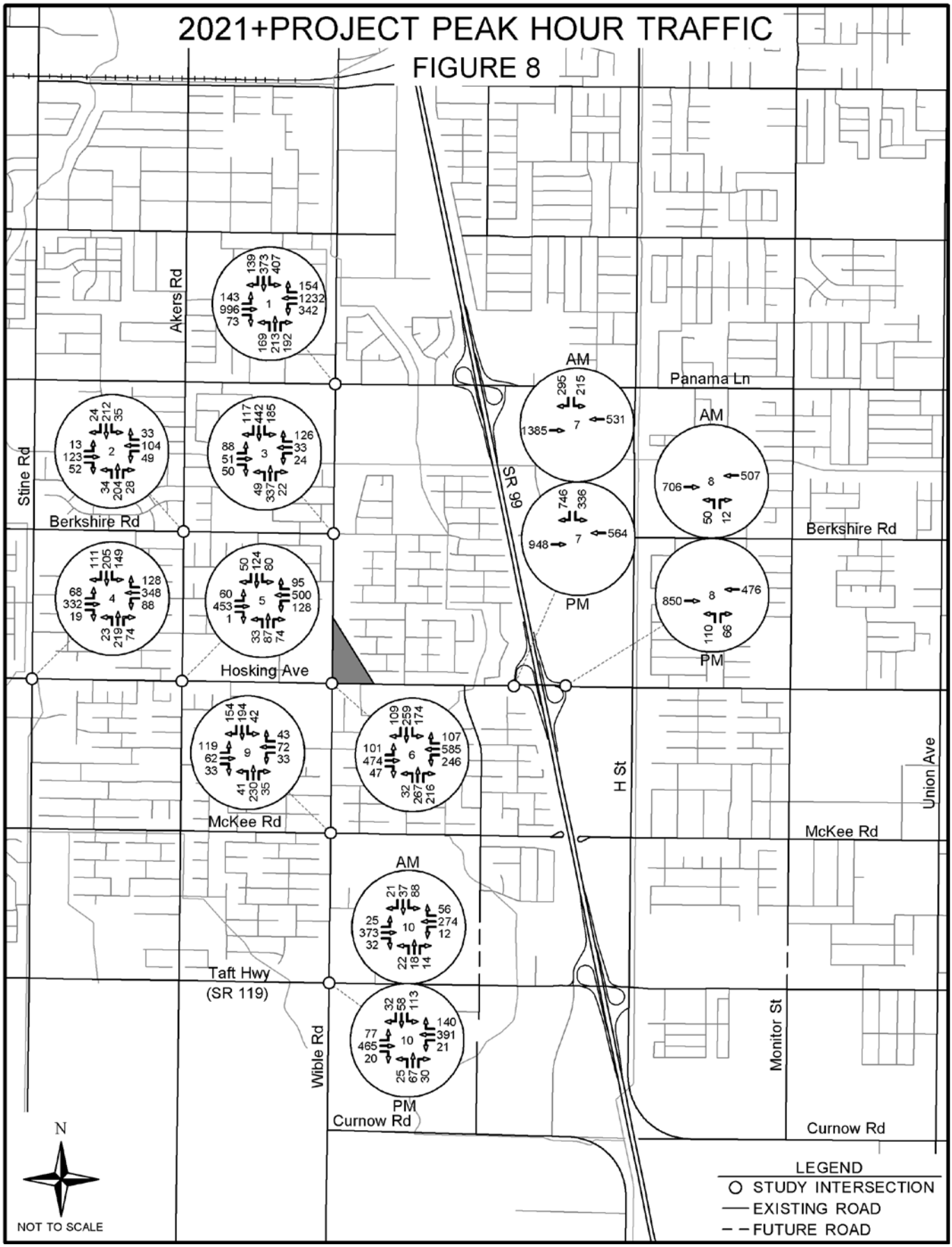
Average annual growth rates ranging between 0.2 and 4 percent were applied to existing peak hour volumes to estimate future volumes for the year 2035. These growth rates were estimated based on a review of existing development and KernCOG traffic model data. Cumulative traffic was also estimated for projects that would not yet be accounted for in the KernCOG traffic model. A list of active tentative projects, within a 2-mile radius of the project site is included in the appendix. A cumulative trip generation and distribution was then created and added to the future traffic volume estimates at the study intersections. Future peak hour volumes for the year 2035 are shown in Figure 9. Future plus project peak hour volumes are shown in Figure 10.

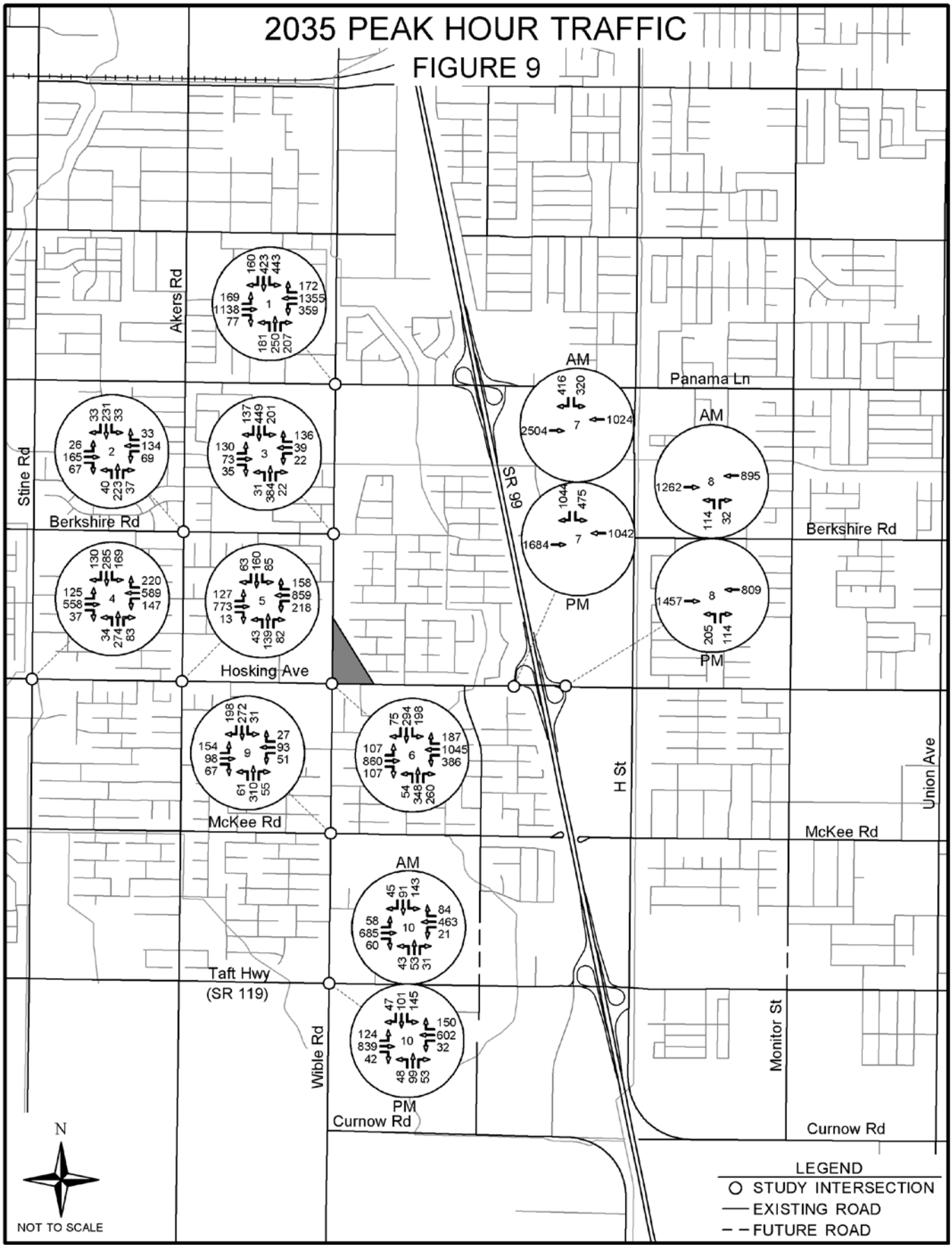

PROJECT PEAK HOUR TRAFFIC
FIGURE 4
Akers Rd
Stine Rd
Berkshire Rd
Hosking Ave
McKee Rd
Taft Hwy
(SR 119)
Wible Rd
Curnow Rd
SR 99
Panama Ln
Berkshire Rd
H St
Union Ave
McKee Rd
Monitor St
Curnow Rd
AM
PM
N
NOT TO SCALE
LEGEND
STUDY INTERSECTION
EXISTING ROAD
FUTURE ROAD

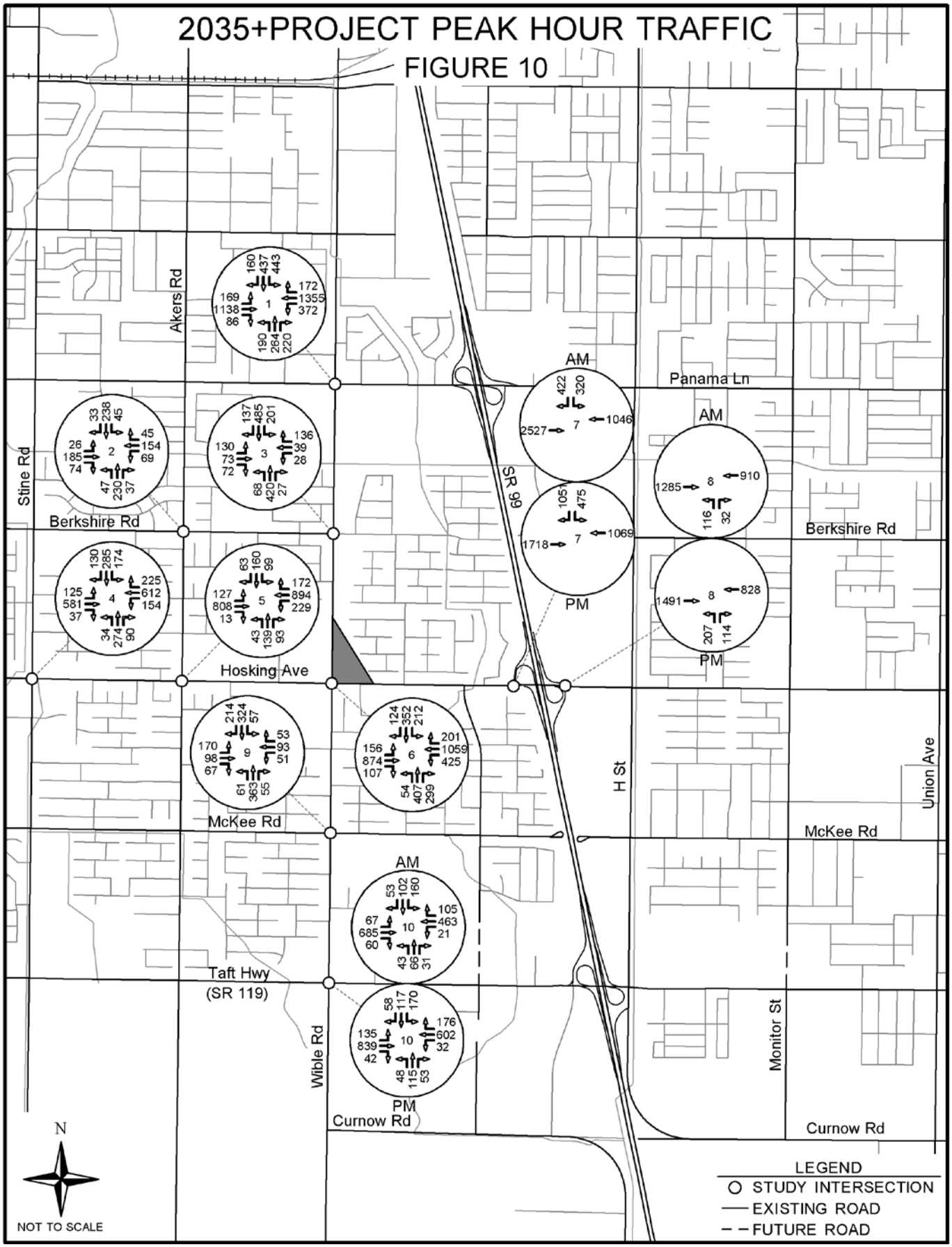

2018 PEAK HOUR TRAFFIC
FIGURE 5
Akers Rd
Stine Rd
Berkshire Rd
Hosking Ave
McKee Rd
Taft Hwy
(SR 119)
Wible Rd
Curnow Rd
SR 99
H St
Panama Ln
Berkshire Rd
McKee Rd
Union Ave
Monitor St
Curnow Rd
AM
PM
N
NOT TO SCALE
LEGEND
STUDY INTERSECTION
EXISTING ROAD
FUTURE ROAD


2018+PROJECT PEAK HOUR TRAFFIC
FIGURE 6
Akers Rd
Stine Rd
Berkshire Rd
Hosking Ave
McKee Rd
Taft Hwy
(SR 119)
Wible Rd
Curnow Rd
SR 99
H St
Panama Ln
Berkshire Rd
McKee Rd
Union Ave
Monitor St
Curnow Rd
AM
PM
N
NOT TO SCALE
LEGEND
STUDY INTERSECTION
EXISTING ROAD
FUTURE ROAD


2021 PEAK HOUR TRAFFIC
FIGURE 7
Akers Rd
Stine Rd
Berkshire Rd
Hosking Ave
McKee Rd
Taft Hwy
(SR 119)
Wible Rd
Curnow Rd
SR 99
H St
Panama Ln
Berkshire Rd
McKee Rd
Union Ave
Monitor St
Curnow Rd
AM
PM
N
NOT TO SCALE
LEGEND
STUDY INTERSECTION
EXISTING ROAD
FUTURE ROAD


2021+PROJECT PEAK HOUR TRAFFIC
FIGURE 8
Akers Rd
Stine Rd
Berkshire Rd
Hosking Ave
McKee Rd
Taft Hwy
(SR 119)
Wible Rd
Curnow Rd
SR 99
H St
Panama Ln
Berkshire Rd
McKee Rd
Union Ave
Monitor St
Curnow Rd
AM
PM
N
NOT TO SCALE
LEGEND
STUDY INTERSECTION
EXISTING ROAD
FUTURE ROAD


2035 PEAK HOUR TRAFFIC
FIGURE 9
Akers Rd
Stine Rd
Berkshire Rd
Hosking Ave
McKee Rd
Taft Hwy
(SR 119)
Wible Rd
Curnow Rd
SR 99
H St
Panama Ln
Berkshire Rd
McKee Rd
Union Ave
Monitor St
Curnow Rd
AM
PM
N
NOT TO SCALE
LEGEND
STUDY INTERSECTION
EXISTING ROAD
FUTURE ROAD


2035+PROJECT PEAK HOUR TRAFFIC
FIGURE 10
Akers Rd
Stine Rd
Berkshire Rd
Hosking Ave
McKee Rd
Taft Hwy
(SR 119)
Wible Rd
Curnow Rd
Panama Ln
SR 99
H St
Union Ave
Monitor St
AM
PM
N
NOT TO SCALE
LEGEND
STUDY INTERSECTION
EXISTING ROAD
FUTURE ROAD

SIGNIFICANT IMPACT CRITERIA

The City of Bakersfield utilizes three criteria to evaluate whether project traffic would cause a significant impact and therefore require mitigation. First, a significant impact would be found when the addition of project traffic causes the level of service of an intersection or roadway segment to drop below LOS C. Second, a significant impact would be found when an intersection or roadway segment operates below LOS C without project traffic and the addition of project traffic causes further degradation in the level of service. Third, for intersections that currently operate at LOS D, E or F, mitigation would be required when the addition of project traffic in the future year creates an additional control or an average delay per vehicle of more than 5 seconds.

These criteria have been adopted by the City of Bakersfield and are contained in various planning documents, such as the Circulation Element of the Metropolitan Bakersfield 2010 General Plan and Kern County's Congestion Management Program.

INTERSECTION ANALYSIS

A capacity analysis of the study intersections was conducted using Synchro 9 software from Trafficware. This software utilizes the capacity analysis methodology in the Transportation Research Board's 2010 Highway Capacity Manual. The analysis was performed for the weekday AM and PM peak hours for each of the following traffic scenarios (AM analyzed for state facilities only):

- Existing (2018) Traffic
- Existing (2018) + Project Traffic
- Build Year (2021)
- Build Year (2021) + Project
- Future (2035) Cumulative Traffic
- Future (2035) Cumulative + Project Traffic

Level of service (LOS) criteria for unsignalized and signalized intersections, as described in HCM 2010, are presented in the tables below. Level of service analysis results for the study intersections are presented in Tables 3 and 4. The intersection peak hour level of service goal for the City of Bakersfield is LOS C or better.

LEVEL OF SERVICE CRITERIA
UNSIGNALIZED INTERSECTION

Level of Service	Average Control Delay (sec/veh)	Expected Delay to Minor Street Traffic
A	≤ 10	Little or no delay
B	> 10 and ≤ 15	Short traffic delays
C	> 15 and ≤ 25	Average traffic delays
D	> 25 and ≤ 35	Long traffic delays
E	> 35 and ≤ 50	Very long traffic delays
F	> 50	Extreme delays

LEVEL OF SERVICE CRITERIA
SIGNALIZED INTERSECTIONS

Level of Service	Average Control Delay (sec/veh)	Volume-to-Capacity Ratio
A	≤ 10	< 0.60
B	> 10 and ≤ 20	0.61 - 0.70
C	> 20 and ≤ 35	0.71 - 0.80
D	> 35 and ≤ 55	0.81 - 0.90
E	> 55 and ≤ 80	0.91 - 1.00
F	> 80	> 1.00

Table 3
Intersection Level of Service
Weekday AM Peak Hour

#	Intersection	Control Type	2018	2018+ Project	2023 (Build Yr)	2023+ Project (Build Yr)	2035 Cum	2035 Cum+ Project	2035+Proj w/Mit[1]
7	SR 99 SB Off Ramp & Hosking Ave	Signal	B	B	B	B	D (50.4)	D (52.8)	C
8	SR 99 NB Off Ramp & Hosking Ave	Signal	A	A	A	A	A	A	-
10	Wible Rd & Taft Hwy (SR 119)	Signal	B	B	B	B	C	C	B

NOTE: Cum=Background Cumulative Traffic; Mit=Mitigation
[1]See Table 7 for Mitigation Measures.
[2]Mitigation due to PM level of service.

Table 4
Intersection Level of Service
Weekday PM Peak Hour

#	Intersection	Control Type	2018	2018+ Project	2023 (Build Yr)	2023+ Project (Build Yr)	2035 Cum	2035 Cum+ Project	2035+Proj w/Mit[1]
1	Wible Rd & Panama Ln	Signal	D (38.7)	D (39.3)	D (44.1)	D (44.5)	D (44.7)	D (45.4)	-[2]
2	Akers St & Berkshire Rd	Signal	C	C	C	C	C	C	-
3	Wible Rd & Berkshire Rd	Signal	C	C	C	C	C	C	-
4	Stine Rd & Hosking Ave	Signal	C	C	C	C	E (69.1)	E (69.4)	C
5	Akers Rd & Hosking Ave	Signal	C	C	C	C	C	C	-
6	Wible Rd & Hosking Ave	Signal	C	D (38.6)	D (35.4)	D (39.6)	F (84.1)	F (84.9)	C
7	SR 99 SB Off Ramp & Hosking Ave	Signal	B	B	B	B	E (56.4)	E (61.0)	C
8	SR 99 NB Off Ramp & Hosking Ave	Signal	A	A	A	A	A	A	-
9	Wible Rd & McKee Rd	All Way Stop	B	B	B	B	D (50.4)	E (37.9)	C
10	Wible Rd & Taft Hwy (SR 119)	Signal	C	C	B	B	E (69.9)	E (70.9)	C

NOTE: Cum=Background Cumulative Traffic; Mit=Mitigation
[1]See Table 7 for Mitigation Measures.
[2]No mitigation since addition of project traffic does not add more than 5 seconds of delay.

TRAFFIC SIGNAL WARRANT ANALYSIS

Weekday PM peak hour signal warrants were evaluated for the unsignalized intersection within the scope of the study based on the 2014 edition of the California Manual on Uniform Traffic Control Devices (2014 CA MUTCD). Signal warrants assess delay to traffic on minor street approaches at major street intersections. Signal warrant analysis results are presented in Table 5.

Table 5
Traffic Signal Warrants
Weekday PM Peak Hour

Intersection #9 - Wible Road & McKee Road						
Year	Without Project			With Project		
	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
2018	514	185	NO	661	201	NO
2021	549	198	NO	696	214	NO
2035	927	319	YES	1074	335	YES

It is important to note that a signal warrant defines the minimum condition under which signalization of an intersection might be warranted. Meeting this threshold does not suggest traffic signals are required, but rather, that other traffic factors and conditions be considered in order to determine whether signals are truly justified.

It is also noted that signal warrants do not necessarily correlate with level of service. An intersection may satisfy a signal warrant condition and operate at or above LOS C, or operate below LOS C and not meet signal warrant criteria.

ROADWAY ANALYSIS

Volume-to-capacity (v/c) ratios for roadway segments in the study area are shown in Table 6. A volume-to-capacity ratio of greater than 0.80 corresponds to a LOS of less than C, as defined in HCM 2010. The City of Bakersfield's operational goal for roadway capacity is LOS C or better.

Table 6
Roadway Capacity

Street	2018[1]	Project ADT	2021 ADT	2021+ Project	2035 ADT	2035+ Project	Existing Capacity	Mitigated Capacity	v/c(Ex) 2018	v/c(Ex) 2018+ Proj	v/c(Fu) 2021	v/c(Fu) 2021+ Proj	v/c(Fu) 2035	v/c(Fu) 2035+ Proj	v/c(Mit) 2035+Proj
Berkshire Rd: Stine Rd - Wible Rd	3149	903	3347	4250	4448	5351	15000	-	0.21	0.27	0.22	0.36	0.30	0.36	-
Hosking Ave: Stine Rd - Wible Rd	13507	1538	15242	16780	26792	28330	40000	-	0.34	0.38	0.38	0.71	0.67	0.71	-
Hosking Ave: Wible Rd - SR 99	17810	1636	20097	21733	35321	36957	60000	-	0.30	0.32	0.33	0.62	0.59	0.62	-
Akers Rd: Hosking Av - Panama Ln	8878	342	8973	9315	9429	9771	15000	-	0.59	0.61	0.60	0.65	0.63	0.65	-
Wible Rd: Hosking Av - Panama Ln	10283	2967	10912	13879	14399	17366	30000	-	0.34	0.44	0.36	0.58	0.48	0.58	-
Wible Rd: Taft Hwy (SR 119) - Hosking Ave	9861[2]	2381	10515	12896	14189	16570	15000	30000	0.66	**0.82**	0.70	**1.10**	**0.95**	**1.10**	0.55

[1]Published ADT data
[2]2018 Data not available; data grown out from previous available year.

MITIGATION

The Regional Transportation Impact Fee (RTIF) Program imposes fees on new development and includes a Regional Transportation Facilities List and Transportation Impact Fee Schedule. The Facilities List includes transportation improvements which are needed by the year 2035 to maintain a LOS C or better for new growth or to prevent the degradation of facilities which currently operate below LOS C. The Fee Schedule sets forth fees to be collected from new development to mitigate the need for transportation improvements.

Intersection and roadway improvements needed by the year 2035 to maintain or improve the operational level of service of the street system in the vicinity of the project are presented in Tables 7 and 8. Additionally, Tables 7 and 8 identify local mitigation improvements not covered by the RTIF Program or adjacent development, and the project's percent share for the cost of these improvements if needed.

Table 7
Future Intersection Improvements and Local Mitigation

#	Intersection	Total Improvements Required by 2035	Local Mitigation *(Improvements not covered by RTIF or adjacent development)*	Project Share for Local Mitigation
4	Stine Rd & Hosking Ave	Change EBT/R to 1 EBT, 1 EBR Change WBT/R to 1 WBT, 1 WBR Add: 1 EBT, 1 EBL, 1 WBT, 1 WBL, 2 NBT, 1 NBL, 2 SBT, 1 SBL	-[1]	N/A
6	Wible Rd & Hosking Ave	Change EBT/R to 1 EBT, 1 EBR Add: 1 EBT, 1 EBL, 1 WBT, 1 WBL, 2 NBT, 1 NBL, 2 SBT, 1 SBL	-[1]	N/A
7	SR 99 SB Off Ramp & Hosking Ave	Add 1 EBT[2]	-[1]	N/A
9	Wible Rd & McKee Rd	Install Signal Change NBT/R to 1 NBT, 1 NBR	-[1]	N/A
10	Wible Rd & Taft Hwy (SR 119)	Change SBT/R/L to 2 SBL, 3 SBT, 1 SBR Add: 2 EBT, 1 EBL, 2 WBT, WBL	-[1]	N/A

NOTES: NB=Northbound; L=Left-Turn Lane; SB=Southbound; T=Through Lane; EB=Eastbound; R=Right-Turn Lane; WB=Westbound

[1]All improvements are included in the Fee Program facilities list.

[2]Striping only.

Table 8
Future Roadway Improvements and Local Mitigation

Roadway Segment	Total Improvements Required by 2040	Local Mitigation (Improvements not covered by RTIF or adjacent development)
Wible Road: Taft Hwy (SR 119) to Hosking Ave	Add 2 Lanes	-

This study evaluated the potential traffic impact of a proposed commercial General Plan Amendment (GPA) and Zone Change located on the northeast corner of Hosking Avenue and Wible Road. Study findings are summarized below.

Intersection Level of Service

With the exception of the intersection at Wible Road & Panama Lane, all intersections within the scope of the study currently operate at or above LOS C during the weekday peak hours. With the addition of project traffic in the existing year, it is anticipated that Wible Road & Hosking Avenue will operate below level of service C.

It is anticipated that all intersections operating at or above LOS C in the existing plus project condition will continue to do so in the 2023 build year and 2023 build year plus project conditions.

By 2035, four additional intersections are anticipated to operate below a level of service C prior to the addition of project traffic (Stine Road & Hosking Avenue, SR 99 SB Off Ramp & Hosking Avenue, Wible Road & McKee Road, and Wible Road & Taft Highway/State Route 119). All other intersections operating at or above LOS C are anticipated to continue to do so with the addition of project traffic.

All study intersections meeting City of Bakersfield significant impact criteria can be mitigated to operate at LOS C during the weekday peak hours in the year 2035 through measures included in the Regional Transportation Impact Fee program.

Roadway Capacity

All roadway segments within the scope of the study currently operate at or above LOS C. It is anticipated that the roadway segment of Wible Road between Taft Highway (SR 119) and Hosking Avenue will operate below LOS C with the addition of project traffic in the existing year.

It is anticipated that all roadway segments operating at or above LOS C in the existing plus project condition will continue to do so through the future year 2035 and 2035 plus project conditions.

The segment of Wible Road between Taft Highway (SR 119) and Hosking Avenue, which meets the City of Bakersfield's significant impact criteria, can be mitigated to operate at an acceptable level of service through measures included in the Regional Transportation Impact Fee program.

CONCLUSION

Five study intersections and one roadway segment were identified to need improvements by the year 2035 in order to maintain acceptable levels of service (shown in Tables 7and 8). These improvements are included on the RTIF facilities list. Provided the RTIF improvements are constructed, it is anticipated that the proposed commercial General Plan Amendment (GPA) and Zone Change will have minimal impact on traffic operations in the vicinity of the project.

REFERENCES

1. California Manual on Uniform Traffic Control Devices for Streets and Highways, 2014 Edition, State of California, California State Transportation Agency, Department of Transportation (Caltrans), 2014
2. Highway Capacity Manual, Transportation Research Board, 2010
3. Traffic Count Database System (TCDS), Kern Council of Governments (Kern COG)
4. Trip Generation Manual, 9th Edition, Institute of Transportation Engineers (ITE), 2012

APPENDIX

Appendix III

AERMOD Criteria Pollutant Impacts

Project Criteria Pullutant Impact Model Results

MAX	1-HR	3-HR	8-HR	24-HR	ANNUAL
CO	120.5534		48.68663		
NOX	151.0154				10.59897
PM2.5				1.8857	0.69447
PM10				2.93501	0.86316
SOX	0.19818	0.1173		0.04727	0.01391

Standard	1-HR	3-HR	8-HR	24-HR	ANNUAL
CO	23,000		10,000		
NOX	188				57
PM2.5				35	12
PM10				50	20
SOX	196	1300		105	78

Pass/Fail	1-HR	3-HR	8-HR	24-HR	ANNUAL
CO	PASS		PASS		
NOX	PASS				PASS
PM2.5				PASS	PASS
PM10				PASS	PASS
SOX	PASS	PASS		PASS	PASS

Appendix IV

Project Specific U.S. EPA VISCREEN Model Results

Wible-Hosking - Domeland

Visual Effects Screening Analysis for
Source: Wible-Hosking Commercial
Class I Area: Domeland Wilderness

*** Level-1 Screening ***

Input Emissions for

Particulates	0.00	TON/YR
NOx (as NO2)	0.00	TON/YR
Primary NO2	0.00	TON/YR
Soot	0.00	TON/YR
Primary SO4	0.00	TON/YR

**** Default Particle Characteristics Assumed

Transport Scenario Specifications:

Background Ozone:	0.04 ppm
Background Visual Range:	249.00 km
Source-Observer Distance:	83.10 km
Min. Source-Class I Distance:	83.10 km
Max. Source-Class I Distance:	116.10 km
Plume-Source-Observer Angle:	11.25 degrees
Stability:	6
Wind Speed:	1.00 m/s

R E S U L T S

Asterisks (*) indicate plume impacts that exceed screening criteria

Maximum Visual Impacts INSIDE Class I Area
Screening Criteria ARE NOT Exceeded

					Delta E		Contrast	
Backgrnd	Theta	Azi	Distance	Alpha	Crit	Plume	Crit	Plume
SKY	10.	144.	116.1	25.	2.00	0.000	0.05	0.000
SKY	140.	144.	116.1	25.	2.00	0.000	0.05	0.000
TERRAIN	10.	144.	116.1	25.	2.00	0.000	0.05	0.000
TERRAIN	140.	144.	116.1	25.	2.00	0.000	0.05	0.000

Maximum Visual Impacts OUTSIDE Class I Area
Screening Criteria ARE NOT Exceeded

					Delta E		Contrast	
Backgrnd	Theta	Azi	Distance	Alpha	Crit	Plume	Crit	Plume
SKY	10.	0.	1.0	169.	5.47	0.000	0.12	0.000
SKY	140.	0.	1.0	169.	3.49	0.000	0.12	0.000
TERRAIN	10.	0.	1.0	169.	4.88	0.000	0.12	0.000
TERRAIN	140.	0.	1.0	169.	3.21	0.000	0.12	0.000

Wible-Hosking - San Rafael

Visual Effects Screening Analysis for
Source: Wible-Hosking Commercial
Class I Area: San Rafael Wilderness

*** Level-1 Screening ***

Input Emissions for

Particulates	0.00	TON/YR
NOx (as NO2)	0.00	TON/YR
Primary NO2	0.00	TON/YR
Soot	0.00	TON/YR
Primary SO4	0.00	TON/YR

**** Default Particle Characteristics Assumed

Transport Scenario Specifications:

Background Ozone:	0.04 ppm
Background Visual Range:	243.00 km
Source-Observer Distance:	78.80 km
Min. Source-Class I Distance:	78.80 km
Max. Source-Class I Distance:	106.70 km
Plume-Source-Observer Angle:	11.25 degrees
Stability:	6
Wind Speed:	1.00 m/s

R E S U L T S

Asterisks (*) indicate plume impacts that exceed screening criteria

Maximum Visual Impacts INSIDE Class I Area
Screening Criteria ARE NOT Exceeded

					Delta E		Contrast	
Backgrnd	Theta	Azi	Distance	Alpha	Crit	Plume	Crit	Plume
SKY	10.	141.	106.7	28.	2.00	0.000	0.05	0.000
SKY	140.	141.	106.7	28.	2.00	0.000	0.05	0.000
TERRAIN	10.	141.	106.7	28.	2.00	0.000	0.05	0.000
TERRAIN	140.	141.	106.7	28.	2.00	0.000	0.05	0.000

Maximum Visual Impacts OUTSIDE Class I Area
Screening Criteria ARE NOT Exceeded

					Delta E		Contrast	
Backgrnd	Theta	Azi	Distance	Alpha	Crit	Plume	Crit	Plume
SKY	10.	155.	140.1	14.	2.00	0.000	0.05	0.000
SKY	140.	155.	140.1	14.	2.00	0.000	0.05	0.000
TERRAIN	10.	0.	1.0	169.	4.27	0.000	0.10	0.000
TERRAIN	140.	0.	1.0	169.	2.76	0.000	0.10	0.000

Appendix V

HARP Health Risk Impacts – MEIR

**HARP - Air Dispersion Modeling and Risk Tool v18159 - MEIR Construction Cancer Risk
**1/22/2019
**Exported Risk Results

REC	X	Y	RISK_SUM	SCENARIO	INHAL_RISK
3618	314603.9	3906316	3.08E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	3.08E-06
3617	314607.2	3906334	3.07E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	3.07E-06
3623	314567.3	3906249	3.02E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	3.02E-06
1965	314593.5	3906333	3.00E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	3.00E-06
3622	314567.8	3906272	2.99E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.99E-06
3616	314610.6	3906352	2.99E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.99E-06
3619	314586.4	3906317	2.97E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.97E-06
3624	314566.7	3906226	2.94E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.94E-06
3631	314654.3	3906157	2.90E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.90E-06
3621	314568.4	3906294	2.90E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.90E-06
3632	314676.7	3906156	2.88E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.88E-06
3630	314632	3906157	2.82E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.82E-06
3615	314590.2	3906352	2.79E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.79E-06
3620	314569	3906317	2.78E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.78E-06
3633	314699	3906156	2.75E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.75E-06
3625	314566.1	3906203	2.72E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.72E-06
1964	314568.5	3906333	2.63E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.63E-06
116	314540.1	3906264	2.60E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.60E-06
3629	314609.7	3906157	2.59E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.59E-06
143	314540.1	3906289	2.55E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.55E-06
87	314540.1	3906239	2.55E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.55E-06
3634	314721.3	3906155	2.52E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.52E-06
1800	314662.7	3906140	2.52E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.52E-06
1801	314687.7	3906140	2.49E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.49E-06
3614	314569.8	3906352	2.45E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.45E-06
1799	314637.7	3906140	2.43E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.43E-06
3613	314570.4	3906373	2.41E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.41E-06
170	314540.1	3906314	2.39E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.39E-06
58	314540.1	3906214	2.38E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.38E-06
1802	314712.7	3906140	2.37E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.37E-06
3612	314571	3906394	2.36E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.36E-06
3626	314565.6	3906181	2.30E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.30E-06
1798	314612.7	3906140	2.21E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.21E-06
3635	314743.6	3906155	2.20E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.20E-06
3628	314587.3	3906158	2.18E-06	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	2.18E-06

HIGHEST RISK

**HARP - Air Dispersion Modeling and Risk Tool v18159 - MEIR Construction Chronic (non-cancer) Risk
**1/22/2019
**Exported Risk Results

REC	X	Y	SCENARIO	RESP	MAXHI	
3618	314603.9	3906316	NonCancerChronicDerived_InhSoilDermMMilk	0.000625	0.000625	HIGHEST RISK
3617	314607.2	3906334	NonCancerChronicDerived_InhSoilDermMMilk	0.000622	0.000622	
3623	314567.3	3906249	NonCancerChronicDerived_InhSoilDermMMilk	0.000613	0.000613	
1965	314593.5	3906333	NonCancerChronicDerived_InhSoilDermMMilk	0.000609	0.000609	
3622	314567.8	3906272	NonCancerChronicDerived_InhSoilDermMMilk	0.000607	0.000607	
3616	314610.6	3906352	NonCancerChronicDerived_InhSoilDermMMilk	0.000607	0.000607	
3619	314586.4	3906317	NonCancerChronicDerived_InhSoilDermMMilk	0.000602	0.000602	
3624	314566.7	3906226	NonCancerChronicDerived_InhSoilDermMMilk	0.000597	0.000597	
3631	314654.3	3906157	NonCancerChronicDerived_InhSoilDermMMilk	0.000589	0.000589	
3621	314568.4	3906294	NonCancerChronicDerived_InhSoilDermMMilk	0.000588	0.000588	
3632	314676.7	3906156	NonCancerChronicDerived_InhSoilDermMMilk	0.000584	0.000584	
3630	314632	3906157	NonCancerChronicDerived_InhSoilDermMMilk	0.000571	0.000571	
3615	314590.2	3906352	NonCancerChronicDerived_InhSoilDermMMilk	0.000566	0.000566	
3620	314569	3906317	NonCancerChronicDerived_InhSoilDermMMilk	0.000565	0.000565	
3633	314699	3906156	NonCancerChronicDerived_InhSoilDermMMilk	0.000558	0.000558	
3625	314566.1	3906203	NonCancerChronicDerived_InhSoilDermMMilk	0.000552	0.000552	
1964	314568.5	3906333	NonCancerChronicDerived_InhSoilDermMMilk	0.000533	0.000533	
116	314540.1	3906264	NonCancerChronicDerived_InhSoilDermMMilk	0.000527	0.000527	
3629	314609.7	3906157	NonCancerChronicDerived_InhSoilDermMMilk	0.000526	0.000526	
143	314540.1	3906289	NonCancerChronicDerived_InhSoilDermMMilk	0.000518	0.000518	
87	314540.1	3906239	NonCancerChronicDerived_InhSoilDermMMilk	0.000517	0.000517	
3634	314721.3	3906155	NonCancerChronicDerived_InhSoilDermMMilk	0.000512	0.000512	
1800	314662.7	3906140	NonCancerChronicDerived_InhSoilDermMMilk	0.00051	0.00051	
1801	314687.7	3906140	NonCancerChronicDerived_InhSoilDermMMilk	0.000505	0.000505	
3614	314569.8	3906352	NonCancerChronicDerived_InhSoilDermMMilk	0.000497	0.000497	
1799	314637.7	3906140	NonCancerChronicDerived_InhSoilDermMMilk	0.000493	0.000493	
3613	314570.4	3906373	NonCancerChronicDerived_InhSoilDermMMilk	0.000488	0.000488	
170	314540.1	3906314	NonCancerChronicDerived_InhSoilDermMMilk	0.000486	0.000486	
58	314540.1	3906214	NonCancerChronicDerived_InhSoilDermMMilk	0.000483	0.000483	
1802	314712.7	3906140	NonCancerChronicDerived_InhSoilDermMMilk	0.00048	0.00048	
3612	314571	3906394	NonCancerChronicDerived_InhSoilDermMMilk	0.000478	0.000478	
3626	314565.6	3906181	NonCancerChronicDerived_InhSoilDermMMilk	0.000466	0.000466	
1798	314612.7	3906140	NonCancerChronicDerived_InhSoilDermMMilk	0.000449	0.000449	
3635	314743.6	3906155	NonCancerChronicDerived_InhSoilDermMMilk	0.000447	0.000447	
3628	314587.3	3906158	NonCancerChronicDerived_InhSoilDermMMilk	0.000442	0.000442	

**HARP - Air Dispersion Modeling and Risk Tool v18159 - MEIR Operation Cancer Risk

**1/22/2019

**Exported Risk Results

REC	X	Y	RISK_SUM	SCENARIO	INHAL_RISK
3630	314632	3906157	1.78E-07	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	1.78E-07
3625	314566.1	3906203	1.46E-07	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	1.46E-07
3631	314654.3	3906157	1.45E-07	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	1.45E-07
3629	314609.7	3906157	1.45E-07	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	1.45E-07
3624	314566.7	3906226	1.30E-07	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	1.30E-07
1799	314637.7	3906140	1.26E-07	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	1.26E-07
1798	314612.7	3906140	1.09E-07	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	1.09E-07
3626	314565.6	3906181	1.07E-07	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	1.07E-07
1800	314662.7	3906140	1.06E-07	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	1.06E-07
58	314540.1	3906214	9.93E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	9.93E-08
3628	314587.3	3906158	9.55E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	9.55E-08
3632	314676.7	3906156	9.46E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	9.46E-08
87	314540.1	3906239	8.58E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	8.58E-08
29	314540.1	3906189	8.53E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	8.53E-08
3623	314567.3	3906249	8.39E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	8.39E-08
1780	314637.7	3906115	8.03E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	8.03E-08
1781	314662.7	3906115	7.67E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	7.67E-08
1797	314587.7	3906140	7.57E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	7.57E-08
1801	314687.7	3906140	7.40E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	7.40E-08
57	314515.1	3906214	7.22E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	7.22E-08
1779	314612.7	3906115	7.19E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	7.19E-08
3627	314565	3906158	7.06E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	7.06E-08
86	314515.1	3906239	6.91E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	6.91E-08
28	314515.1	3906189	6.31E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	6.31E-08
1782	314687.7	3906115	6.28E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	6.28E-08
3633	314699	3906156	6.27E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	6.27E-08
116	314540.1	3906264	6.15E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	6.15E-08
1778	314587.7	3906115	5.66E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	5.66E-08
115	314515.1	3906264	5.64E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	5.64E-08
1756	314637.7	3906090	5.61E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	5.61E-08
1757	314662.7	3906090	5.61E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	5.61E-08
85	314490.1	3906239	5.56E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	5.56E-08
56	314490.1	3906214	5.52E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	5.52E-08
3622	314567.8	3906272	5.38E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	5.38E-08
1755	314612.7	3906090	5.16E-08	70YrCancerDerived_InhSoilDermMMilk_FAH16to70	5.16E-08

HIGHEST RISK

**HARP - Air Dispersion Modeling and Risk Tool v18159 - MEIR Operation Chronic (non-cancer) Risk
**1/22/2019
**Exported Risk Results

REC	X	Y	SCENARIO	CNS	KIDNEY	GILV	REPRO/DEVEL	RESP	EYE	ENDO	BLOOD	MAXHI	
3630	314632	3906157	NonCancerChronicDerived_InhSoilDermMMilk	4.78E-05	1.27E-06	1.27E-06	4.36E-05	5.39E-05	5.44E-06	1.27E-06	0.000476	0.000476	Highest Risk
3625	314566.1	3906203	NonCancerChronicDerived_InhSoilDermMMilk	4.16E-05	1.11E-06	1.11E-06	3.80E-05	4.52E-05	4.74E-06	1.11E-06	0.000414	0.000414	
3629	314609.7	3906157	NonCancerChronicDerived_InhSoilDermMMilk	3.98E-05	1.06E-06	1.06E-06	3.64E-05	4.40E-05	4.54E-06	1.06E-06	0.0004	0.0004	
3631	314654.3	3906157	NonCancerChronicDerived_InhSoilDermMMilk	3.59E-05	9.55E-07	9.55E-07	3.28E-05	4.28E-05	4.09E-06	9.55E-07	0.000358	0.000358	
3624	314566.7	3906226	NonCancerChronicDerived_InhSoilDermMMilk	3.54E-05	9.40E-07	9.40E-07	3.23E-05	3.95E-05	4.03E-06	9.40E-07	0.000351	0.000351	
1799	314637.7	3906140	NonCancerChronicDerived_InhSoilDermMMilk	3.16E-05	8.40E-07	8.40E-07	2.88E-05	3.72E-05	3.60E-06	8.40E-07	0.000316	0.000316	
3626	314565.6	3906181	NonCancerChronicDerived_InhSoilDermMMilk	2.98E-05	7.92E-07	7.92E-07	2.72E-05	3.27E-05	3.39E-06	7.92E-07	0.000299	0.000299	
1798	314612.7	3906140	NonCancerChronicDerived_InhSoilDermMMilk	2.81E-05	7.46E-07	7.46E-07	2.56E-05	3.24E-05	3.20E-06	7.46E-07	0.000281	0.000281	
3628	314587.3	3906158	NonCancerChronicDerived_InhSoilDermMMilk	2.58E-05	6.87E-07	6.87E-07	2.36E-05	2.88E-05	2.94E-06	6.87E-07	0.000261	0.000261	
58	314540.1	3906214	NonCancerChronicDerived_InhSoilDermMMilk	2.61E-05	6.94E-07	6.94E-07	2.38E-05	2.99E-05	2.97E-06	6.94E-07	0.00026	0.00026	
1800	314662.7	3906140	NonCancerChronicDerived_InhSoilDermMMilk	2.50E-05	6.63E-07	6.63E-07	2.28E-05	3.07E-05	2.84E-06	6.63E-07	0.000249	0.000249	
29	314540.1	3906189	NonCancerChronicDerived_InhSoilDermMMilk	2.24E-05	5.97E-07	5.97E-07	2.05E-05	2.56E-05	2.56E-06	5.97E-07	0.000224	0.000224	
3632	314676.7	3906156	NonCancerChronicDerived_InhSoilDermMMilk	2.16E-05	5.73E-07	5.73E-07	1.97E-05	2.72E-05	2.46E-06	5.73E-07	0.000216	0.000216	
87	314540.1	3906239	NonCancerChronicDerived_InhSoilDermMMilk	2.14E-05	5.68E-07	5.68E-07	1.95E-05	2.54E-05	2.44E-06	5.68E-07	0.000213	0.000213	
3623	314567.3	3906249	NonCancerChronicDerived_InhSoilDermMMilk	2.06E-05	5.47E-07	5.47E-07	1.88E-05	2.46E-05	2.35E-06	5.47E-07	0.000206	0.000206	
1797	314587.7	3906140	NonCancerChronicDerived_InhSoilDermMMilk	1.94E-05	5.15E-07	5.15E-07	1.77E-05	2.25E-05	2.21E-06	5.15E-07	0.000194	0.000194	
1780	314637.7	3906115	NonCancerChronicDerived_InhSoilDermMMilk	1.90E-05	5.04E-07	5.04E-07	1.73E-05	2.33E-05	2.16E-06	5.04E-07	0.00019	0.00019	
3627	314565	3906158	NonCancerChronicDerived_InhSoilDermMMilk	1.85E-05	4.90E-07	4.90E-07	1.68E-05	2.11E-05	2.10E-06	4.90E-07	0.000185	0.000185	
57	314515.1	3906214	NonCancerChronicDerived_InhSoilDermMMilk	1.78E-05	4.74E-07	4.74E-07	1.63E-05	2.13E-05	2.03E-06	4.74E-07	0.000178	0.000178	
1781	314662.7	3906115	NonCancerChronicDerived_InhSoilDermMMilk	1.74E-05	4.63E-07	4.63E-07	1.59E-05	2.20E-05	1.99E-06	4.63E-07	0.000174	0.000174	
1779	314612.7	3906115	NonCancerChronicDerived_InhSoilDermMMilk	1.72E-05	4.58E-07	4.58E-07	1.57E-05	2.09E-05	1.96E-06	4.58E-07	0.000172	0.000172	
86	314515.1	3906239	NonCancerChronicDerived_InhSoilDermMMilk	1.64E-05	4.37E-07	4.37E-07	1.50E-05	2.01E-05	1.87E-06	4.37E-07	0.000164	0.000164	
1801	314687.7	3906140	NonCancerChronicDerived_InhSoilDermMMilk	1.62E-05	4.30E-07	4.30E-07	1.48E-05	2.10E-05	1.84E-06	4.30E-07	0.000162	0.000162	
28	314515.1	3906189	NonCancerChronicDerived_InhSoilDermMMilk	1.56E-05	4.14E-07	4.14E-07	1.42E-05	1.86E-05	1.78E-06	4.14E-07	0.000156	0.000156	
116	314540.1	3906264	NonCancerChronicDerived_InhSoilDermMMilk	1.38E-05	3.67E-07	3.67E-07	1.26E-05	1.76E-05	1.57E-06	3.67E-07	0.000138	0.000138	
1782	314687.7	3906115	NonCancerChronicDerived_InhSoilDermMMilk	1.35E-05	3.60E-07	3.60E-07	1.24E-05	1.78E-05	1.54E-06	3.60E-07	0.000136	0.000136	
1778	314587.7	3906115	NonCancerChronicDerived_InhSoilDermMMilk	1.35E-05	3.60E-07	3.60E-07	1.23E-05	1.65E-05	1.54E-06	3.60E-07	0.000135	0.000135	
3633	314699	3906156	NonCancerChronicDerived_InhSoilDermMMilk	1.30E-05	3.47E-07	3.47E-07	1.19E-05	1.75E-05	1.49E-06	3.47E-07	0.000131	0.000131	
56	314490.1	3906214	NonCancerChronicDerived_InhSoilDermMMilk	1.29E-05	3.42E-07	3.42E-07	1.18E-05	1.60E-05	1.47E-06	3.42E-07	0.000129	0.000129	
85	314490.1	3906239	NonCancerChronicDerived_InhSoilDermMMilk	1.26E-05	3.35E-07	3.35E-07	1.15E-05	1.59E-05	1.44E-06	3.35E-07	0.000126	0.000126	
1756	314637.7	3906090	NonCancerChronicDerived_InhSoilDermMMilk	1.25E-05	3.33E-07	3.33E-07	1.14E-05	1.60E-05	1.43E-06	3.33E-07	0.000126	0.000126	
115	314515.1	3906264	NonCancerChronicDerived_InhSoilDermMMilk	1.24E-05	3.29E-07	3.29E-07	1.13E-05	1.60E-05	1.41E-06	3.29E-07	0.000124	0.000124	
1757	314662.7	3906090	NonCancerChronicDerived_InhSoilDermMMilk	1.23E-05	3.26E-07	3.26E-07	1.12E-05	1.59E-05	1.40E-06	3.26E-07	0.000123	0.000123	
1755	314612.7	3906090	NonCancerChronicDerived_InhSoilDermMMilk	1.16E-05	3.09E-07	3.09E-07	1.06E-05	1.48E-05	1.33E-06	3.09E-07	0.000117	0.000117	
27	314490.1	3906189	NonCancerChronicDerived_InhSoilDermMMilk	1.15E-05	3.05E-07	3.05E-07	1.05E-05	1.42E-05	1.31E-06	3.05E-07	0.000115	0.000115	

**HARP - Air Dispersion Modeling and Risk Tool v18159 - MEIR Operation Acute (non-cancer) Risk
**1/22/2019
**Exported Risk Results

REC	X	Y	SCENARIO	CNS	IMMUN	REPRO/DEVEL	RESP	EYE	BLOOD	MAXHI	
3629	314609.7	3906157	NonCancerAcute	5.36E-06	0.000518	0.00052161	5.36E-06	5.36E-06	0.000518	0.000522	HIGHEST RISK
3630	314632	3906157	NonCancerAcute	5.24E-06	0.000507	0.00051047	5.24E-06	5.24E-06	0.000507	0.00051	
3628	314587.3	3906158	NonCancerAcute	5.01E-06	0.000489	0.00049274	5.01E-06	5.01E-06	0.000489	0.000493	
3625	314566.1	3906203	NonCancerAcute	4.94E-06	0.000482	0.00048575	4.94E-06	4.94E-06	0.000482	0.000486	
3626	314565.6	3906181	NonCancerAcute	4.86E-06	0.000475	0.00047862	4.86E-06	4.86E-06	0.000475	0.000479	
3631	314654.3	3906157	NonCancerAcute	4.82E-06	0.000471	0.00047465	4.82E-06	4.82E-06	0.000471	0.000475	
1798	314612.7	3906140	NonCancerAcute	4.75E-06	0.000465	0.00046835	4.75E-06	4.75E-06	0.000465	0.000468	
3624	314566.7	3906226	NonCancerAcute	4.68E-06	0.000457	0.00046058	4.68E-06	4.68E-06	0.000457	0.000461	
1799	314637.7	3906140	NonCancerAcute	4.66E-06	0.000457	0.0004599	4.66E-06	4.66E-06	0.000457	0.00046	
1797	314587.7	3906140	NonCancerAcute	4.55E-06	0.000446	0.00044903	4.55E-06	4.55E-06	0.000446	0.000449	
3627	314565	3906158	NonCancerAcute	4.49E-06	0.000441	0.00044406	4.49E-06	4.49E-06	0.000441	0.000444	
3632	314676.7	3906156	NonCancerAcute	4.30E-06	0.000425	0.00042764	4.30E-06	4.30E-06	0.000425	0.000428	
1800	314662.7	3906140	NonCancerAcute	4.24E-06	0.000416	0.00041912	4.24E-06	4.24E-06	0.000416	0.000419	
29	314540.1	3906189	NonCancerAcute	4.13E-06	0.000409	0.00041162	4.13E-06	4.13E-06	0.000409	0.000412	
58	314540.1	3906214	NonCancerAcute	4.11E-06	0.000406	0.00040868	4.11E-06	4.11E-06	0.000406	0.000409	
3623	314567.3	3906249	NonCancerAcute	4.10E-06	0.000406	0.00040858	4.10E-06	4.10E-06	0.000406	0.000409	
1779	314612.7	3906115	NonCancerAcute	4.04E-06	0.000399	0.00040143	4.04E-06	4.04E-06	0.000399	0.000401	
1780	314637.7	3906115	NonCancerAcute	3.96E-06	0.000391	0.00039401	3.96E-06	3.96E-06	0.000391	0.000394	
1778	314587.7	3906115	NonCancerAcute	3.89E-06	0.000385	0.00038802	3.89E-06	3.89E-06	0.000385	0.000388	
87	314540.1	3906239	NonCancerAcute	3.77E-06	0.000374	0.00037667	3.77E-06	3.77E-06	0.000374	0.000377	
3633	314699	3906156	NonCancerAcute	3.72E-06	0.00037	0.00037251	3.72E-06	3.72E-06	0.00037	0.000373	
1801	314687.7	3906140	NonCancerAcute	3.72E-06	0.000369	0.00037108	3.72E-06	3.72E-06	0.000369	0.000371	
1781	314662.7	3906115	NonCancerAcute	3.70E-06	0.000366	0.00036863	3.70E-06	3.70E-06	0.000366	0.000369	
3622	314567.8	3906272	NonCancerAcute	3.53E-06	0.000352	0.00035406	3.53E-06	3.53E-06	0.000352	0.000354	
57	314515.1	3906214	NonCancerAcute	3.52E-06	0.000352	0.00035397	3.52E-06	3.52E-06	0.000352	0.000354	
28	314515.1	3906189	NonCancerAcute	3.46E-06	0.000345	0.00034756	3.46E-06	3.46E-06	0.000345	0.000348	
1755	314612.7	3906090	NonCancerAcute	3.39E-06	0.000338	0.00034056	3.39E-06	3.39E-06	0.000338	0.000341	
1756	314637.7	3906090	NonCancerAcute	3.38E-06	0.000337	0.0003393	3.38E-06	3.38E-06	0.000337	0.000339	
3634	314721.3	3906155	NonCancerAcute	3.36E-06	0.000336	0.00033803	3.36E-06	3.36E-06	0.000336	0.000338	
1802	314712.7	3906140	NonCancerAcute	3.34E-06	0.000333	0.00033531	3.34E-06	3.34E-06	0.000333	0.000335	
1782	314687.7	3906115	NonCancerAcute	3.34E-06	0.000333	0.00033497	3.34E-06	3.34E-06	0.000333	0.000335	
1754	314587.7	3906090	NonCancerAcute	3.30E-06	0.000329	0.0003313	3.30E-06	3.30E-06	0.000329	0.000331	
1757	314662.7	3906090	NonCancerAcute	3.22E-06	0.000321	0.00032346	3.22E-06	3.22E-06	0.000321	0.000323	
86	314515.1	3906239	NonCancerAcute	3.18E-06	0.000318	0.00032052	3.18E-06	3.18E-06	0.000318	0.000321	
3621	314568.4	3906294	NonCancerAcute	3.14E-06	0.000314	0.00031657	3.14E-06	3.14E-06	0.000314	0.000317	

Appendix VI

HARP Health Risk Impacts – MEIW

**HARP - Air Dispersion Modeling and Risk Tool v18159 - MEIW Construction Cancer Risk

**1/21/2019

**Exported Risk Results

REC	X	Y	RISK_SUM	SCENARIO	INHAL_RISK	
31	314603.9	3906316	2.05E-07	25YrCancerDerived_InhSoilDerm	2.05E-07	HIGHEST RISK
30	314607.2	3906334	2.04E-07	25YrCancerDerived_InhSoilDerm	2.04E-07	
36	314567.3	3906249	2.00E-07	25YrCancerDerived_InhSoilDerm	2.00E-07	
29	314610.6	3906352	1.99E-07	25YrCancerDerived_InhSoilDerm	1.99E-07	
35	314567.8	3906272	1.99E-07	25YrCancerDerived_InhSoilDerm	1.99E-07	
32	314586.4	3906317	1.97E-07	25YrCancerDerived_InhSoilDerm	1.97E-07	
37	314566.7	3906226	1.95E-07	25YrCancerDerived_InhSoilDerm	1.95E-07	
34	314568.4	3906294	1.92E-07	25YrCancerDerived_InhSoilDerm	1.92E-07	
44	314654.3	3906157	1.92E-07	25YrCancerDerived_InhSoilDerm	1.92E-07	
45	314676.7	3906156	1.91E-07	25YrCancerDerived_InhSoilDerm	1.91E-07	
43	314632	3906157	1.86E-07	25YrCancerDerived_InhSoilDerm	1.86E-07	
28	314590.2	3906352	1.85E-07	25YrCancerDerived_InhSoilDerm	1.85E-07	
33	314569	3906317	1.85E-07	25YrCancerDerived_InhSoilDerm	1.85E-07	
46	314699	3906156	1.82E-07	25YrCancerDerived_InhSoilDerm	1.82E-07	
38	314566.1	3906203	1.80E-07	25YrCancerDerived_InhSoilDerm	1.80E-07	
42	314609.7	3906157	1.71E-07	25YrCancerDerived_InhSoilDerm	1.71E-07	
47	314721.3	3906155	1.68E-07	25YrCancerDerived_InhSoilDerm	1.68E-07	
27	314569.8	3906352	1.63E-07	25YrCancerDerived_InhSoilDerm	1.63E-07	
26	314570.4	3906373	1.59E-07	25YrCancerDerived_InhSoilDerm	1.59E-07	
25	314571	3906394	1.56E-07	25YrCancerDerived_InhSoilDerm	1.56E-07	
39	314565.6	3906181	1.51E-07	25YrCancerDerived_InhSoilDerm	1.51E-07	
48	314743.6	3906155	1.46E-07	25YrCancerDerived_InhSoilDerm	1.46E-07	
41	314587.3	3906158	1.44E-07	25YrCancerDerived_InhSoilDerm	1.44E-07	
24	314571.5	3906415	1.42E-07	25YrCancerDerived_InhSoilDerm	1.42E-07	
5	314738.9	3906229	1.37E-07	25YrCancerDerived_InhSoilDerm	1.37E-07	
6	314730	3906251	1.36E-07	25YrCancerDerived_InhSoilDerm	1.36E-07	
4	314747.9	3906207	1.35E-07	25YrCancerDerived_InhSoilDerm	1.35E-07	
7	314721.1	3906273	1.34E-07	25YrCancerDerived_InhSoilDerm	1.34E-07	
3	314756.8	3906186	1.31E-07	25YrCancerDerived_InhSoilDerm	1.31E-07	
8	314712.2	3906294	1.31E-07	25YrCancerDerived_InhSoilDerm	1.31E-07	
1	314718.5	3906283	1.30E-07	25YrCancerDerived_InhSoilDerm	1.30E-07	
9	314703.2	3906316	1.26E-07	25YrCancerDerived_InhSoilDerm	1.26E-07	
2	314765.7	3906164	1.22E-07	25YrCancerDerived_InhSoilDerm	1.22E-07	
23	314572.1	3906436	1.22E-07	25YrCancerDerived_InhSoilDerm	1.22E-07	
49	314766	3906155	1.21E-07	25YrCancerDerived_InhSoilDerm	1.21E-07	

**HARP - Air Dispersion Modeling and Risk Tool v18159 - MEIW Construction Chronic (non-cancer) Risk
**1/21/2019
**Exported Risk Results

REC	X	Y	SCENARIO	RESP	MAXHI	
31	314603.9	3906316	NonCancerChronicDerived_InhSoilDerm	0.000661	0.000661	HIGHEST RISK
30	314607.2	3906334	NonCancerChronicDerived_InhSoilDerm	0.000659	0.000659	
36	314567.3	3906249	NonCancerChronicDerived_InhSoilDerm	0.000647	0.000647	
29	314610.6	3906352	NonCancerChronicDerived_InhSoilDerm	0.000642	0.000642	
35	314567.8	3906272	NonCancerChronicDerived_InhSoilDerm	0.000642	0.000642	
32	314586.4	3906317	NonCancerChronicDerived_InhSoilDerm	0.000637	0.000637	
37	314566.7	3906226	NonCancerChronicDerived_InhSoilDerm	0.00063	0.00063	
34	314568.4	3906294	NonCancerChronicDerived_InhSoilDerm	0.000621	0.000621	
44	314654.3	3906157	NonCancerChronicDerived_InhSoilDerm	0.000621	0.000621	
45	314676.7	3906156	NonCancerChronicDerived_InhSoilDerm	0.000616	0.000616	
43	314632	3906157	NonCancerChronicDerived_InhSoilDerm	0.000602	0.000602	
28	314590.2	3906352	NonCancerChronicDerived_InhSoilDerm	0.000599	0.000599	
33	314569	3906317	NonCancerChronicDerived_InhSoilDerm	0.000596	0.000596	
46	314699	3906156	NonCancerChronicDerived_InhSoilDerm	0.000589	0.000589	
38	314566.1	3906203	NonCancerChronicDerived_InhSoilDerm	0.000581	0.000581	
42	314609.7	3906157	NonCancerChronicDerived_InhSoilDerm	0.000553	0.000553	
47	314721.3	3906155	NonCancerChronicDerived_InhSoilDerm	0.000541	0.000541	
27	314569.8	3906352	NonCancerChronicDerived_InhSoilDerm	0.000525	0.000525	
26	314570.4	3906373	NonCancerChronicDerived_InhSoilDerm	0.000515	0.000515	
25	314571	3906394	NonCancerChronicDerived_InhSoilDerm	0.000506	0.000506	
39	314565.6	3906181	NonCancerChronicDerived_InhSoilDerm	0.000489	0.000489	
48	314743.6	3906155	NonCancerChronicDerived_InhSoilDerm	0.000473	0.000473	
41	314587.3	3906158	NonCancerChronicDerived_InhSoilDerm	0.000464	0.000464	
24	314571.5	3906415	NonCancerChronicDerived_InhSoilDerm	0.000458	0.000458	
5	314738.9	3906229	NonCancerChronicDerived_InhSoilDerm	0.000443	0.000443	
6	314730	3906251	NonCancerChronicDerived_InhSoilDerm	0.00044	0.00044	
4	314747.9	3906207	NonCancerChronicDerived_InhSoilDerm	0.000438	0.000438	
7	314721.1	3906273	NonCancerChronicDerived_InhSoilDerm	0.000433	0.000433	
3	314756.8	3906186	NonCancerChronicDerived_InhSoilDerm	0.000423	0.000423	
8	314712.2	3906294	NonCancerChronicDerived_InhSoilDerm	0.000422	0.000422	
1	314718.5	3906283	NonCancerChronicDerived_InhSoilDerm	0.00042	0.00042	
9	314703.2	3906316	NonCancerChronicDerived_InhSoilDerm	0.000408	0.000408	
2	314765.7	3906164	NonCancerChronicDerived_InhSoilDerm	0.000395	0.000395	
23	314572.1	3906436	NonCancerChronicDerived_InhSoilDerm	0.000394	0.000394	
49	314766	3906155	NonCancerChronicDerived_InhSoilDerm	0.000393	0.000393	

**HARP - Air Dispersion Modeling and Risk Tool v18159 - MEIW Operations Cancer Risk

**1/21/2019

**Exported Risk Results

REC	X	Y	RISK_SUM	SCENARIO	INHAL_RISK	
43	314632	3906157	1.12E-08	25YrCancerDerived_InhSoilDerm	1.12E-08	HIGHEST RISK
38	314566.1	3906203	9.17E-09	25YrCancerDerived_InhSoilDerm	9.17E-09	
44	314654.3	3906157	9.09E-09	25YrCancerDerived_InhSoilDerm	9.09E-09	
42	314609.7	3906157	9.08E-09	25YrCancerDerived_InhSoilDerm	9.08E-09	
37	314566.7	3906226	8.13E-09	25YrCancerDerived_InhSoilDerm	8.13E-09	
39	314565.6	3906181	6.73E-09	25YrCancerDerived_InhSoilDerm	6.73E-09	
41	314587.3	3906158	6.00E-09	25YrCancerDerived_InhSoilDerm	6.00E-09	
45	314676.7	3906156	5.94E-09	25YrCancerDerived_InhSoilDerm	5.94E-09	
36	314567.3	3906249	5.26E-09	25YrCancerDerived_InhSoilDerm	5.26E-09	
40	314565	3906158	4.43E-09	25YrCancerDerived_InhSoilDerm	4.43E-09	
46	314699	3906156	3.93E-09	25YrCancerDerived_InhSoilDerm	3.93E-09	
35	314567.8	3906272	3.38E-09	25YrCancerDerived_InhSoilDerm	3.38E-09	
47	314721.3	3906155	2.79E-09	25YrCancerDerived_InhSoilDerm	2.79E-09	
34	314568.4	3906294	2.50E-09	25YrCancerDerived_InhSoilDerm	2.50E-09	
30	314607.2	3906334	2.14E-09	25YrCancerDerived_InhSoilDerm	2.14E-09	
33	314569	3906317	2.13E-09	25YrCancerDerived_InhSoilDerm	2.13E-09	
48	314743.6	3906155	2.10E-09	25YrCancerDerived_InhSoilDerm	2.10E-09	
32	314586.4	3906317	2.09E-09	25YrCancerDerived_InhSoilDerm	2.09E-09	
29	314610.6	3906352	2.02E-09	25YrCancerDerived_InhSoilDerm	2.02E-09	
31	314603.9	3906316	1.97E-09	25YrCancerDerived_InhSoilDerm	1.97E-09	
28	314590.2	3906352	1.69E-09	25YrCancerDerived_InhSoilDerm	1.69E-09	
6	314730	3906251	1.68E-09	25YrCancerDerived_InhSoilDerm	1.68E-09	
4	314747.9	3906207	1.67E-09	25YrCancerDerived_InhSoilDerm	1.67E-09	
7	314721.1	3906273	1.67E-09	25YrCancerDerived_InhSoilDerm	1.67E-09	
27	314569.8	3906352	1.67E-09	25YrCancerDerived_InhSoilDerm	1.67E-09	
5	314738.9	3906229	1.67E-09	25YrCancerDerived_InhSoilDerm	1.67E-09	
3	314756.8	3906186	1.66E-09	25YrCancerDerived_InhSoilDerm	1.66E-09	
49	314766	3906155	1.64E-09	25YrCancerDerived_InhSoilDerm	1.64E-09	
1	314718.5	3906283	1.61E-09	25YrCancerDerived_InhSoilDerm	1.61E-09	
2	314765.7	3906164	1.61E-09	25YrCancerDerived_InhSoilDerm	1.61E-09	
8	314712.2	3906294	1.58E-09	25YrCancerDerived_InhSoilDerm	1.58E-09	
9	314703.2	3906316	1.42E-09	25YrCancerDerived_InhSoilDerm	1.42E-09	
26	314570.4	3906373	1.31E-09	25YrCancerDerived_InhSoilDerm	1.31E-09	
10	314694.3	3906338	1.25E-09	25YrCancerDerived_InhSoilDerm	1.25E-09	
24	314571.5	3906415	1.20E-09	25YrCancerDerived_InhSoilDerm	1.20E-09	

**HARP - Air Dispersion Modeling and Risk Tool v18159 - MEIW Operations Chronic (non-cancer) Risk
**1/21/2019
**Exported Risk Results

REC	X	Y	SCENARIO	CNS	KIDNEY	GILV	REPRO/DEVEL	RESP	EYE	ENDO	BLOOD	MAXHI	
43	314632	3906157	NonCancerChronicDerived_InhSoilDerm	4.78E-05	1.27E-06	1.27E-06	4.36E-05	5.39E-05	5.44E-06	1.27E-06	0.000476	0.000476	HIGHEST RISK
38	314566.1	3906203	NonCancerChronicDerived_InhSoilDerm	4.16E-05	1.11E-06	1.11E-06	3.80E-05	4.52E-05	4.74E-06	1.11E-06	0.000414	0.000414	
42	314609.7	3906157	NonCancerChronicDerived_InhSoilDerm	3.98E-05	1.06E-06	1.06E-06	3.64E-05	4.40E-05	4.54E-06	1.06E-06	0.0004	0.0004	
44	314654.3	3906157	NonCancerChronicDerived_InhSoilDerm	3.59E-05	9.55E-07	9.55E-07	3.28E-05	4.28E-05	4.09E-06	9.55E-07	0.000358	0.000358	
37	314566.7	3906226	NonCancerChronicDerived_InhSoilDerm	3.54E-05	9.40E-07	9.40E-07	3.23E-05	3.95E-05	4.03E-06	9.40E-07	0.000351	0.000351	
39	314565.6	3906181	NonCancerChronicDerived_InhSoilDerm	2.98E-05	7.92E-07	7.92E-07	2.72E-05	3.27E-05	3.39E-06	7.92E-07	0.000299	0.000299	
41	314587.3	3906158	NonCancerChronicDerived_InhSoilDerm	2.58E-05	6.87E-07	6.87E-07	2.36E-05	2.88E-05	2.94E-06	6.87E-07	0.000261	0.000261	
45	314676.7	3906156	NonCancerChronicDerived_InhSoilDerm	2.16E-05	5.73E-07	5.73E-07	1.97E-05	2.72E-05	2.46E-06	5.73E-07	0.000216	0.000216	
36	314567.3	3906249	NonCancerChronicDerived_InhSoilDerm	2.06E-05	5.47E-07	5.47E-07	1.88E-05	2.46E-05	2.35E-06	5.47E-07	0.000206	0.000206	
40	314565	3906158	NonCancerChronicDerived_InhSoilDerm	1.85E-05	4.90E-07	4.90E-07	1.68E-05	2.11E-05	2.10E-06	4.90E-07	0.000185	0.000185	
46	314699	3906156	NonCancerChronicDerived_InhSoilDerm	1.30E-05	3.47E-07	3.47E-07	1.19E-05	1.75E-05	1.49E-06	3.47E-07	0.000131	0.000131	
35	314567.8	3906272	NonCancerChronicDerived_InhSoilDerm	1.14E-05	3.03E-07	3.03E-07	1.04E-05	1.51E-05	1.30E-06	3.03E-07	0.000114	0.000114	
47	314721.3	3906155	NonCancerChronicDerived_InhSoilDerm	8.43E-06	2.24E-07	2.24E-07	7.69E-06	1.21E-05	9.60E-07	2.24E-07	8.46E-05	8.46E-05	
34	314568.4	3906294	NonCancerChronicDerived_InhSoilDerm	6.87E-06	1.83E-07	1.83E-07	6.27E-06	1.06E-05	7.83E-07	1.83E-07	6.91E-05	6.91E-05	
48	314743.6	3906155	NonCancerChronicDerived_InhSoilDerm	5.81E-06	1.54E-07	1.54E-07	5.30E-06	8.91E-06	6.62E-07	1.54E-07	5.84E-05	5.84E-05	
33	314569	3906317	NonCancerChronicDerived_InhSoilDerm	4.54E-06	1.21E-07	1.21E-07	4.15E-06	8.56E-06	5.18E-07	1.21E-07	4.57E-05	4.57E-05	
49	314766	3906155	NonCancerChronicDerived_InhSoilDerm	4.22E-06	1.12E-07	1.12E-07	3.85E-06	6.84E-06	4.81E-07	1.12E-07	4.24E-05	4.24E-05	
32	314586.4	3906317	NonCancerChronicDerived_InhSoilDerm	4.14E-06	1.10E-07	1.10E-07	3.78E-06	8.29E-06	4.72E-07	1.10E-07	4.16E-05	4.16E-05	
2	314765.7	3906164	NonCancerChronicDerived_InhSoilDerm	4.05E-06	1.08E-07	1.08E-07	3.69E-06	6.68E-06	4.61E-07	1.08E-07	4.07E-05	4.07E-05	
3	314756.8	3906186	NonCancerChronicDerived_InhSoilDerm	4.00E-06	1.06E-07	1.06E-07	3.65E-06	6.82E-06	4.56E-07	1.06E-07	4.02E-05	4.02E-05	
4	314747.9	3906207	NonCancerChronicDerived_InhSoilDerm	3.76E-06	9.99E-08	9.99E-08	3.43E-06	6.80E-06	4.28E-07	9.99E-08	3.77E-05	3.77E-05	
31	314603.9	3906316	NonCancerChronicDerived_InhSoilDerm	3.73E-06	9.93E-08	9.93E-08	3.41E-06	7.74E-06	4.25E-07	9.93E-08	3.75E-05	3.75E-05	
5	314738.9	3906229	NonCancerChronicDerived_InhSoilDerm	3.34E-06	8.87E-08	8.87E-08	3.05E-06	6.62E-06	3.80E-07	8.87E-08	3.35E-05	3.35E-05	
6	314730	3906251	NonCancerChronicDerived_InhSoilDerm	2.96E-06	7.87E-08	7.87E-08	2.70E-06	6.52E-06	3.37E-07	7.87E-08	2.97E-05	2.97E-05	
30	314607.2	3906334	NonCancerChronicDerived_InhSoilDerm	2.86E-06	7.61E-08	7.61E-08	2.61E-06	7.98E-06	3.26E-07	7.61E-08	2.87E-05	2.87E-05	
27	314569.8	3906352	NonCancerChronicDerived_InhSoilDerm	2.75E-06	7.30E-08	7.30E-08	2.51E-06	6.41E-06	3.13E-07	7.30E-08	2.76E-05	2.76E-05	
7	314721.1	3906273	NonCancerChronicDerived_InhSoilDerm	2.60E-06	6.92E-08	6.92E-08	2.38E-06	6.36E-06	2.97E-07	6.92E-08	2.61E-05	2.61E-05	
28	314590.2	3906352	NonCancerChronicDerived_InhSoilDerm	2.50E-06	6.66E-08	6.66E-08	2.28E-06	6.39E-06	2.85E-07	6.66E-08	2.52E-05	2.52E-05	
1	314718.5	3906283	NonCancerChronicDerived_InhSoilDerm	2.40E-06	6.37E-08	6.37E-08	2.19E-06	6.08E-06	2.73E-07	6.37E-08	2.41E-05	2.41E-05	
29	314610.6	3906352	NonCancerChronicDerived_InhSoilDerm	2.27E-06	6.03E-08	6.03E-08	2.07E-06	7.36E-06	2.58E-07	6.03E-08	2.28E-05	2.28E-05	
8	314712.2	3906294	NonCancerChronicDerived_InhSoilDerm	2.24E-06	5.96E-08	5.96E-08	2.05E-06	5.93E-06	2.55E-07	5.96E-08	2.25E-05	2.25E-05	
26	314570.4	3906373	NonCancerChronicDerived_InhSoilDerm	2.15E-06	5.72E-08	5.72E-08	1.96E-06	5.03E-06	2.45E-07	5.72E-08	2.16E-05	2.16E-05	
9	314703.2	3906316	NonCancerChronicDerived_InhSoilDerm	1.94E-06	5.16E-08	5.16E-08	1.77E-06	5.31E-06	2.21E-07	5.16E-08	1.95E-05	1.95E-05	
25	314571	3906394	NonCancerChronicDerived_InhSoilDerm	1.73E-06	4.61E-08	4.61E-08	1.58E-06	4.37E-06	1.98E-07	4.61E-08	1.74E-05	1.74E-05	
134	314161.6	3906288	NonCancerChronicDerived_InhSoilDerm	1.71E-06	4.56E-08	4.56E-08	1.56E-06	2.88E-06	1.95E-07	4.56E-08	1.72E-05	1.72E-05	

**HARP - Air Dispersion Modeling and Risk Tool v18159 - MEIW Operations Acute (non-cancer) Risk

**1/21/2019

**Exported Risk Results

REC	X	Y	SCENARIO	CNS	IMMUN	REPRO/DEVEL	RESP	EYE	BLOOD	MAXHI	
42	314609.7	3906157	NonCancerAcute	5.36E-06	0.00051805	0.00052161	5.36E-06	5.36E-06	0.000518	0.000522	HIGHEST RISK
43	314632	3906157	NonCancerAcute	5.24E-06	0.00050699	0.00051047	5.24E-06	5.24E-06	0.000507	0.00051	
41	314587.3	3906158	NonCancerAcute	5.01E-06	0.0004894	0.00049274	5.01E-06	5.01E-06	0.000489	0.000493	
38	314566.1	3906203	NonCancerAcute	4.94E-06	0.00048246	0.00048575	4.94E-06	4.94E-06	0.000482	0.000486	
39	314565.6	3906181	NonCancerAcute	4.86E-06	0.00047539	0.00047862	4.86E-06	4.86E-06	0.000475	0.000479	
44	314654.3	3906157	NonCancerAcute	4.82E-06	0.00047145	0.00047465	4.82E-06	4.82E-06	0.000471	0.000475	
37	314566.7	3906226	NonCancerAcute	4.68E-06	0.00045747	0.00046058	4.68E-06	4.68E-06	0.000457	0.000461	
40	314565	3906158	NonCancerAcute	4.49E-06	0.00044107	0.00044406	4.49E-06	4.49E-06	0.000441	0.000444	
45	314676.7	3906156	NonCancerAcute	4.30E-06	0.00042478	0.00042764	4.30E-06	4.30E-06	0.000425	0.000428	
36	314567.3	3906249	NonCancerAcute	4.10E-06	0.00040585	0.00040858	4.10E-06	4.10E-06	0.000406	0.000409	
46	314699	3906156	NonCancerAcute	3.72E-06	0.00037004	0.00037251	3.72E-06	3.72E-06	0.00037	0.000373	
35	314567.8	3906272	NonCancerAcute	3.53E-06	0.00035171	0.00035406	3.53E-06	3.53E-06	0.000352	0.000354	
47	314721.3	3906155	NonCancerAcute	3.36E-06	0.0003358	0.00033803	3.36E-06	3.36E-06	0.000336	0.000338	
34	314568.4	3906294	NonCancerAcute	3.14E-06	0.00031448	0.00031657	3.14E-06	3.14E-06	0.000314	0.000317	
5	314738.9	3906229	NonCancerAcute	2.92E-06	0.00029286	0.0002948	2.92E-06	2.92E-06	0.000293	0.000295	
31	314603.9	3906316	NonCancerAcute	2.91E-06	0.00029276	0.0002947	2.91E-06	2.91E-06	0.000293	0.000295	
6	314730	3906251	NonCancerAcute	2.91E-06	0.0002912	0.00029313	2.91E-06	2.91E-06	0.000291	0.000293	
48	314743.6	3906155	NonCancerAcute	2.84E-06	0.00028521	0.00028709	2.84E-06	2.84E-06	0.000285	0.000287	
7	314721.1	3906273	NonCancerAcute	2.83E-06	0.00028375	0.00028563	2.83E-06	2.83E-06	0.000284	0.000286	
4	314747.9	3906207	NonCancerAcute	2.82E-06	0.00028204	0.00028392	2.82E-06	2.82E-06	0.000282	0.000284	
8	314712.2	3906294	NonCancerAcute	2.73E-06	0.00027463	0.00027645	2.73E-06	2.73E-06	0.000275	0.000276	
33	314569	3906317	NonCancerAcute	2.70E-06	0.00027196	0.00027375	2.70E-06	2.70E-06	0.000272	0.000274	
32	314586.4	3906317	NonCancerAcute	2.68E-06	0.00026927	0.00027105	2.68E-06	2.68E-06	0.000269	0.000271	
1	314718.5	3906283	NonCancerAcute	2.66E-06	0.0002678	0.00026957	2.66E-06	2.66E-06	0.000268	0.00027	
30	314607.2	3906334	NonCancerAcute	2.56E-06	0.00025883	0.00026054	2.56E-06	2.56E-06	0.000259	0.000261	
3	314756.8	3906186	NonCancerAcute	2.56E-06	0.00025762	0.00025932	2.56E-06	2.56E-06	0.000258	0.000259	
9	314703.2	3906316	NonCancerAcute	2.49E-06	0.0002513	0.00025295	2.49E-06	2.49E-06	0.000251	0.000253	
2	314765.7	3906164	NonCancerAcute	2.40E-06	0.00024193	0.00024352	2.40E-06	2.40E-06	0.000242	0.000244	
49	314766	3906155	NonCancerAcute	2.35E-06	0.00023727	0.00023884	2.35E-06	2.35E-06	0.000237	0.000239	
28	314590.2	3906352	NonCancerAcute	2.30E-06	0.00023195	0.00023347	2.30E-06	2.30E-06	0.000232	0.000233	
10	314694.3	3906338	NonCancerAcute	2.27E-06	0.00022914	0.00023065	2.27E-06	2.27E-06	0.000229	0.000231	
29	314610.6	3906352	NonCancerAcute	2.26E-06	0.00022911	0.00023062	2.26E-06	2.26E-06	0.000229	0.000231	
27	314569.8	3906352	NonCancerAcute	2.06E-06	0.00020806	0.00020943	2.06E-06	2.06E-06	0.000208	0.000209	
11	314685.4	3906360	NonCancerAcute	1.99E-06	0.00020152	0.00020284	1.99E-06	1.99E-06	0.000202	0.000203	
12	314676.5	3906381	NonCancerAcute	1.85E-06	0.00018746	0.00018869	1.85E-06	1.85E-06	0.000187	0.000189	
26	314570.4	3906373	NonCancerAcute	1.78E-06	0.00018064	0.00018182	1.78E-06	1.78E-06	0.000181	0.000182	
25	314571	3906394	NonCancerAcute	1.69E-06	0.00017123	0.00017235	1.69E-06	1.69E-06	0.000171	0.000172	
13	314667.5	3906403	NonCancerAcute	1.68E-06	0.0001706	0.00017171	1.68E-06	1.68E-06	0.000171	0.000172	

Appendix VII

CalEEMod 2016.3.2 Cumulative Impact Modeling (included in PDF)

Wible-Hosking Cumulative Review Project 1

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Bank (with Drive-Through)	4.00	1000sqft	0.09	4,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Table Name	Column Name	Default Value	New Value

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					
2019	0.0855	0.5785	0.4544	7.1000e-004	2.6100e-003	0.0352	0.0378	8.7000e-004	0.0325	0.0334	0.0000	63.4601	63.4601	0.0184	0.0000	63.9204
Maximum	**0.0855**	**0.5785**	**0.4544**	**7.1000e-004**	**2.6100e-003**	**0.0352**	**0.0378**	**8.7000e-004**	**0.0325**	**0.0334**	**0.0000**	**63.4601**	**63.4601**	**0.0184**	**0.0000**	**63.9204**

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					
2019	0.0855	0.5785	0.4544	7.1000e-004	2.6100e-003	0.0352	0.0378	8.7000e-004	0.0325	0.0334	0.0000	63.4600	63.4600	0.0184	0.0000	63.9204
Maximum	**0.0855**	**0.5785**	**0.4544**	**7.1000e-004**	**2.6100e-003**	**0.0352**	**0.0378**	**8.7000e-004**	**0.0325**	**0.0334**	**0.0000**	**63.4600**	**63.4600**	**0.0184**	**0.0000**	**63.9204**

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

Wible-Hosking Cumulative Review Project 1 - San Joaquin Valley Air Basin, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-7-2019	4-6-2019	0.3434	0.3434
2	4-7-2019	7-6-2019	0.3165	0.3165
		Highest	0.3434	0.3434

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	0.0184	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Energy	4.5000e-004	4.0900e-003	3.4400e-003	2.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	14.7182	14.7182	5.5000e-004	1.8000e-004	14.7849
Mobile	0.1334	1.3689	0.9302	3.8200e-003	0.1732	3.3300e-003	0.1765	0.0466	3.1400e-003	0.0497	0.0000	355.8635	355.8635	0.0437	0.0000	356.9558
Waste						0.0000	0.0000		0.0000	0.0000	0.7572	0.0000	0.7572	0.0448	0.0000	1.8758
Water						0.0000	0.0000		0.0000	0.0000	0.0503	0.3484	0.3987	5.1800e-003	1.3000e-004	0.5655
Total	**0.1523**	**1.3730**	**0.9336**	**3.8400e-003**	**0.1732**	**3.6400e-003**	**0.1768**	**0.0466**	**3.4500e-003**	**0.0500**	**0.8074**	**370.9302**	**371.7376**	**0.0942**	**3.1000e-004**	**374.1820**

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	0.0184	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Energy	4.5000e-004	4.0900e-003	3.4400e-003	2.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	14.7182	14.7182	5.5000e-004	1.8000e-004	14.7849
Mobile	0.1334	1.3689	0.9302	3.8200e-003	0.1732	3.3300e-003	0.1765	0.0466	3.1400e-003	0.0497	0.0000	355.8635	355.8635	0.0437	0.0000	356.9558
Waste						0.0000	0.0000		0.0000	0.0000	0.7572	0.0000	0.7572	0.0448	0.0000	1.8758
Water						0.0000	0.0000		0.0000	0.0000	0.0503	0.3484	0.3987	5.1800e-003	1.3000e-004	0.5655
Total	**0.1523**	**1.3730**	**0.9336**	**3.8400e-003**	**0.1732**	**3.6400e-003**	**0.1768**	**0.0466**	**3.4500e-003**	**0.0500**	**0.8074**	**370.9302**	**371.7376**	**0.0942**	**3.1000e-004**	**374.1820**

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

3.0 Construction Detail

Construction Phase

Wible-Hosking Cumulative Review Project 1 - San Joaquin Valley Air Basin, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/7/2019	1/18/2019	5	10	
2	Site Preparation	Site Preparation	1/19/2019	1/21/2019	5	1	
3	Grading	Grading	1/22/2019	1/23/2019	5	2	
4	Building Construction	Building Construction	1/24/2019	6/12/2019	5	100	
5	Paving	Paving	6/13/2019	6/19/2019	5	5	
6	Architectural Coating	Architectural Coating	6/20/2019	6/26/2019	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 6,000; Non-Residential Outdoor: 2,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Wible-Hosking Cumulative Review Project 1 - San Joaquin Valley Air Basin, Annual

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	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	1.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7700e-003	0.0430	0.0385	6.0000e-005		2.6900e-003	2.6900e-003		2.5600e-003	2.5600e-003	0.0000	5.2601	5.2601	1.0000e-003	0.0000	5.2852
Total	**4.7700e-003**	**0.0430**	**0.0385**	**6.0000e-005**		**2.6900e-003**	**2.6900e-003**		**2.5600e-003**	**2.5600e-003**	**0.0000**	**5.2601**	**5.2601**	**1.0000e-003**	**0.0000**	**5.2852**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	2.3000e-004	1.6000e-004	1.6400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3704	0.3704	1.0000e-005	0.0000	0.3707
Total	**2.3000e-004**	**1.6000e-004**	**1.6400e-003**	**0.0000**	**4.0000e-004**	**0.0000**	**4.0000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3704**	**0.3704**	**1.0000e-005**	**0.0000**	**0.3707**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7700e-003	0.0430	0.0385	6.0000e-005		2.6900e-003	2.6900e-003		2.5600e-003	2.5600e-003	0.0000	5.2601	5.2601	1.0000e-003	0.0000	5.2852
Total	**4.7700e-003**	**0.0430**	**0.0385**	**6.0000e-005**		**2.6900e-003**	**2.6900e-003**		**2.5600e-003**	**2.5600e-003**	**0.0000**	**5.2601**	**5.2601**	**1.0000e-003**	**0.0000**	**5.2852**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	2.3000e-004	1.6000e-004	1.6400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3704	0.3704	1.0000e-005	0.0000	0.3707
Total	**2.3000e-004**	**1.6000e-004**	**1.6400e-003**	**0.0000**	**4.0000e-004**	**0.0000**	**4.0000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3704**	**0.3704**	**1.0000e-005**	**0.0000**	**0.3707**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6000e-004	4.4600e-003	2.0700e-003	0.0000		1.8000e-004	1.8000e-004		1.7000e-004	1.7000e-004	0.0000	0.4378	0.4378	1.4000e-004	0.0000	0.4413
Total	**3.6000e-004**	**4.4600e-003**	**2.0700e-003**	**0.0000**	**2.7000e-004**	**1.8000e-004**	**4.5000e-004**	**3.0000e-005**	**1.7000e-004**	**2.0000e-004**	**0.0000**	**0.4378**	**0.4378**	**1.4000e-004**	**0.0000**	**0.4413**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0185	0.0185	0.0000	0.0000	0.0185
Total	**1.0000e-005**	**1.0000e-005**	**8.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0185**	**0.0185**	**0.0000**	**0.0000**	**0.0185**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6000e-004	4.4600e-003	2.0700e-003	0.0000		1.8000e-004	1.8000e-004		1.7000e-004	1.7000e-004	0.0000	0.4378	0.4378	1.4000e-004	0.0000	0.4413
Total	**3.6000e-004**	**4.4600e-003**	**2.0700e-003**	**0.0000**	**2.7000e-004**	**1.8000e-004**	**4.5000e-004**	**3.0000e-005**	**1.7000e-004**	**2.0000e-004**	**0.0000**	**0.4378**	**0.4378**	**1.4000e-004**	**0.0000**	**0.4413**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0185	0.0185	0.0000	0.0000	0.0185
Total	**1.0000e-005**	**1.0000e-005**	**8.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0185**	**0.0185**	**0.0000**	**0.0000**	**0.0185**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5000e-004	8.6000e-003	7.6900e-003	1.0000e-005		5.4000e-004	5.4000e-004		5.1000e-004	5.1000e-004	0.0000	1.0520	1.0520	2.0000e-004	0.0000	1.0570
Total	**9.5000e-004**	**8.6000e-003**	**7.6900e-003**	**1.0000e-005**	**7.5000e-004**	**5.4000e-004**	**1.2900e-003**	**4.1000e-004**	**5.1000e-004**	**9.2000e-004**	**0.0000**	**1.0520**	**1.0520**	**2.0000e-004**	**0.0000**	**1.0570**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	3.0000e-005	3.3000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0741	0.0741	0.0000	0.0000	0.0742
Total	**5.0000e-005**	**3.0000e-005**	**3.3000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0741**	**0.0741**	**0.0000**	**0.0000**	**0.0742**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5000e-004	8.6000e-003	7.6900e-003	1.0000e-005		5.4000e-004	5.4000e-004		5.1000e-004	5.1000e-004	0.0000	1.0520	1.0520	2.0000e-004	0.0000	1.0570
Total	**9.5000e-004**	**8.6000e-003**	**7.6900e-003**	**1.0000e-005**	**7.5000e-004**	**5.4000e-004**	**1.2900e-003**	**4.1000e-004**	**5.1000e-004**	**9.2000e-004**	**0.0000**	**1.0520**	**1.0520**	**2.0000e-004**	**0.0000**	**1.0570**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	3.0000e-005	3.3000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0741	0.0741	0.0000	0.0000	0.0742
Total	**5.0000e-005**	**3.0000e-005**	**3.3000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0741**	**0.0741**	**0.0000**	**0.0000**	**0.0742**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0479	0.4910	0.3772	5.7000e-004		0.0303	0.0303		0.0279	0.0279	0.0000	51.1502	51.1502	0.0162	0.0000	51.5548
Total	**0.0479**	**0.4910**	**0.3772**	**5.7000e-004**		**0.0303**	**0.0303**		**0.0279**	**0.0279**	**0.0000**	**51.1502**	**51.1502**	**0.0162**	**0.0000**	**51.5548**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4000e-004	6.6700e-003	1.3400e-003	1.0000e-005	3.3000e-004	5.0000e-005	3.8000e-004	1.0000e-004	5.0000e-005	1.4000e-004	0.0000	1.3616	1.3616	1.1000e-004	0.0000	1.3645
Worker	2.3000e-004	1.6000e-004	1.6400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3704	0.3704	1.0000e-005	0.0000	0.3707
Total	**4.7000e-004**	**6.8300e-003**	**2.9800e-003**	**1.0000e-005**	**7.3000e-004**	**5.0000e-005**	**7.8000e-004**	**2.1000e-004**	**5.0000e-005**	**2.5000e-004**	**0.0000**	**1.7321**	**1.7321**	**1.2000e-004**	**0.0000**	**1.7352**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0479	0.4910	0.3772	5.7000e-004		0.0303	0.0303		0.0279	0.0279	0.0000	51.1502	51.1502	0.0162	0.0000	51.5548
Total	**0.0479**	**0.4910**	**0.3772**	**5.7000e-004**		**0.0303**	**0.0303**		**0.0279**	**0.0279**	**0.0000**	**51.1502**	**51.1502**	**0.0162**	**0.0000**	**51.5548**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4000e-004	6.6700e-003	1.3400e-003	1.0000e-005	3.3000e-004	5.0000e-005	3.8000e-004	1.0000e-004	5.0000e-005	1.4000e-004	0.0000	1.3616	1.3616	1.1000e-004	0.0000	1.3645
Worker	2.3000e-004	1.6000e-004	1.6400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3704	0.3704	1.0000e-005	0.0000	0.3707
Total	**4.7000e-004**	**6.8300e-003**	**2.9800e-003**	**1.0000e-005**	**7.3000e-004**	**5.0000e-005**	**7.8000e-004**	**2.1000e-004**	**5.0000e-005**	**2.5000e-004**	**0.0000**	**1.7321**	**1.7321**	**1.2000e-004**	**0.0000**	**1.7352**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.0700e-003	0.0196	0.0179	3.0000e-005		1.1100e-003	1.1100e-003		1.0300e-003	1.0300e-003	0.0000	2.3931	2.3931	6.8000e-004	0.0000	2.4102
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.0700e-003**	**0.0196**	**0.0179**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.0300e-003**	**1.0300e-003**	**0.0000**	**2.3931**	**2.3931**	**6.8000e-004**	**0.0000**	**2.4102**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	2.1000e-004	1.5000e-004	1.4800e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3334	0.3334	1.0000e-005	0.0000	0.3337
Total	**2.1000e-004**	**1.5000e-004**	**1.4800e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3334**	**0.3334**	**1.0000e-005**	**0.0000**	**0.3337**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	2.0700e-003	0.0196	0.0179	3.0000e-005		1.1100e-003	1.1100e-003		1.0300e-003	1.0300e-003	0.0000	2.3931	2.3931	6.8000e-004	0.0000	2.4102
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.0700e-003**	**0.0196**	**0.0179**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.0300e-003**	**1.0300e-003**	**0.0000**	**2.3931**	**2.3931**	**6.8000e-004**	**0.0000**	**2.4102**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	2.1000e-004	1.5000e-004	1.4800e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3334	0.3334	1.0000e-005	0.0000	0.3337
Total	**2.1000e-004**	**1.5000e-004**	**1.4800e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3334**	**0.3334**	**1.0000e-005**	**0.0000**	**0.3337**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0278					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7000e-004	4.5900e-003	4.6000e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397
Total	**0.0285**	**4.5900e-003**	**4.6000e-003**	**1.0000e-005**		**3.2000e-004**	**3.2000e-004**		**3.2000e-004**	**3.2000e-004**	**0.0000**	**0.6383**	**0.6383**	**5.0000e-005**	**0.0000**	**0.6397**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0278					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7000e-004	4.5900e-003	4.6000e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397
Total	**0.0285**	**4.5900e-003**	**4.6000e-003**	**1.0000e-005**		**3.2000e-004**	**3.2000e-004**		**3.2000e-004**	**3.2000e-004**	**0.0000**	**0.6383**	**0.6383**	**5.0000e-005**	**0.0000**	**0.6397**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1334	1.3689	0.9302	3.8200e-003	0.1732	3.3300e-003	0.1765	0.0466	3.1400e-003	0.0497	0.0000	355.8635	355.8635	0.0437	0.0000	356.9558
Unmitigated	0.1334	1.3689	0.9302	3.8200e-003	0.1732	3.3300e-003	0.1765	0.0466	3.1400e-003	0.0497	0.0000	355.8635	355.8635	0.0437	0.0000	356.9558

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Bank (with Drive-Through)	592.60	345.28	127.60	454,015	454,015
Total	592.60	345.28	127.60	454,015	454,015

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Bank (with Drive-Through)	9.50	7.30	7.30	6.60	74.40	19.00	27	26	47

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Bank (with Drive-Through)	0.506092	0.032602	0.169295	0.124521	0.019914	0.005374	0.021664	0.110051	0.001797	0.001623	0.005307	0.000969	0.000792

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	10.2634	10.2634	4.6000e-004	1.0000e-004	10.3036
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	10.2634	10.2634	4.6000e-004	1.0000e-004	10.3036
NaturalGas Mitigated	4.5000e-004	4.0900e-003	3.4400e-003	2.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	4.4548	4.4548	9.0000e-005	8.0000e-005	4.4813
NaturalGas Unmitigated	4.5000e-004	4.0900e-003	3.4400e-003	2.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	4.4548	4.4548	9.0000e-005	8.0000e-005	4.4813

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					
Bank (with Drive-Through)	83480	4.5000e-004	4.0900e-003	3.4400e-003	2.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	4.4548	4.4548	9.0000e-005	8.0000e-005	4.4813
Total		**4.5000e-004**	**4.0900e-003**	**3.4400e-003**	**2.0000e-005**		**3.1000e-004**	**3.1000e-004**		**3.1000e-004**	**3.1000e-004**	**0.0000**	**4.4548**	**4.4548**	**9.0000e-005**	**8.0000e-005**	**4.4813**

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					
Bank (with Drive-Through)	83480	4.5000e-004	4.0900e-003	3.4400e-003	2.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	4.4548	4.4548	9.0000e-005	8.0000e-005	4.4813
Total		**4.5000e-004**	**4.0900e-003**	**3.4400e-003**	**2.0000e-005**		**3.1000e-004**	**3.1000e-004**		**3.1000e-004**	**3.1000e-004**	**0.0000**	**4.4548**	**4.4548**	**9.0000e-005**	**8.0000e-005**	**4.4813**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Bank (with Drive-Through)	35280	10.2634	4.6000e-004	1.0000e-004	10.3036
Total		**10.2634**	**4.6000e-004**	**1.0000e-004**	**10.3036**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Bank (with Drive-Through)	35280	10.2634	4.6000e-004	1.0000e-004	10.3036
Total		**10.2634**	**4.6000e-004**	**1.0000e-004**	**10.3036**

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	0.0184	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Unmitigated	0.0184	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005

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	2.7800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0156					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Total	**0.0184**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

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	2.7800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0156					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Total	**0.0184**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.3987	5.1800e-003	1.3000e-004	0.5655
Unmitigated	0.3987	5.1800e-003	1.3000e-004	0.5655

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Bank (with Drive-Through)	0.158492 / 0.0971401	0.3987	5.1800e-003	1.3000e-004	0.5655
Total		**0.3987**	**5.1800e-003**	**1.3000e-004**	**0.5655**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Bank (with Drive-Through)	0.158492 / 0.0971401	0.3987	5.1800e-003	1.3000e-004	0.5655
Total		**0.3987**	**5.1800e-003**	**1.3000e-004**	**0.5655**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.7572	0.0448	0.0000	1.8758
Unmitigated	0.7572	0.0448	0.0000	1.8758

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Bank (with Drive-Through)	3.73	0.7572	0.0448	0.0000	1.8758
Total		**0.7572**	**0.0448**	**0.0000**	**1.8758**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Bank (with Drive-Through)	3.73	0.7572	0.0448	0.0000	1.8758
Total		**0.7572**	**0.0448**	**0.0000**	**1.8758**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Wible-Hosking Cumulative Review Project 2

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	329.70	1000sqft	7.57	329,700.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Table Name	Column Name	Default Value	New Value

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					
2019	0.4071	3.8333	2.7929	6.1900e-003	0.2837	0.1837	0.4674	0.1182	0.1721	0.2902	0.0000	558.0573	558.0573	0.0981	0.0000	560.5107
2020	2.3417	0.4583	0.4190	8.7000e-004	0.0167	0.0220	0.0387	4.5400e-003	0.0206	0.0251	0.0000	77.3210	77.3210	0.0148	0.0000	77.6915
Maximum	**2.3417**	**3.8333**	**2.7929**	**6.1900e-003**	**0.2837**	**0.1837**	**0.4674**	**0.1182**	**0.1721**	**0.2902**	**0.0000**	**558.0573**	**558.0573**	**0.0981**	**0.0000**	**560.5107**

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					
2019	0.4071	3.8333	2.7929	6.1900e-003	0.2837	0.1837	0.4674	0.1182	0.1721	0.2902	0.0000	558.0569	558.0569	0.0981	0.0000	560.5103
2020	2.3417	0.4583	0.4190	8.7000e-004	0.0167	0.0220	0.0387	4.5400e-003	0.0206	0.0251	0.0000	77.3209	77.3209	0.0148	0.0000	77.6915
Maximum	**2.3417**	**3.8333**	**2.7929**	**6.1900e-003**	**0.2837**	**0.1837**	**0.4674**	**0.1182**	**0.1721**	**0.2902**	**0.0000**	**558.0569**	**558.0569**	**0.0981**	**0.0000**	**560.5103**

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

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-7-2019	4-6-2019	1.1766	1.1766
2	4-7-2019	7-6-2019	1.0290	1.0290
3	7-7-2019	10-6-2019	1.0407	1.0407
4	10-7-2019	1-6-2020	1.0390	1.0390
5	1-7-2020	4-6-2020	2.7265	2.7265
		Highest	2.7265	2.7265

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.5172	3.0000e-005	3.0400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.8900e-003	5.8900e-003	2.0000e-005	0.0000	6.2800e-003
Energy	0.0232	0.2109	0.1772	1.2700e-003		0.0160	0.0160		0.0160	0.0160	0.0000	1,104.3335	1,104.3335	0.0440	0.0124	1,109.1254
Mobile	0.9667	10.3333	9.3828	0.0434	2.5181	0.0396	2.5577	0.6773	0.0374	0.7147	0.0000	4,029.0173	4,029.0173	0.2962	0.0000	4,036.4224
Waste						0.0000	0.0000		0.0000	0.0000	62.2411	0.0000	62.2411	3.6783	0.0000	154.1997
Water						0.0000	0.0000		0.0000	0.0000	18.5907	128.8104	147.4011	1.9153	0.0463	209.0776
Total	**2.5070**	**10.5443**	**9.5630**	**0.0447**	**2.5181**	**0.0556**	**2.5738**	**0.6773**	**0.0534**	**0.7308**	**80.8318**	**5,262.1671**	**5,342.9989**	**5.9338**	**0.0587**	**5,508.8313**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.5172	3.0000e-005	3.0400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.8900e-003	5.8900e-003	2.0000e-005	0.0000	6.2800e-003
Energy	0.0232	0.2109	0.1772	1.2700e-003		0.0160	0.0160		0.0160	0.0160	0.0000	1,104.3335	1,104.3335	0.0440	0.0124	1,109.1254
Mobile	0.9667	10.3333	9.3828	0.0434	2.5181	0.0396	2.5577	0.6773	0.0374	0.7147	0.0000	4,029.0173	4,029.0173	0.2962	0.0000	4,036.4224
Waste						0.0000	0.0000		0.0000	0.0000	62.2411	0.0000	62.2411	3.6783	0.0000	154.1997
Water						0.0000	0.0000		0.0000	0.0000	18.5907	128.8104	147.4011	1.9153	0.0463	209.0776
Total	**2.5070**	**10.5443**	**9.5630**	**0.0447**	**2.5181**	**0.0556**	**2.5738**	**0.6773**	**0.0534**	**0.7308**	**80.8318**	**5,262.1671**	**5,342.9989**	**5.9338**	**0.0587**	**5,508.8313**

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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/7/2019	2/1/2019	5	20	
2	Site Preparation	Site Preparation	2/2/2019	2/15/2019	5	10	
3	Grading	Grading	2/16/2019	3/15/2019	5	20	
4	Building Construction	Building Construction	3/16/2019	1/31/2020	5	230	
5	Paving	Paving	2/1/2020	2/28/2020	5	20	
6	Architectural Coating	Architectural Coating	2/29/2020	3/27/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 494,550; Non-Residential Outdoor: 164,850; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	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	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	106.00	54.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	21.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672
Total	**0.0351**	**0.3578**	**0.2206**	**3.9000e-004**		**0.0180**	**0.0180**		**0.0167**	**0.0167**	**0.0000**	**34.6263**	**34.6263**	**9.6300e-003**	**0.0000**	**34.8672**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	4.9000e-004	4.9200e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1113	1.1113	4.0000e-005	0.0000	1.1122
Total	**7.0000e-004**	**4.9000e-004**	**4.9200e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1113**	**1.1113**	**4.0000e-005**	**0.0000**	**1.1122**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671
Total	**0.0351**	**0.3578**	**0.2206**	**3.9000e-004**		**0.0180**	**0.0180**		**0.0167**	**0.0167**	**0.0000**	**34.6263**	**34.6263**	**9.6300e-003**	**0.0000**	**34.8671**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	4.9000e-004	4.9200e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1113	1.1113	4.0000e-005	0.0000	1.1122
Total	**7.0000e-004**	**4.9000e-004**	**4.9200e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1113**	**1.1113**	**4.0000e-005**	**0.0000**	**1.1122**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0903**	**0.0120**	**0.1023**	**0.0497**	**0.0110**	**0.0607**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	4.2000e-004	2.9000e-004	2.9500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6668	0.6668	2.0000e-005	0.0000	0.6673
Total	**4.2000e-004**	**2.9000e-004**	**2.9500e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.6668**	**0.6668**	**2.0000e-005**	**0.0000**	**0.6673**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0903**	**0.0120**	**0.1023**	**0.0497**	**0.0110**	**0.0607**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	4.2000e-004	2.9000e-004	2.9500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6668	0.6668	2.0000e-005	0.0000	0.6673
Total	**4.2000e-004**	**2.9000e-004**	**2.9500e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.6668**	**0.6668**	**2.0000e-005**	**0.0000**	**0.6673**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0258	0.2835	0.1629	3.0000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	26.6423	26.6423	8.4300e-003	0.0000	26.8530
Total	**0.0258**	**0.2835**	**0.1629**	**3.0000e-004**	**0.0655**	**0.0140**	**0.0795**	**0.0337**	**0.0129**	**0.0465**	**0.0000**	**26.6423**	**26.6423**	**8.4300e-003**	**0.0000**	**26.8530**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	4.9000e-004	4.9200e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1113	1.1113	4.0000e-005	0.0000	1.1122
Total	**7.0000e-004**	**4.9000e-004**	**4.9200e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1113**	**1.1113**	**4.0000e-005**	**0.0000**	**1.1122**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0258	0.2835	0.1629	3.0000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	26.6422	26.6422	8.4300e-003	0.0000	26.8530
Total	**0.0258**	**0.2835**	**0.1629**	**3.0000e-004**	**0.0655**	**0.0140**	**0.0795**	**0.0337**	**0.0129**	**0.0465**	**0.0000**	**26.6422**	**26.6422**	**8.4300e-003**	**0.0000**	**26.8530**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	4.9000e-004	4.9200e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1113	1.1113	4.0000e-005	0.0000	1.1122
Total	**7.0000e-004**	**4.9000e-004**	**4.9200e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1113**	**1.1113**	**4.0000e-005**	**0.0000**	**1.1122**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2444	2.1817	1.7765	2.7900e-003		0.1335	0.1335		0.1255	0.1255	0.0000	243.3328	243.3328	0.0593	0.0000	244.8148
Total	**0.2444**	**2.1817**	**1.7765**	**2.7900e-003**		**0.1335**	**0.1335**		**0.1255**	**0.1255**	**0.0000**	**243.3328**	**243.3328**	**0.0593**	**0.0000**	**244.8148**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0273	0.7454	0.1498	1.6000e-003	0.0371	5.6300e-003	0.0427	0.0107	5.3900e-003	0.0161	0.0000	152.2025	152.2025	0.0127	0.0000	152.5200
Worker	0.0510	0.0358	0.3600	9.0000e-004	0.0877	6.5000e-004	0.0884	0.0233	5.9000e-004	0.0239	0.0000	81.2797	81.2797	2.6000e-003	0.0000	81.3447
Total	**0.0783**	**0.7812**	**0.5098**	**2.5000e-003**	**0.1248**	**6.2800e-003**	**0.1310**	**0.0340**	**5.9800e-003**	**0.0400**	**0.0000**	**233.4822**	**233.4822**	**0.0153**	**0.0000**	**233.8647**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2444	2.1817	1.7765	2.7900e-003		0.1335	0.1335		0.1255	0.1255	0.0000	243.3326	243.3326	0.0593	0.0000	244.8145
Total	**0.2444**	**2.1817**	**1.7765**	**2.7900e-003**		**0.1335**	**0.1335**		**0.1255**	**0.1255**	**0.0000**	**243.3326**	**243.3326**	**0.0593**	**0.0000**	**244.8145**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0273	0.7454	0.1498	1.6000e-003	0.0371	5.6300e-003	0.0427	0.0107	5.3900e-003	0.0161	0.0000	152.2025	152.2025	0.0127	0.0000	152.5200
Worker	0.0510	0.0358	0.3600	9.0000e-004	0.0877	6.5000e-004	0.0884	0.0233	5.9000e-004	0.0239	0.0000	81.2797	81.2797	2.6000e-003	0.0000	81.3447
Total	**0.0783**	**0.7812**	**0.5098**	**2.5000e-003**	**0.1248**	**6.2800e-003**	**0.1310**	**0.0340**	**5.9800e-003**	**0.0400**	**0.0000**	**233.4822**	**233.4822**	**0.0153**	**0.0000**	**233.8647**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0244	0.2206	0.1938	3.1000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	26.6352	26.6352	6.5000e-003	0.0000	26.7976
Total	**0.0244**	**0.2206**	**0.1938**	**3.1000e-004**		**0.0129**	**0.0129**		**0.0121**	**0.0121**	**0.0000**	**26.6352**	**26.6352**	**6.5000e-003**	**0.0000**	**26.7976**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4600e-003	0.0756	0.0143	1.8000e-004	4.1200e-003	4.2000e-004	4.5300e-003	1.1900e-003	4.0000e-004	1.5900e-003	0.0000	16.7682	16.7682	1.3200e-003	0.0000	16.8013
Worker	5.1500e-003	3.5000e-003	0.0356	1.0000e-004	9.7500e-003	7.0000e-005	9.8100e-003	2.5900e-003	6.0000e-005	2.6500e-003	0.0000	8.7516	8.7516	2.5000e-004	0.0000	8.7579
Total	**7.6100e-003**	**0.0791**	**0.0499**	**2.8000e-004**	**0.0139**	**4.9000e-004**	**0.0143**	**3.7800e-003**	**4.6000e-004**	**4.2400e-003**	**0.0000**	**25.5198**	**25.5198**	**1.5700e-003**	**0.0000**	**25.5592**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0244	0.2206	0.1938	3.1000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	26.6351	26.6351	6.5000e-003	0.0000	26.7976
Total	**0.0244**	**0.2206**	**0.1938**	**3.1000e-004**		**0.0129**	**0.0129**		**0.0121**	**0.0121**	**0.0000**	**26.6351**	**26.6351**	**6.5000e-003**	**0.0000**	**26.7976**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4600e-003	0.0756	0.0143	1.8000e-004	4.1200e-003	4.2000e-004	4.5300e-003	1.1900e-003	4.0000e-004	1.5900e-003	0.0000	16.7682	16.7682	1.3200e-003	0.0000	16.8013
Worker	5.1500e-003	3.5000e-003	0.0356	1.0000e-004	9.7500e-003	7.0000e-005	9.8100e-003	2.5900e-003	6.0000e-005	2.6500e-003	0.0000	8.7516	8.7516	2.5000e-004	0.0000	8.7579
Total	**7.6100e-003**	**0.0791**	**0.0499**	**2.8000e-004**	**0.0139**	**4.9000e-004**	**0.0143**	**3.7800e-003**	**4.6000e-004**	**4.2400e-003**	**0.0000**	**25.5198**	**25.5198**	**1.5700e-003**	**0.0000**	**25.5592**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0136**	**0.1407**	**0.1465**	**2.3000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**20.0282**	**20.0282**	**6.4800e-003**	**0.0000**	**20.1902**

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	6.3000e-004	4.3000e-004	4.3700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total	**6.3000e-004**	**4.3000e-004**	**4.3700e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0136**	**0.1407**	**0.1465**	**2.3000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**20.0282**	**20.0282**	**6.4800e-003**	**0.0000**	**20.1901**

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	6.3000e-004	4.3000e-004	4.3700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total	**6.3000e-004**	**4.3000e-004**	**4.3700e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.2922					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	**2.2947**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5582**

3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.9000e-004	6.0000e-004	6.1200e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5077	1.5077	4.0000e-005	0.0000	1.5087
Total	**8.9000e-004**	**6.0000e-004**	**6.1200e-003**	**2.0000e-005**	**1.6800e-003**	**1.0000e-005**	**1.6900e-003**	**4.5000e-004**	**1.0000e-005**	**4.6000e-004**	**0.0000**	**1.5077**	**1.5077**	**4.0000e-005**	**0.0000**	**1.5087**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	2.2922					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	**2.2947**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5582**

3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.9000e-004	6.0000e-004	6.1200e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5077	1.5077	4.0000e-005	0.0000	1.5087
Total	**8.9000e-004**	**6.0000e-004**	**6.1200e-003**	**2.0000e-005**	**1.6800e-003**	**1.0000e-005**	**1.6900e-003**	**4.5000e-004**	**1.0000e-005**	**4.6000e-004**	**0.0000**	**1.5077**	**1.5077**	**4.0000e-005**	**0.0000**	**1.5087**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.9667	10.3333	9.3828	0.0434	2.5181	0.0396	2.5577	0.6773	0.0374	0.7147	0.0000	4,029.0173	4,029.0173	0.2962	0.0000	4,036.4224
Unmitigated	0.9667	10.3333	9.3828	0.0434	2.5181	0.0396	2.5577	0.6773	0.0374	0.7147	0.0000	4,029.0173	4,029.0173	0.2962	0.0000	4,036.4224

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	3,636.59	811.06	346.19	6,602,615	6,602,615
Total	3,636.59	811.06	346.19	6,602,615	6,602,615

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.506092	0.032602	0.169295	0.124521	0.019914	0.005374	0.021664	0.110051	0.001797	0.001623	0.005307	0.000969	0.000792

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	874.7312	874.7312	0.0396	8.1800e-003	878.1587
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	874.7312	874.7312	0.0396	8.1800e-003	878.1587
NaturalGas Mitigated	0.0232	0.2109	0.1772	1.2700e-003		0.0160	0.0160		0.0160	0.0160	0.0000	229.6023	229.6023	4.4000e-003	4.2100e-003	230.9667
NaturalGas Unmitigated	0.0232	0.2109	0.1772	1.2700e-003		0.0160	0.0160		0.0160	0.0160	0.0000	229.6023	229.6023	4.4000e-003	4.2100e-003	230.9667

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					
General Office Building	4.30259e+006	0.0232	0.2109	0.1772	1.2700e-003		0.0160	0.0160		0.0160	0.0160	0.0000	229.6023	229.6023	4.4000e-003	4.2100e-003	230.9667
Total		**0.0232**	**0.2109**	**0.1772**	**1.2700e-003**		**0.0160**	**0.0160**		**0.0160**	**0.0160**	**0.0000**	**229.6023**	**229.6023**	**4.4000e-003**	**4.2100e-003**	**230.9667**

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					
General Office Building	4.30259e+006	0.0232	0.2109	0.1772	1.2700e-003		0.0160	0.0160		0.0160	0.0160	0.0000	229.6023	229.6023	4.4000e-003	4.2100e-003	230.9667
Total		**0.0232**	**0.2109**	**0.1772**	**1.2700e-003**		**0.0160**	**0.0160**		**0.0160**	**0.0160**	**0.0000**	**229.6023**	**229.6023**	**4.4000e-003**	**4.2100e-003**	**230.9667**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	3.00686e+006	874.7312	0.0396	8.1800e-003	878.1587
Total		**874.7312**	**0.0396**	**8.1800e-003**	**878.1587**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	3.00686e+006	874.7312	0.0396	8.1800e-003	878.1587
Total		**874.7312**	**0.0396**	**8.1800e-003**	**878.1587**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5172	3.0000e-005	3.0400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.8900e-003	5.8900e-003	2.0000e-005	0.0000	6.2800e-003
Unmitigated	1.5172	3.0000e-005	3.0400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.8900e-003	5.8900e-003	2.0000e-005	0.0000	6.2800e-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	0.2292					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2876					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.8000e-004	3.0000e-005	3.0400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.8900e-003	5.8900e-003	2.0000e-005	0.0000	6.2800e-003
Total	**1.5171**	**3.0000e-005**	**3.0400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.8900e-003**	**5.8900e-003**	**2.0000e-005**	**0.0000**	**6.2800e-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	0.2292					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2876					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.8000e-004	3.0000e-005	3.0400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.8900e-003	5.8900e-003	2.0000e-005	0.0000	6.2800e-003
Total	**1.5171**	**3.0000e-005**	**3.0400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.8900e-003**	**5.8900e-003**	**2.0000e-005**	**0.0000**	**6.2800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	147.4011	1.9153	0.0463	209.0776
Unmitigated	147.4011	1.9153	0.0463	209.0776

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	58.5988 / 35.9154	147.4011	1.9153	0.0463	209.0776
Total		**147.4011**	**1.9153**	**0.0463**	**209.0776**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	58.5988 / 35.9154	147.4011	1.9153	0.0463	209.0776
Total		**147.4011**	**1.9153**	**0.0463**	**209.0776**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	62.2411	3.6783	0.0000	154.1997
Unmitigated	62.2411	3.6783	0.0000	154.1997

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	306.62	62.2411	3.6783	0.0000	154.1997
Total		**62.2411**	**3.6783**	**0.0000**	**154.1997**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	306.62	62.2411	3.6783	0.0000	154.1997
Total		**62.2411**	**3.6783**	**0.0000**	**154.1997**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Wible-Hosking Cumulative Review Project 3

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	870.00	1000sqft	19.97	870,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Table Name	Column Name	Default Value	New Value

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					
2019	0.5591	5.4494	3.8160	0.0105	0.5370	0.2085	0.7456	0.1899	0.1951	0.3850	0.0000	957.2940	957.2940	0.1365	0.0000	960.7067
2020	6.2665	2.0851	1.6407	4.9300e-003	0.1690	0.0720	0.2409	0.0460	0.0676	0.1137	0.0000	448.6001	448.6001	0.0546	0.0000	449.9643
Maximum	**6.2665**	**5.4494**	**3.8160**	**0.0105**	**0.5370**	**0.2085**	**0.7456**	**0.1899**	**0.1951**	**0.3850**	**0.0000**	**957.2940**	**957.2940**	**0.1365**	**0.0000**	**960.7067**

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					
2019	0.5591	5.4494	3.8160	0.0105	0.5370	0.2085	0.7456	0.1899	0.1951	0.3850	0.0000	957.2935	957.2935	0.1365	0.0000	960.7062
2020	6.2665	2.0851	1.6407	4.9300e-003	0.1690	0.0720	0.2409	0.0460	0.0676	0.1137	0.0000	448.6000	448.6000	0.0546	0.0000	449.9641
Maximum	**6.2665**	**5.4494**	**3.8160**	**0.0105**	**0.5370**	**0.2085**	**0.7456**	**0.1899**	**0.1951**	**0.3850**	**0.0000**	**957.2935**	**957.2935**	**0.1365**	**0.0000**	**960.7062**

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

Wible-Hosking Cumulative Review Project 3 - San Joaquin Valley Air Basin, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-7-2019	4-6-2019	1.6372	1.6372
2	4-7-2019	7-6-2019	1.4688	1.4688
3	7-7-2019	10-6-2019	1.4857	1.4857
4	10-7-2019	1-6-2020	1.4888	1.4888
5	1-7-2020	4-6-2020	1.3445	1.3445
6	4-7-2020	7-6-2020	4.5170	4.5170
7	7-7-2020	9-30-2020	2.3855	2.3855
		Highest	4.5170	4.5170

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	4.0034	7.0000e-005	8.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0156	0.0156	4.0000e-005	0.0000	0.0166
Energy	0.0612	0.5565	0.4675	3.3400e-003		0.0423	0.0423		0.0423	0.0423	0.0000	2,914.0739	2,914.0739	0.1160	0.0327	2,926.7185
Mobile	2.5508	27.2672	24.7589	0.1145	6.6447	0.1045	6.7492	1.7873	0.0987	1.8860	0.0000	10,631.6198	10,631.6198	0.7816	0.0000	10,651.1602
Waste						0.0000	0.0000		0.0000	0.0000	164.2400	0.0000	164.2400	9.7063	0.0000	406.8976
Water						0.0000	0.0000		0.0000	0.0000	49.0565	339.9000	388.9565	5.0539	0.1222	551.7060
Total	**6.6155**	**27.8239**	**25.2344**	**0.1178**	**6.6447**	**0.1468**	**6.7916**	**1.7873**	**0.1410**	**1.9284**	**213.2964**	**13,885.6093**	**14,098.9057**	**15.6579**	**0.1549**	**14,536.4990**

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	4.0034	7.0000e-005	8.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0156	0.0156	4.0000e-005	0.0000	0.0166
Energy	0.0612	0.5565	0.4675	3.3400e-003		0.0423	0.0423		0.0423	0.0423	0.0000	2,914.0739	2,914.0739	0.1160	0.0327	2,926.7185
Mobile	2.5508	27.2672	24.7589	0.1145	6.6447	0.1045	6.7492	1.7873	0.0987	1.8860	0.0000	10,631.6198	10,631.6198	0.7816	0.0000	10,651.1602
Waste						0.0000	0.0000		0.0000	0.0000	164.2400	0.0000	164.2400	9.7063	0.0000	406.8976
Water						0.0000	0.0000		0.0000	0.0000	49.0565	339.9000	388.9565	5.0539	0.1222	551.7060
Total	**6.6155**	**27.8239**	**25.2344**	**0.1178**	**6.6447**	**0.1468**	**6.7916**	**1.7873**	**0.1410**	**1.9284**	**213.2964**	**13,885.6093**	**14,098.9057**	**15.6579**	**0.1549**	**14,536.4990**

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

3.0 Construction Detail

Construction Phase

Wible-Hosking Cumulative Review Project 3 - San Joaquin Valley Air Basin, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/7/2019	2/1/2019	5	20	
2	Site Preparation	Site Preparation	2/2/2019	2/15/2019	5	10	
3	Grading	Grading	2/16/2019	3/29/2019	5	30	
4	Building Construction	Building Construction	3/30/2019	5/22/2020	5	300	
5	Paving	Paving	5/23/2020	6/19/2020	5	20	
6	Architectural Coating	Architectural Coating	6/20/2020	7/17/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,305,000; Non-Residential Outdoor: 435,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Wible-Hosking Cumulative Review Project 3 - San Joaquin Valley Air Basin, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	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	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	278.00	143.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	56.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672
Total	**0.0351**	**0.3578**	**0.2206**	**3.9000e-004**		**0.0180**	**0.0180**		**0.0167**	**0.0167**	**0.0000**	**34.6263**	**34.6263**	**9.6300e-003**	**0.0000**	**34.8672**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	4.9000e-004	4.9200e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1113	1.1113	4.0000e-005	0.0000	1.1122
Total	**7.0000e-004**	**4.9000e-004**	**4.9200e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1113**	**1.1113**	**4.0000e-005**	**0.0000**	**1.1122**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671
Total	**0.0351**	**0.3578**	**0.2206**	**3.9000e-004**		**0.0180**	**0.0180**		**0.0167**	**0.0167**	**0.0000**	**34.6263**	**34.6263**	**9.6300e-003**	**0.0000**	**34.8671**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	4.9000e-004	4.9200e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1113	1.1113	4.0000e-005	0.0000	1.1122
Total	**7.0000e-004**	**4.9000e-004**	**4.9200e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1113**	**1.1113**	**4.0000e-005**	**0.0000**	**1.1122**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0903**	**0.0120**	**0.1023**	**0.0497**	**0.0110**	**0.0607**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	4.2000e-004	2.9000e-004	2.9500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6668	0.6668	2.0000e-005	0.0000	0.6673
Total	**4.2000e-004**	**2.9000e-004**	**2.9500e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.6668**	**0.6668**	**2.0000e-005**	**0.0000**	**0.6673**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0903**	**0.0120**	**0.1023**	**0.0497**	**0.0110**	**0.0607**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	4.2000e-004	2.9000e-004	2.9500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6668	0.6668	2.0000e-005	0.0000	0.6673
Total	**4.2000e-004**	**2.9000e-004**	**2.9500e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.6668**	**0.6668**	**2.0000e-005**	**0.0000**	**0.6673**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	83.5520	83.5520	0.0264	0.0000	84.2129
Total	**0.0711**	**0.8178**	**0.5007**	**9.3000e-004**	**0.1301**	**0.0357**	**0.1658**	**0.0540**	**0.0329**	**0.0868**	**0.0000**	**83.5520**	**83.5520**	**0.0264**	**0.0000**	**84.2129**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.3900e-003	9.8000e-004	9.8500e-003	2.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.5000e-004	0.0000	2.2226	2.2226	7.0000e-005	0.0000	2.2244
Total	**1.3900e-003**	**9.8000e-004**	**9.8500e-003**	**2.0000e-005**	**2.4000e-003**	**2.0000e-005**	**2.4200e-003**	**6.4000e-004**	**2.0000e-005**	**6.5000e-004**	**0.0000**	**2.2226**	**2.2226**	**7.0000e-005**	**0.0000**	**2.2244**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	83.5519	83.5519	0.0264	0.0000	84.2128
Total	**0.0711**	**0.8178**	**0.5007**	**9.3000e-004**	**0.1301**	**0.0357**	**0.1658**	**0.0540**	**0.0329**	**0.0868**	**0.0000**	**83.5519**	**83.5519**	**0.0264**	**0.0000**	**84.2128**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.3900e-003	9.8000e-004	9.8500e-003	2.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.5000e-004	0.0000	2.2226	2.2226	7.0000e-005	0.0000	2.2244
Total	**1.3900e-003**	**9.8000e-004**	**9.8500e-003**	**2.0000e-005**	**2.4000e-003**	**2.0000e-005**	**2.4200e-003**	**6.4000e-004**	**2.0000e-005**	**6.5000e-004**	**0.0000**	**2.2226**	**2.2226**	**7.0000e-005**	**0.0000**	**2.2244**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2326	2.0763	1.6906	2.6500e-003		0.1271	0.1271		0.1195	0.1195	0.0000	231.5776	231.5776	0.0564	0.0000	232.9880
Total	**0.2326**	**2.0763**	**1.6906**	**2.6500e-003**		**0.1271**	**0.1271**		**0.1195**	**0.1195**	**0.0000**	**231.5776**	**231.5776**	**0.0564**	**0.0000**	**232.9880**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0688	1.8785	0.3774	4.0400e-003	0.0934	0.0142	0.1076	0.0270	0.0136	0.0406	0.0000	383.5835	383.5835	0.0320	0.0000	384.3836
Worker	0.1273	0.0894	0.8986	2.2500e-003	0.2189	1.6100e-003	0.2205	0.0582	1.4800e-003	0.0597	0.0000	202.8696	202.8696	6.4900e-003	0.0000	203.0318
Total	**0.1961**	**1.9679**	**1.2760**	**6.2900e-003**	**0.3123**	**0.0158**	**0.3281**	**0.0852**	**0.0151**	**0.1002**	**0.0000**	**586.4531**	**586.4531**	**0.0385**	**0.0000**	**587.4154**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2326	2.0763	1.6906	2.6500e-003		0.1271	0.1271		0.1195	0.1195	0.0000	231.5774	231.5774	0.0564	0.0000	232.9877
Total	**0.2326**	**2.0763**	**1.6906**	**2.6500e-003**		**0.1271**	**0.1271**		**0.1195**	**0.1195**	**0.0000**	**231.5774**	**231.5774**	**0.0564**	**0.0000**	**232.9877**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0688	1.8785	0.3774	4.0400e-003	0.0934	0.0142	0.1076	0.0270	0.0136	0.0406	0.0000	383.5835	383.5835	0.0320	0.0000	384.3836
Worker	0.1273	0.0894	0.8986	2.2500e-003	0.2189	1.6100e-003	0.2205	0.0582	1.4800e-003	0.0597	0.0000	202.8696	202.8696	6.4900e-003	0.0000	203.0318
Total	**0.1961**	**1.9679**	**1.2760**	**6.2900e-003**	**0.3123**	**0.0158**	**0.3281**	**0.0852**	**0.0151**	**0.1002**	**0.0000**	**586.4531**	**586.4531**	**0.0385**	**0.0000**	**587.4154**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1092	0.9881	0.8677	1.3900e-003		0.0575	0.0575		0.0541	0.0541	0.0000	119.2791	119.2791	0.0291	0.0000	120.0066
Total	**0.1092**	**0.9881**	**0.8677**	**1.3900e-003**		**0.0575**	**0.0575**		**0.0541**	**0.0541**	**0.0000**	**119.2791**	**119.2791**	**0.0291**	**0.0000**	**120.0066**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0292	0.8964	0.1700	2.0900e-003	0.0488	4.9400e-003	0.0538	0.0141	4.7200e-003	0.0188	0.0000	198.8561	198.8561	0.0157	0.0000	199.2486
Worker	0.0605	0.0411	0.4175	1.1400e-003	0.1145	8.2000e-004	0.1153	0.0304	7.5000e-004	0.0312	0.0000	102.7862	102.7862	2.9400e-003	0.0000	102.8598
Total	**0.0897**	**0.9375**	**0.5875**	**3.2300e-003**	**0.1633**	**5.7600e-003**	**0.1690**	**0.0445**	**5.4700e-003**	**0.0500**	**0.0000**	**301.6422**	**301.6422**	**0.0186**	**0.0000**	**302.1083**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1092	0.9881	0.8677	1.3900e-003		0.0575	0.0575		0.0541	0.0541	0.0000	119.2790	119.2790	0.0291	0.0000	120.0065
Total	**0.1092**	**0.9881**	**0.8677**	**1.3900e-003**		**0.0575**	**0.0575**		**0.0541**	**0.0541**	**0.0000**	**119.2790**	**119.2790**	**0.0291**	**0.0000**	**120.0065**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0292	0.8964	0.1700	2.0900e-003	0.0488	4.9400e-003	0.0538	0.0141	4.7200e-003	0.0188	0.0000	198.8561	198.8561	0.0157	0.0000	199.2486
Worker	0.0605	0.0411	0.4175	1.1400e-003	0.1145	8.2000e-004	0.1153	0.0304	7.5000e-004	0.0312	0.0000	102.7862	102.7862	2.9400e-003	0.0000	102.8598
Total	**0.0897**	**0.9375**	**0.5875**	**3.2300e-003**	**0.1633**	**5.7600e-003**	**0.1690**	**0.0445**	**5.4700e-003**	**0.0500**	**0.0000**	**301.6422**	**301.6422**	**0.0186**	**0.0000**	**302.1083**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0136**	**0.1407**	**0.1465**	**2.3000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**20.0282**	**20.0282**	**6.4800e-003**	**0.0000**	**20.1902**

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	6.3000e-004	4.3000e-004	4.3700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total	**6.3000e-004**	**4.3000e-004**	**4.3700e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0136**	**0.1407**	**0.1465**	**2.3000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**20.0282**	**20.0282**	**6.4800e-003**	**0.0000**	**20.1901**

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	6.3000e-004	4.3000e-004	4.3700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total	**6.3000e-004**	**4.3000e-004**	**4.3700e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	6.0487					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	**6.0511**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5582**

3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	2.3700e-003	1.6100e-003	0.0163	4.0000e-005	4.4800e-003	3.0000e-005	4.5100e-003	1.1900e-003	3.0000e-005	1.2200e-003	0.0000	4.0204	4.0204	1.2000e-004	0.0000	4.0233
Total	**2.3700e-003**	**1.6100e-003**	**0.0163**	**4.0000e-005**	**4.4800e-003**	**3.0000e-005**	**4.5100e-003**	**1.1900e-003**	**3.0000e-005**	**1.2200e-003**	**0.0000**	**4.0204**	**4.0204**	**1.2000e-004**	**0.0000**	**4.0233**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	6.0487					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	**6.0511**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5582**

3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	2.3700e-003	1.6100e-003	0.0163	4.0000e-005	4.4800e-003	3.0000e-005	4.5100e-003	1.1900e-003	3.0000e-005	1.2200e-003	0.0000	4.0204	4.0204	1.2000e-004	0.0000	4.0233
Total	**2.3700e-003**	**1.6100e-003**	**0.0163**	**4.0000e-005**	**4.4800e-003**	**3.0000e-005**	**4.5100e-003**	**1.1900e-003**	**3.0000e-005**	**1.2200e-003**	**0.0000**	**4.0204**	**4.0204**	**1.2000e-004**	**0.0000**	**4.0233**

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	2.5508	27.2672	24.7589	0.1145	6.6447	0.1045	6.7492	1.7873	0.0987	1.8860	0.0000	10,631.6198	10,631.6198	0.7816	0.0000	10,651.1602
Unmitigated	2.5508	27.2672	24.7589	0.1145	6.6447	0.1045	6.7492	1.7873	0.0987	1.8860	0.0000	10,631.6198	10,631.6198	0.7816	0.0000	10,651.1602

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	9,596.10	2,140.20	913.50	17,422,732	17,422,732
Total	9,596.10	2,140.20	913.50	17,422,732	17,422,732

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.506092	0.032602	0.169295	0.124521	0.019914	0.005374	0.021664	0.110051	0.001797	0.001623	0.005307	0.000969	0.000792

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,308.2079	2,308.2079	0.1044	0.0216	2,317.2522
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,308.2079	2,308.2079	0.1044	0.0216	2,317.2522
NaturalGas Mitigated	0.0612	0.5565	0.4675	3.3400e-003		0.0423	0.0423		0.0423	0.0423	0.0000	605.8660	605.8660	0.0116	0.0111	609.4664
NaturalGas Unmitigated	0.0612	0.5565	0.4675	3.3400e-003		0.0423	0.0423		0.0423	0.0423	0.0000	605.8660	605.8660	0.0116	0.0111	609.4664

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					
General Office Building	1.13535e+007	0.0612	0.5565	0.4675	3.3400e-003		0.0423	0.0423		0.0423	0.0423	0.0000	605.8660	605.8660	0.0116	0.0111	609.4664
Total		**0.0612**	**0.5565**	**0.4675**	**3.3400e-003**		**0.0423**	**0.0423**		**0.0423**	**0.0423**	**0.0000**	**605.8660**	**605.8660**	**0.0116**	**0.0111**	**609.4664**

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					
General Office Building	1.13535e+007	0.0612	0.5565	0.4675	3.3400e-003		0.0423	0.0423		0.0423	0.0423	0.0000	605.8660	605.8660	0.0116	0.0111	609.4664
Total		**0.0612**	**0.5565**	**0.4675**	**3.3400e-003**		**0.0423**	**0.0423**		**0.0423**	**0.0423**	**0.0000**	**605.8660**	**605.8660**	**0.0116**	**0.0111**	**609.4664**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	7.9344e+006	2,308.2079	0.1044	0.0216	2,317.2522
Total		**2,308.2079**	**0.1044**	**0.0216**	**2,317.2522**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	7.9344e+006	2,308.2079	0.1044	0.0216	2,317.2522
Total		**2,308.2079**	**0.1044**	**0.0216**	**2,317.2522**

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	4.0034	7.0000e-005	8.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0156	0.0156	4.0000e-005	0.0000	0.0166
Unmitigated	4.0034	7.0000e-005	8.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0156	0.0156	4.0000e-005	0.0000	0.0166

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	0.6049					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.3978					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.5000e-004	7.0000e-005	8.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0156	0.0156	4.0000e-005	0.0000	0.0166
Total	**4.0034**	**7.0000e-005**	**8.0300e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0156**	**0.0156**	**4.0000e-005**	**0.0000**	**0.0166**

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	0.6049					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.3978					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.5000e-004	7.0000e-005	8.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0156	0.0156	4.0000e-005	0.0000	0.0166
Total	**4.0034**	**7.0000e-005**	**8.0300e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0156**	**0.0156**	**4.0000e-005**	**0.0000**	**0.0166**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	388.9565	5.0539	0.1222	551.7060
Unmitigated	388.9565	5.0539	0.1222	551.7060

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	154.628 / 94.7722	388.9565	5.0539	0.1222	551.7060
Total		**388.9565**	**5.0539**	**0.1222**	**551.7060**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	154.628 / 94.7722	388.9565	5.0539	0.1222	551.7060
Total		**388.9565**	**5.0539**	**0.1222**	**551.7060**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	164.2400	9.7063	0.0000	406.8976
Unmitigated	164.2400	9.7063	0.0000	406.8976

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	809.1	164.2400	9.7063	0.0000	406.8976
Total		**164.2400**	**9.7063**	**0.0000**	**406.8976**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	809.1	164.2400	9.7063	0.0000	406.8976
Total		**164.2400**	**9.7063**	**0.0000**	**406.8976**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Wible-Hosking Cumulative Review Project 4

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	945.40	1000sqft	21.70	945,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Table Name	Column Name	Default Value	New Value

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					
2019	0.5771	5.6447	3.9354	0.0110	0.5780	0.2122	0.7902	0.2042	0.1984	0.4026	0.0000	999.9800	999.9800	0.1417	0.0000	1,003.5226
2020	6.9494	3.6238	2.7913	8.7800e-003	0.3131	0.1189	0.4320	0.0853	0.1118	0.1972	0.0000	800.2673	800.2673	0.0921	0.0000	802.5692
Maximum	**6.9494**	**5.6447**	**3.9354**	**0.0110**	**0.5780**	**0.2122**	**0.7902**	**0.2042**	**0.1984**	**0.4026**	**0.0000**	**999.9800**	**999.9800**	**0.1417**	**0.0000**	**1,003.5226**

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					
2019	0.5771	5.6447	3.9354	0.0110	0.5780	0.2122	0.7902	0.2042	0.1984	0.4026	0.0000	999.9796	999.9796	0.1417	0.0000	1,003.5221
2020	6.9494	3.6238	2.7913	8.7800e-003	0.3131	0.1189	0.4320	0.0853	0.1118	0.1972	0.0000	800.2670	800.2670	0.0921	0.0000	802.5690
Maximum	**6.9494**	**5.6447**	**3.9354**	**0.0110**	**0.5780**	**0.2122**	**0.7902**	**0.2042**	**0.1984**	**0.4026**	**0.0000**	**999.9796**	**999.9796**	**0.1417**	**0.0000**	**1,003.5221**

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

Wible-Hosking Cumulative Review Project 4 - San Joaquin Valley Air Basin, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-7-2019	4-6-2019	1.6732	1.6732
2	4-7-2019	7-6-2019	1.5285	1.5285
3	7-7-2019	10-6-2019	1.5462	1.5462
4	10-7-2019	1-6-2020	1.5499	1.5499
5	1-7-2020	4-6-2020	1.3997	1.3997
6	4-7-2020	7-6-2020	1.3897	1.3897
7	7-7-2020	9-30-2020	1.0606	1.0606
		Highest	1.6732	1.6732

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	4.3504	8.0000e-005	8.7200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0169	0.0169	4.0000e-005	0.0000	0.0180
Energy	0.0665	0.6048	0.5080	3.6300e-003		0.0460	0.0460		0.0460	0.0460	0.0000	3,166.6270	3,166.6270	0.1260	0.0355	3,180.3675
Mobile	2.7719	29.6304	26.9046	0.1244	7.2206	0.1135	7.3342	1.9423	0.1073	2.0495	0.0000	11,553.0268	11,553.0268	0.8494	0.0000	11,574.2608
Waste						0.0000	0.0000		0.0000	0.0000	178.4737	0.0000	178.4737	10.5475	0.0000	442.1611
Water						0.0000	0.0000		0.0000	0.0000	53.3080	369.3580	422.6660	5.4919	0.1327	599.5205
Total	**7.1888**	**30.2353**	**27.4214**	**0.1280**	**7.2206**	**0.1595**	**7.3801**	**1.9423**	**0.1532**	**2.0955**	**231.7817**	**15,089.0287**	**15,320.8104**	**17.0149**	**0.1683**	**15,796.3278**

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	4.3504	8.0000e-005	8.7200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0169	0.0169	4.0000e-005	0.0000	0.0180
Energy	0.0665	0.6048	0.5080	3.6300e-003		0.0460	0.0460		0.0460	0.0460	0.0000	3,166.6270	3,166.6270	0.1260	0.0355	3,180.3675
Mobile	2.7719	29.6304	26.9046	0.1244	7.2206	0.1135	7.3342	1.9423	0.1073	2.0495	0.0000	11,553.0268	11,553.0268	0.8494	0.0000	11,574.2608
Waste						0.0000	0.0000		0.0000	0.0000	178.4737	0.0000	178.4737	10.5475	0.0000	442.1611
Water						0.0000	0.0000		0.0000	0.0000	53.3080	369.3580	422.6660	5.4919	0.1327	599.5205
Total	**7.1888**	**30.2353**	**27.4214**	**0.1280**	**7.2206**	**0.1595**	**7.3801**	**1.9423**	**0.1532**	**2.0955**	**231.7817**	**15,089.0287**	**15,320.8104**	**17.0149**	**0.1683**	**15,796.3278**

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

3.0 Construction Detail

Construction Phase

Wible-Hosking Cumulative Review Project 4 - San Joaquin Valley Air Basin, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/7/2019	2/1/2019	5	20	
2	Site Preparation	Site Preparation	2/2/2019	2/15/2019	5	10	
3	Grading	Grading	2/16/2019	4/5/2019	5	35	
4	Building Construction	Building Construction	4/6/2019	9/4/2020	5	370	
5	Paving	Paving	9/5/2020	10/2/2020	5	20	
6	Architectural Coating	Architectural Coating	10/3/2020	10/30/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,418,100; Non-Residential Outdoor: 472,700; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Wible-Hosking Cumulative Review Project 4 - San Joaquin Valley Air Basin, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	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	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	303.00	155.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	61.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672
Total	**0.0351**	**0.3578**	**0.2206**	**3.9000e-004**		**0.0180**	**0.0180**		**0.0167**	**0.0167**	**0.0000**	**34.6263**	**34.6263**	**9.6300e-003**	**0.0000**	**34.8672**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	4.9000e-004	4.9200e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1113	1.1113	4.0000e-005	0.0000	1.1122
Total	**7.0000e-004**	**4.9000e-004**	**4.9200e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1113**	**1.1113**	**4.0000e-005**	**0.0000**	**1.1122**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671
Total	**0.0351**	**0.3578**	**0.2206**	**3.9000e-004**		**0.0180**	**0.0180**		**0.0167**	**0.0167**	**0.0000**	**34.6263**	**34.6263**	**9.6300e-003**	**0.0000**	**34.8671**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	4.9000e-004	4.9200e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1113	1.1113	4.0000e-005	0.0000	1.1122
Total	**7.0000e-004**	**4.9000e-004**	**4.9200e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1113**	**1.1113**	**4.0000e-005**	**0.0000**	**1.1122**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0903**	**0.0120**	**0.1023**	**0.0497**	**0.0110**	**0.0607**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	4.2000e-004	2.9000e-004	2.9500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6668	0.6668	2.0000e-005	0.0000	0.6673
Total	**4.2000e-004**	**2.9000e-004**	**2.9500e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.6668**	**0.6668**	**2.0000e-005**	**0.0000**	**0.6673**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0903**	**0.0120**	**0.1023**	**0.0497**	**0.0110**	**0.0607**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	4.2000e-004	2.9000e-004	2.9500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6668	0.6668	2.0000e-005	0.0000	0.6673
Total	**4.2000e-004**	**2.9000e-004**	**2.9500e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.6668**	**0.6668**	**2.0000e-005**	**0.0000**	**0.6673**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1518	0.0000	0.1518	0.0629	0.0000	0.0629	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0829	0.9541	0.5841	1.0900e-003		0.0417	0.0417		0.0384	0.0384	0.0000	97.4773	97.4773	0.0308	0.0000	98.2483
Total	**0.0829**	**0.9541**	**0.5841**	**1.0900e-003**	**0.1518**	**0.0417**	**0.1935**	**0.0629**	**0.0384**	**0.1013**	**0.0000**	**97.4773**	**97.4773**	**0.0308**	**0.0000**	**98.2483**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.6300e-003	1.1400e-003	0.0115	3.0000e-005	2.8000e-003	2.0000e-005	2.8200e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.5930	2.5930	8.0000e-005	0.0000	2.5951
Total	**1.6300e-003**	**1.1400e-003**	**0.0115**	**3.0000e-005**	**2.8000e-003**	**2.0000e-005**	**2.8200e-003**	**7.4000e-004**	**2.0000e-005**	**7.6000e-004**	**0.0000**	**2.5930**	**2.5930**	**8.0000e-005**	**0.0000**	**2.5951**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1518	0.0000	0.1518	0.0629	0.0000	0.0629	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0829	0.9541	0.5841	1.0900e-003		0.0417	0.0417		0.0384	0.0384	0.0000	97.4772	97.4772	0.0308	0.0000	98.2482
Total	**0.0829**	**0.9541**	**0.5841**	**1.0900e-003**	**0.1518**	**0.0417**	**0.1935**	**0.0629**	**0.0384**	**0.1013**	**0.0000**	**97.4772**	**97.4772**	**0.0308**	**0.0000**	**98.2482**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.6300e-003	1.1400e-003	0.0115	3.0000e-005	2.8000e-003	2.0000e-005	2.8200e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.5930	2.5930	8.0000e-005	0.0000	2.5951
Total	**1.6300e-003**	**1.1400e-003**	**0.0115**	**3.0000e-005**	**2.8000e-003**	**2.0000e-005**	**2.8200e-003**	**7.4000e-004**	**2.0000e-005**	**7.6000e-004**	**0.0000**	**2.5930**	**2.5930**	**8.0000e-005**	**0.0000**	**2.5951**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2267	2.0236	1.6477	2.5800e-003		0.1238	0.1238		0.1164	0.1164	0.0000	225.7000	225.7000	0.0550	0.0000	227.0746
Total	**0.2267**	**2.0236**	**1.6477**	**2.5800e-003**		**0.1238**	**0.1238**		**0.1164**	**0.1164**	**0.0000**	**225.7000**	**225.7000**	**0.0550**	**0.0000**	**227.0746**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0727	1.9844	0.3987	4.2700e-003	0.0986	0.0150	0.1136	0.0285	0.0143	0.0428	0.0000	405.2197	405.2197	0.0338	0.0000	406.0650
Worker	0.1353	0.0950	0.9546	2.3900e-003	0.2326	1.7100e-003	0.2343	0.0618	1.5800e-003	0.0634	0.0000	215.5013	215.5013	6.8900e-003	0.0000	215.6735
Total	**0.2079**	**2.0794**	**1.3533**	**6.6600e-003**	**0.3312**	**0.0167**	**0.3479**	**0.0903**	**0.0159**	**0.1062**	**0.0000**	**620.7209**	**620.7209**	**0.0407**	**0.0000**	**621.7385**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2267	2.0236	1.6477	2.5800e-003		0.1238	0.1238		0.1164	0.1164	0.0000	225.6998	225.6998	0.0550	0.0000	227.0743
Total	**0.2267**	**2.0236**	**1.6477**	**2.5800e-003**		**0.1238**	**0.1238**		**0.1164**	**0.1164**	**0.0000**	**225.6998**	**225.6998**	**0.0550**	**0.0000**	**227.0743**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0727	1.9844	0.3987	4.2700e-003	0.0986	0.0150	0.1136	0.0285	0.0143	0.0428	0.0000	405.2197	405.2197	0.0338	0.0000	406.0650
Worker	0.1353	0.0950	0.9546	2.3900e-003	0.2326	1.7100e-003	0.2343	0.0618	1.5800e-003	0.0634	0.0000	215.5013	215.5013	6.8900e-003	0.0000	215.6735
Total	**0.2079**	**2.0794**	**1.3533**	**6.6600e-003**	**0.3312**	**0.0167**	**0.3479**	**0.0903**	**0.0159**	**0.1062**	**0.0000**	**620.7209**	**620.7209**	**0.0407**	**0.0000**	**621.7385**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1887	1.7076	1.4995	2.4000e-003		0.0994	0.0994		0.0935	0.0935	0.0000	206.1329	206.1329	0.0503	0.0000	207.3901
Total	**0.1887**	**1.7076**	**1.4995**	**2.4000e-003**		**0.0994**	**0.0994**		**0.0935**	**0.0935**	**0.0000**	**206.1329**	**206.1329**	**0.0503**	**0.0000**	**207.3901**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0547	1.6792	0.3185	3.9200e-003	0.0915	9.2500e-003	0.1007	0.0264	8.8500e-003	0.0353	0.0000	372.4923	372.4923	0.0294	0.0000	373.2275
Worker	0.1140	0.0774	0.7864	2.1400e-003	0.2156	1.5400e-003	0.2171	0.0573	1.4100e-003	0.0587	0.0000	193.6044	193.6044	5.5500e-003	0.0000	193.7431
Total	**0.1687**	**1.7566**	**1.1048**	**6.0600e-003**	**0.3070**	**0.0108**	**0.3178**	**0.0837**	**0.0103**	**0.0940**	**0.0000**	**566.0967**	**566.0967**	**0.0350**	**0.0000**	**566.9706**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1887	1.7076	1.4995	2.4000e-003		0.0994	0.0994		0.0935	0.0935	0.0000	206.1326	206.1326	0.0503	0.0000	207.3899
Total	**0.1887**	**1.7076**	**1.4995**	**2.4000e-003**		**0.0994**	**0.0994**		**0.0935**	**0.0935**	**0.0000**	**206.1326**	**206.1326**	**0.0503**	**0.0000**	**207.3899**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0547	1.6792	0.3185	3.9200e-003	0.0915	9.2500e-003	0.1007	0.0264	8.8500e-003	0.0353	0.0000	372.4923	372.4923	0.0294	0.0000	373.2275
Worker	0.1140	0.0774	0.7864	2.1400e-003	0.2156	1.5400e-003	0.2171	0.0573	1.4100e-003	0.0587	0.0000	193.6044	193.6044	5.5500e-003	0.0000	193.7431
Total	**0.1687**	**1.7566**	**1.1048**	**6.0600e-003**	**0.3070**	**0.0108**	**0.3178**	**0.0837**	**0.0103**	**0.0940**	**0.0000**	**566.0967**	**566.0967**	**0.0350**	**0.0000**	**566.9706**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0136**	**0.1407**	**0.1465**	**2.3000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**20.0282**	**20.0282**	**6.4800e-003**	**0.0000**	**20.1902**

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	6.3000e-004	4.3000e-004	4.3700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total	**6.3000e-004**	**4.3000e-004**	**4.3700e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0136**	**0.1407**	**0.1465**	**2.3000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**20.0282**	**20.0282**	**6.4800e-003**	**0.0000**	**20.1901**

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	6.3000e-004	4.3000e-004	4.3700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total	**6.3000e-004**	**4.3000e-004**	**4.3700e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	6.5729					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	**6.5753**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5582**

3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	2.5800e-003	1.7500e-003	0.0178	5.0000e-005	4.8800e-003	3.0000e-005	4.9100e-003	1.3000e-003	3.0000e-005	1.3300e-003	0.0000	4.3794	4.3794	1.3000e-004	0.0000	4.3825
Total	**2.5800e-003**	**1.7500e-003**	**0.0178**	**5.0000e-005**	**4.8800e-003**	**3.0000e-005**	**4.9100e-003**	**1.3000e-003**	**3.0000e-005**	**1.3300e-003**	**0.0000**	**4.3794**	**4.3794**	**1.3000e-004**	**0.0000**	**4.3825**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	6.5729					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	**6.5753**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5582**

3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	2.5800e-003	1.7500e-003	0.0178	5.0000e-005	4.8800e-003	3.0000e-005	4.9100e-003	1.3000e-003	3.0000e-005	1.3300e-003	0.0000	4.3794	4.3794	1.3000e-004	0.0000	4.3825
Total	**2.5800e-003**	**1.7500e-003**	**0.0178**	**5.0000e-005**	**4.8800e-003**	**3.0000e-005**	**4.9100e-003**	**1.3000e-003**	**3.0000e-005**	**1.3300e-003**	**0.0000**	**4.3794**	**4.3794**	**1.3000e-004**	**0.0000**	**4.3825**

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	2.7719	29.6304	26.9046	0.1244	7.2206	0.1135	7.3342	1.9423	0.1073	2.0495	0.0000	11,553.0268	11,553.0268	0.8494	0.0000	11,574.2608
Unmitigated	2.7719	29.6304	26.9046	0.1244	7.2206	0.1135	7.3342	1.9423	0.1073	2.0495	0.0000	11,553.0268	11,553.0268	0.8494	0.0000	11,574.2608

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	10,427.76	2,325.68	992.67	18,932,702	18,932,702
Total	10,427.76	2,325.68	992.67	18,932,702	18,932,702

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.506092	0.032602	0.169295	0.124521	0.019914	0.005374	0.021664	0.110051	0.001797	0.001623	0.005307	0.000969	0.000792

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,508.2526	2,508.2526	0.1134	0.0235	2,518.0807
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,508.2526	2,508.2526	0.1134	0.0235	2,518.0807
NaturalGas Mitigated	0.0665	0.6048	0.5080	3.6300e-003		0.0460	0.0460		0.0460	0.0460	0.0000	658.3744	658.3744	0.0126	0.0121	662.2868
NaturalGas Unmitigated	0.0665	0.6048	0.5080	3.6300e-003		0.0460	0.0460		0.0460	0.0460	0.0000	658.3744	658.3744	0.0126	0.0121	662.2868

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					
General Office Building	1.23375e+007	0.0665	0.6048	0.5080	3.6300e-003		0.0460	0.0460		0.0460	0.0460	0.0000	658.3744	658.3744	0.0126	0.0121	662.2868
Total		**0.0665**	**0.6048**	**0.5080**	**3.6300e-003**		**0.0460**	**0.0460**		**0.0460**	**0.0460**	**0.0000**	**658.3744**	**658.3744**	**0.0126**	**0.0121**	**662.2868**

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					
General Office Building	1.23375e+007	0.0665	0.6048	0.5080	3.6300e-003		0.0460	0.0460		0.0460	0.0460	0.0000	658.3744	658.3744	0.0126	0.0121	662.2868
Total		**0.0665**	**0.6048**	**0.5080**	**3.6300e-003**		**0.0460**	**0.0460**		**0.0460**	**0.0460**	**0.0000**	**658.3744**	**658.3744**	**0.0126**	**0.0121**	**662.2868**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	8.62205e+006	2,508.2526	0.1134	0.0235	2,518.0807
Total		**2,508.2526**	**0.1134**	**0.0235**	**2,518.0807**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	8.62205e+006	2,508.2526	0.1134	0.0235	2,518.0807
Total		**2,508.2526**	**0.1134**	**0.0235**	**2,518.0807**

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	4.3504	8.0000e-005	8.7200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0169	0.0169	4.0000e-005	0.0000	0.0180
Unmitigated	4.3504	8.0000e-005	8.7200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0169	0.0169	4.0000e-005	0.0000	0.0180

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	0.6573					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.6923					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.1000e-004	8.0000e-005	8.7200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0169	0.0169	4.0000e-005	0.0000	0.0180
Total	**4.3504**	**8.0000e-005**	**8.7200e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0169**	**0.0169**	**4.0000e-005**	**0.0000**	**0.0180**

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	0.6573					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.6923					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.1000e-004	8.0000e-005	8.7200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0169	0.0169	4.0000e-005	0.0000	0.0180
Total	**4.3504**	**8.0000e-005**	**8.7200e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0169**	**0.0169**	**4.0000e-005**	**0.0000**	**0.0180**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	422.6660	5.4919	0.1327	599.5205
Unmitigated	422.6660	5.4919	0.1327	599.5205

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	168.029 / 102.986	422.6660	5.4919	0.1327	599.5205
Total		**422.6660**	**5.4919**	**0.1327**	**599.5205**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	168.029 / 102.986	422.6660	5.4919	0.1327	599.5205
Total		**422.6660**	**5.4919**	**0.1327**	**599.5205**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	178.4737	10.5475	0.0000	442.1611
Unmitigated	178.4737	10.5475	0.0000	442.1611

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	879.22	178.4737	10.5475	0.0000	442.1611
Total		**178.4737**	**10.5475**	**0.0000**	**442.1611**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	879.22	178.4737	10.5475	0.0000	442.1611
Total		**178.4737**	**10.5475**	**0.0000**	**442.1611**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Condo/Townhouse	404.40	Dwelling Unit	25.27	404,400.00	1157

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Table Name	Column Name	Default Value	New Value
tblWoodstoves	NumberCatalytic	25.27	0.00
tblWoodstoves	NumberNoncatalytic	25.27	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.5245	4.4708	3.5877	7.5400e-003	0.5942	0.2139	0.8080	0.2388	0.1993	0.4381	0.0000	677.6837	677.6837	0.1250	0.0000	680.8089
2020	0.4612	3.3084	3.4488	8.1600e-003	0.3421	0.1523	0.4944	0.0918	0.1432	0.2350	0.0000	729.1937	729.1937	0.0939	0.0000	731.5404
2021	3.8518	0.4394	0.5231	1.0400e-003	0.0311	0.0215	0.0526	8.3200e-003	0.0201	0.0284	0.0000	92.2278	92.2278	0.0175	0.0000	92.6647
Maximum	**3.8518**	**4.4708**	**3.5877**	**8.1600e-003**	**0.5942**	**0.2139**	**0.8080**	**0.2388**	**0.1993**	**0.4381**	**0.0000**	**729.1937**	**729.1937**	**0.1250**	**0.0000**	**731.5404**

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					
2019	0.5245	4.4708	3.5877	7.5400e-003	0.5942	0.2139	0.8080	0.2388	0.1993	0.4381	0.0000	677.6833	677.6833	0.1250	0.0000	680.8084
2020	0.4612	3.3084	3.4488	8.1600e-003	0.3421	0.1523	0.4944	0.0918	0.1432	0.2350	0.0000	729.1933	729.1933	0.0939	0.0000	731.5400
2021	3.8518	0.4394	0.5231	1.0400e-003	0.0311	0.0215	0.0526	8.3200e-003	0.0201	0.0284	0.0000	92.2278	92.2278	0.0175	0.0000	92.6646
Maximum	**3.8518**	**4.4708**	**3.5877**	**8.1600e-003**	**0.5942**	**0.2139**	**0.8080**	**0.2388**	**0.1993**	**0.4381**	**0.0000**	**729.1933**	**729.1933**	**0.1250**	**0.0000**	**731.5400**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-7-2019**	**4-6-2019**	1.5308	1.5308
2	**4-7-2019**	**7-6-2019**	1.4362	1.4362
3	**7-7-2019**	**10-6-2019**	1.0419	1.0419
4	**10-7-2019**	**1-6-2020**	1.0408	1.0408
5	**1-7-2020**	**4-6-2020**	0.9400	0.9400
6	**4-7-2020**	**7-6-2020**	0.9360	0.9360
7	**7-7-2020**	**10-6-2020**	0.9465	0.9465
8	**10-7-2020**	**1-6-2021**	0.9448	0.9448
9	**1-7-2021**	**4-6-2021**	2.3554	2.3554
10	**4-7-2021**	**7-6-2021**	1.8774	1.8774
		Highest	2.3554	2.3554

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	2.0678	0.1860	3.0736	1.1200e-003		0.0288	0.0288		0.0288	0.0288	0.0000	180.0940	180.0940	8.1100e-003	3.2100e-003	181.2539
Energy	0.0392	0.3348	0.1425	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	1,035.7012	1,035.7012	0.0367	0.0132	1,040.5442
Mobile	0.8615	9.3017	8.9512	0.0422	2.5258	0.0387	2.5646	0.6794	0.0366	0.7160	0.0000	3,914.0325	3,914.0325	0.2595	0.0000	3,920.5187
Waste						0.0000	0.0000		0.0000	0.0000	37.7604	0.0000	37.7604	2.2316	0.0000	93.5497
Water						0.0000	0.0000		0.0000	0.0000	8.3591	58.3885	66.7476	0.8612	0.0208	94.4815
Total	**2.9685**	**9.8225**	**12.1673**	**0.0454**	**2.5258**	**0.0946**	**2.6204**	**0.6794**	**0.0925**	**0.7719**	**46.1195**	**5,188.2162**	**5,234.3356**	**3.3971**	**0.0372**	**5,330.3480**

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	2.0678	0.1860	3.0736	1.1200e-003		0.0288	0.0288		0.0288	0.0288	0.0000	180.0940	180.0940	8.1100e-003	3.2100e-003	181.2539
Energy	0.0392	0.3348	0.1425	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	1,035.7012	1,035.7012	0.0367	0.0132	1,040.5442
Mobile	0.8615	9.3017	8.9512	0.0422	2.5258	0.0387	2.5646	0.6794	0.0366	0.7160	0.0000	3,914.0325	3,914.0325	0.2595	0.0000	3,920.5187
Waste						0.0000	0.0000		0.0000	0.0000	37.7604	0.0000	37.7604	2.2316	0.0000	93.5497
Water						0.0000	0.0000		0.0000	0.0000	8.3591	58.3885	66.7476	0.8612	0.0208	94.4815
Total	**2.9685**	**9.8225**	**12.1673**	**0.0454**	**2.5258**	**0.0946**	**2.6204**	**0.6794**	**0.0925**	**0.7719**	**46.1195**	**5,188.2162**	**5,234.3356**	**3.3971**	**0.0372**	**5,330.3480**

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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/7/2019	2/15/2019	5	30	
2	Site Preparation	Site Preparation	2/16/2019	3/15/2019	5	20	
3	Grading	Grading	3/16/2019	5/17/2019	5	45	
4	Building Construction	Building Construction	5/18/2019	1/22/2021	5	440	
5	Paving	Paving	1/23/2021	3/12/2021	5	35	
6	Architectural Coating	Architectural Coating	3/13/2021	4/30/2021	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 818,910; Residential Outdoor: 272,970; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	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	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	291.00	43.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	58.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0527	0.5367	0.3309	5.8000e-004		0.0269	0.0269		0.0250	0.0250	0.0000	51.9395	51.9395	0.0145	0.0000	52.3007
Total	**0.0527**	**0.5367**	**0.3309**	**5.8000e-004**		**0.0269**	**0.0269**		**0.0250**	**0.0250**	**0.0000**	**51.9395**	**51.9395**	**0.0145**	**0.0000**	**52.3007**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.0500e-003	7.3000e-004	7.3800e-003	2.0000e-005	1.8000e-003	1.0000e-005	1.8100e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.6669	1.6669	5.0000e-005	0.0000	1.6683
Total	**1.0500e-003**	**7.3000e-004**	**7.3800e-003**	**2.0000e-005**	**1.8000e-003**	**1.0000e-005**	**1.8100e-003**	**4.8000e-004**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**1.6669**	**1.6669**	**5.0000e-005**	**0.0000**	**1.6683**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0527	0.5367	0.3309	5.8000e-004		0.0269	0.0269		0.0250	0.0250	0.0000	51.9394	51.9394	0.0145	0.0000	52.3007
Total	**0.0527**	**0.5367**	**0.3309**	**5.8000e-004**		**0.0269**	**0.0269**		**0.0250**	**0.0250**	**0.0000**	**51.9394**	**51.9394**	**0.0145**	**0.0000**	**52.3007**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.0500e-003	7.3000e-004	7.3800e-003	2.0000e-005	1.8000e-003	1.0000e-005	1.8100e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.6669	1.6669	5.0000e-005	0.0000	1.6683
Total	**1.0500e-003**	**7.3000e-004**	**7.3800e-003**	**2.0000e-005**	**1.8000e-003**	**1.0000e-005**	**1.8100e-003**	**4.8000e-004**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**1.6669**	**1.6669**	**5.0000e-005**	**0.0000**	**1.6683**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0434	0.4557	0.2206	3.8000e-004		0.0239	0.0239		0.0220	0.0220	0.0000	34.1687	34.1687	0.0108	0.0000	34.4390
Total	**0.0434**	**0.4557**	**0.2206**	**3.8000e-004**	**0.1807**	**0.0239**	**0.2046**	**0.0993**	**0.0220**	**0.1213**	**0.0000**	**34.1687**	**34.1687**	**0.0108**	**0.0000**	**34.4390**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.4000e-004	5.9000e-004	5.9100e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.3336	1.3336	4.0000e-005	0.0000	1.3346
Total	**8.4000e-004**	**5.9000e-004**	**5.9100e-003**	**1.0000e-005**	**1.4400e-003**	**1.0000e-005**	**1.4500e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.3336**	**1.3336**	**4.0000e-005**	**0.0000**	**1.3346**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0434	0.4557	0.2206	3.8000e-004		0.0239	0.0239		0.0220	0.0220	0.0000	34.1687	34.1687	0.0108	0.0000	34.4389
Total	**0.0434**	**0.4557**	**0.2206**	**3.8000e-004**	**0.1807**	**0.0239**	**0.2046**	**0.0993**	**0.0220**	**0.1213**	**0.0000**	**34.1687**	**34.1687**	**0.0108**	**0.0000**	**34.4389**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.4000e-004	5.9000e-004	5.9100e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.3336	1.3336	4.0000e-005	0.0000	1.3346
Total	**8.4000e-004**	**5.9000e-004**	**5.9100e-003**	**1.0000e-005**	**1.4400e-003**	**1.0000e-005**	**1.4500e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.3336**	**1.3336**	**4.0000e-005**	**0.0000**	**1.3346**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1952	0.0000	0.1952	0.0809	0.0000	0.0809	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1066	1.2267	0.7510	1.4000e-003		0.0536	0.0536		0.0493	0.0493	0.0000	125.3280	125.3280	0.0397	0.0000	126.3193
Total	**0.1066**	**1.2267**	**0.7510**	**1.4000e-003**	**0.1952**	**0.0536**	**0.2488**	**0.0809**	**0.0493**	**0.1302**	**0.0000**	**125.3280**	**125.3280**	**0.0397**	**0.0000**	**126.3193**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	2.0900e-003	1.4700e-003	0.0148	4.0000e-005	3.6000e-003	3.0000e-005	3.6200e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	3.3339	3.3339	1.1000e-004	0.0000	3.3365
Total	**2.0900e-003**	**1.4700e-003**	**0.0148**	**4.0000e-005**	**3.6000e-003**	**3.0000e-005**	**3.6200e-003**	**9.6000e-004**	**2.0000e-005**	**9.8000e-004**	**0.0000**	**3.3339**	**3.3339**	**1.1000e-004**	**0.0000**	**3.3365**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1952	0.0000	0.1952	0.0809	0.0000	0.0809	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1066	1.2267	0.7510	1.4000e-003		0.0536	0.0536		0.0493	0.0493	0.0000	125.3278	125.3278	0.0397	0.0000	126.3191
Total	**0.1066**	**1.2267**	**0.7510**	**1.4000e-003**	**0.1952**	**0.0536**	**0.2488**	**0.0809**	**0.0493**	**0.1302**	**0.0000**	**125.3278**	**125.3278**	**0.0397**	**0.0000**	**126.3191**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	2.0900e-003	1.4700e-003	0.0148	4.0000e-005	3.6000e-003	3.0000e-005	3.6200e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	3.3339	3.3339	1.1000e-004	0.0000	3.3365
Total	**2.0900e-003**	**1.4700e-003**	**0.0148**	**4.0000e-005**	**3.6000e-003**	**3.0000e-005**	**3.6200e-003**	**9.6000e-004**	**2.0000e-005**	**9.8000e-004**	**0.0000**	**3.3339**	**3.3339**	**1.1000e-004**	**0.0000**	**3.3365**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1913	1.7074	1.3903	2.1800e-003		0.1045	0.1045		0.0982	0.0982	0.0000	190.4344	190.4344	0.0464	0.0000	191.5942
Total	**0.1913**	**1.7074**	**1.3903**	**2.1800e-003**		**0.1045**	**0.1045**		**0.0982**	**0.0982**	**0.0000**	**190.4344**	**190.4344**	**0.0464**	**0.0000**	**191.5942**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0170	0.4645	0.0933	1.0000e-003	0.0231	3.5100e-003	0.0266	6.6700e-003	3.3600e-003	0.0100	0.0000	94.8508	94.8508	7.9100e-003	0.0000	95.0487
Worker	0.1096	0.0770	0.7735	1.9300e-003	0.1884	1.3900e-003	0.1898	0.0501	1.2800e-003	0.0514	0.0000	174.6280	174.6280	5.5800e-003	0.0000	174.7676
Total	**0.1266**	**0.5415**	**0.8669**	**2.9300e-003**	**0.2115**	**4.9000e-003**	**0.2164**	**0.0568**	**4.6400e-003**	**0.0614**	**0.0000**	**269.4789**	**269.4789**	**0.0135**	**0.0000**	**269.8163**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1913	1.7074	1.3903	2.1800e-003		0.1045	0.1045		0.0982	0.0982	0.0000	190.4342	190.4342	0.0464	0.0000	191.5940
Total	**0.1913**	**1.7074**	**1.3903**	**2.1800e-003**		**0.1045**	**0.1045**		**0.0982**	**0.0982**	**0.0000**	**190.4342**	**190.4342**	**0.0464**	**0.0000**	**191.5940**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0170	0.4645	0.0933	1.0000e-003	0.0231	3.5100e-003	0.0266	6.6700e-003	3.3600e-003	0.0100	0.0000	94.8508	94.8508	7.9100e-003	0.0000	95.0487
Worker	0.1096	0.0770	0.7735	1.9300e-003	0.1884	1.3900e-003	0.1898	0.0501	1.2800e-003	0.0514	0.0000	174.6280	174.6280	5.5800e-003	0.0000	174.7676
Total	**0.1266**	**0.5415**	**0.8669**	**2.9300e-003**	**0.2115**	**4.9000e-003**	**0.2164**	**0.0568**	**4.6400e-003**	**0.0614**	**0.0000**	**269.4789**	**269.4789**	**0.0135**	**0.0000**	**269.8163**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4091	303.4091	0.0740	0.0000	305.2596
Total	**0.2777**	**2.5134**	**2.2072**	**3.5300e-003**		**0.1463**	**0.1463**		**0.1376**	**0.1376**	**0.0000**	**303.4091**	**303.4091**	**0.0740**	**0.0000**	**305.2596**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0223	0.6857	0.1301	1.6000e-003	0.0373	3.7800e-003	0.0411	0.0108	3.6100e-003	0.0144	0.0000	152.1021	152.1021	0.0120	0.0000	152.4024
Worker	0.1611	0.1094	1.1116	3.0300e-003	0.3048	2.1700e-003	0.3069	0.0810	2.0000e-003	0.0830	0.0000	273.6824	273.6824	7.8400e-003	0.0000	273.8784
Total	**0.1835**	**0.7951**	**1.2417**	**4.6300e-003**	**0.3421**	**5.9500e-003**	**0.3481**	**0.0918**	**5.6100e-003**	**0.0974**	**0.0000**	**425.7846**	**425.7846**	**0.0199**	**0.0000**	**426.2808**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4087	303.4087	0.0740	0.0000	305.2592
Total	**0.2777**	**2.5134**	**2.2072**	**3.5300e-003**		**0.1463**	**0.1463**		**0.1376**	**0.1376**	**0.0000**	**303.4087**	**303.4087**	**0.0740**	**0.0000**	**305.2592**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0223	0.6857	0.1301	1.6000e-003	0.0373	3.7800e-003	0.0411	0.0108	3.6100e-003	0.0144	0.0000	152.1021	152.1021	0.0120	0.0000	152.4024
Worker	0.1611	0.1094	1.1116	3.0300e-003	0.3048	2.1700e-003	0.3069	0.0810	2.0000e-003	0.0830	0.0000	273.6824	273.6824	7.8400e-003	0.0000	273.8784
Total	**0.1835**	**0.7951**	**1.2417**	**4.6300e-003**	**0.3421**	**5.9500e-003**	**0.3481**	**0.0918**	**5.6100e-003**	**0.0974**	**0.0000**	**425.7846**	**425.7846**	**0.0199**	**0.0000**	**426.2808**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0152	0.1395	0.1326	2.2000e-004		7.6700e-003	7.6700e-003		7.2100e-003	7.2100e-003	0.0000	18.5310	18.5310	4.4700e-003	0.0000	18.6428
Total	**0.0152**	**0.1395**	**0.1326**	**2.2000e-004**		**7.6700e-003**	**7.6700e-003**		**7.2100e-003**	**7.2100e-003**	**0.0000**	**18.5310**	**18.5310**	**4.4700e-003**	**0.0000**	**18.6428**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1100e-003	0.0379	6.9200e-003	1.0000e-004	2.2800e-003	1.1000e-004	2.3900e-003	6.6000e-004	1.0000e-004	7.6000e-004	0.0000	9.2024	9.2024	7.0000e-004	0.0000	9.2200
Worker	9.0700e-003	5.9400e-003	0.0616	1.8000e-004	0.0186	1.3000e-004	0.0187	4.9500e-003	1.2000e-004	5.0600e-003	0.0000	16.1324	16.1324	4.3000e-004	0.0000	16.1431
Total	**0.0102**	**0.0439**	**0.0685**	**2.8000e-004**	**0.0209**	**2.4000e-004**	**0.0211**	**5.6100e-003**	**2.2000e-004**	**5.8200e-003**	**0.0000**	**25.3348**	**25.3348**	**1.1300e-003**	**0.0000**	**25.3630**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0152	0.1395	0.1326	2.2000e-004		7.6700e-003	7.6700e-003		7.2100e-003	7.2100e-003	0.0000	18.5310	18.5310	4.4700e-003	0.0000	18.6427
Total	**0.0152**	**0.1395**	**0.1326**	**2.2000e-004**		**7.6700e-003**	**7.6700e-003**		**7.2100e-003**	**7.2100e-003**	**0.0000**	**18.5310**	**18.5310**	**4.4700e-003**	**0.0000**	**18.6427**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1100e-003	0.0379	6.9200e-003	1.0000e-004	2.2800e-003	1.1000e-004	2.3900e-003	6.6000e-004	1.0000e-004	7.6000e-004	0.0000	9.2024	9.2024	7.0000e-004	0.0000	9.2200
Worker	9.0700e-003	5.9400e-003	0.0616	1.8000e-004	0.0186	1.3000e-004	0.0187	4.9500e-003	1.2000e-004	5.0600e-003	0.0000	16.1324	16.1324	4.3000e-004	0.0000	16.1431
Total	**0.0102**	**0.0439**	**0.0685**	**2.8000e-004**	**0.0209**	**2.4000e-004**	**0.0211**	**5.6100e-003**	**2.2000e-004**	**5.8200e-003**	**0.0000**	**25.3348**	**25.3348**	**1.1300e-003**	**0.0000**	**25.3630**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0220	0.2261	0.2564	4.0000e-004		0.0119	0.0119		0.0109	0.0109	0.0000	35.0411	35.0411	0.0113	0.0000	35.3244
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0220**	**0.2261**	**0.2564**	**4.0000e-004**		**0.0119**	**0.0119**		**0.0109**	**0.0109**	**0.0000**	**35.0411**	**35.0411**	**0.0113**	**0.0000**	**35.3244**

3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0200e-003	6.7000e-004	6.9400e-003	2.0000e-005	2.1000e-003	1.0000e-005	2.1100e-003	5.6000e-004	1.0000e-005	5.7000e-004	0.0000	1.8191	1.8191	5.0000e-005	0.0000	1.8203
Total	**1.0200e-003**	**6.7000e-004**	**6.9400e-003**	**2.0000e-005**	**2.1000e-003**	**1.0000e-005**	**2.1100e-003**	**5.6000e-004**	**1.0000e-005**	**5.7000e-004**	**0.0000**	**1.8191**	**1.8191**	**5.0000e-005**	**0.0000**	**1.8203**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0220	0.2261	0.2564	4.0000e-004		0.0119	0.0119		0.0109	0.0109	0.0000	35.0411	35.0411	0.0113	0.0000	35.3244
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0220**	**0.2261**	**0.2564**	**4.0000e-004**		**0.0119**	**0.0119**		**0.0109**	**0.0109**	**0.0000**	**35.0411**	**35.0411**	**0.0113**	**0.0000**	**35.3244**

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0200e-003	6.7000e-004	6.9400e-003	2.0000e-005	2.1000e-003	1.0000e-005	2.1100e-003	5.6000e-004	1.0000e-005	5.7000e-004	0.0000	1.8191	1.8191	5.0000e-005	0.0000	1.8203
Total	**1.0200e-003**	**6.7000e-004**	**6.9400e-003**	**2.0000e-005**	**2.1000e-003**	**1.0000e-005**	**2.1100e-003**	**5.6000e-004**	**1.0000e-005**	**5.7000e-004**	**0.0000**	**1.8191**	**1.8191**	**5.0000e-005**	**0.0000**	**1.8203**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.7957					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8300e-003	0.0267	0.0318	5.0000e-005		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003	0.0000	4.4682	4.4682	3.1000e-004	0.0000	4.4759
Total	**3.7995**	**0.0267**	**0.0318**	**5.0000e-005**		**1.6500e-003**	**1.6500e-003**		**1.6500e-003**	**1.6500e-003**	**0.0000**	**4.4682**	**4.4682**	**3.1000e-004**	**0.0000**	**4.4759**

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9500e-003	2.5900e-003	0.0269	8.0000e-005	8.1100e-003	6.0000e-005	8.1700e-003	2.1600e-003	5.0000e-005	2.2100e-003	0.0000	7.0337	7.0337	1.9000e-004	0.0000	7.0383
Total	**3.9500e-003**	**2.5900e-003**	**0.0269**	**8.0000e-005**	**8.1100e-003**	**6.0000e-005**	**8.1700e-003**	**2.1600e-003**	**5.0000e-005**	**2.2100e-003**	**0.0000**	**7.0337**	**7.0337**	**1.9000e-004**	**0.0000**	**7.0383**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3.7957					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8300e-003	0.0267	0.0318	5.0000e-005		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003	0.0000	4.4682	4.4682	3.1000e-004	0.0000	4.4759
Total	**3.7995**	**0.0267**	**0.0318**	**5.0000e-005**		**1.6500e-003**	**1.6500e-003**		**1.6500e-003**	**1.6500e-003**	**0.0000**	**4.4682**	**4.4682**	**3.1000e-004**	**0.0000**	**4.4759**

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9500e-003	2.5900e-003	0.0269	8.0000e-005	8.1100e-003	6.0000e-005	8.1700e-003	2.1600e-003	5.0000e-005	2.2100e-003	0.0000	7.0337	7.0337	1.9000e-004	0.0000	7.0383
Total	**3.9500e-003**	**2.5900e-003**	**0.0269**	**8.0000e-005**	**8.1100e-003**	**6.0000e-005**	**8.1700e-003**	**2.1600e-003**	**5.0000e-005**	**2.2100e-003**	**0.0000**	**7.0337**	**7.0337**	**1.9000e-004**	**0.0000**	**7.0383**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.8615	9.3017	8.9512	0.0422	2.5258	0.0387	2.5646	0.6794	0.0366	0.7160	0.0000	3,914.0325	3,914.0325	0.2595	0.0000	3,920.5187
Unmitigated	0.8615	9.3017	8.9512	0.0422	2.5258	0.0387	2.5646	0.6794	0.0366	0.7160	0.0000	3,914.0325	3,914.0325	0.2595	0.0000	3,920.5187

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	2,349.56	2,292.95	1957.30	6,622,780	6,622,780
Total	2,349.56	2,292.95	1,957.30	6,622,780	6,622,780

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	7.30	7.50	45.60	19.00	35.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.506092	0.032602	0.169295	0.124521	0.019914	0.005374	0.021664	0.110051	0.001797	0.001623	0.005307	0.000969	0.000792

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	647.9982	647.9982	0.0293	6.0600e-003	650.5373
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	647.9982	647.9982	0.0293	6.0600e-003	650.5373
NaturalGas Mitigated	0.0392	0.3348	0.1425	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	387.7030	387.7030	7.4300e-003	7.1100e-003	390.0070
NaturalGas Unmitigated	0.0392	0.3348	0.1425	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	387.7030	387.7030	7.4300e-003	7.1100e-003	390.0070

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					
Condo/Townhouse	7.26528e+006	0.0392	0.3348	0.1425	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	387.7030	387.7030	7.4300e-003	7.1100e-003	390.0070
Total		**0.0392**	**0.3348**	**0.1425**	**2.1400e-003**		**0.0271**	**0.0271**		**0.0271**	**0.0271**	**0.0000**	**387.7030**	**387.7030**	**7.4300e-003**	**7.1100e-003**	**390.0070**

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					
Condo/Townhouse	7.26528e+006	0.0392	0.3348	0.1425	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	387.7030	387.7030	7.4300e-003	7.1100e-003	390.0070
Total		**0.0392**	**0.3348**	**0.1425**	**2.1400e-003**		**0.0271**	**0.0271**		**0.0271**	**0.0271**	**0.0000**	**387.7030**	**387.7030**	**7.4300e-003**	**7.1100e-003**	**390.0070**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	2.22748e+006	647.9982	0.0293	6.0600e-003	650.5373
Total		**647.9982**	**0.0293**	**6.0600e-003**	**650.5373**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	2.22748e+006	647.9982	0.0293	6.0600e-003	650.5373
Total		**647.9982**	**0.0293**	**6.0600e-003**	**650.5373**

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	2.0678	0.1860	3.0736	1.1200e-003		0.0288	0.0288		0.0288	0.0288	0.0000	180.0940	180.0940	8.1100e-003	3.2100e-003	181.2539
Unmitigated	2.0678	0.1860	3.0736	1.1200e-003		0.0288	0.0288		0.0288	0.0288	0.0000	180.0940	180.0940	8.1100e-003	3.2100e-003	181.2539

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	0.3796					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5794					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0177	0.1513	0.0644	9.7000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	175.1891	175.1891	3.3600e-003	3.2100e-003	176.2301
Landscaping	0.0912	0.0347	3.0092	1.6000e-004		0.0166	0.0166		0.0166	0.0166	0.0000	4.9049	4.9049	4.7500e-003	0.0000	5.0237
Total	**2.0678**	**0.1860**	**3.0736**	**1.1300e-003**		**0.0288**	**0.0288**		**0.0288**	**0.0288**	**0.0000**	**180.0940**	**180.0940**	**8.1100e-003**	**3.2100e-003**	**181.2538**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3796					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5794					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0177	0.1513	0.0644	9.7000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	175.1891	175.1891	3.3600e-003	3.2100e-003	176.2301
Landscaping	0.0912	0.0347	3.0092	1.6000e-004		0.0166	0.0166		0.0166	0.0166	0.0000	4.9049	4.9049	4.7500e-003	0.0000	5.0237
Total	**2.0678**	**0.1860**	**3.0736**	**1.1300e-003**		**0.0288**	**0.0288**		**0.0288**	**0.0288**	**0.0000**	**180.0940**	**180.0940**	**8.1100e-003**	**3.2100e-003**	**181.2538**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	66.7476	0.8612	0.0208	94.4815
Unmitigated	66.7476	0.8612	0.0208	94.4815

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	26.3483 / 16.6109	66.7476	0.8612	0.0208	94.4815
Total		**66.7476**	**0.8612**	**0.0208**	**94.4815**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	26.3483 / 16.6109	66.7476	0.8612	0.0208	94.4815
Total		**66.7476**	**0.8612**	**0.0208**	**94.4815**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	37.7604	2.2316	0.0000	93.5497
Unmitigated	37.7604	2.2316	0.0000	93.5497

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	186.02	37.7604	2.2316	0.0000	93.5497
Total		**37.7604**	**2.2316**	**0.0000**	**93.5497**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	186.02	37.7604	2.2316	0.0000	93.5497
Total		**37.7604**	**2.2316**	**0.0000**	**93.5497**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Wible-Hosking Cumulative Review Project 6

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	22.00	1000sqft	0.51	22,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Table Name	Column Name	Default Value	New Value

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					
2019	0.2128	0.5995	0.4683	7.8000e-004	6.0200e-003	0.0353	0.0414	1.8000e-003	0.0327	0.0345	0.0000	69.7861	69.7861	0.0188	0.0000	70.2567
Maximum	**0.2128**	**0.5995**	**0.4683**	**7.8000e-004**	**6.0200e-003**	**0.0353**	**0.0414**	**1.8000e-003**	**0.0327**	**0.0345**	**0.0000**	**69.7861**	**69.7861**	**0.0188**	**0.0000**	**70.2567**

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					
2019	0.2128	0.5995	0.4683	7.8000e-004	6.0200e-003	0.0353	0.0414	1.8000e-003	0.0327	0.0345	0.0000	69.7860	69.7860	0.0188	0.0000	70.2567
Maximum	**0.2128**	**0.5995**	**0.4683**	**7.8000e-004**	**6.0200e-003**	**0.0353**	**0.0414**	**1.8000e-003**	**0.0327**	**0.0345**	**0.0000**	**69.7860**	**69.7860**	**0.0188**	**0.0000**	**70.2567**

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

Wible-Hosking Cumulative Review Project 6 - San Joaquin Valley Air Basin, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-7-2019	4-6-2019	0.3555	0.3555
2	4-7-2019	7-6-2019	0.4526	0.4526
		Highest	0.4526	0.4526

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	0.1012	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.9000e-004	3.9000e-004	0.0000	0.0000	4.2000e-004
Energy	1.2700e-003	0.0115	9.6900e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	64.7223	64.7223	2.6000e-003	7.2000e-004	65.0013
Mobile	0.2867	3.0186	2.4897	0.0111	0.6067	0.0100	0.6168	0.1632	9.4700e-003	0.1727	0.0000	1,034.1015	1,034.1015	0.0901	0.0000	1,036.3541
Waste						0.0000	0.0000		0.0000	0.0000	4.6891	0.0000	4.6891	0.2771	0.0000	11.6170
Water						0.0000	0.0000		0.0000	0.0000	0.5170	3.5821	4.0991	0.0533	1.2900e-003	5.8143
Total	**0.3892**	**3.0302**	**2.4996**	**0.0112**	**0.6067**	**0.0109**	**0.6177**	**0.1632**	**0.0104**	**0.1736**	**5.2061**	**1,102.4063**	**1,107.6124**	**0.4231**	**2.0100e-003**	**1,118.7871**

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	0.1012	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.9000e-004	3.9000e-004	0.0000	0.0000	4.2000e-004
Energy	1.2700e-003	0.0115	9.6900e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	64.7223	64.7223	2.6000e-003	7.2000e-004	65.0013
Mobile	0.2867	3.0186	2.4897	0.0111	0.6067	0.0100	0.6168	0.1632	9.4700e-003	0.1727	0.0000	1,034.1015	1,034.1015	0.0901	0.0000	1,036.3541
Waste						0.0000	0.0000		0.0000	0.0000	4.6891	0.0000	4.6891	0.2771	0.0000	11.6170
Water						0.0000	0.0000		0.0000	0.0000	0.5170	3.5821	4.0991	0.0533	1.2900e-003	5.8143
Total	**0.3892**	**3.0302**	**2.4996**	**0.0112**	**0.6067**	**0.0109**	**0.6177**	**0.1632**	**0.0104**	**0.1736**	**5.2061**	**1,102.4063**	**1,107.6124**	**0.4231**	**2.0100e-003**	**1,118.7871**

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

3.0 Construction Detail

Construction Phase

Wible-Hosking Cumulative Review Project 6 - San Joaquin Valley Air Basin, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/7/2019	1/18/2019	5	10	
2	Site Preparation	Site Preparation	1/19/2019	1/21/2019	5	1	
3	Grading	Grading	1/22/2019	1/23/2019	5	2	
4	Building Construction	Building Construction	1/24/2019	6/12/2019	5	100	
5	Paving	Paving	6/13/2019	6/19/2019	5	5	
6	Architectural Coating	Architectural Coating	6/20/2019	6/26/2019	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 33,000; Non-Residential Outdoor: 11,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Wible-Hosking Cumulative Review Project 6 - San Joaquin Valley Air Basin, Annual

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	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	7.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7700e-003	0.0430	0.0385	6.0000e-005		2.6900e-003	2.6900e-003		2.5600e-003	2.5600e-003	0.0000	5.2601	5.2601	1.0000e-003	0.0000	5.2852
Total	**4.7700e-003**	**0.0430**	**0.0385**	**6.0000e-005**		**2.6900e-003**	**2.6900e-003**		**2.5600e-003**	**2.5600e-003**	**0.0000**	**5.2601**	**5.2601**	**1.0000e-003**	**0.0000**	**5.2852**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	2.3000e-004	1.6000e-004	1.6400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3704	0.3704	1.0000e-005	0.0000	0.3707
Total	**2.3000e-004**	**1.6000e-004**	**1.6400e-003**	**0.0000**	**4.0000e-004**	**0.0000**	**4.0000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3704**	**0.3704**	**1.0000e-005**	**0.0000**	**0.3707**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7700e-003	0.0430	0.0385	6.0000e-005		2.6900e-003	2.6900e-003		2.5600e-003	2.5600e-003	0.0000	5.2601	5.2601	1.0000e-003	0.0000	5.2852
Total	**4.7700e-003**	**0.0430**	**0.0385**	**6.0000e-005**		**2.6900e-003**	**2.6900e-003**		**2.5600e-003**	**2.5600e-003**	**0.0000**	**5.2601**	**5.2601**	**1.0000e-003**	**0.0000**	**5.2852**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	2.3000e-004	1.6000e-004	1.6400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3704	0.3704	1.0000e-005	0.0000	0.3707
Total	**2.3000e-004**	**1.6000e-004**	**1.6400e-003**	**0.0000**	**4.0000e-004**	**0.0000**	**4.0000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3704**	**0.3704**	**1.0000e-005**	**0.0000**	**0.3707**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6000e-004	4.4600e-003	2.0700e-003	0.0000		1.8000e-004	1.8000e-004		1.7000e-004	1.7000e-004	0.0000	0.4378	0.4378	1.4000e-004	0.0000	0.4413
Total	**3.6000e-004**	**4.4600e-003**	**2.0700e-003**	**0.0000**	**2.7000e-004**	**1.8000e-004**	**4.5000e-004**	**3.0000e-005**	**1.7000e-004**	**2.0000e-004**	**0.0000**	**0.4378**	**0.4378**	**1.4000e-004**	**0.0000**	**0.4413**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0185	0.0185	0.0000	0.0000	0.0185
Total	**1.0000e-005**	**1.0000e-005**	**8.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0185**	**0.0185**	**0.0000**	**0.0000**	**0.0185**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6000e-004	4.4600e-003	2.0700e-003	0.0000		1.8000e-004	1.8000e-004		1.7000e-004	1.7000e-004	0.0000	0.4378	0.4378	1.4000e-004	0.0000	0.4413
Total	**3.6000e-004**	**4.4600e-003**	**2.0700e-003**	**0.0000**	**2.7000e-004**	**1.8000e-004**	**4.5000e-004**	**3.0000e-005**	**1.7000e-004**	**2.0000e-004**	**0.0000**	**0.4378**	**0.4378**	**1.4000e-004**	**0.0000**	**0.4413**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0185	0.0185	0.0000	0.0000	0.0185
Total	**1.0000e-005**	**1.0000e-005**	**8.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0185**	**0.0185**	**0.0000**	**0.0000**	**0.0185**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5000e-004	8.6000e-003	7.6900e-003	1.0000e-005		5.4000e-004	5.4000e-004		5.1000e-004	5.1000e-004	0.0000	1.0520	1.0520	2.0000e-004	0.0000	1.0570
Total	**9.5000e-004**	**8.6000e-003**	**7.6900e-003**	**1.0000e-005**	**7.5000e-004**	**5.4000e-004**	**1.2900e-003**	**4.1000e-004**	**5.1000e-004**	**9.2000e-004**	**0.0000**	**1.0520**	**1.0520**	**2.0000e-004**	**0.0000**	**1.0570**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	3.0000e-005	3.3000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0741	0.0741	0.0000	0.0000	0.0742
Total	**5.0000e-005**	**3.0000e-005**	**3.3000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0741**	**0.0741**	**0.0000**	**0.0000**	**0.0742**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5000e-004	8.6000e-003	7.6900e-003	1.0000e-005		5.4000e-004	5.4000e-004		5.1000e-004	5.1000e-004	0.0000	1.0520	1.0520	2.0000e-004	0.0000	1.0570
Total	**9.5000e-004**	**8.6000e-003**	**7.6900e-003**	**1.0000e-005**	**7.5000e-004**	**5.4000e-004**	**1.2900e-003**	**4.1000e-004**	**5.1000e-004**	**9.2000e-004**	**0.0000**	**1.0520**	**1.0520**	**2.0000e-004**	**0.0000**	**1.0570**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	3.0000e-005	3.3000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0741	0.0741	0.0000	0.0000	0.0742
Total	**5.0000e-005**	**3.0000e-005**	**3.3000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0741**	**0.0741**	**0.0000**	**0.0000**	**0.0742**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0479	0.4910	0.3772	5.7000e-004		0.0303	0.0303		0.0279	0.0279	0.0000	51.1502	51.1502	0.0162	0.0000	51.5548
Total	**0.0479**	**0.4910**	**0.3772**	**5.7000e-004**		**0.0303**	**0.0303**		**0.0279**	**0.0279**	**0.0000**	**51.1502**	**51.1502**	**0.0162**	**0.0000**	**51.5548**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.8000e-004	0.0267	5.3600e-003	6.0000e-005	1.3300e-003	2.0000e-004	1.5300e-003	3.8000e-004	1.9000e-004	5.8000e-004	0.0000	5.4465	5.4465	4.5000e-004	0.0000	5.4579
Worker	1.6300e-003	1.1400e-003	0.0115	3.0000e-005	2.8000e-003	2.0000e-005	2.8200e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.5930	2.5930	8.0000e-005	0.0000	2.5951
Total	**2.6100e-003**	**0.0278**	**0.0169**	**9.0000e-005**	**4.1300e-003**	**2.2000e-004**	**4.3500e-003**	**1.1200e-003**	**2.1000e-004**	**1.3400e-003**	**0.0000**	**8.0395**	**8.0395**	**5.3000e-004**	**0.0000**	**8.0529**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0479	0.4910	0.3772	5.7000e-004		0.0303	0.0303		0.0279	0.0279	0.0000	51.1502	51.1502	0.0162	0.0000	51.5548
Total	**0.0479**	**0.4910**	**0.3772**	**5.7000e-004**		**0.0303**	**0.0303**		**0.0279**	**0.0279**	**0.0000**	**51.1502**	**51.1502**	**0.0162**	**0.0000**	**51.5548**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.8000e-004	0.0267	5.3600e-003	6.0000e-005	1.3300e-003	2.0000e-004	1.5300e-003	3.8000e-004	1.9000e-004	5.8000e-004	0.0000	5.4465	5.4465	4.5000e-004	0.0000	5.4579
Worker	1.6300e-003	1.1400e-003	0.0115	3.0000e-005	2.8000e-003	2.0000e-005	2.8200e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.5930	2.5930	8.0000e-005	0.0000	2.5951
Total	**2.6100e-003**	**0.0278**	**0.0169**	**9.0000e-005**	**4.1300e-003**	**2.2000e-004**	**4.3500e-003**	**1.1200e-003**	**2.1000e-004**	**1.3400e-003**	**0.0000**	**8.0395**	**8.0395**	**5.3000e-004**	**0.0000**	**8.0529**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.0700e-003	0.0196	0.0179	3.0000e-005		1.1100e-003	1.1100e-003		1.0300e-003	1.0300e-003	0.0000	2.3931	2.3931	6.8000e-004	0.0000	2.4102
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.0700e-003**	**0.0196**	**0.0179**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.0300e-003**	**1.0300e-003**	**0.0000**	**2.3931**	**2.3931**	**6.8000e-004**	**0.0000**	**2.4102**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	2.1000e-004	1.5000e-004	1.4800e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3334	0.3334	1.0000e-005	0.0000	0.3337
Total	**2.1000e-004**	**1.5000e-004**	**1.4800e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3334**	**0.3334**	**1.0000e-005**	**0.0000**	**0.3337**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	2.0700e-003	0.0196	0.0179	3.0000e-005		1.1100e-003	1.1100e-003		1.0300e-003	1.0300e-003	0.0000	2.3931	2.3931	6.8000e-004	0.0000	2.4102
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.0700e-003**	**0.0196**	**0.0179**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.0300e-003**	**1.0300e-003**	**0.0000**	**2.3931**	**2.3931**	**6.8000e-004**	**0.0000**	**2.4102**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	2.1000e-004	1.5000e-004	1.4800e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3334	0.3334	1.0000e-005	0.0000	0.3337
Total	**2.1000e-004**	**1.5000e-004**	**1.4800e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3334**	**0.3334**	**1.0000e-005**	**0.0000**	**0.3337**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1530					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7000e-004	4.5900e-003	4.6000e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397
Total	**0.1536**	**4.5900e-003**	**4.6000e-003**	**1.0000e-005**		**3.2000e-004**	**3.2000e-004**		**3.2000e-004**	**3.2000e-004**	**0.0000**	**0.6383**	**0.6383**	**5.0000e-005**	**0.0000**	**0.6397**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0185	0.0185	0.0000	0.0000	0.0185
Total	**1.0000e-005**	**1.0000e-005**	**8.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0185**	**0.0185**	**0.0000**	**0.0000**	**0.0185**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1530					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7000e-004	4.5900e-003	4.6000e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397
Total	**0.1536**	**4.5900e-003**	**4.6000e-003**	**1.0000e-005**		**3.2000e-004**	**3.2000e-004**		**3.2000e-004**	**3.2000e-004**	**0.0000**	**0.6383**	**0.6383**	**5.0000e-005**	**0.0000**	**0.6397**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0185	0.0185	0.0000	0.0000	0.0185
Total	**1.0000e-005**	**1.0000e-005**	**8.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0185**	**0.0185**	**0.0000**	**0.0000**	**0.0185**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2867	3.0186	2.4897	0.0111	0.6067	0.0100	0.6168	0.1632	9.4700e-003	0.1727	0.0000	1,034.1015	1,034.1015	0.0901	0.0000	1,036.3541
Unmitigated	0.2867	3.0186	2.4897	0.0111	0.6067	0.0100	0.6168	0.1632	9.4700e-003	0.1727	0.0000	1,034.1015	1,034.1015	0.0901	0.0000	1,036.3541

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	939.40	1,099.34	555.28	1,590,904	1,590,904
Total	939.40	1,099.34	555.28	1,590,904	1,590,904

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Regional Shopping Center	0.506092	0.032602	0.169295	0.124521	0.019914	0.005374	0.021664	0.110051	0.001797	0.001623	0.005307	0.000969	0.000792

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	52.1604	52.1604	2.3600e-003	4.9000e-004	52.3648
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	52.1604	52.1604	2.3600e-003	4.9000e-004	52.3648
NaturalGas Mitigated	1.2700e-003	0.0115	9.6900e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	12.5618	12.5618	2.4000e-004	2.3000e-004	12.6365
NaturalGas Unmitigated	1.2700e-003	0.0115	9.6900e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	12.5618	12.5618	2.4000e-004	2.3000e-004	12.6365

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					
Regional Shopping Center	235400	1.2700e-003	0.0115	9.6900e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	12.5618	12.5618	2.4000e-004	2.3000e-004	12.6365
Total		**1.2700e-003**	**0.0115**	**9.6900e-003**	**7.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.8000e-004**	**8.8000e-004**	**0.0000**	**12.5618**	**12.5618**	**2.4000e-004**	**2.3000e-004**	**12.6365**

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					
Regional Shopping Center	235400	1.2700e-003	0.0115	9.6900e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	12.5618	12.5618	2.4000e-004	2.3000e-004	12.6365
Total		**1.2700e-003**	**0.0115**	**9.6900e-003**	**7.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.8000e-004**	**8.8000e-004**	**0.0000**	**12.5618**	**12.5618**	**2.4000e-004**	**2.3000e-004**	**12.6365**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Regional Shopping Center	179300	52.1604	2.3600e-003	4.9000e-004	52.3648
Total		**52.1604**	**2.3600e-003**	**4.9000e-004**	**52.3648**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Regional Shopping Center	179300	52.1604	2.3600e-003	4.9000e-004	52.3648
Total		**52.1604**	**2.3600e-003**	**4.9000e-004**	**52.3648**

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	0.1012	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.9000e-004	3.9000e-004	0.0000	0.0000	4.2000e-004
Unmitigated	0.1012	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.9000e-004	3.9000e-004	0.0000	0.0000	4.2000e-004

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	0.0153					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0859					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.9000e-004	3.9000e-004	0.0000	0.0000	4.2000e-004
Total	**0.1012**	**0.0000**	**2.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.9000e-004**	**3.9000e-004**	**0.0000**	**0.0000**	**4.2000e-004**

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	0.0153					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0859					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.9000e-004	3.9000e-004	0.0000	0.0000	4.2000e-004
Total	**0.1012**	**0.0000**	**2.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.9000e-004**	**3.9000e-004**	**0.0000**	**0.0000**	**4.2000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4.0991	0.0533	1.2900e-003	5.8143
Unmitigated	4.0991	0.0533	1.2900e-003	5.8143

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Regional Shopping Center	1.6296 / 0.998784	4.0991	0.0533	1.2900e-003	5.8143
Total		**4.0991**	**0.0533**	**1.2900e-003**	**5.8143**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Regional Shopping Center	1.6296 / 0.998784	4.0991	0.0533	1.2900e-003	5.8143
Total		**4.0991**	**0.0533**	**1.2900e-003**	**5.8143**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.6891	0.2771	0.0000	11.6170
Unmitigated	4.6891	0.2771	0.0000	11.6170

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Regional Shopping Center	23.1	4.6891	0.2771	0.0000	11.6170
Total		**4.6891**	**0.2771**	**0.0000**	**11.6170**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Regional Shopping Center	23.1	4.6891	0.2771	0.0000	11.6170
Total		**4.6891**	**0.2771**	**0.0000**	**11.6170**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Wible-Hosking Cumulative Review Project 7

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	1,743.30	1000sqft	40.02	1,743,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Table Name	Column Name	Default Value	New Value

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					
2019	0.6610	6.7404	4.3799	0.0119	0.9316	0.2523	1.1839	0.3752	0.2345	0.6097	0.0000	1,084.9841	1,084.9841	0.1758	0.0000	1,089.3793
2020	0.7351	7.2836	5.2036	0.0200	0.8328	0.1756	1.0084	0.2271	0.1655	0.3926	0.0000	1,839.8582	1,839.8582	0.1689	0.0000	1,844.0814
2021	0.6520	6.5759	4.8398	0.0196	0.8296	0.1407	0.9703	0.2262	0.1324	0.3586	0.0000	1,805.3349	1,805.3349	0.1625	0.0000	1,809.3974
2022	12.4320	3.0414	2.5543	9.4700e-003	0.3935	0.0707	0.4642	0.1071	0.0664	0.1735	0.0000	868.9082	868.9082	0.0884	0.0000	871.1179
Maximum	**12.4320**	**7.2836**	**5.2036**	**0.0200**	**0.9316**	**0.2523**	**1.1839**	**0.3752**	**0.2345**	**0.6097**	**0.0000**	**1,839.8582**	**1,839.8582**	**0.1758**	**0.0000**	**1,844.0814**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.6610	6.7404	4.3799	0.0119	0.9316	0.2523	1.1839	0.3752	0.2345	0.6097	0.0000	1,084.9835	1,084.9835	0.1758	0.0000	1,089.3788
2020	0.7351	7.2836	5.2036	0.0200	0.8328	0.1756	1.0084	0.2271	0.1655	0.3926	0.0000	1,839.8579	1,839.8579	0.1689	0.0000	1,844.0811
2021	0.6520	6.5759	4.8398	0.0196	0.8296	0.1407	0.9703	0.2262	0.1324	0.3586	0.0000	1,805.3345	1,805.3345	0.1625	0.0000	1,809.3970
2022	12.4320	3.0414	2.5543	9.4700e-003	0.3935	0.0707	0.4642	0.1071	0.0664	0.1735	0.0000	868.9080	868.9080	0.0884	0.0000	871.1177
Maximum	**12.4320**	**7.2836**	**5.2036**	**0.0200**	**0.9316**	**0.2523**	**1.1839**	**0.3752**	**0.2345**	**0.6097**	**0.0000**	**1,839.8579**	**1,839.8579**	**0.1758**	**0.0000**	**1,844.0811**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-7-2019**	**4-6-2019**	1.3508	1.3508
2	**4-7-2019**	**7-6-2019**	1.8644	1.8644
3	**7-7-2019**	**10-6-2019**	2.1103	2.1103
4	**10-7-2019**	**1-6-2020**	2.2125	2.2125
5	**1-7-2020**	**4-6-2020**	1.9972	1.9972
6	**4-7-2020**	**7-6-2020**	1.9788	1.9788
7	**7-7-2020**	**10-6-2020**	2.0018	2.0018
8	**10-7-2020**	**1-6-2021**	2.0078	2.0078

9	**1-7-2021**	**4-6-2021**	1.7864	1.7864
10	**4-7-2021**	**7-6-2021**	1.7928	1.7928
11	**7-7-2021**	**10-6-2021**	1.8135	1.8135
12	**10-7-2021**	**1-6-2022**	1.8183	1.8183
13	**1-7-2022**	**4-6-2022**	1.6553	1.6553
14	**4-7-2022**	**7-6-2022**	1.3019	1.3019
15	**7-7-2022**	**9-30-2022**	5.7625	5.7625
		Highest	5.7625	5.7625

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	8.0220	1.5000e-004	0.0161	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0312	0.0312	8.0000e-005	0.0000	0.0332
Energy	0.1006	0.9144	0.7681	5.4900e-003		0.0695	0.0695		0.0695	0.0695	0.0000	5,128.6512	5,128.6512	0.2060	0.0569	5,150.7617
Mobile	22.7185	239.1970	197.2838	0.8814	48.0790	0.7946	48.8736	12.9326	0.7505	13.6831	0.0000	81,943.1426	81,943.1426	7.1399	0.0000	82,121.6390
Waste						0.0000	0.0000		0.0000	0.0000	371.5668	0.0000	371.5668	21.9590	0.0000	920.5411
Water						0.0000	0.0000		0.0000	0.0000	40.9672	283.8516	324.8188	4.2206	0.1020	460.7314
Total	**30.8411**	**240.1116**	**198.0680**	**0.8869**	**48.0790**	**0.8642**	**48.9432**	**12.9326**	**0.8201**	**13.7527**	**412.5340**	**87,355.6766**	**87,768.2106**	**33.5254**	**0.1589**	**88,653.7065**

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	8.0220	1.5000e-004	0.0161	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0312	0.0312	8.0000e-005	0.0000	0.0332
Energy	0.1006	0.9144	0.7681	5.4900e-003		0.0695	0.0695		0.0695	0.0695	0.0000	5,128.6512	5,128.6512	0.2060	0.0569	5,150.7617
Mobile	22.7185	239.1970	197.2838	0.8814	48.0790	0.7946	48.8736	12.9326	0.7505	13.6831	0.0000	81,943.1426	81,943.1426	7.1399	0.0000	82,121.6390
Waste						0.0000	0.0000		0.0000	0.0000	371.5668	0.0000	371.5668	21.9590	0.0000	920.5411
Water						0.0000	0.0000		0.0000	0.0000	40.9672	283.8516	324.8188	4.2206	0.1020	460.7314
Total	**30.8411**	**240.1116**	**198.0680**	**0.8869**	**48.0790**	**0.8642**	**48.9432**	**12.9326**	**0.8201**	**13.7527**	**412.5340**	**87,355.6766**	**87,768.2106**	**33.5254**	**0.1589**	**88,653.7065**

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

3.0 Construction Detail

Construction Phase

Wible-Hosking Cumulative Review Project 7 - San Joaquin Valley Air Basin, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/7/2019	3/15/2019	5	50	
2	Site Preparation	Site Preparation	3/16/2019	4/26/2019	5	30	
3	Grading	Grading	4/27/2019	8/9/2019	5	75	
4	Building Construction	Building Construction	8/10/2019	6/10/2022	5	740	
5	Paving	Paving	6/11/2022	8/26/2022	5	55	
6	Architectural Coating	Architectural Coating	8/27/2022	11/11/2022	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 187.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,614,950; Non-Residential Outdoor: 871,650; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Wible-Hosking Cumulative Review Project 7 - San Joaquin Valley Air Basin, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	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	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	558.00	286.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	112.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0878	0.8946	0.5515	9.7000e-004		0.0449	0.0449		0.0417	0.0417	0.0000	86.5658	86.5658	0.0241	0.0000	87.1679
Total	**0.0878**	**0.8946**	**0.5515**	**9.7000e-004**		**0.0449**	**0.0449**		**0.0417**	**0.0417**	**0.0000**	**86.5658**	**86.5658**	**0.0241**	**0.0000**	**87.1679**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.7400e-003	1.2200e-003	0.0123	3.0000e-005	3.0000e-003	2.0000e-005	3.0200e-003	8.0000e-004	2.0000e-005	8.2000e-004	0.0000	2.7782	2.7782	9.0000e-005	0.0000	2.7804
Total	**1.7400e-003**	**1.2200e-003**	**0.0123**	**3.0000e-005**	**3.0000e-003**	**2.0000e-005**	**3.0200e-003**	**8.0000e-004**	**2.0000e-005**	**8.2000e-004**	**0.0000**	**2.7782**	**2.7782**	**9.0000e-005**	**0.0000**	**2.7804**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0878	0.8946	0.5515	9.7000e-004		0.0449	0.0449		0.0417	0.0417	0.0000	86.5657	86.5657	0.0241	0.0000	87.1678
Total	**0.0878**	**0.8946**	**0.5515**	**9.7000e-004**		**0.0449**	**0.0449**		**0.0417**	**0.0417**	**0.0000**	**86.5657**	**86.5657**	**0.0241**	**0.0000**	**87.1678**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.7400e-003	1.2200e-003	0.0123	3.0000e-005	3.0000e-003	2.0000e-005	3.0200e-003	8.0000e-004	2.0000e-005	8.2000e-004	0.0000	2.7782	2.7782	9.0000e-005	0.0000	2.7804
Total	**1.7400e-003**	**1.2200e-003**	**0.0123**	**3.0000e-005**	**3.0000e-003**	**2.0000e-005**	**3.0200e-003**	**8.0000e-004**	**2.0000e-005**	**8.2000e-004**	**0.0000**	**2.7782**	**2.7782**	**9.0000e-005**	**0.0000**	**2.7804**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2710	0.0000	0.2710	0.1490	0.0000	0.1490	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0650	0.6836	0.3310	5.7000e-004		0.0359	0.0359		0.0330	0.0330	0.0000	51.2530	51.2530	0.0162	0.0000	51.6584
Total	**0.0650**	**0.6836**	**0.3310**	**5.7000e-004**	**0.2710**	**0.0359**	**0.3069**	**0.1490**	**0.0330**	**0.1820**	**0.0000**	**51.2530**	**51.2530**	**0.0162**	**0.0000**	**51.6584**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.2600e-003	8.8000e-004	8.8600e-003	2.0000e-005	2.1600e-003	2.0000e-005	2.1700e-003	5.7000e-004	1.0000e-005	5.9000e-004	0.0000	2.0003	2.0003	6.0000e-005	0.0000	2.0019
Total	**1.2600e-003**	**8.8000e-004**	**8.8600e-003**	**2.0000e-005**	**2.1600e-003**	**2.0000e-005**	**2.1700e-003**	**5.7000e-004**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**2.0003**	**2.0003**	**6.0000e-005**	**0.0000**	**2.0019**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2710	0.0000	0.2710	0.1490	0.0000	0.1490	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0650	0.6836	0.3309	5.7000e-004		0.0359	0.0359		0.0330	0.0330	0.0000	51.2530	51.2530	0.0162	0.0000	51.6584
Total	**0.0650**	**0.6836**	**0.3309**	**5.7000e-004**	**0.2710**	**0.0359**	**0.3069**	**0.1490**	**0.0330**	**0.1820**	**0.0000**	**51.2530**	**51.2530**	**0.0162**	**0.0000**	**51.6584**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.2600e-003	8.8000e-004	8.8600e-003	2.0000e-005	2.1600e-003	2.0000e-005	2.1700e-003	5.7000e-004	1.0000e-005	5.9000e-004	0.0000	2.0003	2.0003	6.0000e-005	0.0000	2.0019
Total	**1.2600e-003**	**8.8000e-004**	**8.8600e-003**	**2.0000e-005**	**2.1600e-003**	**2.0000e-005**	**2.1700e-003**	**5.7000e-004**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**2.0003**	**2.0003**	**6.0000e-005**	**0.0000**	**2.0019**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3253	0.0000	0.3253	0.1349	0.0000	0.1349	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1777	2.0445	1.2516	2.3300e-003		0.0894	0.0894		0.0822	0.0822	0.0000	208.8800	208.8800	0.0661	0.0000	210.5321
Total	**0.1777**	**2.0445**	**1.2516**	**2.3300e-003**	**0.3253**	**0.0894**	**0.4146**	**0.1349**	**0.0822**	**0.2171**	**0.0000**	**208.8800**	**208.8800**	**0.0661**	**0.0000**	**210.5321**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	3.4900e-003	2.4500e-003	0.0246	6.0000e-005	6.0000e-003	4.0000e-005	6.0400e-003	1.5900e-003	4.0000e-005	1.6300e-003	0.0000	5.5565	5.5565	1.8000e-004	0.0000	5.5609
Total	**3.4900e-003**	**2.4500e-003**	**0.0246**	**6.0000e-005**	**6.0000e-003**	**4.0000e-005**	**6.0400e-003**	**1.5900e-003**	**4.0000e-005**	**1.6300e-003**	**0.0000**	**5.5565**	**5.5565**	**1.8000e-004**	**0.0000**	**5.5609**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3253	0.0000	0.3253	0.1349	0.0000	0.1349	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1777	2.0445	1.2516	2.3300e-003		0.0894	0.0894		0.0822	0.0822	0.0000	208.8797	208.8797	0.0661	0.0000	210.5319
Total	**0.1777**	**2.0445**	**1.2516**	**2.3300e-003**	**0.3253**	**0.0894**	**0.4146**	**0.1349**	**0.0822**	**0.2171**	**0.0000**	**208.8797**	**208.8797**	**0.0661**	**0.0000**	**210.5319**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	3.4900e-003	2.4500e-003	0.0246	6.0000e-005	6.0000e-003	4.0000e-005	6.0400e-003	1.5900e-003	4.0000e-005	1.6300e-003	0.0000	5.5565	5.5565	1.8000e-004	0.0000	5.5609
Total	**3.4900e-003**	**2.4500e-003**	**0.0246**	**6.0000e-005**	**6.0000e-003**	**4.0000e-005**	**6.0400e-003**	**1.5900e-003**	**4.0000e-005**	**1.6300e-003**	**0.0000**	**5.5565**	**5.5565**	**1.8000e-004**	**0.0000**	**5.5609**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1204	1.0750	0.8754	1.3700e-003		0.0658	0.0658		0.0619	0.0619	0.0000	119.9031	119.9031	0.0292	0.0000	120.6334
Total	**0.1204**	**1.0750**	**0.8754**	**1.3700e-003**		**0.0658**	**0.0658**		**0.0619**	**0.0619**	**0.0000**	**119.9031**	**119.9031**	**0.0292**	**0.0000**	**120.6334**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0712	1.9452	0.3908	4.1800e-003	0.0967	0.0147	0.1114	0.0279	0.0141	0.0420	0.0000	397.2133	397.2133	0.0331	0.0000	398.0419
Worker	0.1323	0.0929	0.9339	2.3400e-003	0.2275	1.6800e-003	0.2292	0.0605	1.5400e-003	0.0620	0.0000	210.8338	210.8338	6.7400e-003	0.0000	211.0024
Total	**0.2036**	**2.0381**	**1.3247**	**6.5200e-003**	**0.3242**	**0.0164**	**0.3406**	**0.0884**	**0.0156**	**0.1040**	**0.0000**	**608.0472**	**608.0472**	**0.0399**	**0.0000**	**609.0443**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1204	1.0750	0.8754	1.3700e-003		0.0658	0.0658		0.0619	0.0619	0.0000	119.9030	119.9030	0.0292	0.0000	120.6332
Total	**0.1204**	**1.0750**	**0.8754**	**1.3700e-003**		**0.0658**	**0.0658**		**0.0619**	**0.0619**	**0.0000**	**119.9030**	**119.9030**	**0.0292**	**0.0000**	**120.6332**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0712	1.9452	0.3908	4.1800e-003	0.0967	0.0147	0.1114	0.0279	0.0141	0.0420	0.0000	397.2133	397.2133	0.0331	0.0000	398.0419
Worker	0.1323	0.0929	0.9339	2.3400e-003	0.2275	1.6800e-003	0.2292	0.0605	1.5400e-003	0.0620	0.0000	210.8338	210.8338	6.7400e-003	0.0000	211.0024
Total	**0.2036**	**2.0381**	**1.3247**	**6.5200e-003**	**0.3242**	**0.0164**	**0.3406**	**0.0884**	**0.0156**	**0.1040**	**0.0000**	**608.0472**	**608.0472**	**0.0399**	**0.0000**	**609.0443**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4091	303.4091	0.0740	0.0000	305.2596
Total	**0.2777**	**2.5134**	**2.2072**	**3.5300e-003**		**0.1463**	**0.1463**		**0.1376**	**0.1376**	**0.0000**	**303.4091**	**303.4091**	**0.0740**	**0.0000**	**305.2596**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1485	4.5605	0.8650	0.0107	0.2484	0.0251	0.2735	0.0718	0.0240	0.0958	0.0000	1,011.6560	1,011.6560	0.0799	0.0000	1,013.6529
Worker	0.3090	0.2098	2.1315	5.8100e-003	0.5844	4.1600e-003	0.5886	0.1553	3.8400e-003	0.1592	0.0000	524.7931	524.7931	0.0150	0.0000	525.1690
Total	**0.4574**	**4.7703**	**2.9965**	**0.0165**	**0.8328**	**0.0293**	**0.8621**	**0.2271**	**0.0279**	**0.2550**	**0.0000**	**1,536.4492**	**1,536.4492**	**0.0949**	**0.0000**	**1,538.8218**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4087	303.4087	0.0740	0.0000	305.2592
Total	**0.2777**	**2.5134**	**2.2072**	**3.5300e-003**		**0.1463**	**0.1463**		**0.1376**	**0.1376**	**0.0000**	**303.4087**	**303.4087**	**0.0740**	**0.0000**	**305.2592**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1485	4.5605	0.8650	0.0107	0.2484	0.0251	0.2735	0.0718	0.0240	0.0958	0.0000	1,011.6560	1,011.6560	0.0799	0.0000	1,013.6529
Worker	0.3090	0.2098	2.1315	5.8100e-003	0.5844	4.1600e-003	0.5886	0.1553	3.8400e-003	0.1592	0.0000	524.7931	524.7931	0.0150	0.0000	525.1690
Total	**0.4574**	**4.7703**	**2.9965**	**0.0165**	**0.8328**	**0.0293**	**0.8621**	**0.2271**	**0.0279**	**0.2550**	**0.0000**	**1,536.4492**	**1,536.4492**	**0.0949**	**0.0000**	**1,538.8218**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
Total	**0.2481**	**2.2749**	**2.1631**	**3.5100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**	**0.0000**	**302.2867**	**302.2867**	**0.0729**	**0.0000**	**304.1099**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1203	4.1152	0.7508	0.0105	0.2474	0.0116	0.2590	0.0715	0.0111	0.0826	0.0000	998.4317	998.4317	0.0762	0.0000	1,000.3376
Worker	0.2836	0.1858	1.9260	5.5800e-003	0.5822	4.0100e-003	0.5862	0.1547	3.6900e-003	0.1584	0.0000	504.6165	504.6165	0.0133	0.0000	504.9499
Total	**0.4039**	**4.3010**	**2.6768**	**0.0161**	**0.8296**	**0.0156**	**0.8452**	**0.2262**	**0.0148**	**0.2410**	**0.0000**	**1,503.0482**	**1,503.0482**	**0.0896**	**0.0000**	**1,505.2875**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095
Total	**0.2481**	**2.2749**	**2.1631**	**3.5100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**	**0.0000**	**302.2863**	**302.2863**	**0.0729**	**0.0000**	**304.1095**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1203	4.1152	0.7508	0.0105	0.2474	0.0116	0.2590	0.0715	0.0111	0.0826	0.0000	998.4317	998.4317	0.0762	0.0000	1,000.3376
Worker	0.2836	0.1858	1.9260	5.5800e-003	0.5822	4.0100e-003	0.5862	0.1547	3.6900e-003	0.1584	0.0000	504.6165	504.6165	0.0133	0.0000	504.9499
Total	**0.4039**	**4.3010**	**2.6768**	**0.0161**	**0.8296**	**0.0156**	**0.8452**	**0.2262**	**0.0148**	**0.2410**	**0.0000**	**1,503.0482**	**1,503.0482**	**0.0896**	**0.0000**	**1,505.2875**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0981	0.8979	0.9409	1.5500e-003		0.0465	0.0465		0.0438	0.0438	0.0000	133.2420	133.2420	0.0319	0.0000	134.0400
Total	**0.0981**	**0.8979**	**0.9409**	**1.5500e-003**		**0.0465**	**0.0465**		**0.0438**	**0.0438**	**0.0000**	**133.2420**	**133.2420**	**0.0319**	**0.0000**	**134.0400**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0493	1.7178	0.3051	4.5900e-003	0.1090	4.4200e-003	0.1134	0.0315	4.2300e-003	0.0357	0.0000	435.8368	435.8368	0.0324	0.0000	436.6464
Worker	0.1157	0.0731	0.7733	2.3700e-003	0.2565	1.7100e-003	0.2582	0.0682	1.5700e-003	0.0698	0.0000	214.3950	214.3950	5.2400e-003	0.0000	214.5261
Total	**0.1650**	**1.7908**	**1.0784**	**6.9600e-003**	**0.3655**	**6.1300e-003**	**0.3717**	**0.0997**	**5.8000e-003**	**0.1055**	**0.0000**	**650.2317**	**650.2317**	**0.0376**	**0.0000**	**651.1724**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0981	0.8979	0.9409	1.5500e-003		0.0465	0.0465		0.0438	0.0438	0.0000	133.2419	133.2419	0.0319	0.0000	134.0399
Total	**0.0981**	**0.8979**	**0.9409**	**1.5500e-003**		**0.0465**	**0.0465**		**0.0438**	**0.0438**	**0.0000**	**133.2419**	**133.2419**	**0.0319**	**0.0000**	**134.0399**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0493	1.7178	0.3051	4.5900e-003	0.1090	4.4200e-003	0.1134	0.0315	4.2300e-003	0.0357	0.0000	435.8368	435.8368	0.0324	0.0000	436.6464
Worker	0.1157	0.0731	0.7733	2.3700e-003	0.2565	1.7100e-003	0.2582	0.0682	1.5700e-003	0.0698	0.0000	214.3950	214.3950	5.2400e-003	0.0000	214.5261
Total	**0.1650**	**1.7908**	**1.0784**	**6.9600e-003**	**0.3655**	**6.1300e-003**	**0.3717**	**0.0997**	**5.8000e-003**	**0.1055**	**0.0000**	**650.2317**	**650.2317**	**0.0376**	**0.0000**	**651.1724**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0303	0.3059	0.4010	6.3000e-004		0.0156	0.0156		0.0144	0.0144	0.0000	55.0758	55.0758	0.0178	0.0000	55.5211
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0303**	**0.3059**	**0.4010**	**6.3000e-004**		**0.0156**	**0.0156**		**0.0144**	**0.0144**	**0.0000**	**55.0758**	**55.0758**	**0.0178**	**0.0000**	**55.5211**

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	1.4900e-003	9.4000e-004	9.9400e-003	3.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	9.0000e-004	0.0000	2.7564	2.7564	7.0000e-005	0.0000	2.7581
Total	**1.4900e-003**	**9.4000e-004**	**9.9400e-003**	**3.0000e-005**	**3.3000e-003**	**2.0000e-005**	**3.3200e-003**	**8.8000e-004**	**2.0000e-005**	**9.0000e-004**	**0.0000**	**2.7564**	**2.7564**	**7.0000e-005**	**0.0000**	**2.7581**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0303	0.3059	0.4010	6.3000e-004		0.0156	0.0156		0.0144	0.0144	0.0000	55.0757	55.0757	0.0178	0.0000	55.5210
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0303**	**0.3059**	**0.4010**	**6.3000e-004**		**0.0156**	**0.0156**		**0.0144**	**0.0144**	**0.0000**	**55.0757**	**55.0757**	**0.0178**	**0.0000**	**55.5210**

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	1.4900e-003	9.4000e-004	9.9400e-003	3.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	9.0000e-004	0.0000	2.7564	2.7564	7.0000e-005	0.0000	2.7581
Total	**1.4900e-003**	**9.4000e-004**	**9.9400e-003**	**3.0000e-005**	**3.3000e-003**	**2.0000e-005**	**3.3200e-003**	**8.8000e-004**	**2.0000e-005**	**9.0000e-004**	**0.0000**	**2.7564**	**2.7564**	**7.0000e-005**	**0.0000**	**2.7581**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	12.1203					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.6200e-003	0.0387	0.0499	8.0000e-005		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	7.0215	7.0215	4.6000e-004	0.0000	7.0329
Total	**12.1259**	**0.0387**	**0.0499**	**8.0000e-005**		**2.2500e-003**	**2.2500e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.0215**	**7.0215**	**4.6000e-004**	**0.0000**	**7.0329**

3.7 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0111	7.0200e-003	0.0742	2.3000e-004	0.0246	1.6000e-004	0.0248	6.5400e-003	1.5000e-004	6.7000e-003	0.0000	20.5809	20.5809	5.0000e-004	0.0000	20.5934
Total	**0.0111**	**7.0200e-003**	**0.0742**	**2.3000e-004**	**0.0246**	**1.6000e-004**	**0.0248**	**6.5400e-003**	**1.5000e-004**	**6.7000e-003**	**0.0000**	**20.5809**	**20.5809**	**5.0000e-004**	**0.0000**	**20.5934**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	12.1203					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.6200e-003	0.0387	0.0499	8.0000e-005		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	7.0214	7.0214	4.6000e-004	0.0000	7.0329
Total	**12.1259**	**0.0387**	**0.0499**	**8.0000e-005**		**2.2500e-003**	**2.2500e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.0214**	**7.0214**	**4.6000e-004**	**0.0000**	**7.0329**

3.7 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0111	7.0200e-003	0.0742	2.3000e-004	0.0246	1.6000e-004	0.0248	6.5400e-003	1.5000e-004	6.7000e-003	0.0000	20.5809	20.5809	5.0000e-004	0.0000	20.5934
Total	**0.0111**	**7.0200e-003**	**0.0742**	**2.3000e-004**	**0.0246**	**1.6000e-004**	**0.0248**	**6.5400e-003**	**1.5000e-004**	**6.7000e-003**	**0.0000**	**20.5809**	**20.5809**	**5.0000e-004**	**0.0000**	**20.5934**

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	22.7185	239.1970	197.2838	0.8814	48.0790	0.7946	48.8736	12.9326	0.7505	13.6831	0.0000	81,943.1426	81,943.1426	7.1399	0.0000	82,121.6390
Unmitigated	22.7185	239.1970	197.2838	0.8814	48.0790	0.7946	48.8736	12.9326	0.7505	13.6831	0.0000	81,943.1426	81,943.1426	7.1399	0.0000	82,121.6390

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	74,438.91	87,112.70	44000.89	126,064,657	126,064,657
Total	74,438.91	87,112.70	44,000.89	126,064,657	126,064,657

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Regional Shopping Center	0.506092	0.032602	0.169295	0.124521	0.019914	0.005374	0.021664	0.110051	0.001797	0.001623	0.005307	0.000969	0.000792

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,133.2396	4,133.2396	0.1869	0.0387	4,149.4348
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,133.2396	4,133.2396	0.1869	0.0387	4,149.4348
NaturalGas Mitigated	0.1006	0.9144	0.7681	5.4900e-003		0.0695	0.0695		0.0695	0.0695	0.0000	995.4117	995.4117	0.0191	0.0183	1,001.3269
NaturalGas Unmitigated	0.1006	0.9144	0.7681	5.4900e-003		0.0695	0.0695		0.0695	0.0695	0.0000	995.4117	995.4117	0.0191	0.0183	1,001.3269

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					
Regional Shopping Center	1.86533e+007	0.1006	0.9144	0.7681	5.4900e-003		0.0695	0.0695		0.0695	0.0695	0.0000	995.4117	995.4117	0.0191	0.0183	1,001.3269
Total		**0.1006**	**0.9144**	**0.7681**	**5.4900e-003**		**0.0695**	**0.0695**		**0.0695**	**0.0695**	**0.0000**	**995.4117**	**995.4117**	**0.0191**	**0.0183**	**1,001.3269**

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					
Regional Shopping Center	1.86533e+007	0.1006	0.9144	0.7681	5.4900e-003		0.0695	0.0695		0.0695	0.0695	0.0000	995.4117	995.4117	0.0191	0.0183	1,001.3269
Total		**0.1006**	**0.9144**	**0.7681**	**5.4900e-003**		**0.0695**	**0.0695**		**0.0695**	**0.0695**	**0.0000**	**995.4117**	**995.4117**	**0.0191**	**0.0183**	**1,001.3269**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Regional Shopping Center	1.42079e+007	4,133.2396	0.1869	0.0387	4,149.4348
Total		**4,133.2396**	**0.1869**	**0.0387**	**4,149.4348**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Regional Shopping Center	1.42079e+007	4,133.2396	0.1869	0.0387	4,149.4348
Total		**4,133.2396**	**0.1869**	**0.0387**	**4,149.4348**

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	8.0220	1.5000e-004	0.0161	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0312	0.0312	8.0000e-005	0.0000	0.0332
Unmitigated	8.0220	1.5000e-004	0.0161	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0312	0.0312	8.0000e-005	0.0000	0.0332

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	1.2120					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.8085					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5000e-003	1.5000e-004	0.0161	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0312	0.0312	8.0000e-005	0.0000	0.0332
Total	**8.0220**	**1.5000e-004**	**0.0161**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.0312**	**0.0312**	**8.0000e-005**	**0.0000**	**0.0332**

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	1.2120					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.8085					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5000e-003	1.5000e-004	0.0161	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0312	0.0312	8.0000e-005	0.0000	0.0332
Total	**8.0220**	**1.5000e-004**	**0.0161**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.0312**	**0.0312**	**8.0000e-005**	**0.0000**	**0.0332**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	324.8188	4.2206	0.1020	460.7314
Unmitigated	324.8188	4.2206	0.1020	460.7314

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Regional Shopping Center	129.131 / 79.1446	324.8188	4.2206	0.1020	460.7314
Total		**324.8188**	**4.2206**	**0.1020**	**460.7314**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Regional Shopping Center	129.131 / 79.1446	324.8188	4.2206	0.1020	460.7314
Total		**324.8188**	**4.2206**	**0.1020**	**460.7314**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	371.5668	21.9590	0.0000	920.5411
Unmitigated	371.5668	21.9590	0.0000	920.5411

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Regional Shopping Center	1830.46	371.5668	21.9590	0.0000	920.5411
Total		**371.5668**	**21.9590**	**0.0000**	**920.5411**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Regional Shopping Center	1830.46	371.5668	21.9590	0.0000	920.5411
Total		**371.5668**	**21.9590**	**0.0000**	**920.5411**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	2,478.20	1000sqft	56.89	2,478,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Table Name	Column Name	Default Value	New Value

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					
2019	0.6281	6.6085	4.1145	9.5500e-003	1.0213	0.2741	1.2954	0.4462	0.2536	0.6998	0.0000	867.3183	867.3183	0.1839	0.0000	871.9151
2020	0.9276	9.2855	6.4642	0.0269	1.1831	0.1879	1.3710	0.3226	0.1772	0.4998	0.0000	2,485.3443	2,485.3443	0.2088	0.0000	2,490.5636
2021	0.8219	8.3808	5.9660	0.0264	1.1786	0.1472	1.3258	0.3214	0.1386	0.4600	0.0000	2,436.7750	2,436.7750	0.2001	0.0000	2,441.7776
2022	0.7518	7.7780	5.5911	0.0258	1.1741	0.1248	1.2989	0.3201	0.1176	0.4377	0.0000	2,388.9119	2,388.9119	0.1930	0.0000	2,393.7357
2023	0.6596	6.3378	5.1840	0.0252	1.1741	0.1005	1.2746	0.3201	0.0946	0.4147	0.0000	2,329.3186	2,329.3186	0.1581	0.0000	2,333.2701
2024	17.3655	1.1256	1.3201	4.2800e-003	0.1876	0.0305	0.2181	0.0508	0.0284	0.0792	0.0000	389.7278	389.7278	0.0438	0.0000	390.8232
Maximum	**17.3655**	**9.2855**	**6.4642**	**0.0269**	**1.1831**	**0.2741**	**1.3710**	**0.4462**	**0.2536**	**0.6998**	**0.0000**	**2,485.3443**	**2,485.3443**	**0.2088**	**0.0000**	**2,490.5636**

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2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.6281	6.6085	4.1145	9.5500e-003	1.0213	0.2741	1.2954	0.4462	0.2536	0.6998	0.0000	867.3176	867.3176	0.1839	0.0000	871.9144
2020	0.9276	9.2855	6.4642	0.0269	1.1831	0.1879	1.3710	0.3226	0.1772	0.4998	0.0000	2,485.3440	2,485.3440	0.2088	0.0000	2,490.5633
2021	0.8219	8.3808	5.9660	0.0264	1.1786	0.1472	1.3258	0.3214	0.1386	0.4600	0.0000	2,436.7746	2,436.7746	0.2001	0.0000	2,441.7772
2022	0.7518	7.7780	5.5911	0.0258	1.1741	0.1248	1.2989	0.3201	0.1176	0.4377	0.0000	2,388.9116	2,388.9116	0.1930	0.0000	2,393.7354
2023	0.6596	6.3378	5.1840	0.0252	1.1741	0.1005	1.2746	0.3201	0.0946	0.4147	0.0000	2,329.3182	2,329.3182	0.1581	0.0000	2,333.2697
2024	17.3655	1.1256	1.3201	4.2800e-003	0.1876	0.0305	0.2181	0.0508	0.0284	0.0792	0.0000	389.7276	389.7276	0.0438	0.0000	390.8230
Maximum	**17.3655**	**9.2855**	**6.4642**	**0.0269**	**1.1831**	**0.2741**	**1.3710**	**0.4462**	**0.2536**	**0.6998**	**0.0000**	**2,485.3440**	**2,485.3440**	**0.2088**	**0.0000**	**2,490.5633**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-7-2019**	**4-6-2019**	1.2672	1.2672
2	**4-7-2019**	**7-6-2019**	1.7011	1.7011
3	**7-7-2019**	**10-6-2019**	1.9525	1.9525
4	**10-7-2019**	**1-6-2020**	2.5026	2.5026
5	**1-7-2020**	**4-6-2020**	2.5448	2.5448

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6	**4-7-2020**	**7-6-2020**	2.5187	2.5187
7	**7-7-2020**	**10-6-2020**	2.5483	2.5483
8	**10-7-2020**	**1-6-2021**	2.5585	2.5585
9	**1-7-2021**	**4-6-2021**	2.2753	2.2753
10	**4-7-2021**	**7-6-2021**	2.2816	2.2816
11	**7-7-2021**	**10-6-2021**	2.3081	2.3081
12	**10-7-2021**	**1-6-2022**	2.3167	2.3167
13	**1-7-2022**	**4-6-2022**	2.1164	2.1164
14	**4-7-2022**	**7-6-2022**	2.1240	2.1240
15	**7-7-2022**	**10-6-2022**	2.1485	2.1485
16	**10-7-2022**	**1-6-2023**	2.1393	2.1393
17	**1-7-2023**	**4-6-2023**	1.7374	1.7374
18	**4-7-2023**	**7-6-2023**	1.7474	1.7474
19	**7-7-2023**	**10-6-2023**	1.7673	1.7673
20	**10-7-2023**	**1-6-2024**	1.7730	1.7730
21	**1-7-2024**	**4-6-2024**	0.8516	0.8516
22	**4-7-2024**	**7-6-2024**	7.2718	7.2718
23	**7-7-2024**	**9-30-2024**	10.2231	10.2231
		Highest	10.2231	10.2231

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	11.4037	2.1000e-004	0.0229	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0443	0.0443	1.2000e-004	0.0000	0.0472
Energy	0.1430	1.2998	1.0919	7.8000e-003		0.0988	0.0988		0.0988	0.0988	0.0000	7,290.6691	7,290.6691	0.2928	0.0809	7,322.1004
Mobile	32.2957	340.0322	280.4501	1.2530	68.3470	1.1296	69.4766	18.3844	1.0669	19.4513	0.0000	116,486.8331	116,486.8331	10.1497	0.0000	116,740.5758
Waste						0.0000	0.0000		0.0000	0.0000	528.2048	0.0000	528.2048	31.2160	0.0000	1,308.6051
Water						0.0000	0.0000		0.0000	0.0000	58.2372	403.5112	461.7483	5.9998	0.1450	654.9559
Total	**43.8424**	**341.3322**	**281.5649**	**1.2608**	**68.3470**	**1.2285**	**69.5755**	**18.3844**	**1.1658**	**19.5502**	**586.4420**	**124,181.0576**	**124,767.4996**	**47.6584**	**0.2259**	**126,026.2844**

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	11.4037	2.1000e-004	0.0229	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0443	0.0443	1.2000e-004	0.0000	0.0472
Energy	0.1430	1.2998	1.0919	7.8000e-003		0.0988	0.0988		0.0988	0.0988	0.0000	7,290.6691	7,290.6691	0.2928	0.0809	7,322.1004
Mobile	32.2957	340.0322	280.4501	1.2530	68.3470	1.1296	69.4766	18.3844	1.0669	19.4513	0.0000	116,486.8331	116,486.8331	10.1497	0.0000	116,740.5758
Waste						0.0000	0.0000		0.0000	0.0000	528.2048	0.0000	528.2048	31.2160	0.0000	1,308.6051
Water						0.0000	0.0000		0.0000	0.0000	58.2372	403.5112	461.7483	5.9998	0.1450	654.9559
Total	**43.8424**	**341.3322**	**281.5649**	**1.2608**	**68.3470**	**1.2285**	**69.5755**	**18.3844**	**1.1658**	**19.5502**	**586.4420**	**124,181.0576**	**124,767.4996**	**47.6584**	**0.2259**	**126,026.2844**

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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/7/2019	4/12/2019	5	70	
2	Site Preparation	Site Preparation	4/13/2019	6/7/2019	5	40	
3	Grading	Grading	6/8/2019	11/8/2019	5	110	
4	Building Construction	Building Construction	11/9/2019	2/9/2024	5	1110	
5	Paving	Paving	2/10/2024	5/24/2024	5	75	
6	Architectural Coating	Architectural Coating	5/25/2024	9/6/2024	5	75	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 275

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 3,717,300; Non-Residential Outdoor: 1,239,100; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	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	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	793.00	406.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	159.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1230	1.2524	0.7721	1.3600e-003		0.0628	0.0628		0.0584	0.0584	0.0000	121.1922	121.1922	0.0337	0.0000	122.0350
Total	**0.1230**	**1.2524**	**0.7721**	**1.3600e-003**		**0.0628**	**0.0628**		**0.0584**	**0.0584**	**0.0000**	**121.1922**	**121.1922**	**0.0337**	**0.0000**	**122.0350**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	2.4400e-003	1.7100e-003	0.0172	4.0000e-005	4.2000e-003	3.0000e-005	4.2300e-003	1.1200e-003	3.0000e-005	1.1400e-003	0.0000	3.8895	3.8895	1.2000e-004	0.0000	3.8926
Total	**2.4400e-003**	**1.7100e-003**	**0.0172**	**4.0000e-005**	**4.2000e-003**	**3.0000e-005**	**4.2300e-003**	**1.1200e-003**	**3.0000e-005**	**1.1400e-003**	**0.0000**	**3.8895**	**3.8895**	**1.2000e-004**	**0.0000**	**3.8926**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1230	1.2524	0.7721	1.3600e-003		0.0628	0.0628		0.0584	0.0584	0.0000	121.1920	121.1920	0.0337	0.0000	122.0349
Total	**0.1230**	**1.2524**	**0.7721**	**1.3600e-003**		**0.0628**	**0.0628**		**0.0584**	**0.0584**	**0.0000**	**121.1920**	**121.1920**	**0.0337**	**0.0000**	**122.0349**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	2.4400e-003	1.7100e-003	0.0172	4.0000e-005	4.2000e-003	3.0000e-005	4.2300e-003	1.1200e-003	3.0000e-005	1.1400e-003	0.0000	3.8895	3.8895	1.2000e-004	0.0000	3.8926
Total	**2.4400e-003**	**1.7100e-003**	**0.0172**	**4.0000e-005**	**4.2000e-003**	**3.0000e-005**	**4.2300e-003**	**1.1200e-003**	**3.0000e-005**	**1.1400e-003**	**0.0000**	**3.8895**	**3.8895**	**1.2000e-004**	**0.0000**	**3.8926**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3613	0.0000	0.3613	0.1986	0.0000	0.1986	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0867	0.9115	0.4413	7.6000e-004		0.0478	0.0478		0.0440	0.0440	0.0000	68.3374	68.3374	0.0216	0.0000	68.8779
Total	**0.0867**	**0.9115**	**0.4413**	**7.6000e-004**	**0.3613**	**0.0478**	**0.4091**	**0.1986**	**0.0440**	**0.2426**	**0.0000**	**68.3374**	**68.3374**	**0.0216**	**0.0000**	**68.8779**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.6700e-003	1.1800e-003	0.0118	3.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.6671	2.6671	9.0000e-005	0.0000	2.6692
Total	**1.6700e-003**	**1.1800e-003**	**0.0118**	**3.0000e-005**	**2.8800e-003**	**2.0000e-005**	**2.9000e-003**	**7.6000e-004**	**2.0000e-005**	**7.8000e-004**	**0.0000**	**2.6671**	**2.6671**	**9.0000e-005**	**0.0000**	**2.6692**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3613	0.0000	0.3613	0.1986	0.0000	0.1986	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0867	0.9115	0.4413	7.6000e-004		0.0478	0.0478		0.0440	0.0440	0.0000	68.3373	68.3373	0.0216	0.0000	68.8778
Total	**0.0867**	**0.9115**	**0.4413**	**7.6000e-004**	**0.3613**	**0.0478**	**0.4091**	**0.1986**	**0.0440**	**0.2426**	**0.0000**	**68.3373**	**68.3373**	**0.0216**	**0.0000**	**68.8778**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.6700e-003	1.1800e-003	0.0118	3.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.6671	2.6671	9.0000e-005	0.0000	2.6692
Total	**1.6700e-003**	**1.1800e-003**	**0.0118**	**3.0000e-005**	**2.8800e-003**	**2.0000e-005**	**2.9000e-003**	**7.6000e-004**	**2.0000e-005**	**7.8000e-004**	**0.0000**	**2.6671**	**2.6671**	**9.0000e-005**	**0.0000**	**2.6692**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4770	0.0000	0.4770	0.1978	0.0000	0.1978	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2606	2.9986	1.8357	3.4100e-003		0.1311	0.1311		0.1206	0.1206	0.0000	306.3573	306.3573	0.0969	0.0000	308.7805
Total	**0.2606**	**2.9986**	**1.8357**	**3.4100e-003**	**0.4770**	**0.1311**	**0.6081**	**0.1978**	**0.1206**	**0.3184**	**0.0000**	**306.3573**	**306.3573**	**0.0969**	**0.0000**	**308.7805**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1100e-003	3.5900e-003	0.0361	9.0000e-005	8.7900e-003	6.0000e-005	8.8600e-003	2.3400e-003	6.0000e-005	2.4000e-003	0.0000	8.1495	8.1495	2.6000e-004	0.0000	8.1560
Total	**5.1100e-003**	**3.5900e-003**	**0.0361**	**9.0000e-005**	**8.7900e-003**	**6.0000e-005**	**8.8600e-003**	**2.3400e-003**	**6.0000e-005**	**2.4000e-003**	**0.0000**	**8.1495**	**8.1495**	**2.6000e-004**	**0.0000**	**8.1560**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4770	0.0000	0.4770	0.1978	0.0000	0.1978	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2606	2.9986	1.8357	3.4100e-003		0.1311	0.1311		0.1206	0.1206	0.0000	306.3569	306.3569	0.0969	0.0000	308.7801
Total	**0.2606**	**2.9986**	**1.8357**	**3.4100e-003**	**0.4770**	**0.1311**	**0.6081**	**0.1978**	**0.1206**	**0.3184**	**0.0000**	**306.3569**	**306.3569**	**0.0969**	**0.0000**	**308.7801**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1100e-003	3.5900e-003	0.0361	9.0000e-005	8.7900e-003	6.0000e-005	8.8600e-003	2.3400e-003	6.0000e-005	2.4000e-003	0.0000	8.1495	8.1495	2.6000e-004	0.0000	8.1560
Total	**5.1100e-003**	**3.5900e-003**	**0.0361**	**9.0000e-005**	**8.7900e-003**	**6.0000e-005**	**8.8600e-003**	**2.3400e-003**	**6.0000e-005**	**2.4000e-003**	**0.0000**	**8.1495**	**8.1495**	**2.6000e-004**	**0.0000**	**8.1560**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0437	0.3900	0.3175	5.0000e-004		0.0239	0.0239		0.0224	0.0224	0.0000	43.4943	43.4943	0.0106	0.0000	43.7592
Total	**0.0437**	**0.3900**	**0.3175**	**5.0000e-004**		**0.0239**	**0.0239**		**0.0224**	**0.0224**	**0.0000**	**43.4943**	**43.4943**	**0.0106**	**0.0000**	**43.7592**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0367	1.0017	0.2012	2.1500e-003	0.0498	7.5700e-003	0.0574	0.0144	7.2400e-003	0.0216	0.0000	204.5434	204.5434	0.0171	0.0000	204.9700
Worker	0.0682	0.0479	0.4815	1.2000e-003	0.1173	8.6000e-004	0.1182	0.0312	8.0000e-004	0.0320	0.0000	108.6878	108.6878	3.4800e-003	0.0000	108.7747
Total	**0.1049**	**1.0496**	**0.6827**	**3.3500e-003**	**0.1671**	**8.4300e-003**	**0.1755**	**0.0456**	**8.0400e-003**	**0.0536**	**0.0000**	**313.2312**	**313.2312**	**0.0206**	**0.0000**	**313.7447**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0437	0.3900	0.3175	5.0000e-004		0.0239	0.0239		0.0224	0.0224	0.0000	43.4942	43.4942	0.0106	0.0000	43.7591
Total	**0.0437**	**0.3900**	**0.3175**	**5.0000e-004**		**0.0239**	**0.0239**		**0.0224**	**0.0224**	**0.0000**	**43.4942**	**43.4942**	**0.0106**	**0.0000**	**43.7591**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0367	1.0017	0.2012	2.1500e-003	0.0498	7.5700e-003	0.0574	0.0144	7.2400e-003	0.0216	0.0000	204.5434	204.5434	0.0171	0.0000	204.9700
Worker	0.0682	0.0479	0.4815	1.2000e-003	0.1173	8.6000e-004	0.1182	0.0312	8.0000e-004	0.0320	0.0000	108.6878	108.6878	3.4800e-003	0.0000	108.7747
Total	**0.1049**	**1.0496**	**0.6827**	**3.3500e-003**	**0.1671**	**8.4300e-003**	**0.1755**	**0.0456**	**8.0400e-003**	**0.0536**	**0.0000**	**313.2312**	**313.2312**	**0.0206**	**0.0000**	**313.7447**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4091	303.4091	0.0740	0.0000	305.2596
Total	**0.2777**	**2.5134**	**2.2072**	**3.5300e-003**		**0.1463**	**0.1463**		**0.1376**	**0.1376**	**0.0000**	**303.4091**	**303.4091**	**0.0740**	**0.0000**	**305.2596**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.2108	6.4740	1.2279	0.0151	0.3526	0.0357	0.3882	0.1019	0.0341	0.1360	0.0000	1,436.1271	1,436.1271	0.1134	0.0000	1,438.9617
Worker	0.4391	0.2981	3.0292	8.2600e-003	0.8305	5.9200e-003	0.8364	0.2207	5.4500e-003	0.2262	0.0000	745.8082	745.8082	0.0214	0.0000	746.3423
Total	**0.6499**	**6.7721**	**4.2571**	**0.0234**	**1.1831**	**0.0416**	**1.2247**	**0.3226**	**0.0396**	**0.3622**	**0.0000**	**2,181.9352**	**2,181.9352**	**0.1348**	**0.0000**	**2,185.3040**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4087	303.4087	0.0740	0.0000	305.2592
Total	**0.2777**	**2.5134**	**2.2072**	**3.5300e-003**		**0.1463**	**0.1463**		**0.1376**	**0.1376**	**0.0000**	**303.4087**	**303.4087**	**0.0740**	**0.0000**	**305.2592**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.2108	6.4740	1.2279	0.0151	0.3526	0.0357	0.3882	0.1019	0.0341	0.1360	0.0000	1,436.1271	1,436.1271	0.1134	0.0000	1,438.9617
Worker	0.4391	0.2981	3.0292	8.2600e-003	0.8305	5.9200e-003	0.8364	0.2207	5.4500e-003	0.2262	0.0000	745.8082	745.8082	0.0214	0.0000	746.3423
Total	**0.6499**	**6.7721**	**4.2571**	**0.0234**	**1.1831**	**0.0416**	**1.2247**	**0.3226**	**0.0396**	**0.3622**	**0.0000**	**2,181.9352**	**2,181.9352**	**0.1348**	**0.0000**	**2,185.3040**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
Total	**0.2481**	**2.2749**	**2.1631**	**3.5100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**	**0.0000**	**302.2867**	**302.2867**	**0.0729**	**0.0000**	**304.1099**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1708	5.8419	1.0658	0.0149	0.3512	0.0164	0.3677	0.1015	0.0157	0.1172	0.0000	1,417.3541	1,417.3541	0.1082	0.0000	1,420.0597
Worker	0.4030	0.2640	2.7371	7.9300e-003	0.8273	5.6900e-003	0.8330	0.2199	5.2400e-003	0.2251	0.0000	717.1343	717.1343	0.0190	0.0000	717.6080
Total	**0.5738**	**6.1059**	**3.8029**	**0.0229**	**1.1786**	**0.0221**	**1.2007**	**0.3214**	**0.0210**	**0.3423**	**0.0000**	**2,134.4884**	**2,134.4884**	**0.1272**	**0.0000**	**2,137.6678**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095
Total	**0.2481**	**2.2749**	**2.1631**	**3.5100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**	**0.0000**	**302.2863**	**302.2863**	**0.0729**	**0.0000**	**304.1095**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1708	5.8419	1.0658	0.0149	0.3512	0.0164	0.3677	0.1015	0.0157	0.1172	0.0000	1,417.3541	1,417.3541	0.1082	0.0000	1,420.0597
Worker	0.4030	0.2640	2.7371	7.9300e-003	0.8273	5.6900e-003	0.8330	0.2199	5.2400e-003	0.2251	0.0000	717.1343	717.1343	0.0190	0.0000	717.6080
Total	**0.5738**	**6.1059**	**3.8029**	**0.0229**	**1.1786**	**0.0221**	**1.2007**	**0.3214**	**0.0210**	**0.3423**	**0.0000**	**2,134.4884**	**2,134.4884**	**0.1272**	**0.0000**	**2,137.6678**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2428	301.2428	0.0722	0.0000	303.0471
Total	**0.2218**	**2.0300**	**2.1272**	**3.5000e-003**		**0.1052**	**0.1052**		**0.0990**	**0.0990**	**0.0000**	**301.2428**	**301.2428**	**0.0722**	**0.0000**	**303.0471**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1582	5.5131	0.9793	0.0147	0.3499	0.0142	0.3641	0.1011	0.0136	0.1146	0.0000	1,398.8120	1,398.8120	0.1039	0.0000	1,401.4105
Worker	0.3718	0.2348	2.4845	7.6200e-003	0.8242	5.4900e-003	0.8297	0.2191	5.0600e-003	0.2241	0.0000	688.8571	688.8571	0.0168	0.0000	689.2782
Total	**0.5300**	**5.7479**	**3.4638**	**0.0223**	**1.1741**	**0.0197**	**1.1937**	**0.3201**	**0.0186**	**0.3388**	**0.0000**	**2,087.6691**	**2,087.6691**	**0.1208**	**0.0000**	**2,090.6887**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2425	301.2425	0.0722	0.0000	303.0467
Total	**0.2218**	**2.0300**	**2.1272**	**3.5000e-003**		**0.1052**	**0.1052**		**0.0990**	**0.0990**	**0.0000**	**301.2425**	**301.2425**	**0.0722**	**0.0000**	**303.0467**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1582	5.5131	0.9793	0.0147	0.3499	0.0142	0.3641	0.1011	0.0136	0.1146	0.0000	1,398.8120	1,398.8120	0.1039	0.0000	1,401.4105
Worker	0.3718	0.2348	2.4845	7.6200e-003	0.8242	5.4900e-003	0.8297	0.2191	5.0600e-003	0.2241	0.0000	688.8571	688.8571	0.0168	0.0000	689.2782
Total	**0.5300**	**5.7479**	**3.4638**	**0.0223**	**1.1741**	**0.0197**	**1.1937**	**0.3201**	**0.0186**	**0.3388**	**0.0000**	**2,087.6691**	**2,087.6691**	**0.1208**	**0.0000**	**2,090.6887**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3462	301.3462	0.0717	0.0000	303.1383
Total	**0.2045**	**1.8700**	**2.1117**	**3.5000e-003**		**0.0910**	**0.0910**		**0.0856**	**0.0856**	**0.0000**	**301.3462**	**301.3462**	**0.0717**	**0.0000**	**303.1383**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1098	4.2578	0.8086	0.0144	0.3499	4.2200e-003	0.3541	0.1011	4.0400e-003	0.1051	0.0000	1,364.8049	1,364.8049	0.0714	0.0000	1,366.5889
Worker	0.3453	0.2100	2.2637	7.3300e-003	0.8242	5.3400e-003	0.8295	0.2191	4.9200e-003	0.2240	0.0000	663.1675	663.1675	0.0150	0.0000	663.5428
Total	**0.4551**	**4.4678**	**3.0723**	**0.0217**	**1.1741**	**9.5600e-003**	**1.1836**	**0.3201**	**8.9600e-003**	**0.3291**	**0.0000**	**2,027.9724**	**2,027.9724**	**0.0864**	**0.0000**	**2,030.1318**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3458	301.3458	0.0717	0.0000	303.1380
Total	**0.2045**	**1.8700**	**2.1117**	**3.5000e-003**		**0.0910**	**0.0910**		**0.0856**	**0.0856**	**0.0000**	**301.3458**	**301.3458**	**0.0717**	**0.0000**	**303.1380**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1098	4.2578	0.8086	0.0144	0.3499	4.2200e-003	0.3541	0.1011	4.0400e-003	0.1051	0.0000	1,364.8049	1,364.8049	0.0714	0.0000	1,366.5889
Worker	0.3453	0.2100	2.2637	7.3300e-003	0.8242	5.3400e-003	0.8295	0.2191	4.9200e-003	0.2240	0.0000	663.1675	663.1675	0.0150	0.0000	663.5428
Total	**0.4551**	**4.4678**	**3.0723**	**0.0217**	**1.1741**	**9.5600e-003**	**1.1836**	**0.3201**	**8.9600e-003**	**0.3291**	**0.0000**	**2,027.9724**	**2,027.9724**	**0.0864**	**0.0000**	**2,030.1318**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0221	0.2017	0.2425	4.0000e-004		9.2000e-003	9.2000e-003		8.6500e-003	8.6500e-003	0.0000	34.7774	34.7774	8.2200e-003	0.0000	34.9830
Total	**0.0221**	**0.2017**	**0.2425**	**4.0000e-004**		**9.2000e-003**	**9.2000e-003**		**8.6500e-003**	**8.6500e-003**	**0.0000**	**34.7774**	**34.7774**	**8.2200e-003**	**0.0000**	**34.9830**

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0123	0.4874	0.0880	1.6400e-003	0.0404	4.8000e-004	0.0409	0.0117	4.6000e-004	0.0121	0.0000	156.2869	156.2869	8.3500e-003	0.0000	156.4956
Worker	0.0372	0.0218	0.2410	8.1000e-004	0.0951	6.0000e-004	0.0957	0.0253	5.5000e-004	0.0258	0.0000	73.6104	73.6104	1.5600e-003	0.0000	73.6494
Total	**0.0495**	**0.5091**	**0.3290**	**2.4500e-003**	**0.1355**	**1.0800e-003**	**0.1366**	**0.0369**	**1.0100e-003**	**0.0380**	**0.0000**	**229.8972**	**229.8972**	**9.9100e-003**	**0.0000**	**230.1450**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0221	0.2017	0.2425	4.0000e-004		9.2000e-003	9.2000e-003		8.6500e-003	8.6500e-003	0.0000	34.7773	34.7773	8.2200e-003	0.0000	34.9829
Total	**0.0221**	**0.2017**	**0.2425**	**4.0000e-004**		**9.2000e-003**	**9.2000e-003**		**8.6500e-003**	**8.6500e-003**	**0.0000**	**34.7773**	**34.7773**	**8.2200e-003**	**0.0000**	**34.9829**

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0123	0.4874	0.0880	1.6400e-003	0.0404	4.8000e-004	0.0409	0.0117	4.6000e-004	0.0121	0.0000	156.2869	156.2869	8.3500e-003	0.0000	156.4956
Worker	0.0372	0.0218	0.2410	8.1000e-004	0.0951	6.0000e-004	0.0957	0.0253	5.5000e-004	0.0258	0.0000	73.6104	73.6104	1.5600e-003	0.0000	73.6494
Total	**0.0495**	**0.5091**	**0.3290**	**2.4500e-003**	**0.1355**	**1.0800e-003**	**0.1366**	**0.0369**	**1.0100e-003**	**0.0380**	**0.0000**	**229.8972**	**229.8972**	**9.9100e-003**	**0.0000**	**230.1450**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0371	0.3572	0.5485	8.6000e-004		0.0176	0.0176		0.0162	0.0162	0.0000	75.0995	75.0995	0.0243	0.0000	75.7067
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0371**	**0.3572**	**0.5485**	**8.6000e-004**		**0.0176**	**0.0176**		**0.0162**	**0.0162**	**0.0000**	**75.0995**	**75.0995**	**0.0243**	**0.0000**	**75.7067**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.7600e-003	1.0300e-003	0.0114	4.0000e-005	4.5000e-003	3.0000e-005	4.5300e-003	1.2000e-003	3.0000e-005	1.2200e-003	0.0000	3.4810	3.4810	7.0000e-005	0.0000	3.4828
Total	**1.7600e-003**	**1.0300e-003**	**0.0114**	**4.0000e-005**	**4.5000e-003**	**3.0000e-005**	**4.5300e-003**	**1.2000e-003**	**3.0000e-005**	**1.2200e-003**	**0.0000**	**3.4810**	**3.4810**	**7.0000e-005**	**0.0000**	**3.4828**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0371	0.3572	0.5485	8.6000e-004		0.0176	0.0176		0.0162	0.0162	0.0000	75.0994	75.0994	0.0243	0.0000	75.7066
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0371**	**0.3572**	**0.5485**	**8.6000e-004**		**0.0176**	**0.0176**		**0.0162**	**0.0162**	**0.0000**	**75.0994**	**75.0994**	**0.0243**	**0.0000**	**75.7066**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.7600e-003	1.0300e-003	0.0114	4.0000e-005	4.5000e-003	3.0000e-005	4.5300e-003	1.2000e-003	3.0000e-005	1.2200e-003	0.0000	3.4810	3.4810	7.0000e-005	0.0000	3.4828
Total	**1.7600e-003**	**1.0300e-003**	**0.0114**	**4.0000e-005**	**4.5000e-003**	**3.0000e-005**	**4.5300e-003**	**1.2000e-003**	**3.0000e-005**	**1.2200e-003**	**0.0000**	**3.4810**	**3.4810**	**7.0000e-005**	**0.0000**	**3.4828**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	17.2297					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7800e-003	0.0457	0.0679	1.1000e-004		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	9.5747	9.5747	5.4000e-004	0.0000	9.5882
Total	**17.2365**	**0.0457**	**0.0679**	**1.1000e-004**		**2.2800e-003**	**2.2800e-003**		**2.2800e-003**	**2.2800e-003**	**0.0000**	**9.5747**	**9.5747**	**5.4000e-004**	**0.0000**	**9.5882**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0187	0.0109	0.1208	4.1000e-004	0.0477	3.0000e-004	0.0480	0.0127	2.8000e-004	0.0130	0.0000	36.8980	36.8980	7.8000e-004	0.0000	36.9176
Total	**0.0187**	**0.0109**	**0.1208**	**4.1000e-004**	**0.0477**	**3.0000e-004**	**0.0480**	**0.0127**	**2.8000e-004**	**0.0130**	**0.0000**	**36.8980**	**36.8980**	**7.8000e-004**	**0.0000**	**36.9176**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	17.2297					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7800e-003	0.0457	0.0679	1.1000e-004		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	9.5747	9.5747	5.4000e-004	0.0000	9.5882
Total	**17.2365**	**0.0457**	**0.0679**	**1.1000e-004**		**2.2800e-003**	**2.2800e-003**		**2.2800e-003**	**2.2800e-003**	**0.0000**	**9.5747**	**9.5747**	**5.4000e-004**	**0.0000**	**9.5882**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0187	0.0109	0.1208	4.1000e-004	0.0477	3.0000e-004	0.0480	0.0127	2.8000e-004	0.0130	0.0000	36.8980	36.8980	7.8000e-004	0.0000	36.9176
Total	**0.0187**	**0.0109**	**0.1208**	**4.1000e-004**	**0.0477**	**3.0000e-004**	**0.0480**	**0.0127**	**2.8000e-004**	**0.0130**	**0.0000**	**36.8980**	**36.8980**	**7.8000e-004**	**0.0000**	**36.9176**

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	32.2957	340.0322	280.4501	1.2530	68.3470	1.1296	69.4766	18.3844	1.0669	19.4513	0.0000	116,486.8331	116,486.8331	10.1497	0.0000	116,740.5758
Unmitigated	32.2957	340.0322	280.4501	1.2530	68.3470	1.1296	69.4766	18.3844	1.0669	19.4513	0.0000	116,486.8331	116,486.8331	10.1497	0.0000	116,740.5758

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	105,819.14	123,835.65	62549.77	179,208,072	179,208,072
Total	105,819.14	123,835.65	62,549.77	179,208,072	179,208,072

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Regional Shopping Center	0.506092	0.032602	0.169295	0.124521	0.019914	0.005374	0.021664	0.110051	0.001797	0.001623	0.005307	0.000969	0.000792

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,875.6349	5,875.6349	0.2657	0.0550	5,898.6574
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,875.6349	5,875.6349	0.2657	0.0550	5,898.6574
NaturalGas Mitigated	0.1430	1.2998	1.0919	7.8000e-003		0.0988	0.0988		0.0988	0.0988	0.0000	1,415.0342	1,415.0342	0.0271	0.0259	1,423.4431
NaturalGas Unmitigated	0.1430	1.2998	1.0919	7.8000e-003		0.0988	0.0988		0.0988	0.0988	0.0000	1,415.0342	1,415.0342	0.0271	0.0259	1,423.4431

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					
Regional Shopping Center	2.65167e+007	0.1430	1.2998	1.0919	7.8000e-003		0.0988	0.0988		0.0988	0.0988	0.0000	1,415.0342	1,415.0342	0.0271	0.0259	1,423.4431
Total		**0.1430**	**1.2998**	**1.0919**	**7.8000e-003**		**0.0988**	**0.0988**		**0.0988**	**0.0988**	**0.0000**	**1,415.0342**	**1,415.0342**	**0.0271**	**0.0259**	**1,423.4431**

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					
Regional Shopping Center	2.65167e+007	0.1430	1.2998	1.0919	7.8000e-003		0.0988	0.0988		0.0988	0.0988	0.0000	1,415.0342	1,415.0342	0.0271	0.0259	1,423.4431
Total		**0.1430**	**1.2998**	**1.0919**	**7.8000e-003**		**0.0988**	**0.0988**		**0.0988**	**0.0988**	**0.0000**	**1,415.0342**	**1,415.0342**	**0.0271**	**0.0259**	**1,423.4431**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Regional Shopping Center	2.01973e+007	5,875.6349	0.2657	0.0550	5,898.6574
Total		**5,875.6349**	**0.2657**	**0.0550**	**5,898.6574**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Regional Shopping Center	2.01973e+007	5,875.6349	0.2657	0.0550	5,898.6574
Total		**5,875.6349**	**0.2657**	**0.0550**	**5,898.6574**

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	11.4037	2.1000e-004	0.0229	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0443	0.0443	1.2000e-004	0.0000	0.0472
Unmitigated	11.4037	2.1000e-004	0.0229	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0443	0.0443	1.2000e-004	0.0000	0.0472

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	1.7230					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.6786					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.1400e-003	2.1000e-004	0.0229	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0443	0.0443	1.2000e-004	0.0000	0.0472
Total	**11.4037**	**2.1000e-004**	**0.0229**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**	**0.0000**	**0.0443**	**0.0443**	**1.2000e-004**	**0.0000**	**0.0472**

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	1.7230					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.6786					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.1400e-003	2.1000e-004	0.0229	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0443	0.0443	1.2000e-004	0.0000	0.0472
Total	**11.4037**	**2.1000e-004**	**0.0229**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**	**0.0000**	**0.0443**	**0.0443**	**1.2000e-004**	**0.0000**	**0.0472**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	461.7483	5.9998	0.1450	654.9559
Unmitigated	461.7483	5.9998	0.1450	654.9559

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Regional Shopping Center	183.567 / 112.509	461.7483	5.9998	0.1450	654.9559
Total		**461.7483**	**5.9998**	**0.1450**	**654.9559**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Regional Shopping Center	183.567 / 112.509	461.7483	5.9998	0.1450	654.9559
Total		**461.7483**	**5.9998**	**0.1450**	**654.9559**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	528.2048	31.2160	0.0000	1,308.6051
Unmitigated	528.2048	31.2160	0.0000	1,308.6051

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Regional Shopping Center	2602.11	528.2048	31.2160	0.0000	1,308.6051
Total		**528.2048**	**31.2160**	**0.0000**	**1,308.6051**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Regional Shopping Center	2602.11	528.2048	31.2160	0.0000	1,308.6051
Total		**528.2048**	**31.2160**	**0.0000**	**1,308.6051**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	615.00	1000sqft	14.12	615,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Table Name	Column Name	Default Value	New Value

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					
2019	0.5018	4.8716	3.4433	8.6500e-003	0.4458	0.2039	0.6497	0.1650	0.1907	0.3557	0.0000	785.5236	785.5236	0.1252	0.0000	788.6541
2020	4.4667	1.8094	1.4642	3.9700e-003	0.1199	0.0703	0.1902	0.0327	0.0660	0.0987	0.0000	359.0259	359.0259	0.0491	0.0000	360.2524
Maximum	**4.4667**	**4.8716**	**3.4433**	**8.6500e-003**	**0.4458**	**0.2039**	**0.6497**	**0.1650**	**0.1907**	**0.3557**	**0.0000**	**785.5236**	**785.5236**	**0.1252**	**0.0000**	**788.6541**

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					
2019	0.5018	4.8716	3.4433	8.6500e-003	0.4458	0.2039	0.6497	0.1650	0.1907	0.3557	0.0000	785.5232	785.5232	0.1252	0.0000	788.6536
2020	4.4667	1.8094	1.4642	3.9700e-003	0.1199	0.0703	0.1902	0.0327	0.0660	0.0987	0.0000	359.0257	359.0257	0.0491	0.0000	360.2523
Maximum	**4.4667**	**4.8716**	**3.4433**	**8.6500e-003**	**0.4458**	**0.2039**	**0.6497**	**0.1650**	**0.1907**	**0.3557**	**0.0000**	**785.5232**	**785.5232**	**0.1252**	**0.0000**	**788.6536**

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

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-7-2019	4-6-2019	1.6189	1.6189
2	4-7-2019	7-6-2019	1.2613	1.2613
3	7-7-2019	10-6-2019	1.2757	1.2757
4	10-7-2019	1-6-2020	1.2765	1.2765
5	1-7-2020	4-6-2020	1.1532	1.1532
6	4-7-2020	7-6-2020	3.3445	3.3445
7	7-7-2020	9-30-2020	1.6885	1.6885
		Highest	3.3445	3.3445

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	2.8300	5.0000e-005	5.6700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0110	0.0110	3.0000e-005	0.0000	0.0117
Energy	0.0355	0.3226	0.2710	1.9400e-003		0.0245	0.0245		0.0245	0.0245	0.0000	1,809.2815	1,809.2815	0.0727	0.0201	1,817.0817
Mobile	8.0146	84.3837	69.5976	0.3109	16.9613	0.2803	17.2416	4.5624	0.2648	4.8271	0.0000	28,907.8373	28,907.8373	2.5188	0.0000	28,970.8071
Waste						0.0000	0.0000		0.0000	0.0000	131.0814	0.0000	131.0814	7.7467	0.0000	324.7487
Water						0.0000	0.0000		0.0000	0.0000	14.4524	100.1369	114.5893	1.4889	0.0360	162.5365
Total	**10.8801**	**84.7064**	**69.8743**	**0.3129**	**16.9613**	**0.3049**	**17.2661**	**4.5624**	**0.2893**	**4.8517**	**145.5338**	**30,817.2668**	**30,962.8005**	**11.8271**	**0.0561**	**31,275.1856**

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	2.8300	5.0000e-005	5.6700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0110	0.0110	3.0000e-005	0.0000	0.0117
Energy	0.0355	0.3226	0.2710	1.9400e-003		0.0245	0.0245		0.0245	0.0245	0.0000	1,809.2815	1,809.2815	0.0727	0.0201	1,817.0817
Mobile	8.0146	84.3837	69.5976	0.3109	16.9613	0.2803	17.2416	4.5624	0.2648	4.8271	0.0000	28,907.8373	28,907.8373	2.5188	0.0000	28,970.8071
Waste						0.0000	0.0000		0.0000	0.0000	131.0814	0.0000	131.0814	7.7467	0.0000	324.7487
Water						0.0000	0.0000		0.0000	0.0000	14.4524	100.1369	114.5893	1.4889	0.0360	162.5365
Total	**10.8801**	**84.7064**	**69.8743**	**0.3129**	**16.9613**	**0.3049**	**17.2661**	**4.5624**	**0.2893**	**4.8517**	**145.5338**	**30,817.2668**	**30,962.8005**	**11.8271**	**0.0561**	**31,275.1856**

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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/7/2019	2/1/2019	5	20	
2	Site Preparation	Site Preparation	2/2/2019	2/15/2019	5	10	
3	Grading	Grading	2/16/2019	3/29/2019	5	30	
4	Building Construction	Building Construction	3/30/2019	5/22/2020	5	300	
5	Paving	Paving	5/23/2020	6/19/2020	5	20	
6	Architectural Coating	Architectural Coating	6/20/2020	7/17/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 922,500; Non-Residential Outdoor: 307,500; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	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	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	197.00	101.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	39.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672
Total	**0.0351**	**0.3578**	**0.2206**	**3.9000e-004**		**0.0180**	**0.0180**		**0.0167**	**0.0167**	**0.0000**	**34.6263**	**34.6263**	**9.6300e-003**	**0.0000**	**34.8672**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	4.9000e-004	4.9200e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1113	1.1113	4.0000e-005	0.0000	1.1122
Total	**7.0000e-004**	**4.9000e-004**	**4.9200e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1113**	**1.1113**	**4.0000e-005**	**0.0000**	**1.1122**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671
Total	**0.0351**	**0.3578**	**0.2206**	**3.9000e-004**		**0.0180**	**0.0180**		**0.0167**	**0.0167**	**0.0000**	**34.6263**	**34.6263**	**9.6300e-003**	**0.0000**	**34.8671**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	4.9000e-004	4.9200e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1113	1.1113	4.0000e-005	0.0000	1.1122
Total	**7.0000e-004**	**4.9000e-004**	**4.9200e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1113**	**1.1113**	**4.0000e-005**	**0.0000**	**1.1122**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0903**	**0.0120**	**0.1023**	**0.0497**	**0.0110**	**0.0607**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	4.2000e-004	2.9000e-004	2.9500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6668	0.6668	2.0000e-005	0.0000	0.6673
Total	**4.2000e-004**	**2.9000e-004**	**2.9500e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.6668**	**0.6668**	**2.0000e-005**	**0.0000**	**0.6673**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0903**	**0.0120**	**0.1023**	**0.0497**	**0.0110**	**0.0607**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	4.2000e-004	2.9000e-004	2.9500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6668	0.6668	2.0000e-005	0.0000	0.6673
Total	**4.2000e-004**	**2.9000e-004**	**2.9500e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.6668**	**0.6668**	**2.0000e-005**	**0.0000**	**0.6673**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	83.5520	83.5520	0.0264	0.0000	84.2129
Total	**0.0711**	**0.8178**	**0.5007**	**9.3000e-004**	**0.1301**	**0.0357**	**0.1658**	**0.0540**	**0.0329**	**0.0868**	**0.0000**	**83.5520**	**83.5520**	**0.0264**	**0.0000**	**84.2129**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.3900e-003	9.8000e-004	9.8500e-003	2.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.5000e-004	0.0000	2.2226	2.2226	7.0000e-005	0.0000	2.2244
Total	**1.3900e-003**	**9.8000e-004**	**9.8500e-003**	**2.0000e-005**	**2.4000e-003**	**2.0000e-005**	**2.4200e-003**	**6.4000e-004**	**2.0000e-005**	**6.5000e-004**	**0.0000**	**2.2226**	**2.2226**	**7.0000e-005**	**0.0000**	**2.2244**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	83.5519	83.5519	0.0264	0.0000	84.2128
Total	**0.0711**	**0.8178**	**0.5007**	**9.3000e-004**	**0.1301**	**0.0357**	**0.1658**	**0.0540**	**0.0329**	**0.0868**	**0.0000**	**83.5519**	**83.5519**	**0.0264**	**0.0000**	**84.2128**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.3900e-003	9.8000e-004	9.8500e-003	2.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.5000e-004	0.0000	2.2226	2.2226	7.0000e-005	0.0000	2.2244
Total	**1.3900e-003**	**9.8000e-004**	**9.8500e-003**	**2.0000e-005**	**2.4000e-003**	**2.0000e-005**	**2.4200e-003**	**6.4000e-004**	**2.0000e-005**	**6.5000e-004**	**0.0000**	**2.2226**	**2.2226**	**7.0000e-005**	**0.0000**	**2.2244**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2326	2.0763	1.6906	2.6500e-003		0.1271	0.1271		0.1195	0.1195	0.0000	231.5776	231.5776	0.0564	0.0000	232.9880
Total	**0.2326**	**2.0763**	**1.6906**	**2.6500e-003**		**0.1271**	**0.1271**		**0.1195**	**0.1195**	**0.0000**	**231.5776**	**231.5776**	**0.0564**	**0.0000**	**232.9880**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0486	1.3268	0.2666	2.8500e-003	0.0660	0.0100	0.0760	0.0191	9.5900e-003	0.0286	0.0000	270.9226	270.9226	0.0226	0.0000	271.4877
Worker	0.0902	0.0634	0.6368	1.5900e-003	0.1551	1.1400e-003	0.1563	0.0412	1.0500e-003	0.0423	0.0000	143.7601	143.7601	4.6000e-003	0.0000	143.8750
Total	**0.1388**	**1.3901**	**0.9034**	**4.4400e-003**	**0.2211**	**0.0112**	**0.2323**	**0.0603**	**0.0106**	**0.0709**	**0.0000**	**414.6827**	**414.6827**	**0.0272**	**0.0000**	**415.3627**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2326	2.0763	1.6906	2.6500e-003		0.1271	0.1271		0.1195	0.1195	0.0000	231.5774	231.5774	0.0564	0.0000	232.9877
Total	**0.2326**	**2.0763**	**1.6906**	**2.6500e-003**		**0.1271**	**0.1271**		**0.1195**	**0.1195**	**0.0000**	**231.5774**	**231.5774**	**0.0564**	**0.0000**	**232.9877**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0486	1.3268	0.2666	2.8500e-003	0.0660	0.0100	0.0760	0.0191	9.5900e-003	0.0286	0.0000	270.9226	270.9226	0.0226	0.0000	271.4877
Worker	0.0902	0.0634	0.6368	1.5900e-003	0.1551	1.1400e-003	0.1563	0.0412	1.0500e-003	0.0423	0.0000	143.7601	143.7601	4.6000e-003	0.0000	143.8750
Total	**0.1388**	**1.3901**	**0.9034**	**4.4400e-003**	**0.2211**	**0.0112**	**0.2323**	**0.0603**	**0.0106**	**0.0709**	**0.0000**	**414.6827**	**414.6827**	**0.0272**	**0.0000**	**415.3627**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1092	0.9881	0.8677	1.3900e-003		0.0575	0.0575		0.0541	0.0541	0.0000	119.2791	119.2791	0.0291	0.0000	120.0066
Total	**0.1092**	**0.9881**	**0.8677**	**1.3900e-003**		**0.0575**	**0.0575**		**0.0541**	**0.0541**	**0.0000**	**119.2791**	**119.2791**	**0.0291**	**0.0000**	**120.0066**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0206	0.6332	0.1201	1.4800e-003	0.0345	3.4900e-003	0.0380	9.9600e-003	3.3400e-003	0.0133	0.0000	140.4508	140.4508	0.0111	0.0000	140.7280
Worker	0.0429	0.0291	0.2958	8.1000e-004	0.0811	5.8000e-004	0.0817	0.0216	5.3000e-004	0.0221	0.0000	72.8377	72.8377	2.0900e-003	0.0000	72.8898
Total	**0.0635**	**0.6623**	**0.4159**	**2.2900e-003**	**0.1156**	**4.0700e-003**	**0.1197**	**0.0315**	**3.8700e-003**	**0.0354**	**0.0000**	**213.2885**	**213.2885**	**0.0132**	**0.0000**	**213.6178**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1092	0.9881	0.8677	1.3900e-003		0.0575	0.0575		0.0541	0.0541	0.0000	119.2790	119.2790	0.0291	0.0000	120.0065
Total	**0.1092**	**0.9881**	**0.8677**	**1.3900e-003**		**0.0575**	**0.0575**		**0.0541**	**0.0541**	**0.0000**	**119.2790**	**119.2790**	**0.0291**	**0.0000**	**120.0065**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0206	0.6332	0.1201	1.4800e-003	0.0345	3.4900e-003	0.0380	9.9600e-003	3.3400e-003	0.0133	0.0000	140.4508	140.4508	0.0111	0.0000	140.7280
Worker	0.0429	0.0291	0.2958	8.1000e-004	0.0811	5.8000e-004	0.0817	0.0216	5.3000e-004	0.0221	0.0000	72.8377	72.8377	2.0900e-003	0.0000	72.8898
Total	**0.0635**	**0.6623**	**0.4159**	**2.2900e-003**	**0.1156**	**4.0700e-003**	**0.1197**	**0.0315**	**3.8700e-003**	**0.0354**	**0.0000**	**213.2885**	**213.2885**	**0.0132**	**0.0000**	**213.6178**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0136**	**0.1407**	**0.1465**	**2.3000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**20.0282**	**20.0282**	**6.4800e-003**	**0.0000**	**20.1902**

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	6.3000e-004	4.3000e-004	4.3700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total	**6.3000e-004**	**4.3000e-004**	**4.3700e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0136**	**0.1407**	**0.1465**	**2.3000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**20.0282**	**20.0282**	**6.4800e-003**	**0.0000**	**20.1901**

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	6.3000e-004	4.3000e-004	4.3700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total	**6.3000e-004**	**4.3000e-004**	**4.3700e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.2758					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	**4.2782**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5582**

3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	1.6500e-003	1.1200e-003	0.0114	3.0000e-005	3.1200e-003	2.0000e-005	3.1400e-003	8.3000e-004	2.0000e-005	8.5000e-004	0.0000	2.7999	2.7999	8.0000e-005	0.0000	2.8019
Total	**1.6500e-003**	**1.1200e-003**	**0.0114**	**3.0000e-005**	**3.1200e-003**	**2.0000e-005**	**3.1400e-003**	**8.3000e-004**	**2.0000e-005**	**8.5000e-004**	**0.0000**	**2.7999**	**2.7999**	**8.0000e-005**	**0.0000**	**2.8019**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	4.2758					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	**4.2782**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5582**

3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	1.6500e-003	1.1200e-003	0.0114	3.0000e-005	3.1200e-003	2.0000e-005	3.1400e-003	8.3000e-004	2.0000e-005	8.5000e-004	0.0000	2.7999	2.7999	8.0000e-005	0.0000	2.8019
Total	**1.6500e-003**	**1.1200e-003**	**0.0114**	**3.0000e-005**	**3.1200e-003**	**2.0000e-005**	**3.1400e-003**	**8.3000e-004**	**2.0000e-005**	**8.5000e-004**	**0.0000**	**2.7999**	**2.7999**	**8.0000e-005**	**0.0000**	**2.8019**

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	8.0146	84.3837	69.5976	0.3109	16.9613	0.2803	17.2416	4.5624	0.2648	4.8271	0.0000	28,907.8373	28,907.8373	2.5188	0.0000	28,970.8071
Unmitigated	8.0146	84.3837	69.5976	0.3109	16.9613	0.2803	17.2416	4.5624	0.2648	4.8271	0.0000	28,907.8373	28,907.8373	2.5188	0.0000	28,970.8071

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	26,260.50	30,731.55	15522.60	44,472,990	44,472,990
Total	26,260.50	30,731.55	15,522.60	44,472,990	44,472,990

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Regional Shopping Center	0.506092	0.032602	0.169295	0.124521	0.019914	0.005374	0.021664	0.110051	0.001797	0.001623	0.005307	0.000969	0.000792

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,458.1210	1,458.1210	0.0659	0.0136	1,463.8344
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,458.1210	1,458.1210	0.0659	0.0136	1,463.8344
NaturalGas Mitigated	0.0355	0.3226	0.2710	1.9400e-003		0.0245	0.0245		0.0245	0.0245	0.0000	351.1605	351.1605	6.7300e-003	6.4400e-003	353.2473
NaturalGas Unmitigated	0.0355	0.3226	0.2710	1.9400e-003		0.0245	0.0245		0.0245	0.0245	0.0000	351.1605	351.1605	6.7300e-003	6.4400e-003	353.2473

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					
Regional Shopping Center	6.5805e+006	0.0355	0.3226	0.2710	1.9400e-003		0.0245	0.0245		0.0245	0.0245	0.0000	351.1605	351.1605	6.7300e-003	6.4400e-003	353.2473
Total		**0.0355**	**0.3226**	**0.2710**	**1.9400e-003**		**0.0245**	**0.0245**		**0.0245**	**0.0245**	**0.0000**	**351.1605**	**351.1605**	**6.7300e-003**	**6.4400e-003**	**353.2473**

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					
Regional Shopping Center	6.5805e+006	0.0355	0.3226	0.2710	1.9400e-003		0.0245	0.0245		0.0245	0.0245	0.0000	351.1605	351.1605	6.7300e-003	6.4400e-003	353.2473
Total		**0.0355**	**0.3226**	**0.2710**	**1.9400e-003**		**0.0245**	**0.0245**		**0.0245**	**0.0245**	**0.0000**	**351.1605**	**351.1605**	**6.7300e-003**	**6.4400e-003**	**353.2473**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Regional Shopping Center	5.01225e+006	1,458.1210	0.0659	0.0136	1,463.8344
Total		**1,458.1210**	**0.0659**	**0.0136**	**1,463.8344**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Regional Shopping Center	5.01225e+006	1,458.1210	0.0659	0.0136	1,463.8344
Total		**1,458.1210**	**0.0659**	**0.0136**	**1,463.8344**

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	2.8300	5.0000e-005	5.6700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0110	0.0110	3.0000e-005	0.0000	0.0117
Unmitigated	2.8300	5.0000e-005	5.6700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0110	0.0110	3.0000e-005	0.0000	0.0117

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	0.4276					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4019					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.3000e-004	5.0000e-005	5.6700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0110	0.0110	3.0000e-005	0.0000	0.0117
Total	**2.8300**	**5.0000e-005**	**5.6700e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0110**	**0.0110**	**3.0000e-005**	**0.0000**	**0.0117**

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	0.4276					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4019					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.3000e-004	5.0000e-005	5.6700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0110	0.0110	3.0000e-005	0.0000	0.0117
Total	**2.8300**	**5.0000e-005**	**5.6700e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0110**	**0.0110**	**3.0000e-005**	**0.0000**	**0.0117**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	114.5893	1.4889	0.0360	162.5365
Unmitigated	114.5893	1.4889	0.0360	162.5365

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Regional Shopping Center	45.5546 / 27.9206	114.5893	1.4889	0.0360	162.5365
Total		**114.5893**	**1.4889**	**0.0360**	**162.5365**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Regional Shopping Center	45.5546 / 27.9206	114.5893	1.4889	0.0360	162.5365
Total		**114.5893**	**1.4889**	**0.0360**	**162.5365**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	131.0814	7.7467	0.0000	324.7487
Unmitigated	131.0814	7.7467	0.0000	324.7487

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Regional Shopping Center	645.75	131.0814	7.7467	0.0000	324.7487
Total		**131.0814**	**7.7467**	**0.0000**	**324.7487**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Regional Shopping Center	645.75	131.0814	7.7467	0.0000	324.7487
Total		**131.0814**	**7.7467**	**0.0000**	**324.7487**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Wible-Hosking Cumulative Review Project 10

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	2,095.60	1000sqft	48.11	2,095,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Table Name	Column Name	Default Value	New Value

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					
2019	0.7020	7.1469	4.6470	0.0132	0.9969	0.2556	1.2525	0.3930	0.2376	0.6306	0.0000	1,206.8447	1,206.8447	0.1838	0.0000	1,211.4392
2020	0.8273	8.2350	5.8077	0.0233	1.0006	0.1815	1.1821	0.2728	0.1710	0.4439	0.0000	2,147.7573	2,147.7573	0.1879	0.0000	2,152.4546
2021	0.7334	7.4336	5.3795	0.0228	0.9968	0.1438	1.1406	0.2718	0.1353	0.4071	0.0000	2,106.5124	2,106.5124	0.1804	0.0000	2,111.0223
2022	14.9168	3.3999	2.7863	0.0109	0.4720	0.0720	0.5439	0.1285	0.0675	0.1960	0.0000	1,003.2303	1,003.2303	0.0960	0.0000	1,005.6304
Maximum	**14.9168**	**8.2350**	**5.8077**	**0.0233**	**1.0006**	**0.2556**	**1.2525**	**0.3930**	**0.2376**	**0.6306**	**0.0000**	**2,147.7573**	**2,147.7573**	**0.1879**	**0.0000**	**2,152.4546**

Wible-Hosking Cumulative Review Project 10 - San Joaquin Valley Air Basin, Annual

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.7020	7.1469	4.6470	0.0132	0.9969	0.2556	1.2525	0.3930	0.2376	0.6306	0.0000	1,206.8442	1,206.8442	0.1838	0.0000	1,211.4387
2020	0.8273	8.2350	5.8077	0.0233	1.0006	0.1815	1.1821	0.2728	0.1710	0.4439	0.0000	2,147.7569	2,147.7569	0.1879	0.0000	2,152.4542
2021	0.7334	7.4336	5.3795	0.0228	0.9968	0.1438	1.1406	0.2718	0.1353	0.4071	0.0000	2,106.5120	2,106.5120	0.1804	0.0000	2,111.0219
2022	14.9168	3.3999	2.7863	0.0109	0.4720	0.0720	0.5439	0.1285	0.0675	0.1960	0.0000	1,003.2301	1,003.2301	0.0960	0.0000	1,005.6302
Maximum	**14.9168**	**8.2350**	**5.8077**	**0.0233**	**1.0006**	**0.2556**	**1.2525**	**0.3930**	**0.2376**	**0.6306**	**0.0000**	**2,147.7569**	**2,147.7569**	**0.1879**	**0.0000**	**2,152.4542**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-7-2019**	**4-6-2019**	1.3508	1.3508
2	**4-7-2019**	**7-6-2019**	1.8644	1.8644
3	**7-7-2019**	**10-6-2019**	2.2906	2.2906
4	**10-7-2019**	**1-6-2020**	2.5013	2.5013
5	**1-7-2020**	**4-6-2020**	2.2576	2.2576
6	**4-7-2020**	**7-6-2020**	2.2356	2.2356
7	**7-7-2020**	**10-6-2020**	2.2617	2.2617
8	**10-7-2020**	**1-6-2021**	2.2697	2.2697

9	**1-7-2021**	**4-6-2021**	2.0189	2.0189
10	**4-7-2021**	**7-6-2021**	2.0253	2.0253
11	**7-7-2021**	**10-6-2021**	2.0487	2.0487
12	**10-7-2021**	**1-6-2022**	2.0553	2.0553
13	**1-7-2022**	**4-6-2022**	1.8746	1.8746
14	**4-7-2022**	**7-6-2022**	1.4587	1.4587
15	**7-7-2022**	**9-30-2022**	6.8775	6.8775
		Highest	6.8775	6.8775

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	9.6431	1.8000e-004	0.0193	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0375	0.0375	1.0000e-004	0.0000	0.0399
Energy	0.1209	1.0992	0.9233	6.5900e-003		0.0835	0.0835		0.0835	0.0835	0.0000	6,165.0901	6,165.0901	0.2476	0.0684	6,191.6688
Mobile	27.3097	287.5359	237.1525	1.0595	57.7952	0.9552	58.7504	15.5461	0.9022	16.4483	0.0000	98,502.8680	98,502.8680	8.5827	0.0000	98,717.4363
Waste						0.0000	0.0000		0.0000	0.0000	446.6573	0.0000	446.6573	26.3967	0.0000	1,106.5744
Water						0.0000	0.0000		0.0000	0.0000	49.2462	341.2146	390.4608	5.0735	0.1226	553.8397
Total	**37.0737**	**288.6352**	**238.0951**	**1.0661**	**57.7952**	**1.0388**	**58.8340**	**15.5461**	**0.9858**	**16.5319**	**495.9034**	**105,009.2101**	**105,505.1135**	**40.3006**	**0.1910**	**106,569.5592**

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	9.6431	1.8000e-004	0.0193	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0375	0.0375	1.0000e-004	0.0000	0.0399
Energy	0.1209	1.0992	0.9233	6.5900e-003		0.0835	0.0835		0.0835	0.0835	0.0000	6,165.0901	6,165.0901	0.2476	0.0684	6,191.6688
Mobile	27.3097	287.5359	237.1525	1.0595	57.7952	0.9552	58.7504	15.5461	0.9022	16.4483	0.0000	98,502.8680	98,502.8680	8.5827	0.0000	98,717.4363
Waste						0.0000	0.0000		0.0000	0.0000	446.6573	0.0000	446.6573	26.3967	0.0000	1,106.5744
Water						0.0000	0.0000		0.0000	0.0000	49.2462	341.2146	390.4608	5.0735	0.1226	553.8397
Total	**37.0737**	**288.6352**	**238.0951**	**1.0661**	**57.7952**	**1.0388**	**58.8340**	**15.5461**	**0.9858**	**16.5319**	**495.9034**	**105,009.2101**	**105,505.1135**	**40.3006**	**0.1910**	**106,569.5592**

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

3.0 Construction Detail

Construction Phase

Wible-Hosking Cumulative Review Project 10 - San Joaquin Valley Air Basin, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/7/2019	3/15/2019	5	50	
2	Site Preparation	Site Preparation	3/16/2019	4/26/2019	5	30	
3	Grading	Grading	4/27/2019	8/9/2019	5	75	
4	Building Construction	Building Construction	8/10/2019	6/10/2022	5	740	
5	Paving	Paving	6/11/2022	8/26/2022	5	55	
6	Architectural Coating	Architectural Coating	8/27/2022	11/11/2022	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 187.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 3,143,400; Non-Residential Outdoor: 1,047,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Wible-Hosking Cumulative Review Project 10 - San Joaquin Valley Air Basin, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	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	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	671.00	343.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	134.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0878	0.8946	0.5515	9.7000e-004		0.0449	0.0449		0.0417	0.0417	0.0000	86.5658	86.5658	0.0241	0.0000	87.1679
Total	**0.0878**	**0.8946**	**0.5515**	**9.7000e-004**		**0.0449**	**0.0449**		**0.0417**	**0.0417**	**0.0000**	**86.5658**	**86.5658**	**0.0241**	**0.0000**	**87.1679**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.7400e-003	1.2200e-003	0.0123	3.0000e-005	3.0000e-003	2.0000e-005	3.0200e-003	8.0000e-004	2.0000e-005	8.2000e-004	0.0000	2.7782	2.7782	9.0000e-005	0.0000	2.7804
Total	**1.7400e-003**	**1.2200e-003**	**0.0123**	**3.0000e-005**	**3.0000e-003**	**2.0000e-005**	**3.0200e-003**	**8.0000e-004**	**2.0000e-005**	**8.2000e-004**	**0.0000**	**2.7782**	**2.7782**	**9.0000e-005**	**0.0000**	**2.7804**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0878	0.8946	0.5515	9.7000e-004		0.0449	0.0449		0.0417	0.0417	0.0000	86.5657	86.5657	0.0241	0.0000	87.1678
Total	**0.0878**	**0.8946**	**0.5515**	**9.7000e-004**		**0.0449**	**0.0449**		**0.0417**	**0.0417**	**0.0000**	**86.5657**	**86.5657**	**0.0241**	**0.0000**	**87.1678**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.7400e-003	1.2200e-003	0.0123	3.0000e-005	3.0000e-003	2.0000e-005	3.0200e-003	8.0000e-004	2.0000e-005	8.2000e-004	0.0000	2.7782	2.7782	9.0000e-005	0.0000	2.7804
Total	**1.7400e-003**	**1.2200e-003**	**0.0123**	**3.0000e-005**	**3.0000e-003**	**2.0000e-005**	**3.0200e-003**	**8.0000e-004**	**2.0000e-005**	**8.2000e-004**	**0.0000**	**2.7782**	**2.7782**	**9.0000e-005**	**0.0000**	**2.7804**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2710	0.0000	0.2710	0.1490	0.0000	0.1490	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0650	0.6836	0.3310	5.7000e-004		0.0359	0.0359		0.0330	0.0330	0.0000	51.2530	51.2530	0.0162	0.0000	51.6584
Total	**0.0650**	**0.6836**	**0.3310**	**5.7000e-004**	**0.2710**	**0.0359**	**0.3069**	**0.1490**	**0.0330**	**0.1820**	**0.0000**	**51.2530**	**51.2530**	**0.0162**	**0.0000**	**51.6584**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.2600e-003	8.8000e-004	8.8600e-003	2.0000e-005	2.1600e-003	2.0000e-005	2.1700e-003	5.7000e-004	1.0000e-005	5.9000e-004	0.0000	2.0003	2.0003	6.0000e-005	0.0000	2.0019
Total	**1.2600e-003**	**8.8000e-004**	**8.8600e-003**	**2.0000e-005**	**2.1600e-003**	**2.0000e-005**	**2.1700e-003**	**5.7000e-004**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**2.0003**	**2.0003**	**6.0000e-005**	**0.0000**	**2.0019**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2710	0.0000	0.2710	0.1490	0.0000	0.1490	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0650	0.6836	0.3309	5.7000e-004		0.0359	0.0359		0.0330	0.0330	0.0000	51.2530	51.2530	0.0162	0.0000	51.6584
Total	**0.0650**	**0.6836**	**0.3309**	**5.7000e-004**	**0.2710**	**0.0359**	**0.3069**	**0.1490**	**0.0330**	**0.1820**	**0.0000**	**51.2530**	**51.2530**	**0.0162**	**0.0000**	**51.6584**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	1.2600e-003	8.8000e-004	8.8600e-003	2.0000e-005	2.1600e-003	2.0000e-005	2.1700e-003	5.7000e-004	1.0000e-005	5.9000e-004	0.0000	2.0003	2.0003	6.0000e-005	0.0000	2.0019
Total	**1.2600e-003**	**8.8000e-004**	**8.8600e-003**	**2.0000e-005**	**2.1600e-003**	**2.0000e-005**	**2.1700e-003**	**5.7000e-004**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**2.0003**	**2.0003**	**6.0000e-005**	**0.0000**	**2.0019**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3253	0.0000	0.3253	0.1349	0.0000	0.1349	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1777	2.0445	1.2516	2.3300e-003		0.0894	0.0894		0.0822	0.0822	0.0000	208.8800	208.8800	0.0661	0.0000	210.5321
Total	**0.1777**	**2.0445**	**1.2516**	**2.3300e-003**	**0.3253**	**0.0894**	**0.4146**	**0.1349**	**0.0822**	**0.2171**	**0.0000**	**208.8800**	**208.8800**	**0.0661**	**0.0000**	**210.5321**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	3.4900e-003	2.4500e-003	0.0246	6.0000e-005	6.0000e-003	4.0000e-005	6.0400e-003	1.5900e-003	4.0000e-005	1.6300e-003	0.0000	5.5565	5.5565	1.8000e-004	0.0000	5.5609
Total	**3.4900e-003**	**2.4500e-003**	**0.0246**	**6.0000e-005**	**6.0000e-003**	**4.0000e-005**	**6.0400e-003**	**1.5900e-003**	**4.0000e-005**	**1.6300e-003**	**0.0000**	**5.5565**	**5.5565**	**1.8000e-004**	**0.0000**	**5.5609**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3253	0.0000	0.3253	0.1349	0.0000	0.1349	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1777	2.0445	1.2516	2.3300e-003		0.0894	0.0894		0.0822	0.0822	0.0000	208.8797	208.8797	0.0661	0.0000	210.5319
Total	**0.1777**	**2.0445**	**1.2516**	**2.3300e-003**	**0.3253**	**0.0894**	**0.4146**	**0.1349**	**0.0822**	**0.2171**	**0.0000**	**208.8797**	**208.8797**	**0.0661**	**0.0000**	**210.5319**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	3.4900e-003	2.4500e-003	0.0246	6.0000e-005	6.0000e-003	4.0000e-005	6.0400e-003	1.5900e-003	4.0000e-005	1.6300e-003	0.0000	5.5565	5.5565	1.8000e-004	0.0000	5.5609
Total	**3.4900e-003**	**2.4500e-003**	**0.0246**	**6.0000e-005**	**6.0000e-003**	**4.0000e-005**	**6.0400e-003**	**1.5900e-003**	**4.0000e-005**	**1.6300e-003**	**0.0000**	**5.5565**	**5.5565**	**1.8000e-004**	**0.0000**	**5.5609**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1204	1.0750	0.8754	1.3700e-003		0.0658	0.0658		0.0619	0.0619	0.0000	119.9031	119.9031	0.0292	0.0000	120.6334
Total	**0.1204**	**1.0750**	**0.8754**	**1.3700e-003**		**0.0658**	**0.0658**		**0.0619**	**0.0619**	**0.0000**	**119.9031**	**119.9031**	**0.0292**	**0.0000**	**120.6334**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0854	2.3329	0.4687	5.0200e-003	0.1160	0.0176	0.1336	0.0335	0.0169	0.0504	0.0000	476.3782	476.3782	0.0398	0.0000	477.3719
Worker	0.1591	0.1117	1.1231	2.8100e-003	0.2736	2.0100e-003	0.2756	0.0727	1.8600e-003	0.0746	0.0000	253.5296	253.5296	8.1100e-003	0.0000	253.7323
Total	**0.2446**	**2.4446**	**1.5917**	**7.8300e-003**	**0.3896**	**0.0196**	**0.4092**	**0.1062**	**0.0187**	**0.1249**	**0.0000**	**729.9078**	**729.9078**	**0.0479**	**0.0000**	**731.1042**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1204	1.0750	0.8754	1.3700e-003		0.0658	0.0658		0.0619	0.0619	0.0000	119.9030	119.9030	0.0292	0.0000	120.6332
Total	**0.1204**	**1.0750**	**0.8754**	**1.3700e-003**		**0.0658**	**0.0658**		**0.0619**	**0.0619**	**0.0000**	**119.9030**	**119.9030**	**0.0292**	**0.0000**	**120.6332**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0854	2.3329	0.4687	5.0200e-003	0.1160	0.0176	0.1336	0.0335	0.0169	0.0504	0.0000	476.3782	476.3782	0.0398	0.0000	477.3719
Worker	0.1591	0.1117	1.1231	2.8100e-003	0.2736	2.0100e-003	0.2756	0.0727	1.8600e-003	0.0746	0.0000	253.5296	253.5296	8.1100e-003	0.0000	253.7323
Total	**0.2446**	**2.4446**	**1.5917**	**7.8300e-003**	**0.3896**	**0.0196**	**0.4092**	**0.1062**	**0.0187**	**0.1249**	**0.0000**	**729.9078**	**729.9078**	**0.0479**	**0.0000**	**731.1042**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4091	303.4091	0.0740	0.0000	305.2596
Total	**0.2777**	**2.5134**	**2.2072**	**3.5300e-003**		**0.1463**	**0.1463**		**0.1376**	**0.1376**	**0.0000**	**303.4091**	**303.4091**	**0.0740**	**0.0000**	**305.2596**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1781	5.4694	1.0373	0.0128	0.2979	0.0301	0.3280	0.0861	0.0288	0.1149	0.0000	1,213.2798	1,213.2798	0.0958	0.0000	1,215.6746
Worker	0.3715	0.2523	2.5632	6.9900e-003	0.7027	5.0100e-003	0.7078	0.1868	4.6100e-003	0.1914	0.0000	631.0684	631.0684	0.0181	0.0000	631.5204
Total	**0.5496**	**5.7217**	**3.6005**	**0.0198**	**1.0006**	**0.0351**	**1.0358**	**0.2728**	**0.0334**	**0.3063**	**0.0000**	**1,844.3482**	**1,844.3482**	**0.1139**	**0.0000**	**1,847.1950**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4087	303.4087	0.0740	0.0000	305.2592
Total	**0.2777**	**2.5134**	**2.2072**	**3.5300e-003**		**0.1463**	**0.1463**		**0.1376**	**0.1376**	**0.0000**	**303.4087**	**303.4087**	**0.0740**	**0.0000**	**305.2592**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1781	5.4694	1.0373	0.0128	0.2979	0.0301	0.3280	0.0861	0.0288	0.1149	0.0000	1,213.2798	1,213.2798	0.0958	0.0000	1,215.6746
Worker	0.3715	0.2523	2.5632	6.9900e-003	0.7027	5.0100e-003	0.7078	0.1868	4.6100e-003	0.1914	0.0000	631.0684	631.0684	0.0181	0.0000	631.5204
Total	**0.5496**	**5.7217**	**3.6005**	**0.0198**	**1.0006**	**0.0351**	**1.0358**	**0.2728**	**0.0334**	**0.3063**	**0.0000**	**1,844.3482**	**1,844.3482**	**0.1139**	**0.0000**	**1,847.1950**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
Total	**0.2481**	**2.2749**	**2.1631**	**3.5100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**	**0.0000**	**302.2867**	**302.2867**	**0.0729**	**0.0000**	**304.1099**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1443	4.9354	0.9004	0.0126	0.2967	0.0139	0.3106	0.0857	0.0133	0.0990	0.0000	1,197.4198	1,197.4198	0.0914	0.0000	1,199.7056
Worker	0.3410	0.2234	2.3160	6.7100e-003	0.7001	4.8200e-003	0.7049	0.1861	4.4400e-003	0.1905	0.0000	606.8059	606.8059	0.0160	0.0000	607.2068
Total	**0.4853**	**5.1588**	**3.2164**	**0.0193**	**0.9968**	**0.0187**	**1.0155**	**0.2718**	**0.0177**	**0.2895**	**0.0000**	**1,804.2257**	**1,804.2257**	**0.1075**	**0.0000**	**1,806.9124**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095
Total	**0.2481**	**2.2749**	**2.1631**	**3.5100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**	**0.0000**	**302.2863**	**302.2863**	**0.0729**	**0.0000**	**304.1095**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1443	4.9354	0.9004	0.0126	0.2967	0.0139	0.3106	0.0857	0.0133	0.0990	0.0000	1,197.4198	1,197.4198	0.0914	0.0000	1,199.7056
Worker	0.3410	0.2234	2.3160	6.7100e-003	0.7001	4.8200e-003	0.7049	0.1861	4.4400e-003	0.1905	0.0000	606.8059	606.8059	0.0160	0.0000	607.2068
Total	**0.4853**	**5.1588**	**3.2164**	**0.0193**	**0.9968**	**0.0187**	**1.0155**	**0.2718**	**0.0177**	**0.2895**	**0.0000**	**1,804.2257**	**1,804.2257**	**0.1075**	**0.0000**	**1,806.9124**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0981	0.8979	0.9409	1.5500e-003		0.0465	0.0465		0.0438	0.0438	0.0000	133.2420	133.2420	0.0319	0.0000	134.0400
Total	**0.0981**	**0.8979**	**0.9409**	**1.5500e-003**		**0.0465**	**0.0465**		**0.0438**	**0.0438**	**0.0000**	**133.2420**	**133.2420**	**0.0319**	**0.0000**	**134.0400**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0591	2.0601	0.3659	5.5000e-003	0.1307	5.3000e-003	0.1360	0.0378	5.0700e-003	0.0428	0.0000	522.6993	522.6993	0.0388	0.0000	523.6703
Worker	0.1392	0.0879	0.9299	2.8500e-003	0.3085	2.0600e-003	0.3105	0.0820	1.8900e-003	0.0839	0.0000	257.8119	257.8119	6.3000e-003	0.0000	257.9695
Total	**0.1983**	**2.1480**	**1.2958**	**8.3500e-003**	**0.4392**	**7.3600e-003**	**0.4466**	**0.1198**	**6.9600e-003**	**0.1267**	**0.0000**	**780.5112**	**780.5112**	**0.0451**	**0.0000**	**781.6398**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0981	0.8979	0.9409	1.5500e-003		0.0465	0.0465		0.0438	0.0438	0.0000	133.2419	133.2419	0.0319	0.0000	134.0399
Total	**0.0981**	**0.8979**	**0.9409**	**1.5500e-003**		**0.0465**	**0.0465**		**0.0438**	**0.0438**	**0.0000**	**133.2419**	**133.2419**	**0.0319**	**0.0000**	**134.0399**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0591	2.0601	0.3659	5.5000e-003	0.1307	5.3000e-003	0.1360	0.0378	5.0700e-003	0.0428	0.0000	522.6993	522.6993	0.0388	0.0000	523.6703
Worker	0.1392	0.0879	0.9299	2.8500e-003	0.3085	2.0600e-003	0.3105	0.0820	1.8900e-003	0.0839	0.0000	257.8119	257.8119	6.3000e-003	0.0000	257.9695
Total	**0.1983**	**2.1480**	**1.2958**	**8.3500e-003**	**0.4392**	**7.3600e-003**	**0.4466**	**0.1198**	**6.9600e-003**	**0.1267**	**0.0000**	**780.5112**	**780.5112**	**0.0451**	**0.0000**	**781.6398**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0303	0.3059	0.4010	6.3000e-004		0.0156	0.0156		0.0144	0.0144	0.0000	55.0758	55.0758	0.0178	0.0000	55.5211
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0303**	**0.3059**	**0.4010**	**6.3000e-004**		**0.0156**	**0.0156**		**0.0144**	**0.0144**	**0.0000**	**55.0758**	**55.0758**	**0.0178**	**0.0000**	**55.5211**

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	1.4900e-003	9.4000e-004	9.9400e-003	3.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	9.0000e-004	0.0000	2.7564	2.7564	7.0000e-005	0.0000	2.7581
Total	**1.4900e-003**	**9.4000e-004**	**9.9400e-003**	**3.0000e-005**	**3.3000e-003**	**2.0000e-005**	**3.3200e-003**	**8.8000e-004**	**2.0000e-005**	**9.0000e-004**	**0.0000**	**2.7564**	**2.7564**	**7.0000e-005**	**0.0000**	**2.7581**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0303	0.3059	0.4010	6.3000e-004		0.0156	0.0156		0.0144	0.0144	0.0000	55.0757	55.0757	0.0178	0.0000	55.5210
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0303**	**0.3059**	**0.4010**	**6.3000e-004**		**0.0156**	**0.0156**		**0.0144**	**0.0144**	**0.0000**	**55.0757**	**55.0757**	**0.0178**	**0.0000**	**55.5210**

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	1.4900e-003	9.4000e-004	9.9400e-003	3.0000e-005	3.3000e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	9.0000e-004	0.0000	2.7564	2.7564	7.0000e-005	0.0000	2.7581
Total	**1.4900e-003**	**9.4000e-004**	**9.9400e-003**	**3.0000e-005**	**3.3000e-003**	**2.0000e-005**	**3.3200e-003**	**8.8000e-004**	**2.0000e-005**	**9.0000e-004**	**0.0000**	**2.7564**	**2.7564**	**7.0000e-005**	**0.0000**	**2.7581**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	14.5697					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.6200e-003	0.0387	0.0499	8.0000e-005		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	7.0215	7.0215	4.6000e-004	0.0000	7.0329
Total	**14.5753**	**0.0387**	**0.0499**	**8.0000e-005**		**2.2500e-003**	**2.2500e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.0215**	**7.0215**	**4.6000e-004**	**0.0000**	**7.0329**

3.7 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0133	8.3900e-003	0.0888	2.7000e-004	0.0295	2.0000e-004	0.0297	7.8300e-003	1.8000e-004	8.0100e-003	0.0000	24.6235	24.6235	6.0000e-004	0.0000	24.6386
Total	**0.0133**	**8.3900e-003**	**0.0888**	**2.7000e-004**	**0.0295**	**2.0000e-004**	**0.0297**	**7.8300e-003**	**1.8000e-004**	**8.0100e-003**	**0.0000**	**24.6235**	**24.6235**	**6.0000e-004**	**0.0000**	**24.6386**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	14.5697					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.6200e-003	0.0387	0.0499	8.0000e-005		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	7.0214	7.0214	4.6000e-004	0.0000	7.0329
Total	**14.5753**	**0.0387**	**0.0499**	**8.0000e-005**		**2.2500e-003**	**2.2500e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.0214**	**7.0214**	**4.6000e-004**	**0.0000**	**7.0329**

3.7 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0133	8.3900e-003	0.0888	2.7000e-004	0.0295	2.0000e-004	0.0297	7.8300e-003	1.8000e-004	8.0100e-003	0.0000	24.6235	24.6235	6.0000e-004	0.0000	24.6386
Total	**0.0133**	**8.3900e-003**	**0.0888**	**2.7000e-004**	**0.0295**	**2.0000e-004**	**0.0297**	**7.8300e-003**	**1.8000e-004**	**8.0100e-003**	**0.0000**	**24.6235**	**24.6235**	**6.0000e-004**	**0.0000**	**24.6386**

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	27.3097	287.5359	237.1525	1.0595	57.7952	0.9552	58.7504	15.5461	0.9022	16.4483	0.0000	98,502.8680	98,502.8680	8.5827	0.0000	98,717.4363
Unmitigated	27.3097	287.5359	237.1525	1.0595	57.7952	0.9552	58.7504	15.5461	0.9022	16.4483	0.0000	98,502.8680	98,502.8680	8.5827	0.0000	98,717.4363

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	89,482.12	104,717.13	52892.94	151,540,810	151,540,810
Total	89,482.12	104,717.13	52,892.94	151,540,810	151,540,810

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Regional Shopping Center	0.506092	0.032602	0.169295	0.124521	0.019914	0.005374	0.021664	0.110051	0.001797	0.001623	0.005307	0.000969	0.000792

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,968.5177	4,968.5177	0.2247	0.0465	4,987.9858
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,968.5177	4,968.5177	0.2247	0.0465	4,987.9858
NaturalGas Mitigated	0.1209	1.0992	0.9233	6.5900e-003		0.0835	0.0835		0.0835	0.0835	0.0000	1,196.5724	1,196.5724	0.0229	0.0219	1,203.6830
NaturalGas Unmitigated	0.1209	1.0992	0.9233	6.5900e-003		0.0835	0.0835		0.0835	0.0835	0.0000	1,196.5724	1,196.5724	0.0229	0.0219	1,203.6830

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					
Regional Shopping Center	2.24229e+007	0.1209	1.0992	0.9233	6.5900e-003		0.0835	0.0835		0.0835	0.0835	0.0000	1,196.5724	1,196.5724	0.0229	0.0219	1,203.6830
Total		**0.1209**	**1.0992**	**0.9233**	**6.5900e-003**		**0.0835**	**0.0835**		**0.0835**	**0.0835**	**0.0000**	**1,196.5724**	**1,196.5724**	**0.0229**	**0.0219**	**1,203.6830**

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					
Regional Shopping Center	2.24229e+007	0.1209	1.0992	0.9233	6.5900e-003		0.0835	0.0835		0.0835	0.0835	0.0000	1,196.5724	1,196.5724	0.0229	0.0219	1,203.6830
Total		**0.1209**	**1.0992**	**0.9233**	**6.5900e-003**		**0.0835**	**0.0835**		**0.0835**	**0.0835**	**0.0000**	**1,196.5724**	**1,196.5724**	**0.0229**	**0.0219**	**1,203.6830**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Regional Shopping Center	1.70791e+007	4,968.5177	0.2247	0.0465	4,987.9858
Total		**4,968.5177**	**0.2247**	**0.0465**	**4,987.9858**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Regional Shopping Center	1.70791e+007	4,968.5177	0.2247	0.0465	4,987.9858
Total		**4,968.5177**	**0.2247**	**0.0465**	**4,987.9858**

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	9.6431	1.8000e-004	0.0193	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0375	0.0375	1.0000e-004	0.0000	0.0399
Unmitigated	9.6431	1.8000e-004	0.0193	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0375	0.0375	1.0000e-004	0.0000	0.0399

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	1.4570					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	8.1844					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8100e-003	1.8000e-004	0.0193	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0375	0.0375	1.0000e-004	0.0000	0.0399
Total	**9.6432**	**1.8000e-004**	**0.0193**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0375**	**0.0375**	**1.0000e-004**	**0.0000**	**0.0399**

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	1.4570					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	8.1844					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8100e-003	1.8000e-004	0.0193	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0375	0.0375	1.0000e-004	0.0000	0.0399
Total	**9.6432**	**1.8000e-004**	**0.0193**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0375**	**0.0375**	**1.0000e-004**	**0.0000**	**0.0399**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	390.4608	5.0735	0.1226	553.8397
Unmitigated	390.4608	5.0735	0.1226	553.8397

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Regional Shopping Center	155.226 / 95.1387	390.4608	5.0735	0.1226	553.8397
Total		**390.4608**	**5.0735**	**0.1226**	**553.8397**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Regional Shopping Center	155.226 / 95.1387	390.4608	5.0735	0.1226	553.8397
Total		**390.4608**	**5.0735**	**0.1226**	**553.8397**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	446.6573	26.3967	0.0000	1,106.5744
Unmitigated	446.6573	26.3967	0.0000	1,106.5744

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Regional Shopping Center	2200.38	446.6573	26.3967	0.0000	1,106.5744
Total		**446.6573**	**26.3967**	**0.0000**	**1,106.5744**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Regional Shopping Center	2200.38	446.6573	26.3967	0.0000	1,106.5744
Total		**446.6573**	**26.3967**	**0.0000**	**1,106.5744**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Wible-Hosking Cumulative Review Project 11

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	339.20	1000sqft	7.79	339,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Table Name	Column Name	Default Value	New Value

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					
2019	0.4096	3.8619	2.8086	6.2800e-003	0.2876	0.1839	0.4715	0.1192	0.1723	0.2915	0.0000	565.9948	565.9948	0.0987	0.0000	568.4618
2020	2.4081	0.4612	0.4208	8.8000e-004	0.0173	0.0220	0.0393	4.6800e-003	0.0206	0.0253	0.0000	78.2615	78.2615	0.0149	0.0000	78.6335
Maximum	**2.4081**	**3.8619**	**2.8086**	**6.2800e-003**	**0.2876**	**0.1839**	**0.4715**	**0.1192**	**0.1723**	**0.2915**	**0.0000**	**565.9948**	**565.9948**	**0.0987**	**0.0000**	**568.4618**

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					
2019	0.4096	3.8619	2.8086	6.2800e-003	0.2876	0.1839	0.4715	0.1192	0.1723	0.2915	0.0000	565.9944	565.9944	0.0987	0.0000	568.4614
2020	2.4081	0.4612	0.4208	8.8000e-004	0.0173	0.0220	0.0393	4.6800e-003	0.0206	0.0253	0.0000	78.2614	78.2614	0.0149	0.0000	78.6335
Maximum	**2.4081**	**3.8619**	**2.8086**	**6.2800e-003**	**0.2876**	**0.1839**	**0.4715**	**0.1192**	**0.1723**	**0.2915**	**0.0000**	**565.9944**	**565.9944**	**0.0987**	**0.0000**	**568.4614**

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

Wible-Hosking Cumulative Review Project 11 - San Joaquin Valley Air Basin, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-7-2019	4-6-2019	1.1789	1.1789
2	4-7-2019	7-6-2019	1.0387	1.0387
3	7-7-2019	10-6-2019	1.0504	1.0504
4	10-7-2019	1-6-2020	1.0488	1.0488
5	1-7-2020	4-6-2020	2.7951	2.7951
		Highest	2.7951	2.7951

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.5609	3.0000e-005	3.1300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.0600e-003	6.0600e-003	2.0000e-005	0.0000	6.4600e-003
Energy	0.0196	0.1779	0.1495	1.0700e-003		0.0135	0.0135		0.0135	0.0135	0.0000	997.8997	997.8997	0.0401	0.0111	1,002.2018
Mobile	4.4204	46.5414	38.3862	0.1715	9.3549	0.1546	9.5095	2.5163	0.1460	2.6624	0.0000	15,943.9649	15,943.9649	1.3892	0.0000	15,978.6956
Waste						0.0000	0.0000		0.0000	0.0000	72.2973	0.0000	72.2973	4.2727	0.0000	179.1134
Water						0.0000	0.0000		0.0000	0.0000	7.9711	55.2300	63.2011	0.8212	0.0199	89.6461
Total	**6.0009**	**46.7194**	**38.5388**	**0.1726**	**9.3549**	**0.1681**	**9.5230**	**2.5163**	**0.1596**	**2.6759**	**80.2684**	**16,997.1006**	**17,077.3690**	**6.5232**	**0.0309**	**17,249.6633**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.5609	3.0000e-005	3.1300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.0600e-003	6.0600e-003	2.0000e-005	0.0000	6.4600e-003
Energy	0.0196	0.1779	0.1495	1.0700e-003		0.0135	0.0135		0.0135	0.0135	0.0000	997.8997	997.8997	0.0401	0.0111	1,002.2018
Mobile	4.4204	46.5414	38.3862	0.1715	9.3549	0.1546	9.5095	2.5163	0.1460	2.6624	0.0000	15,943.9649	15,943.9649	1.3892	0.0000	15,978.6956
Waste						0.0000	0.0000		0.0000	0.0000	72.2973	0.0000	72.2973	4.2727	0.0000	179.1134
Water						0.0000	0.0000		0.0000	0.0000	7.9711	55.2300	63.2011	0.8212	0.0199	89.6461
Total	**6.0009**	**46.7194**	**38.5388**	**0.1726**	**9.3549**	**0.1681**	**9.5230**	**2.5163**	**0.1596**	**2.6759**	**80.2684**	**16,997.1006**	**17,077.3690**	**6.5232**	**0.0309**	**17,249.6633**

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

3.0 Construction Detail

Construction Phase

Wible-Hosking Cumulative Review Project 11 - San Joaquin Valley Air Basin, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/7/2019	2/1/2019	5	20	
2	Site Preparation	Site Preparation	2/2/2019	2/15/2019	5	10	
3	Grading	Grading	2/16/2019	3/15/2019	5	20	
4	Building Construction	Building Construction	3/16/2019	1/31/2020	5	230	
5	Paving	Paving	2/1/2020	2/28/2020	5	20	
6	Architectural Coating	Architectural Coating	2/29/2020	3/27/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 508,800; Non-Residential Outdoor: 169,600; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Wible-Hosking Cumulative Review Project 11 - San Joaquin Valley Air Basin, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	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	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	109.00	56.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	22.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672
Total	**0.0351**	**0.3578**	**0.2206**	**3.9000e-004**		**0.0180**	**0.0180**		**0.0167**	**0.0167**	**0.0000**	**34.6263**	**34.6263**	**9.6300e-003**	**0.0000**	**34.8672**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	4.9000e-004	4.9200e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1113	1.1113	4.0000e-005	0.0000	1.1122
Total	**7.0000e-004**	**4.9000e-004**	**4.9200e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1113**	**1.1113**	**4.0000e-005**	**0.0000**	**1.1122**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671
Total	**0.0351**	**0.3578**	**0.2206**	**3.9000e-004**		**0.0180**	**0.0180**		**0.0167**	**0.0167**	**0.0000**	**34.6263**	**34.6263**	**9.6300e-003**	**0.0000**	**34.8671**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	4.9000e-004	4.9200e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1113	1.1113	4.0000e-005	0.0000	1.1122
Total	**7.0000e-004**	**4.9000e-004**	**4.9200e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1113**	**1.1113**	**4.0000e-005**	**0.0000**	**1.1122**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0903**	**0.0120**	**0.1023**	**0.0497**	**0.0110**	**0.0607**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	4.2000e-004	2.9000e-004	2.9500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6668	0.6668	2.0000e-005	0.0000	0.6673
Total	**4.2000e-004**	**2.9000e-004**	**2.9500e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.6668**	**0.6668**	**2.0000e-005**	**0.0000**	**0.6673**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0903**	**0.0120**	**0.1023**	**0.0497**	**0.0110**	**0.0607**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	4.2000e-004	2.9000e-004	2.9500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6668	0.6668	2.0000e-005	0.0000	0.6673
Total	**4.2000e-004**	**2.9000e-004**	**2.9500e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.6668**	**0.6668**	**2.0000e-005**	**0.0000**	**0.6673**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0258	0.2835	0.1629	3.0000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	26.6423	26.6423	8.4300e-003	0.0000	26.8530
Total	**0.0258**	**0.2835**	**0.1629**	**3.0000e-004**	**0.0655**	**0.0140**	**0.0795**	**0.0337**	**0.0129**	**0.0465**	**0.0000**	**26.6423**	**26.6423**	**8.4300e-003**	**0.0000**	**26.8530**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	4.9000e-004	4.9200e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1113	1.1113	4.0000e-005	0.0000	1.1122
Total	**7.0000e-004**	**4.9000e-004**	**4.9200e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1113**	**1.1113**	**4.0000e-005**	**0.0000**	**1.1122**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0258	0.2835	0.1629	3.0000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	26.6422	26.6422	8.4300e-003	0.0000	26.8530
Total	**0.0258**	**0.2835**	**0.1629**	**3.0000e-004**	**0.0655**	**0.0140**	**0.0795**	**0.0337**	**0.0129**	**0.0465**	**0.0000**	**26.6422**	**26.6422**	**8.4300e-003**	**0.0000**	**26.8530**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	4.9000e-004	4.9200e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1113	1.1113	4.0000e-005	0.0000	1.1122
Total	**7.0000e-004**	**4.9000e-004**	**4.9200e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1113**	**1.1113**	**4.0000e-005**	**0.0000**	**1.1122**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2444	2.1817	1.7765	2.7900e-003		0.1335	0.1335		0.1255	0.1255	0.0000	243.3328	243.3328	0.0593	0.0000	244.8148
Total	**0.2444**	**2.1817**	**1.7765**	**2.7900e-003**		**0.1335**	**0.1335**		**0.1255**	**0.1255**	**0.0000**	**243.3328**	**243.3328**	**0.0593**	**0.0000**	**244.8148**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0283	0.7730	0.1553	1.6600e-003	0.0384	5.8400e-003	0.0443	0.0111	5.5900e-003	0.0167	0.0000	157.8396	157.8396	0.0132	0.0000	158.1689
Worker	0.0525	0.0368	0.3702	9.3000e-004	0.0902	6.6000e-004	0.0909	0.0240	6.1000e-004	0.0246	0.0000	83.5801	83.5801	2.6700e-003	0.0000	83.6469
Total	**0.0808**	**0.8098**	**0.5255**	**2.5900e-003**	**0.1286**	**6.5000e-003**	**0.1351**	**0.0351**	**6.2000e-003**	**0.0413**	**0.0000**	**241.4197**	**241.4197**	**0.0158**	**0.0000**	**241.8157**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2444	2.1817	1.7765	2.7900e-003		0.1335	0.1335		0.1255	0.1255	0.0000	243.3326	243.3326	0.0593	0.0000	244.8145
Total	**0.2444**	**2.1817**	**1.7765**	**2.7900e-003**		**0.1335**	**0.1335**		**0.1255**	**0.1255**	**0.0000**	**243.3326**	**243.3326**	**0.0593**	**0.0000**	**244.8145**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.0283	0.7730	0.1553	1.6600e-003	0.0384	5.8400e-003	0.0443	0.0111	5.5900e-003	0.0167	0.0000	157.8396	157.8396	0.0132	0.0000	158.1689
Worker	0.0525	0.0368	0.3702	9.3000e-004	0.0902	6.6000e-004	0.0909	0.0240	6.1000e-004	0.0246	0.0000	83.5801	83.5801	2.6700e-003	0.0000	83.6469
Total	**0.0808**	**0.8098**	**0.5255**	**2.5900e-003**	**0.1286**	**6.5000e-003**	**0.1351**	**0.0351**	**6.2000e-003**	**0.0413**	**0.0000**	**241.4197**	**241.4197**	**0.0158**	**0.0000**	**241.8157**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0244	0.2206	0.1938	3.1000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	26.6352	26.6352	6.5000e-003	0.0000	26.7976
Total	**0.0244**	**0.2206**	**0.1938**	**3.1000e-004**		**0.0129**	**0.0129**		**0.0121**	**0.0121**	**0.0000**	**26.6352**	**26.6352**	**6.5000e-003**	**0.0000**	**26.7976**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5500e-003	0.0784	0.0149	1.8000e-004	4.2700e-003	4.3000e-004	4.7000e-003	1.2300e-003	4.1000e-004	1.6500e-003	0.0000	17.3893	17.3893	1.3700e-003	0.0000	17.4236
Worker	5.3000e-003	3.6000e-003	0.0366	1.0000e-004	0.0100	7.0000e-005	0.0101	2.6600e-003	7.0000e-005	2.7300e-003	0.0000	8.9993	8.9993	2.6000e-004	0.0000	9.0057
Total	**7.8500e-003**	**0.0820**	**0.0514**	**2.8000e-004**	**0.0143**	**5.0000e-004**	**0.0148**	**3.8900e-003**	**4.8000e-004**	**4.3800e-003**	**0.0000**	**26.3885**	**26.3885**	**1.6300e-003**	**0.0000**	**26.4293**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0244	0.2206	0.1938	3.1000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	26.6351	26.6351	6.5000e-003	0.0000	26.7976
Total	**0.0244**	**0.2206**	**0.1938**	**3.1000e-004**		**0.0129**	**0.0129**		**0.0121**	**0.0121**	**0.0000**	**26.6351**	**26.6351**	**6.5000e-003**	**0.0000**	**26.7976**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5500e-003	0.0784	0.0149	1.8000e-004	4.2700e-003	4.3000e-004	4.7000e-003	1.2300e-003	4.1000e-004	1.6500e-003	0.0000	17.3893	17.3893	1.3700e-003	0.0000	17.4236
Worker	5.3000e-003	3.6000e-003	0.0366	1.0000e-004	0.0100	7.0000e-005	0.0101	2.6600e-003	7.0000e-005	2.7300e-003	0.0000	8.9993	8.9993	2.6000e-004	0.0000	9.0057
Total	**7.8500e-003**	**0.0820**	**0.0514**	**2.8000e-004**	**0.0143**	**5.0000e-004**	**0.0148**	**3.8900e-003**	**4.8000e-004**	**4.3800e-003**	**0.0000**	**26.3885**	**26.3885**	**1.6300e-003**	**0.0000**	**26.4293**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0136**	**0.1407**	**0.1465**	**2.3000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**20.0282**	**20.0282**	**6.4800e-003**	**0.0000**	**20.1902**

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	6.3000e-004	4.3000e-004	4.3700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total	**6.3000e-004**	**4.3000e-004**	**4.3700e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0136**	**0.1407**	**0.1465**	**2.3000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**20.0282**	**20.0282**	**6.4800e-003**	**0.0000**	**20.1901**

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	6.3000e-004	4.3000e-004	4.3700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total	**6.3000e-004**	**4.3000e-004**	**4.3700e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.3583					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	**2.3607**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5582**

3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.3000e-004	6.3000e-004	6.4200e-003	2.0000e-005	1.7600e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.5795	1.5795	5.0000e-005	0.0000	1.5806
Total	**9.3000e-004**	**6.3000e-004**	**6.4200e-003**	**2.0000e-005**	**1.7600e-003**	**1.0000e-005**	**1.7700e-003**	**4.7000e-004**	**1.0000e-005**	**4.8000e-004**	**0.0000**	**1.5795**	**1.5795**	**5.0000e-005**	**0.0000**	**1.5806**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	2.3583					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	**2.3607**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5582**

3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.3000e-004	6.3000e-004	6.4200e-003	2.0000e-005	1.7600e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.5795	1.5795	5.0000e-005	0.0000	1.5806
Total	**9.3000e-004**	**6.3000e-004**	**6.4200e-003**	**2.0000e-005**	**1.7600e-003**	**1.0000e-005**	**1.7700e-003**	**4.7000e-004**	**1.0000e-005**	**4.8000e-004**	**0.0000**	**1.5795**	**1.5795**	**5.0000e-005**	**0.0000**	**1.5806**

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	4.4204	46.5414	38.3862	0.1715	9.3549	0.1546	9.5095	2.5163	0.1460	2.6624	0.0000	15,943.9649	15,943.9649	1.3892	0.0000	15,978.6956
Unmitigated	4.4204	46.5414	38.3862	0.1715	9.3549	0.1546	9.5095	2.5163	0.1460	2.6624	0.0000	15,943.9649	15,943.9649	1.3892	0.0000	15,978.6956

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	14,483.84	16,949.82	8561.41	24,528,843	24,528,843
Total	14,483.84	16,949.82	8,561.41	24,528,843	24,528,843

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Regional Shopping Center	0.506092	0.032602	0.169295	0.124521	0.019914	0.005374	0.021664	0.110051	0.001797	0.001623	0.005307	0.000969	0.000792

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	804.2189	804.2189	0.0364	7.5200e-003	807.3701
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	804.2189	804.2189	0.0364	7.5200e-003	807.3701
NaturalGas Mitigated	0.0196	0.1779	0.1495	1.0700e-003		0.0135	0.0135		0.0135	0.0135	0.0000	193.6807	193.6807	3.7100e-003	3.5500e-003	194.8317
NaturalGas Unmitigated	0.0196	0.1779	0.1495	1.0700e-003		0.0135	0.0135		0.0135	0.0135	0.0000	193.6807	193.6807	3.7100e-003	3.5500e-003	194.8317

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					
Regional Shopping Center	3.62944e+006	0.0196	0.1779	0.1495	1.0700e-003		0.0135	0.0135		0.0135	0.0135	0.0000	193.6807	193.6807	3.7100e-003	3.5500e-003	194.8317
Total		**0.0196**	**0.1779**	**0.1495**	**1.0700e-003**		**0.0135**	**0.0135**		**0.0135**	**0.0135**	**0.0000**	**193.6807**	**193.6807**	**3.7100e-003**	**3.5500e-003**	**194.8317**

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					
Regional Shopping Center	3.62944e+006	0.0196	0.1779	0.1495	1.0700e-003		0.0135	0.0135		0.0135	0.0135	0.0000	193.6807	193.6807	3.7100e-003	3.5500e-003	194.8317
Total		**0.0196**	**0.1779**	**0.1495**	**1.0700e-003**		**0.0135**	**0.0135**		**0.0135**	**0.0135**	**0.0000**	**193.6807**	**193.6807**	**3.7100e-003**	**3.5500e-003**	**194.8317**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Regional Shopping Center	2.76448e+006	804.2189	0.0364	7.5200e-003	807.3701
Total		**804.2189**	**0.0364**	**7.5200e-003**	**807.3701**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Regional Shopping Center	2.76448e+006	804.2189	0.0364	7.5200e-003	807.3701
Total		**804.2189**	**0.0364**	**7.5200e-003**	**807.3701**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5609	3.0000e-005	3.1300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.0600e-003	6.0600e-003	2.0000e-005	0.0000	6.4600e-003
Unmitigated	1.5609	3.0000e-005	3.1300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.0600e-003	6.0600e-003	2.0000e-005	0.0000	6.4600e-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	0.2358					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3248					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.9000e-004	3.0000e-005	3.1300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.0600e-003	6.0600e-003	2.0000e-005	0.0000	6.4600e-003
Total	**1.5609**	**3.0000e-005**	**3.1300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.0600e-003**	**6.0600e-003**	**2.0000e-005**	**0.0000**	**6.4600e-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	0.2358					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3248					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.9000e-004	3.0000e-005	3.1300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.0600e-003	6.0600e-003	2.0000e-005	0.0000	6.4600e-003
Total	**1.5609**	**3.0000e-005**	**3.1300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.0600e-003**	**6.0600e-003**	**2.0000e-005**	**0.0000**	**6.4600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	63.2011	0.8212	0.0199	89.6461
Unmitigated	63.2011	0.8212	0.0199	89.6461

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Regional Shopping Center	25.1254 / 15.3994	63.2011	0.8212	0.0199	89.6461
Total		**63.2011**	**0.8212**	**0.0199**	**89.6461**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Regional Shopping Center	25.1254 / 15.3994	63.2011	0.8212	0.0199	89.6461
Total		**63.2011**	**0.8212**	**0.0199**	**89.6461**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	72.2973	4.2727	0.0000	179.1134
Unmitigated	72.2973	4.2727	0.0000	179.1134

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Regional Shopping Center	356.16	72.2973	4.2727	0.0000	179.1134
Total		**72.2973**	**4.2727**	**0.0000**	**179.1134**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Regional Shopping Center	356.16	72.2973	4.2727	0.0000	179.1134
Total		**72.2973**	**4.2727**	**0.0000**	**179.1134**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix VIII

TAZ Analysis

PROJECTED HHOUSE CHART DATA

2000 RSA	Description	2005	2006 HHOLDS. 2006	2015 HHOLDS. 2015	2025 HHOLDS. 2025	2035 HHOLDS. 2035	TAZ
TOTAL	**TAZ DWELLING UNIT PROJECTION + EXISTING**		2346	2534	2931	3304	
	PROPOSED PROJECTS + EXISTING		2346	2346	2346	2346	

PROJECTED JOB CHART DATA

2000 RSA	Description	2005	2006 JOBS 2006	2015 JOBS 2015	2025 JOBS 2025	2035 JOBS 2035	TAZ
TOTAL	**TAZ JOB PROJECTION + EXISTING**		2631	2890	3059	3224	
	PROPOSED PROJECTS + EXISTING		2631	2631	2741	2741	

Appendix IX

Greenhouse Gas Emission Calculations

Phase 1 Mitigated Operational GHG Emissions (2005)

Project	Bio- CO2	Nbio-CO2	Total CO2	CH4	N20	CO2e
	MT/yr					
Area	0	0.00151	0.00151	0.00001	0	0.00169
Energy	0	25.2338	25.2338	0.0011	0.00025	25.3362
Mobile	0	1946.574	1946.574	1.0268	0	1972.243
Waste	3.4955	0	3.4955	0.2066	0	8.66
Water	0.1347	0.933	1.0676	0.0139	0.00034	1.5144
Total	3.6302	1972.743	1976.373	1.24841	0.00059	2007.756

Phase 2 Mitigated Operational GHG Emissions (2005)

Project	Bio- CO2	Nbio-CO2	Total CO2	CH4	N20	CO2e
	MT/yr					
Area	0	0.00775	0.00775	0.00004	0	0.00865
Energy	0	342.6266	342.6266	0.0138	0.00379	344.1005
Mobile	0	4440.767	4440.767	1.4363	0	4476.674
Waste	33.9584	0	33.9584	2.0069	0	84.1304
Water	2.2694	14.2292	16.4986	0.2337	0.00564	24.0217
Total	36.2278	4797.63	4833.858	3.69074	0.00943	4928.935

Combined Mitigated Operational GHG Emissions (2005)

Project	Bio- CO2	Nbio-CO2	Total CO2	CH4	N20	CO2e
	MT/yr					
Area	0	0.00926	0.00926	0.00005	0	0.01034
Energy	0	367.8604	367.8604	0.0149	0.00404	369.4367
Mobile	0	6387.341	6387.341	2.4631	0	6448.917
Waste	37.4539	0	37.4539	2.2135	0	92.7904
Water	2.4041	15.1622	17.5662	0.2476	0.00598	25.5361
Total	39.858	6770.373	6810.231	4.93915	0.01002	6936.691

Phase 1 Mitigated Operational GHG Emissions (2010)

Project	Bio- CO2	Nbio-CO2	Total CO2	CH4	N20	CO2e
	MT/yr					
Area	0	0.00151	0.00151	0.00001	0	0.00165
Energy	0	25.2338	25.2338	0.0011	0.00025	25.3362
Mobile	0	1603.199	1603.199	0.6343	0	1619.057
Waste	3.4955	0	3.4955	0.2066	0	8.66
Water	0.1347	0.933	1.0676	0.0139	0.00034	1.5144
Total	3.6302	1629.367	1632.997	0.85591	0.00059	1654.569

Phase 2 Mitigated Operational GHG Emissions (2010)

Project	Bio- CO2	Nbio-CO2	Total CO2	CH4	N20	CO2e
	MT/yr					
Area	0	0.00775	0.00775	0.00003	0	0.00843
Energy	0	342.6266	342.6266	0.0138	0.00379	344.1005
Mobile	0	3985.038	3985.038	0.9107	0	4007.805
Waste	33.9584	0	33.9584	2.0069	0	84.1304
Water	2.2694	14.2292	16.4986	0.2337	0.00564	24.0217
Total	36.2278	4341.902	4378.129	3.16513	0.00943	4460.066

Combined Mitigated Operational GHG Emissions (2010)

Project	Bio- CO2	Nbio-CO2	Total CO2	CH4	N20	CO2e
	MT/yr					
Area	0	0.00926	0.00926	0.00004	0	0.01008
Energy	0	367.8604	367.8604	0.0149	0.00404	369.4367
Mobile	0	5588.237	5588.237	1.545	0	5626.861
Waste	37.4539	0	37.4539	2.2135	0	92.7904
Water	2.4041	15.1622	17.5662	0.2476	0.00598	25.5361
Total	39.858	5971.269	6011.126	4.02104	0.01002	6114.635

Phase 1 Mitigated Operational GHG Emissions (2020)

Project	Bio- CO2	Nbio-CO2	Total CO2	CH4	N20	CO2e
	MT/yr					
Area	0	0.00151	0.00151	0	0	0.00161
Energy	0	25.2338	25.2338	0.0011	0.00025	25.3362
Mobile	0	965.2203	965.2203	0.1008	0	967.7403
Waste	3.4955	0	3.4955	0.2066	0	8.66
Water	0.1347	0.933	1.0676	0.0139	0.00034	1.5144
Total	3.6302	991.3886	995.0187	0.3224	0.00059	1003.253

Phase 2 Mitigated Operational GHG Emissions (2020)

Project	Bio- CO2	Nbio-CO2	Total CO2	CH4	N20	CO2e
	MT/yr					
Area	0	0.00775	0.00775	0.00002	0	0.00827
Energy	0	342.6266	342.6266	0.0138	0.00379	344.1005
Mobile	0	2451.129	2451.129	0.1809	0	2455.65
Waste	33.9584	0	33.9584	2.0069	0	84.1304
Water	2.2694	14.2292	16.4986	0.2337	0.00564	24.0217
Total	36.2278	2807.993	2844.22	2.43532	0.00943	2907.911

Combined Mitigated Operational GHG Emissions (2020)

Project	Bio- CO2	Nbio-CO2	Total CO2	CH4	N20	CO2e
	MT/yr					
Area	0	0.00926	0.00926	0.00002	0	0.00988
Energy	0	367.8604	367.8604	0.0149	0.00404	369.4367
Mobile	0	3416.349	3416.349	0.2817	0	3423.391
Waste	37.4539	0	37.4539	2.2135	0	92.7904
Water	2.4041	15.1622	17.5662	0.2476	0.00598	25.5361
Total	39.858	3799.381	3839.239	2.75772	0.01002	3911.164

Phase 1 Mitigated Operational GHG Emissions (2030)

Project	Bio- CO2	Nbio-CO2	Total CO2	CH4	N20	CO2e
	MT/yr					
Area	0	0.00151	0.00151	0	0	0.00161
Energy	0	25.2338	25.2338	0.0011	0.00025	25.3362
Mobile	0	710.3532	710.3532	0.0545	0	711.7155
Waste	3.4955	0	3.4955	0.2066	0	8.66
Water	0.1347	0.933	1.0676	0.0139	0.00034	1.5144
Total	3.6302	736.5215	740.1516	0.2761	0.00059	747.2277

Phase 2 Mitigated Operational GHG Emissions (2030)

Project	Bio- CO2	Nbio-CO2	Total CO2	CH4	N20	CO2e
	MT/yr					
Area	0	0.00775	0.00775	0.00002	0	0.00825
Energy	0	342.6266	342.6266	0.0138	0.00379	344.1005
Mobile	0	1804.748	1804.748	0.097	0	1807.174
Waste	33.9584	0	33.9584	2.0069	0	84.1304
Water	2.2694	14.2292	16.4986	0.2337	0.00564	24.0217
Total	36.2278	2161.611	2197.839	2.35142	0.00943	2259.435

Combined Mitigated Operational GHG Emissions (2030)

Project	Bio- CO2	Nbio-CO2	Total CO2	CH4	N20	CO2e
	MT/yr					
Area	0	0.00926	0.00926	0.00002	0	0.00986
Energy	0	367.8604	367.8604	0.0149	0.00404	369.4367
Mobile	0	2515.101	2515.101	0.1515	0	2518.89
Waste	37.4539	0	37.4539	2.2135	0	92.7904
Water	2.4041	15.1622	17.5662	0.2476	0.00598	25.5361
Total	39.858	2898.133	2937.991	2.62752	0.01002	3006.663

Phase 1 Mitigated Operational GHG Emissions (2035)

Project	Bio- CO2	Nbio-CO2	Total CO2	CH4	N20	CO2e
	MT/yr					
Area	0	0.00151	0.00151	0	0	0.00161
Energy	0	25.2338	25.2338	0.0011	0.00025	25.3362
Mobile	0	675.8964	675.8964	0.0522	0	677.2012
Waste	3.4955	0	3.4955	0.2066	0	8.66
Water	0.1347	0.933	1.0676	0.0139	0.00034	1.5144
Total	3.6302	702.0647	705.6948	0.2738	0.00059	712.7134

Phase 2 Mitigated Operational GHG Emissions (2035)

Project	Bio- CO2	Nbio-CO2	Total CO2	CH4	N20	CO2e
	MT/yr					
Area	0	0.00775	0.00775	0.00002	0	0.00825
Energy	0	342.6266	342.6266	0.0138	0.00379	344.1005
Mobile	0	1701.376	1701.376	0.0891	0	1703.603
Waste	33.9584	0	33.9584	2.0069	0	84.1304
Water	2.2694	14.2292	16.4986	0.2337	0.00564	24.0217
Total	36.2278	2058.24	2094.468	2.34352	0.00943	2155.864

Combined Mitigated Operational GHG Emissions (2035)

Project	Bio- CO2	Nbio-CO2	Total CO2	CH4	N20	CO2e
	MT/yr					
Area	0	0.00926	0.00926	0.00002	0	0.00986
Energy	0	367.8604	367.8604	0.0149	0.00404	369.4367
Mobile	0	2377.273	2377.273	0.1413	0	2380.804
Waste	37.4539	0	37.4539	2.2135	0	92.7904
Water	2.4041	15.1622	17.5662	0.2476	0.00598	25.5361
Total	39.858	2760.305	2800.162	2.61732	0.01002	2868.577

BAU GHG 2008 Mitigated Operational Emissions

2005 & 2010 are used to create 2008 (linear regression). 2020 is the comparable year.

Metric Tons/Year	2005					
	Bio-CO2	N Bio-CO2	Total CO2	CH4	N2O	CO2e
Area	0.00	0.01	0.01	0.00	0.00	**0.01**
Energy	0.00	367.86	367.86	0.01	0.00	**369.44**
Mobile	0.00	6387.34	6387.34	2.46	0.00	**6448.92**
Waste	37.45	0.00	37.45	2.21	0.00	**92.79**
Water	2.40	15.16	17.57	0.25	0.01	**25.54**
					Total:	**6936.69**

Metric Tons/Year	2010					
	Bio-CO2	N Bio-CO2	Total CO2	CH4	N2O	CO2e
Area	0.00	0.01	0.01	0.00	0.00	**0.01**
Energy	0.00	367.86	367.86	0.01	0.00	**369.44**
Mobile	0.00	5588.24	5588.24	1.55	0.00	**5626.86**
Waste	37.45	0.00	37.45	2.21	0.00	**92.79**
Water	2.40	15.16	17.57	0.25	0.01	**25.54**
					Total:	**6114.63**

Metric Tons/Year (*Project Mitigated*)	2020					
	Bio-CO2	N Bio-CO2	Total CO2	CH4	N2O	CO2e
Area	0.00	0.01	0.01	0.00	0.00	**0.01**
Energy	0.00	367.86	367.86	0.01	0.00	**369.44**
Mobile	0.00	3416.35	3416.35	0.28	0.00	**3423.39**
Waste	37.45	0.00	37.45	2.21	0.00	**92.79**
Water	2.40	15.16	17.57	0.25	0.01	**25.54**
					Total:	**3911.16**

Metric Tons/Year (*BAU*)	2008					
	Bio-CO2	N Bio-CO2	Total CO2	CH4	N2O	CO2e
Area	0.00	0.01	0.01	0.00	0.00	**0.01**
Energy	0.00	367.86	367.86	0.01	0.00	**369.44**
Mobile	0.00	5907.88	5907.88	1.91	0.00	**5955.68**
Waste	37.45	0.00	37.45	2.21	0.00	**92.79**
Water	2.40	15.16	17.57	0.25	0.01	**25.54**
					Total:	**6443.46**

29% Reduction Goal for 2020:	**4574.854317**	**MT CO_2e**
Project Reduction:	**2532.29**	**MT CO_2e**
Difference:	**-2042.56**	**MT CO_2e**
% Reduction (2008 vs 2020):	**39.30 %**	

(Requires Carbon Credit Purchase)

Wible-Hosking Commercial - Gas Station

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	14.75	1000sqft	0.34	14,751.00	0
Parking Lot	64.18	1000sqft	1.47	64,179.29	0
Convenience Market With Gas Pumps	5.73	1000sqft	0.13	5,726.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	7			**Operational Year**	2005
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Other Non-Asphalt Surfaces: Pedestrian pavement, landscaping, cement pads.

Demolition -

Vehicle Trips - From Traffic Study.

Sequestration -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - Low VOC paints.

Fleet Mix - Commercial development serves surrounding residential.

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	150	75
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	14,750.00	14,751.00
tblLandUse	LandUseSquareFeet	64,180.00	64,179.29
tblLandUse	LandUseSquareFeet	5,730.00	5,726.00
tblSequestration	NumberOfNewTrees	0.00	35.00
tblVehicleTrips	ST_TR	1,448.33	624.20
tblVehicleTrips	SU_TR	1,182.08	624.20
tblVehicleTrips	WD_TR	845.60	624.20

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					
2019											0.0000	281.9465	281.9465	0.0480	0.0000	283.1463
Maximum											**0.0000**	**281.9465**	**281.9465**	**0.0480**	**0.0000**	**283.1463**

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					
2019											0.0000	281.9463	281.9463	0.0480	0.0000	283.1460
Maximum											**0.0000**	**281.9463**	**281.9463**	**0.0480**	**0.0000**	**283.1460**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	1.5100e-003	1.5100e-003	1.0000e-005	0.0000	1.6900e-003
Energy											0.0000	25.2338	25.2338	1.1000e-003	2.5000e-004	25.3362
Mobile											0.0000	1,946.5744	1,946.5744	1.0268	0.0000	1,972.2434
Waste											3.4955	0.0000	3.4955	0.2066	0.0000	8.6600
Water											0.1347	0.9330	1.0676	0.0139	3.4000e-004	1.5144
Total											**3.6302**	**1,972.7427**	**1,976.3728**	**1.2483**	**5.9000e-004**	**2,007.7556**

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											0.0000	1.5100e-003	1.5100e-003	1.0000e-005	0.0000	1.6900e-003
Energy											0.0000	25.2338	25.2338	1.1000e-003	2.5000e-004	25.3362
Mobile											0.0000	1,946.5744	1,946.5744	1.0268	0.0000	1,972.2434
Waste											3.4955	0.0000	3.4955	0.2066	0.0000	8.6600
Water											0.1347	0.9330	1.0676	0.0139	3.4000e-004	1.5144
Total											**3.6302**	**1,972.7427**	**1,976.3728**	**1.2483**	**5.9000e-004**	**2,007.7556**

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

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	24.7800
Total	**24.7800**

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	1/1/2019	1/28/2019	5	20	
2	Site Preparation	Site Preparation	1/29/2019	1/30/2019	5	2	
3	Grading	Grading	1/31/2019	2/5/2019	5	4	
4	Building Construction	Building Construction	2/6/2019	11/12/2019	5	200	
5	Paving	Paving	11/13/2019	11/26/2019	5	10	
6	Architectural Coating	Architectural Coating	11/27/2019	12/10/2019	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.81

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 8,589; Non-Residential Outdoor: 2,863; Striped Parking Area: 4,736 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	35.00	14.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total											**0.0000**	**21.4161**	**21.4161**	**5.4500e-003**	**0.0000**	**21.5524**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.1537	0.1537	1.0000e-005	0.0000	0.1540
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.9631	0.9631	3.0000e-005	0.0000	0.9639
Total											**0.0000**	**1.1169**	**1.1169**	**4.0000e-005**	**0.0000**	**1.1178**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total											**0.0000**	**21.4161**	**21.4161**	**5.4500e-003**	**0.0000**	**21.5524**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.1537	0.1537	1.0000e-005	0.0000	0.1540
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.9631	0.9631	3.0000e-005	0.0000	0.9639
Total											**0.0000**	**1.1169**	**1.1169**	**4.0000e-005**	**0.0000**	**1.1178**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.5467	1.5467	4.9000e-004	0.0000	1.5589
Total											**0.0000**	**1.5467**	**1.5467**	**4.9000e-004**	**0.0000**	**1.5589**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0593	0.0593	0.0000	0.0000	0.0593
Total											**0.0000**	**0.0593**	**0.0593**	**0.0000**	**0.0000**	**0.0593**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.5467	1.5467	4.9000e-004	0.0000	1.5589
Total											**0.0000**	**1.5467**	**1.5467**	**4.9000e-004**	**0.0000**	**1.5589**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0593	0.0593	0.0000	0.0000	0.0593
Total											**0.0000**	**0.0593**	**0.0593**	**0.0000**	**0.0000**	**0.0593**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5336	2.5336	8.0000e-004	0.0000	2.5536
Total											**0.0000**	**2.5336**	**2.5336**	**8.0000e-004**	**0.0000**	**2.5536**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1185	0.1185	0.0000	0.0000	0.1186
Total											**0.0000**	**0.1185**	**0.1185**	**0.0000**	**0.0000**	**0.1186**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5336	2.5336	8.0000e-004	0.0000	2.5536
Total											**0.0000**	**2.5336**	**2.5336**	**8.0000e-004**	**0.0000**	**2.5536**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1185	0.1185	0.0000	0.0000	0.1186
Total											**0.0000**	**0.1185**	**0.1185**	**0.0000**	**0.0000**	**0.1186**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	183.0719	183.0719	0.0352	0.0000	183.9518
Total											**0.0000**	**183.0719**	**183.0719**	**0.0352**	**0.0000**	**183.9518**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	38.1255	38.1255	3.1800e-003	0.0000	38.2050
Worker											0.0000	25.9301	25.9301	8.3000e-004	0.0000	25.9508
Total											**0.0000**	**64.0556**	**64.0556**	**4.0100e-003**	**0.0000**	**64.1559**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	183.0717	183.0717	0.0352	0.0000	183.9515
Total											**0.0000**	**183.0717**	**183.0717**	**0.0352**	**0.0000**	**183.9515**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	38.1255	38.1255	3.1800e-003	0.0000	38.2050
Worker											0.0000	25.9301	25.9301	8.3000e-004	0.0000	25.9508
Total											**0.0000**	**64.0556**	**64.0556**	**4.0100e-003**	**0.0000**	**64.1559**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	6.0105	6.0105	1.8700e-003	0.0000	6.0572
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**6.0105**	**6.0105**	**1.8700e-003**	**0.0000**	**6.0572**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4816	0.4816	2.0000e-005	0.0000	0.4819
Total											**0.0000**	**0.4816**	**0.4816**	**2.0000e-005**	**0.0000**	**0.4819**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	6.0105	6.0105	1.8700e-003	0.0000	6.0572
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**6.0105**	**6.0105**	**1.8700e-003**	**0.0000**	**6.0572**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4816	0.4816	2.0000e-005	0.0000	0.4819
Total											**0.0000**	**0.4816**	**0.4816**	**2.0000e-005**	**0.0000**	**0.4819**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2793
Total											**0.0000**	**1.2766**	**1.2766**	**1.1000e-004**	**0.0000**	**1.2793**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2593	0.2593	1.0000e-005	0.0000	0.2595
Total											**0.0000**	**0.2593**	**0.2593**	**1.0000e-005**	**0.0000**	**0.2595**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2793
Total											**0.0000**	**1.2766**	**1.2766**	**1.1000e-004**	**0.0000**	**1.2793**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2593	0.2593	1.0000e-005	0.0000	0.2595
Total											**0.0000**	**0.2593**	**0.2593**	**1.0000e-005**	**0.0000**	**0.2595**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	1,946.5744	1,946.5744	1.0268	0.0000	1,972.2434
Unmitigated											0.0000	1,946.5744	1,946.5744	1.0268	0.0000	1,972.2434

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	3,576.67	3,576.67	3576.67	1,918,539	1,918,539
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	3,576.67	3,576.67	3,576.67	1,918,539	1,918,539

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.419110	0.063099	0.152111	0.182171	0.043370	0.007308	0.023041	0.098286	0.001486	0.001644	0.005352	0.001034	0.001989
Other Non-Asphalt Surfaces	0.419110	0.063099	0.152111	0.182171	0.043370	0.007308	0.023041	0.098286	0.001486	0.001644	0.005352	0.001034	0.001989
Parking Lot	0.419110	0.063099	0.152111	0.182171	0.043370	0.007308	0.023041	0.098286	0.001486	0.001644	0.005352	0.001034	0.001989

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	23.4921	23.4921	1.0600e-003	2.2000e-004	23.5842
Electricity Unmitigated											0.0000	23.4921	23.4921	1.0600e-003	2.2000e-004	23.5842
NaturalGas Mitigated											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521
NaturalGas Unmitigated											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521

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					
Convenience Market With Gas Pumps	32638.2											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**1.7417**	**1.7417**	**3.0000e-005**	**3.0000e-005**	**1.7521**

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					
Convenience Market With Gas Pumps	32638.2											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**1.7417**	**1.7417**	**3.0000e-005**	**3.0000e-005**	**1.7521**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	58290.7	16.9574	7.7000e-004	1.6000e-004	17.0239
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	22462.8	6.5347	3.0000e-004	6.0000e-005	6.5603
Total		**23.4921**	**1.0700e-003**	**2.2000e-004**	**23.5842**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	58290.7	16.9574	7.7000e-004	1.6000e-004	17.0239
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	22462.8	6.5347	3.0000e-004	6.0000e-005	6.5603
Total		**23.4921**	**1.0700e-003**	**2.2000e-004**	**23.5842**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	1.5100e-003	1.5100e-003	1.0000e-005	0.0000	1.6900e-003
Unmitigated											0.0000	1.5100e-003	1.5100e-003	1.0000e-005	0.0000	1.6900e-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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	1.5100e-003	1.5100e-003	1.0000e-005	0.0000	1.6900e-003
Total											**0.0000**	**1.5100e-003**	**1.5100e-003**	**1.0000e-005**	**0.0000**	**1.6900e-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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	1.5100e-003	1.5100e-003	1.0000e-005	0.0000	1.6900e-003
Total											**0.0000**	**1.5100e-003**	**1.5100e-003**	**1.0000e-005**	**0.0000**	**1.6900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.0676	0.0139	3.4000e-004	1.5144
Unmitigated	1.0676	0.0139	3.4000e-004	1.5144

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.424436 / 0.260138	1.0676	0.0139	3.4000e-004	1.5144
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.0676**	**0.0139**	**3.4000e-004**	**1.5144**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.424436 / 0.260138	1.0676	0.0139	3.4000e-004	1.5144
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.0676**	**0.0139**	**3.4000e-004**	**1.5144**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.4955	0.2066	0.0000	8.6600
Unmitigated	3.4955	0.2066	0.0000	8.6600

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	17.22	3.4955	0.2066	0.0000	8.6600
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**3.4955**	**0.2066**	**0.0000**	**8.6600**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	17.22	3.4955	0.2066	0.0000	8.6600
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**3.4955**	**0.2066**	**0.0000**	**8.6600**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	24.7800	0.0000	0.0000	24.7800

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	35	24.7800	0.0000	0.0000	24.7800
Total		**24.7800**	**0.0000**	**0.0000**	**24.7800**

Wible-Hosking Commercial - Remaining Buildout

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	238.33	1000sqft	5.47	238,329.00	0
Parking Lot	126.12	1000sqft	2.90	126,121.00	0
Fast Food Restaurant with Drive Thru	2.73	1000sqft	0.06	2,726.00	0
High Turnover (Sit Down Restaurant)	6.08	1000sqft	0.14	6,076.00	0
Strip Mall	60.47	1000sqft	1.39	60,474.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	7			**Operational Year**	2005
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Wible-Hosking Commercial - Remaining Buildout - San Joaquin Valley Air Basin, Annual

Project Characteristics -

Land Use - Other Non-Asphalt Surfaces: Pedestrian pavement, landscaping, cement pad.

Construction Phase - Estimated excavation required for retention basin.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Estimated equipment for excavation of retention basin.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Estimate for required equipment to excavate retention basin.

Demolition -

Vehicle Trips - Values known from Traffic Study.

Sequestration -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - Low VOC paint.

Fleet Mix - Commercial development serves surrounding residential.

Wible-Hosking Commercial - Remaining Buildout - San Joaquin Valley Air Basin, Annual

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	150	75
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	238,330.00	238,329.00
tblLandUse	LandUseSquareFeet	126,120.00	126,121.00
tblLandUse	LandUseSquareFeet	2,730.00	2,726.00
tblLandUse	LandUseSquareFeet	6,080.00	6,076.00
tblLandUse	LandUseSquareFeet	60,470.00	60,474.00
tblSequestration	NumberOfNewTrees	0.00	148.00
tblVehicleTrips	ST_TR	722.03	470.95
tblVehicleTrips	ST_TR	158.37	112.18
tblVehicleTrips	SU_TR	542.72	470.95
tblVehicleTrips	SU_TR	131.84	112.18
tblVehicleTrips	WD_TR	496.12	470.95
tblVehicleTrips	WD_TR	127.15	112.18

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020											0.0000	666.0091	666.0091	0.1039	0.0000	668.6065
2021											0.0000	74.9596	74.9596	0.0134	0.0000	75.2938
Maximum											**0.0000**	**666.0091**	**666.0091**	**0.1039**	**0.0000**	**668.6065**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020											0.0000	666.0088	666.0088	0.1039	0.0000	668.6061
2021											0.0000	74.9596	74.9596	0.0134	0.0000	75.2938
Maximum											**0.0000**	**666.0088**	**666.0088**	**0.1039**	**0.0000**	**668.6061**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	7.7500e-003	7.7500e-003	4.0000e-005	0.0000	8.6500e-003
Energy											0.0000	342.6266	342.6266	0.0138	3.7900e-003	344.1005
Mobile											0.0000	4,440.7667	4,440.7667	1.4363	0.0000	4,476.6737
Waste											33.9584	0.0000	33.9584	2.0069	0.0000	84.1304
Water											2.2694	14.2292	16.4986	0.2337	5.6400e-003	24.0217
Total											**36.2278**	**4,797.6302**	**4,833.8580**	**3.6907**	**9.4300e-003**	**4,928.9350**

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											0.0000	7.7500e-003	7.7500e-003	4.0000e-005	0.0000	8.6500e-003
Energy											0.0000	342.6266	342.6266	0.0138	3.7900e-003	344.1005
Mobile											0.0000	4,440.7667	4,440.7667	1.4363	0.0000	4,476.6737
Waste											33.9584	0.0000	33.9584	2.0069	0.0000	84.1304
Water											2.2694	14.2292	16.4986	0.2337	5.6400e-003	24.0217
Total											**36.2278**	**4,797.6302**	**4,833.8580**	**3.6907**	**9.4300e-003**	**4,928.9350**

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

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	104.7840
Total	**104.7840**

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	1/1/2020	1/28/2020	5	20	
2	Site Preparation	Site Preparation	1/29/2020	2/11/2020	5	10	
3	Grading	Grading	2/12/2020	3/10/2020	5	20	
4	Excavating Retention Basin	Trenching	2/12/2020	2/13/2020	5	2	
5	Building Construction	Building Construction	3/11/2020	1/26/2021	5	230	
6	Paving	Paving	1/27/2021	2/23/2021	5	20	
7	Architectural Coating	Architectural Coating	2/24/2021	3/23/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 8.37

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 103,914; Non-Residential Outdoor: 34,638; Striped Parking Area: 21,867 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Excavating Retention Basin	Excavators	1	8.00	158	0.38
Excavating Retention Basin	Rubber Tired Dozers	1	8.00	247	0.40
Excavating Retention Basin	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	59.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Excavating Retention Basin	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	176.00	71.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386
Total											**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2386**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	2.2413	2.2413	1.3000e-004	0.0000	2.2445
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**3.3182**	**3.3182**	**1.6000e-004**	**0.0000**	**3.3221**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385
Total											**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2385**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	2.2413	2.2413	1.3000e-004	0.0000	2.2445
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**3.3182**	**3.3182**	**1.6000e-004**	**0.0000**	**3.3221**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total											**0.0000**	**16.7153**	**16.7153**	**5.4100e-003**	**0.0000**	**16.8505**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.6461	0.6461	2.0000e-005	0.0000	0.6466
Total											**0.0000**	**0.6461**	**0.6461**	**2.0000e-005**	**0.0000**	**0.6466**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total											**0.0000**	**16.7153**	**16.7153**	**5.4100e-003**	**0.0000**	**16.8505**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.6461	0.6461	2.0000e-005	0.0000	0.6466
Total											**0.0000**	**0.6461**	**0.6461**	**2.0000e-005**	**0.0000**	**0.6466**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	26.0588	26.0588	8.4300e-003	0.0000	26.2694
Total											**0.0000**	**26.0588**	**26.0588**	**8.4300e-003**	**0.0000**	**26.2694**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											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
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	26.0587	26.0587	8.4300e-003	0.0000	26.2694
Total											**0.0000**	**26.0587**	**26.0587**	**8.4300e-003**	**0.0000**	**26.2694**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											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
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

3.5 Excavating Retention Basin - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	1.4771	1.4771	4.8000e-004	0.0000	1.4891
Total											**0.0000**	**1.4771**	**1.4771**	**4.8000e-004**	**0.0000**	**1.4891**

3.5 Excavating Retention Basin - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0574	0.0574	0.0000	0.0000	0.0575
Total											**0.0000**	**0.0574**	**0.0574**	**0.0000**	**0.0000**	**0.0575**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	1.4771	1.4771	4.8000e-004	0.0000	1.4891
Total											**0.0000**	**1.4771**	**1.4771**	**4.8000e-004**	**0.0000**	**1.4891**

3.5 Excavating Retention Basin - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0574	0.0574	0.0000	0.0000	0.0575
Total											**0.0000**	**0.0574**	**0.0574**	**0.0000**	**0.0000**	**0.0575**

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	245.5066	245.5066	0.0599	0.0000	247.0040
Total											**0.0000**	**245.5066**	**245.5066**	**0.0599**	**0.0000**	**247.0040**

3.6 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	203.2169	203.2169	0.0160	0.0000	203.6180
Worker											0.0000	133.9372	133.9372	3.8400e-003	0.0000	134.0331
Total											**0.0000**	**337.1541**	**337.1541**	**0.0199**	**0.0000**	**337.6511**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	245.5063	245.5063	0.0599	0.0000	247.0037
Total											**0.0000**	**245.5063**	**245.5063**	**0.0599**	**0.0000**	**247.0037**

3.6 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	203.2169	203.2169	0.0160	0.0000	203.6180
Worker											0.0000	133.9372	133.9372	3.8400e-003	0.0000	134.0331
Total											**0.0000**	**337.1541**	**337.1541**	**0.0199**	**0.0000**	**337.6511**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.8474	20.8474	5.0300e-003	0.0000	20.9731
Total											**0.0000**	**20.8474**	**20.8474**	**5.0300e-003**	**0.0000**	**20.9731**

3.6 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	17.0940	17.0940	1.3100e-003	0.0000	17.1266
Worker											0.0000	10.9767	10.9767	2.9000e-004	0.0000	10.9840
Total											**0.0000**	**28.0707**	**28.0707**	**1.6000e-003**	**0.0000**	**28.1106**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.8473	20.8473	5.0300e-003	0.0000	20.9731
Total											**0.0000**	**20.8473**	**20.8473**	**5.0300e-003**	**0.0000**	**20.9731**

3.6 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	17.0940	17.0940	1.3100e-003	0.0000	17.1266
Worker											0.0000	10.9767	10.9767	2.9000e-004	0.0000	10.9840
Total											**0.0000**	**28.0707**	**28.0707**	**1.6000e-003**	**0.0000**	**28.1106**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.7 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0395	1.0395	3.0000e-005	0.0000	1.0402
Total											**0.0000**	**1.0395**	**1.0395**	**3.0000e-005**	**0.0000**	**1.0402**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.7 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0395	1.0395	3.0000e-005	0.0000	1.0402
Total											**0.0000**	**1.0395**	**1.0395**	**3.0000e-005**	**0.0000**	**1.0402**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total											**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.8 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.4254	2.4254	6.0000e-005	0.0000	2.4270
Total											**0.0000**	**2.4254**	**2.4254**	**6.0000e-005**	**0.0000**	**2.4270**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total											**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.8 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.4254	2.4254	6.0000e-005	0.0000	2.4270
Total											**0.0000**	**2.4254**	**2.4254**	**6.0000e-005**	**0.0000**	**2.4270**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	4,440.7667	4,440.7667	1.4363	0.0000	4,476.6737
Unmitigated											0.0000	4,440.7667	4,440.7667	1.4363	0.0000	4,476.6737

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	1,285.69	1,285.69	1285.69	1,201,256	1,201,256
High Turnover (Sit Down Restaurant)	682.05	682.05	682.05	791,364	791,364
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	2,680.03	2,542.16	1235.40	3,779,178	3,779,178
Total	4,647.78	4,509.91	3,203.15	5,771,797	5,771,797

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.419110	0.063099	0.152111	0.182171	0.043370	0.007308	0.023041	0.098286	0.001486	0.001644	0.005352	0.001034	0.001989
High Turnover (Sit Down Restaurant)	0.419110	0.063099	0.152111	0.182171	0.043370	0.007308	0.023041	0.098286	0.001486	0.001644	0.005352	0.001034	0.001989
Other Non-Asphalt Surfaces	0.419110	0.063099	0.152111	0.182171	0.043370	0.007308	0.023041	0.098286	0.001486	0.001644	0.005352	0.001034	0.001989
Parking Lot	0.419110	0.063099	0.152111	0.182171	0.043370	0.007308	0.023041	0.098286	0.001486	0.001644	0.005352	0.001034	0.001989
Strip Mall	0.419110	0.063099	0.152111	0.182171	0.043370	0.007308	0.023041	0.098286	0.001486	0.001644	0.005352	0.001034	0.001989

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	277.6886	277.6886	0.0126	2.6000e-003	278.7766
Electricity Unmitigated											0.0000	277.6886	277.6886	0.0126	2.6000e-003	278.7766
NaturalGas Mitigated											0.0000	64.9380	64.9380	1.2400e-003	1.1900e-003	65.3239
NaturalGas Unmitigated											0.0000	64.9380	64.9380	1.2400e-003	1.1900e-003	65.3239

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	270119											0.0000	14.4146	14.4146	2.8000e-004	2.6000e-004	14.5003
High Turnover (Sit Down Restaurant)	602071											0.0000	32.1288	32.1288	6.2000e-004	5.9000e-004	32.3197
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	344702											0.0000	18.3946	18.3946	3.5000e-004	3.4000e-004	18.5039
Total												**0.0000**	**64.9380**	**64.9380**	**1.2500e-003**	**1.1900e-003**	**65.3239**

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	270119											0.0000	14.4146	14.4146	2.8000e-004	2.6000e-004	14.5003
High Turnover (Sit Down Restaurant)	602071											0.0000	32.1288	32.1288	6.2000e-004	5.9000e-004	32.3197
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	344702											0.0000	18.3946	18.3946	3.5000e-004	3.4000e-004	18.5039
Total												**0.0000**	**64.9380**	**64.9380**	**1.2500e-003**	**1.1900e-003**	**65.3239**

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	91293.7	26.5584	1.2000e-003	2.5000e-004	26.6625
High Turnover (Sit Down Restaurant)	203485	59.1962	2.6800e-003	5.5000e-004	59.4281
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	44142.3	12.8415	5.8000e-004	1.2000e-004	12.8918
Strip Mall	615625	179.0925	8.1000e-003	1.6800e-003	179.7942
Total		**277.6886**	**0.0126**	**2.6000e-003**	**278.7766**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	91293.7	26.5584	1.2000e-003	2.5000e-004	26.6625
High Turnover (Sit Down Restaurant)	203485	59.1962	2.6800e-003	5.5000e-004	59.4281
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	44142.3	12.8415	5.8000e-004	1.2000e-004	12.8918
Strip Mall	615625	179.0925	8.1000e-003	1.6800e-003	179.7942
Total		**277.6886**	**0.0126**	**2.6000e-003**	**278.7766**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	7.7500e-003	7.7500e-003	4.0000e-005	0.0000	8.6500e-003
Unmitigated											0.0000	7.7500e-003	7.7500e-003	4.0000e-005	0.0000	8.6500e-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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	7.7500e-003	7.7500e-003	4.0000e-005	0.0000	8.6500e-003
Total											**0.0000**	**7.7500e-003**	**7.7500e-003**	**4.0000e-005**	**0.0000**	**8.6500e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	7.7500e-003	7.7500e-003	4.0000e-005	0.0000	8.6500e-003
Total											**0.0000**	**7.7500e-003**	**7.7500e-003**	**4.0000e-005**	**0.0000**	**8.6500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.4986	0.2337	5.6400e-003	24.0217
Unmitigated	16.4986	0.2337	5.6400e-003	24.0217

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	0.828647 / 0.0528924	1.6211	0.0271	6.5000e-004	2.4915
High Turnover (Sit Down Restaurant)	1.84548 / 0.117797	3.6105	0.0603	1.4500e-003	5.5488
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.47917 / 2.74529	11.2670	0.1464	3.5400e-003	15.9814
Total		**16.4986**	**0.2337**	**5.6400e-003**	**24.0217**

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	0.828647 / 0.0528924	1.6211	0.0271	6.5000e-004	2.4915
High Turnover (Sit Down Restaurant)	1.84548 / 0.117797	3.6105	0.0603	1.4500e-003	5.5488
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.47917 / 2.74529	11.2670	0.1464	3.5400e-003	15.9814
Total		**16.4986**	**0.2337**	**5.6400e-003**	**24.0217**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	33.9584	2.0069	0.0000	84.1304
Unmitigated	33.9584	2.0069	0.0000	84.1304

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	31.45	6.3841	0.3773	0.0000	15.8163
High Turnover (Sit Down Restaurant)	72.35	14.6864	0.8679	0.0000	36.3849
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	63.49	12.8879	0.7617	0.0000	31.9292
Total		**33.9584**	**2.0069**	**0.0000**	**84.1304**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	31.45	6.3841	0.3773	0.0000	15.8163
High Turnover (Sit Down Restaurant)	72.35	14.6864	0.8679	0.0000	36.3849
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	63.49	12.8879	0.7617	0.0000	31.9292
Total		**33.9584**	**2.0069**	**0.0000**	**84.1304**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	104.7840	0.0000	0.0000	104.7840

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	148	104.7840	0.0000	0.0000	104.7840
Total		**104.7840**	**0.0000**	**0.0000**	**104.7840**

Wible-Hosking Commercial - Gas Station

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	14.75	1000sqft	0.34	14,751.00	0
Parking Lot	64.18	1000sqft	1.47	64,179.29	0
Convenience Market With Gas Pumps	5.73	1000sqft	0.13	5,726.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	7			**Operational Year**	2010
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Other Non-Asphalt Surfaces: Pedestrian pavement, landscaping, cement pads.

Demolition -

Vehicle Trips - From Traffic Study.

Sequestration -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - Low VOC paints.

Fleet Mix - Commercial development serves surrounding residential.

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	150	75
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	14,750.00	14,751.00
tblLandUse	LandUseSquareFeet	64,180.00	64,179.29
tblLandUse	LandUseSquareFeet	5,730.00	5,726.00
tblSequestration	NumberOfNewTrees	0.00	35.00
tblVehicleTrips	ST_TR	1,448.33	624.20
tblVehicleTrips	SU_TR	1,182.08	624.20
tblVehicleTrips	WD_TR	845.60	624.20

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					
2019											0.0000	281.9465	281.9465	0.0480	0.0000	283.1463
Maximum											**0.0000**	**281.9465**	**281.9465**	**0.0480**	**0.0000**	**283.1463**

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					
2019											0.0000	281.9463	281.9463	0.0480	0.0000	283.1460
Maximum											**0.0000**	**281.9463**	**281.9463**	**0.0480**	**0.0000**	**283.1460**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	1.5100e-003	1.5100e-003	1.0000e-005	0.0000	1.6500e-003
Energy											0.0000	25.2338	25.2338	1.1000e-003	2.5000e-004	25.3362
Mobile											0.0000	1,603.1986	1,603.1986	0.6343	0.0000	1,619.0565
Waste											3.4955	0.0000	3.4955	0.2066	0.0000	8.6600
Water											0.1347	0.9330	1.0676	0.0139	3.4000e-004	1.5144
Total											**3.6302**	**1,629.3669**	**1,632.9971**	**0.8559**	**5.9000e-004**	**1,654.5687**

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											0.0000	1.5100e-003	1.5100e-003	1.0000e-005	0.0000	1.6500e-003
Energy											0.0000	25.2338	25.2338	1.1000e-003	2.5000e-004	25.3362
Mobile											0.0000	1,603.1986	1,603.1986	0.6343	0.0000	1,619.0565
Waste											3.4955	0.0000	3.4955	0.2066	0.0000	8.6600
Water											0.1347	0.9330	1.0676	0.0139	3.4000e-004	1.5144
Total											**3.6302**	**1,629.3669**	**1,632.9971**	**0.8559**	**5.9000e-004**	**1,654.5687**

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

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	24.7800
Total	**24.7800**

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	1/1/2019	1/28/2019	5	20	
2	Site Preparation	Site Preparation	1/29/2019	1/30/2019	5	2	
3	Grading	Grading	1/31/2019	2/5/2019	5	4	
4	Building Construction	Building Construction	2/6/2019	11/12/2019	5	200	
5	Paving	Paving	11/13/2019	11/26/2019	5	10	
6	Architectural Coating	Architectural Coating	11/27/2019	12/10/2019	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.81

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 8,589; Non-Residential Outdoor: 2,863; Striped Parking Area: 4,736 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	35.00	14.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total											**0.0000**	**21.4161**	**21.4161**	**5.4500e-003**	**0.0000**	**21.5524**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.1537	0.1537	1.0000e-005	0.0000	0.1540
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.9631	0.9631	3.0000e-005	0.0000	0.9639
Total											**0.0000**	**1.1169**	**1.1169**	**4.0000e-005**	**0.0000**	**1.1178**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total											**0.0000**	**21.4161**	**21.4161**	**5.4500e-003**	**0.0000**	**21.5524**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.1537	0.1537	1.0000e-005	0.0000	0.1540
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.9631	0.9631	3.0000e-005	0.0000	0.9639
Total											**0.0000**	**1.1169**	**1.1169**	**4.0000e-005**	**0.0000**	**1.1178**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.5467	1.5467	4.9000e-004	0.0000	1.5589
Total											**0.0000**	**1.5467**	**1.5467**	**4.9000e-004**	**0.0000**	**1.5589**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0593	0.0593	0.0000	0.0000	0.0593
Total											**0.0000**	**0.0593**	**0.0593**	**0.0000**	**0.0000**	**0.0593**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.5467	1.5467	4.9000e-004	0.0000	1.5589
Total											**0.0000**	**1.5467**	**1.5467**	**4.9000e-004**	**0.0000**	**1.5589**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0593	0.0593	0.0000	0.0000	0.0593
Total											**0.0000**	**0.0593**	**0.0593**	**0.0000**	**0.0000**	**0.0593**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5336	2.5336	8.0000e-004	0.0000	2.5536
Total											**0.0000**	**2.5336**	**2.5336**	**8.0000e-004**	**0.0000**	**2.5536**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1185	0.1185	0.0000	0.0000	0.1186
Total											**0.0000**	**0.1185**	**0.1185**	**0.0000**	**0.0000**	**0.1186**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5336	2.5336	8.0000e-004	0.0000	2.5536
Total											**0.0000**	**2.5336**	**2.5336**	**8.0000e-004**	**0.0000**	**2.5536**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1185	0.1185	0.0000	0.0000	0.1186
Total											**0.0000**	**0.1185**	**0.1185**	**0.0000**	**0.0000**	**0.1186**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	183.0719	183.0719	0.0352	0.0000	183.9518
Total											**0.0000**	**183.0719**	**183.0719**	**0.0352**	**0.0000**	**183.9518**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	38.1255	38.1255	3.1800e-003	0.0000	38.2050
Worker											0.0000	25.9301	25.9301	8.3000e-004	0.0000	25.9508
Total											**0.0000**	**64.0556**	**64.0556**	**4.0100e-003**	**0.0000**	**64.1559**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	183.0717	183.0717	0.0352	0.0000	183.9515
Total											**0.0000**	**183.0717**	**183.0717**	**0.0352**	**0.0000**	**183.9515**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	38.1255	38.1255	3.1800e-003	0.0000	38.2050
Worker											0.0000	25.9301	25.9301	8.3000e-004	0.0000	25.9508
Total											**0.0000**	**64.0556**	**64.0556**	**4.0100e-003**	**0.0000**	**64.1559**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	6.0105	6.0105	1.8700e-003	0.0000	6.0572
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**6.0105**	**6.0105**	**1.8700e-003**	**0.0000**	**6.0572**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4816	0.4816	2.0000e-005	0.0000	0.4819
Total											**0.0000**	**0.4816**	**0.4816**	**2.0000e-005**	**0.0000**	**0.4819**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	6.0105	6.0105	1.8700e-003	0.0000	6.0572
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**6.0105**	**6.0105**	**1.8700e-003**	**0.0000**	**6.0572**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4816	0.4816	2.0000e-005	0.0000	0.4819
Total											**0.0000**	**0.4816**	**0.4816**	**2.0000e-005**	**0.0000**	**0.4819**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2793
Total											**0.0000**	**1.2766**	**1.2766**	**1.1000e-004**	**0.0000**	**1.2793**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2593	0.2593	1.0000e-005	0.0000	0.2595
Total											**0.0000**	**0.2593**	**0.2593**	**1.0000e-005**	**0.0000**	**0.2595**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2793
Total											**0.0000**	**1.2766**	**1.2766**	**1.1000e-004**	**0.0000**	**1.2793**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2593	0.2593	1.0000e-005	0.0000	0.2595
Total											**0.0000**	**0.2593**	**0.2593**	**1.0000e-005**	**0.0000**	**0.2595**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	1,603.1986	1,603.1986	0.6343	0.0000	1,619.0565
Unmitigated											0.0000	1,603.1986	1,603.1986	0.6343	0.0000	1,619.0565

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	3,576.67	3,576.67	3576.67	1,918,539	1,918,539
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	3,576.67	3,576.67	3,576.67	1,918,539	1,918,539

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.422984	0.052650	0.154628	0.194025	0.043720	0.008834	0.019253	0.089962	0.001921	0.002254	0.007059	0.001063	0.001647
Other Non-Asphalt Surfaces	0.422984	0.052650	0.154628	0.194025	0.043720	0.008834	0.019253	0.089962	0.001921	0.002254	0.007059	0.001063	0.001647
Parking Lot	0.422984	0.052650	0.154628	0.194025	0.043720	0.008834	0.019253	0.089962	0.001921	0.002254	0.007059	0.001063	0.001647

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	23.4921	23.4921	1.0600e-003	2.2000e-004	23.5842
Electricity Unmitigated											0.0000	23.4921	23.4921	1.0600e-003	2.2000e-004	23.5842
NaturalGas Mitigated											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521
NaturalGas Unmitigated											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521

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					
Convenience Market With Gas Pumps	32638.2											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**1.7417**	**1.7417**	**3.0000e-005**	**3.0000e-005**	**1.7521**

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					
Convenience Market With Gas Pumps	32638.2											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**1.7417**	**1.7417**	**3.0000e-005**	**3.0000e-005**	**1.7521**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	58290.7	16.9574	7.7000e-004	1.6000e-004	17.0239
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	22462.8	6.5347	3.0000e-004	6.0000e-005	6.5603
Total		**23.4921**	**1.0700e-003**	**2.2000e-004**	**23.5842**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	58290.7	16.9574	7.7000e-004	1.6000e-004	17.0239
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	22462.8	6.5347	3.0000e-004	6.0000e-005	6.5603
Total		**23.4921**	**1.0700e-003**	**2.2000e-004**	**23.5842**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	1.5100e-003	1.5100e-003	1.0000e-005	0.0000	1.6500e-003
Unmitigated											0.0000	1.5100e-003	1.5100e-003	1.0000e-005	0.0000	1.6500e-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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	1.5100e-003	1.5100e-003	1.0000e-005	0.0000	1.6500e-003
Total											**0.0000**	**1.5100e-003**	**1.5100e-003**	**1.0000e-005**	**0.0000**	**1.6500e-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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	1.5100e-003	1.5100e-003	1.0000e-005	0.0000	1.6500e-003
Total											**0.0000**	**1.5100e-003**	**1.5100e-003**	**1.0000e-005**	**0.0000**	**1.6500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.0676	0.0139	3.4000e-004	1.5144
Unmitigated	1.0676	0.0139	3.4000e-004	1.5144

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.424436 / 0.260138	1.0676	0.0139	3.4000e-004	1.5144
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.0676**	**0.0139**	**3.4000e-004**	**1.5144**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.424436 / 0.260138	1.0676	0.0139	3.4000e-004	1.5144
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.0676**	**0.0139**	**3.4000e-004**	**1.5144**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.4955	0.2066	0.0000	8.6600
Unmitigated	3.4955	0.2066	0.0000	8.6600

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	17.22	3.4955	0.2066	0.0000	8.6600
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**3.4955**	**0.2066**	**0.0000**	**8.6600**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	17.22	3.4955	0.2066	0.0000	8.6600
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**3.4955**	**0.2066**	**0.0000**	**8.6600**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	24.7800	0.0000	0.0000	24.7800

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	35	24.7800	0.0000	0.0000	24.7800
Total		**24.7800**	**0.0000**	**0.0000**	**24.7800**

Wible-Hosking Commercial - Remaining Buildout

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	238.33	1000sqft	5.47	238,329.00	0
Parking Lot	126.12	1000sqft	2.90	126,121.00	0
Fast Food Restaurant with Drive Thru	2.73	1000sqft	0.06	2,726.00	0
High Turnover (Sit Down Restaurant)	6.08	1000sqft	0.14	6,076.00	0
Strip Mall	60.47	1000sqft	1.39	60,474.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	7			**Operational Year**	2010
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Wible-Hosking Commercial - Remaining Buildout - San Joaquin Valley Air Basin, Annual

Project Characteristics -

Land Use - Other Non-Asphalt Surfaces: Pedestrian pavement, landscaping, cement pad.

Construction Phase - Estimated excavation required for retention basin.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Estimated equipment for excavation of retention basin.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Estimate for required equipment to excavate retention basin.

Demolition -

Vehicle Trips - Values known from Traffic Study.

Sequestration -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - Low VOC paint.

Fleet Mix - Commercial development serves surrounding residential.

Wible-Hosking Commercial - Remaining Buildout - San Joaquin Valley Air Basin, Annual

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	150	75
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	238,330.00	238,329.00
tblLandUse	LandUseSquareFeet	126,120.00	126,121.00
tblLandUse	LandUseSquareFeet	2,730.00	2,726.00
tblLandUse	LandUseSquareFeet	6,080.00	6,076.00
tblLandUse	LandUseSquareFeet	60,470.00	60,474.00
tblSequestration	NumberOfNewTrees	0.00	148.00
tblVehicleTrips	ST_TR	722.03	470.95
tblVehicleTrips	ST_TR	158.37	112.18
tblVehicleTrips	SU_TR	542.72	470.95
tblVehicleTrips	SU_TR	131.84	112.18
tblVehicleTrips	WD_TR	496.12	470.95
tblVehicleTrips	WD_TR	127.15	112.18

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020											0.0000	666.0091	666.0091	0.1039	0.0000	668.6065
2021											0.0000	74.9596	74.9596	0.0134	0.0000	75.2938
Maximum											**0.0000**	**666.0091**	**666.0091**	**0.1039**	**0.0000**	**668.6065**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020											0.0000	666.0088	666.0088	0.1039	0.0000	668.6061
2021											0.0000	74.9596	74.9596	0.0134	0.0000	75.2938
Maximum											**0.0000**	**666.0088**	**666.0088**	**0.1039**	**0.0000**	**668.6061**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	7.7500e-003	7.7500e-003	3.0000e-005	0.0000	8.4300e-003
Energy											0.0000	342.6266	342.6266	0.0138	3.7900e-003	344.1005
Mobile											0.0000	3,985.0381	3,985.0381	0.9107	0.0000	4,007.8049
Waste											33.9584	0.0000	33.9584	2.0069	0.0000	84.1304
Water											2.2694	14.2292	16.4986	0.2337	5.6400e-003	24.0217
Total											**36.2278**	**4,341.9016**	**4,378.1293**	**3.1651**	**9.4300e-003**	**4,460.0660**

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											0.0000	7.7500e-003	7.7500e-003	3.0000e-005	0.0000	8.4300e-003
Energy											0.0000	342.6266	342.6266	0.0138	3.7900e-003	344.1005
Mobile											0.0000	3,985.0381	3,985.0381	0.9107	0.0000	4,007.8049
Waste											33.9584	0.0000	33.9584	2.0069	0.0000	84.1304
Water											2.2694	14.2292	16.4986	0.2337	5.6400e-003	24.0217
Total											**36.2278**	**4,341.9016**	**4,378.1293**	**3.1651**	**9.4300e-003**	**4,460.0660**

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

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	104.7840
Total	**104.7840**

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	1/1/2020	1/28/2020	5	20	
2	Site Preparation	Site Preparation	1/29/2020	2/11/2020	5	10	
3	Grading	Grading	2/12/2020	3/10/2020	5	20	
4	Excavating Retention Basin	Trenching	2/12/2020	2/13/2020	5	2	
5	Building Construction	Building Construction	3/11/2020	1/26/2021	5	230	
6	Paving	Paving	1/27/2021	2/23/2021	5	20	
7	Architectural Coating	Architectural Coating	2/24/2021	3/23/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 8.37

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 103,914; Non-Residential Outdoor: 34,638; Striped Parking Area: 21,867 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Excavating Retention Basin	Excavators	1	8.00	158	0.38
Excavating Retention Basin	Rubber Tired Dozers	1	8.00	247	0.40
Excavating Retention Basin	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	59.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Excavating Retention Basin	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	176.00	71.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386
Total											**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2386**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	2.2413	2.2413	1.3000e-004	0.0000	2.2445
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**3.3182**	**3.3182**	**1.6000e-004**	**0.0000**	**3.3221**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385
Total											**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2385**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	2.2413	2.2413	1.3000e-004	0.0000	2.2445
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**3.3182**	**3.3182**	**1.6000e-004**	**0.0000**	**3.3221**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total											**0.0000**	**16.7153**	**16.7153**	**5.4100e-003**	**0.0000**	**16.8505**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.6461	0.6461	2.0000e-005	0.0000	0.6466
Total											**0.0000**	**0.6461**	**0.6461**	**2.0000e-005**	**0.0000**	**0.6466**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total											**0.0000**	**16.7153**	**16.7153**	**5.4100e-003**	**0.0000**	**16.8505**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.6461	0.6461	2.0000e-005	0.0000	0.6466
Total											**0.0000**	**0.6461**	**0.6461**	**2.0000e-005**	**0.0000**	**0.6466**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	26.0588	26.0588	8.4300e-003	0.0000	26.2694
Total											**0.0000**	**26.0588**	**26.0588**	**8.4300e-003**	**0.0000**	**26.2694**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											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
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	26.0587	26.0587	8.4300e-003	0.0000	26.2694
Total											**0.0000**	**26.0587**	**26.0587**	**8.4300e-003**	**0.0000**	**26.2694**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											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
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

3.5 Excavating Retention Basin - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	1.4771	1.4771	4.8000e-004	0.0000	1.4891
Total											**0.0000**	**1.4771**	**1.4771**	**4.8000e-004**	**0.0000**	**1.4891**

3.5 Excavating Retention Basin - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0574	0.0574	0.0000	0.0000	0.0575
Total											**0.0000**	**0.0574**	**0.0574**	**0.0000**	**0.0000**	**0.0575**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	1.4771	1.4771	4.8000e-004	0.0000	1.4891
Total											**0.0000**	**1.4771**	**1.4771**	**4.8000e-004**	**0.0000**	**1.4891**

3.5 Excavating Retention Basin - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0574	0.0574	0.0000	0.0000	0.0575
Total											**0.0000**	**0.0574**	**0.0574**	**0.0000**	**0.0000**	**0.0575**

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	245.5066	245.5066	0.0599	0.0000	247.0040
Total											**0.0000**	**245.5066**	**245.5066**	**0.0599**	**0.0000**	**247.0040**

3.6 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	203.2169	203.2169	0.0160	0.0000	203.6180
Worker											0.0000	133.9372	133.9372	3.8400e-003	0.0000	134.0331
Total											**0.0000**	**337.1541**	**337.1541**	**0.0199**	**0.0000**	**337.6511**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	245.5063	245.5063	0.0599	0.0000	247.0037
Total											**0.0000**	**245.5063**	**245.5063**	**0.0599**	**0.0000**	**247.0037**

3.6 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	203.2169	203.2169	0.0160	0.0000	203.6180
Worker											0.0000	133.9372	133.9372	3.8400e-003	0.0000	134.0331
Total											**0.0000**	**337.1541**	**337.1541**	**0.0199**	**0.0000**	**337.6511**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.8474	20.8474	5.0300e-003	0.0000	20.9731
Total											**0.0000**	**20.8474**	**20.8474**	**5.0300e-003**	**0.0000**	**20.9731**

3.6 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	17.0940	17.0940	1.3100e-003	0.0000	17.1266
Worker											0.0000	10.9767	10.9767	2.9000e-004	0.0000	10.9840
Total											**0.0000**	**28.0707**	**28.0707**	**1.6000e-003**	**0.0000**	**28.1106**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.8473	20.8473	5.0300e-003	0.0000	20.9731
Total											**0.0000**	**20.8473**	**20.8473**	**5.0300e-003**	**0.0000**	**20.9731**

3.6 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	17.0940	17.0940	1.3100e-003	0.0000	17.1266
Worker											0.0000	10.9767	10.9767	2.9000e-004	0.0000	10.9840
Total											**0.0000**	**28.0707**	**28.0707**	**1.6000e-003**	**0.0000**	**28.1106**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.7 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0395	1.0395	3.0000e-005	0.0000	1.0402
Total											**0.0000**	**1.0395**	**1.0395**	**3.0000e-005**	**0.0000**	**1.0402**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.7 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0395	1.0395	3.0000e-005	0.0000	1.0402
Total											**0.0000**	**1.0395**	**1.0395**	**3.0000e-005**	**0.0000**	**1.0402**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total											**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.8 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.4254	2.4254	6.0000e-005	0.0000	2.4270
Total											**0.0000**	**2.4254**	**2.4254**	**6.0000e-005**	**0.0000**	**2.4270**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total											**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.8 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.4254	2.4254	6.0000e-005	0.0000	2.4270
Total											**0.0000**	**2.4254**	**2.4254**	**6.0000e-005**	**0.0000**	**2.4270**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	3,985.0381	3,985.0381	0.9107	0.0000	4,007.8049
Unmitigated											0.0000	3,985.0381	3,985.0381	0.9107	0.0000	4,007.8049

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	1,285.69	1,285.69	1285.69	1,201,256	1,201,256
High Turnover (Sit Down Restaurant)	682.05	682.05	682.05	791,364	791,364
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	2,680.03	2,542.16	1235.40	3,779,178	3,779,178
Total	4,647.78	4,509.91	3,203.15	5,771,797	5,771,797

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.422984	0.052650	0.154628	0.194025	0.043720	0.008834	0.019253	0.089962	0.001921	0.002254	0.007059	0.001063	0.001647
High Turnover (Sit Down Restaurant)	0.422984	0.052650	0.154628	0.194025	0.043720	0.008834	0.019253	0.089962	0.001921	0.002254	0.007059	0.001063	0.001647
Other Non-Asphalt Surfaces	0.422984	0.052650	0.154628	0.194025	0.043720	0.008834	0.019253	0.089962	0.001921	0.002254	0.007059	0.001063	0.001647
Parking Lot	0.422984	0.052650	0.154628	0.194025	0.043720	0.008834	0.019253	0.089962	0.001921	0.002254	0.007059	0.001063	0.001647
Strip Mall	0.422984	0.052650	0.154628	0.194025	0.043720	0.008834	0.019253	0.089962	0.001921	0.002254	0.007059	0.001063	0.001647

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	277.6886	277.6886	0.0126	2.6000e-003	278.7766
Electricity Unmitigated											0.0000	277.6886	277.6886	0.0126	2.6000e-003	278.7766
NaturalGas Mitigated											0.0000	64.9380	64.9380	1.2400e-003	1.1900e-003	65.3239
NaturalGas Unmitigated											0.0000	64.9380	64.9380	1.2400e-003	1.1900e-003	65.3239

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	270119											0.0000	14.4146	14.4146	2.8000e-004	2.6000e-004	14.5003
High Turnover (Sit Down Restaurant)	602071											0.0000	32.1288	32.1288	6.2000e-004	5.9000e-004	32.3197
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	344702											0.0000	18.3946	18.3946	3.5000e-004	3.4000e-004	18.5039
Total												**0.0000**	**64.9380**	**64.9380**	**1.2500e-003**	**1.1900e-003**	**65.3239**

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	270119											0.0000	14.4146	14.4146	2.8000e-004	2.6000e-004	14.5003
High Turnover (Sit Down Restaurant)	602071											0.0000	32.1288	32.1288	6.2000e-004	5.9000e-004	32.3197
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	344702											0.0000	18.3946	18.3946	3.5000e-004	3.4000e-004	18.5039
Total												**0.0000**	**64.9380**	**64.9380**	**1.2500e-003**	**1.1900e-003**	**65.3239**

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	91293.7	26.5584	1.2000e-003	2.5000e-004	26.6625
High Turnover (Sit Down Restaurant)	203485	59.1962	2.6800e-003	5.5000e-004	59.4281
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	44142.3	12.8415	5.8000e-004	1.2000e-004	12.8918
Strip Mall	615625	179.0925	8.1000e-003	1.6800e-003	179.7942
Total		**277.6886**	**0.0126**	**2.6000e-003**	**278.7766**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	91293.7	26.5584	1.2000e-003	2.5000e-004	26.6625
High Turnover (Sit Down Restaurant)	203485	59.1962	2.6800e-003	5.5000e-004	59.4281
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	44142.3	12.8415	5.8000e-004	1.2000e-004	12.8918
Strip Mall	615625	179.0925	8.1000e-003	1.6800e-003	179.7942
Total		**277.6886**	**0.0126**	**2.6000e-003**	**278.7766**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	7.7500e-003	7.7500e-003	3.0000e-005	0.0000	8.4300e-003
Unmitigated											0.0000	7.7500e-003	7.7500e-003	3.0000e-005	0.0000	8.4300e-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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	7.7500e-003	7.7500e-003	3.0000e-005	0.0000	8.4300e-003
Total											**0.0000**	**7.7500e-003**	**7.7500e-003**	**3.0000e-005**	**0.0000**	**8.4300e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	7.7500e-003	7.7500e-003	3.0000e-005	0.0000	8.4300e-003
Total											**0.0000**	**7.7500e-003**	**7.7500e-003**	**3.0000e-005**	**0.0000**	**8.4300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.4986	0.2337	5.6400e-003	24.0217
Unmitigated	16.4986	0.2337	5.6400e-003	24.0217

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	0.828647 / 0.0528924	1.6211	0.0271	6.5000e-004	2.4915
High Turnover (Sit Down Restaurant)	1.84548 / 0.117797	3.6105	0.0603	1.4500e-003	5.5488
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.47917 / 2.74529	11.2670	0.1464	3.5400e-003	15.9814
Total		**16.4986**	**0.2337**	**5.6400e-003**	**24.0217**

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	0.828647 / 0.0528924	1.6211	0.0271	6.5000e-004	2.4915
High Turnover (Sit Down Restaurant)	1.84548 / 0.117797	3.6105	0.0603	1.4500e-003	5.5488
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.47917 / 2.74529	11.2670	0.1464	3.5400e-003	15.9814
Total		**16.4986**	**0.2337**	**5.6400e-003**	**24.0217**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	33.9584	2.0069	0.0000	84.1304
Unmitigated	33.9584	2.0069	0.0000	84.1304

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	31.45	6.3841	0.3773	0.0000	15.8163
High Turnover (Sit Down Restaurant)	72.35	14.6864	0.8679	0.0000	36.3849
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	63.49	12.8879	0.7617	0.0000	31.9292
Total		**33.9584**	**2.0069**	**0.0000**	**84.1304**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	31.45	6.3841	0.3773	0.0000	15.8163
High Turnover (Sit Down Restaurant)	72.35	14.6864	0.8679	0.0000	36.3849
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	63.49	12.8879	0.7617	0.0000	31.9292
Total		**33.9584**	**2.0069**	**0.0000**	**84.1304**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	104.7840	0.0000	0.0000	104.7840

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	148	104.7840	0.0000	0.0000	104.7840
Total		**104.7840**	**0.0000**	**0.0000**	**104.7840**

Wible-Hosking Commercial - Gas Station

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	14.75	1000sqft	0.34	14,751.00	0
Parking Lot	64.18	1000sqft	1.47	64,179.29	0
Convenience Market With Gas Pumps	5.73	1000sqft	0.13	5,726.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	7			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Wible-Hosking Commercial - Gas Station - San Joaquin Valley Air Basin, Annual

Project Characteristics -

Land Use - Other Non-Asphalt Surfaces: Pedestrian pavement, landscaping, cement pads.

Demolition -

Vehicle Trips - From Traffic Study.

Sequestration -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - Low VOC paints.

Fleet Mix - Commercial development serves surrounding residential.

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	150	75
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	LDA	0.50	0.54
tblFleetMix	LDA	0.50	0.54
tblFleetMix	LDA	0.50	0.54
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT1	0.03	0.20

tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.6000e-003
tblFleetMix	LHD1	0.02	1.6000e-003
tblFleetMix	LHD1	0.02	1.6000e-003
tblFleetMix	LHD2	5.6900e-003	9.0000e-004
tblFleetMix	LHD2	5.6900e-003	9.0000e-004
tblFleetMix	LHD2	5.6900e-003	9.0000e-004
tblFleetMix	MCY	5.3970e-003	2.6000e-003
tblFleetMix	MCY	5.3970e-003	2.6000e-003
tblFleetMix	MCY	5.3970e-003	2.6000e-003
tblFleetMix	MDV	0.13	0.05
tblFleetMix	MDV	0.13	0.05
tblFleetMix	MDV	0.13	0.05
tblFleetMix	MH	8.4800e-004	1.5000e-003
tblFleetMix	MH	8.4800e-004	1.5000e-003
tblFleetMix	MH	8.4800e-004	1.5000e-003
tblFleetMix	MHD	0.02	9.1000e-003
tblFleetMix	MHD	0.02	9.1000e-003
tblFleetMix	MHD	0.02	9.1000e-003
tblFleetMix	OBUS	1.7990e-003	0.00
tblFleetMix	OBUS	1.7990e-003	0.00
tblFleetMix	OBUS	1.7990e-003	0.00
tblFleetMix	SBUS	9.8700e-004	1.1000e-003
tblFleetMix	SBUS	9.8700e-004	1.1000e-003
tblFleetMix	SBUS	9.8700e-004	1.1000e-003

tblFleetMix	UBUS	1.6900e-003	4.4000e-003
tblFleetMix	UBUS	1.6900e-003	4.4000e-003
tblFleetMix	UBUS	1.6900e-003	4.4000e-003
tblLandUse	LandUseSquareFeet	14,750.00	14,751.00
tblLandUse	LandUseSquareFeet	64,180.00	64,179.29
tblLandUse	LandUseSquareFeet	5,730.00	5,726.00
tblSequestration	NumberOfNewTrees	0.00	35.00
tblVehicleTrips	ST_TR	1,448.33	624.20
tblVehicleTrips	SU_TR	1,182.08	624.20
tblVehicleTrips	WD_TR	845.60	624.20

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					
2019											0.0000	281.9465	281.9465	0.0480	0.0000	283.1463
Maximum											**0.0000**	**281.9465**	**281.9465**	**0.0480**	**0.0000**	**283.1463**

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					
2019											0.0000	281.9463	281.9463	0.0480	0.0000	283.1460
Maximum											**0.0000**	**281.9463**	**281.9463**	**0.0480**	**0.0000**	**283.1460**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Energy											0.0000	25.2338	25.2338	1.1000e-003	2.5000e-004	25.3362
Mobile											0.0000	965.2203	965.2203	0.1008	0.0000	967.7403
Waste											3.4955	0.0000	3.4955	0.2066	0.0000	8.6600
Water											0.1347	0.9330	1.0676	0.0139	3.4000e-004	1.5144
Total											**3.6302**	**991.3886**	**995.0187**	**0.3224**	**5.9000e-004**	**1,003.2525**

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											0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Energy											0.0000	25.2338	25.2338	1.1000e-003	2.5000e-004	25.3362
Mobile											0.0000	965.2203	965.2203	0.1008	0.0000	967.7403
Waste											3.4955	0.0000	3.4955	0.2066	0.0000	8.6600
Water											0.1347	0.9330	1.0676	0.0139	3.4000e-004	1.5144
Total											**3.6302**	**991.3886**	**995.0187**	**0.3224**	**5.9000e-004**	**1,003.2525**

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

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	24.7800
Total	**24.7800**

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	1/1/2019	1/28/2019	5	20	
2	Site Preparation	Site Preparation	1/29/2019	1/30/2019	5	2	
3	Grading	Grading	1/31/2019	2/5/2019	5	4	
4	Building Construction	Building Construction	2/6/2019	11/12/2019	5	200	
5	Paving	Paving	11/13/2019	11/26/2019	5	10	
6	Architectural Coating	Architectural Coating	11/27/2019	12/10/2019	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.81

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 8,589; Non-Residential Outdoor: 2,863; Striped Parking Area: 4,736 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	35.00	14.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total											**0.0000**	**21.4161**	**21.4161**	**5.4500e-003**	**0.0000**	**21.5524**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.1537	0.1537	1.0000e-005	0.0000	0.1540
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.9631	0.9631	3.0000e-005	0.0000	0.9639
Total											**0.0000**	**1.1169**	**1.1169**	**4.0000e-005**	**0.0000**	**1.1178**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total											**0.0000**	**21.4161**	**21.4161**	**5.4500e-003**	**0.0000**	**21.5524**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.1537	0.1537	1.0000e-005	0.0000	0.1540
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.9631	0.9631	3.0000e-005	0.0000	0.9639
Total											**0.0000**	**1.1169**	**1.1169**	**4.0000e-005**	**0.0000**	**1.1178**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.5467	1.5467	4.9000e-004	0.0000	1.5589
Total											**0.0000**	**1.5467**	**1.5467**	**4.9000e-004**	**0.0000**	**1.5589**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0593	0.0593	0.0000	0.0000	0.0593
Total											**0.0000**	**0.0593**	**0.0593**	**0.0000**	**0.0000**	**0.0593**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.5467	1.5467	4.9000e-004	0.0000	1.5589
Total											**0.0000**	**1.5467**	**1.5467**	**4.9000e-004**	**0.0000**	**1.5589**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0593	0.0593	0.0000	0.0000	0.0593
Total											**0.0000**	**0.0593**	**0.0593**	**0.0000**	**0.0000**	**0.0593**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5336	2.5336	8.0000e-004	0.0000	2.5536
Total											**0.0000**	**2.5336**	**2.5336**	**8.0000e-004**	**0.0000**	**2.5536**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1185	0.1185	0.0000	0.0000	0.1186
Total											**0.0000**	**0.1185**	**0.1185**	**0.0000**	**0.0000**	**0.1186**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5336	2.5336	8.0000e-004	0.0000	2.5536
Total											**0.0000**	**2.5336**	**2.5336**	**8.0000e-004**	**0.0000**	**2.5536**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1185	0.1185	0.0000	0.0000	0.1186
Total											**0.0000**	**0.1185**	**0.1185**	**0.0000**	**0.0000**	**0.1186**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	183.0719	183.0719	0.0352	0.0000	183.9518
Total											**0.0000**	**183.0719**	**183.0719**	**0.0352**	**0.0000**	**183.9518**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	38.1255	38.1255	3.1800e-003	0.0000	38.2050
Worker											0.0000	25.9301	25.9301	8.3000e-004	0.0000	25.9508
Total											**0.0000**	**64.0556**	**64.0556**	**4.0100e-003**	**0.0000**	**64.1559**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	183.0717	183.0717	0.0352	0.0000	183.9515
Total											**0.0000**	**183.0717**	**183.0717**	**0.0352**	**0.0000**	**183.9515**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	38.1255	38.1255	3.1800e-003	0.0000	38.2050
Worker											0.0000	25.9301	25.9301	8.3000e-004	0.0000	25.9508
Total											**0.0000**	**64.0556**	**64.0556**	**4.0100e-003**	**0.0000**	**64.1559**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	6.0105	6.0105	1.8700e-003	0.0000	6.0572
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**6.0105**	**6.0105**	**1.8700e-003**	**0.0000**	**6.0572**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4816	0.4816	2.0000e-005	0.0000	0.4819
Total											**0.0000**	**0.4816**	**0.4816**	**2.0000e-005**	**0.0000**	**0.4819**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	6.0105	6.0105	1.8700e-003	0.0000	6.0572
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**6.0105**	**6.0105**	**1.8700e-003**	**0.0000**	**6.0572**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4816	0.4816	2.0000e-005	0.0000	0.4819
Total											**0.0000**	**0.4816**	**0.4816**	**2.0000e-005**	**0.0000**	**0.4819**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2793
Total											**0.0000**	**1.2766**	**1.2766**	**1.1000e-004**	**0.0000**	**1.2793**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2593	0.2593	1.0000e-005	0.0000	0.2595
Total											**0.0000**	**0.2593**	**0.2593**	**1.0000e-005**	**0.0000**	**0.2595**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2793
Total											**0.0000**	**1.2766**	**1.2766**	**1.1000e-004**	**0.0000**	**1.2793**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2593	0.2593	1.0000e-005	0.0000	0.2595
Total											**0.0000**	**0.2593**	**0.2593**	**1.0000e-005**	**0.0000**	**0.2595**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	965.2203	965.2203	0.1008	0.0000	967.7403
Unmitigated											0.0000	965.2203	965.2203	0.1008	0.0000	967.7403

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	3,576.67	3,576.67	3576.67	1,918,539	1,918,539
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	3,576.67	3,576.67	3,576.67	1,918,539	1,918,539

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100	0.001500
Other Non-Asphalt Surfaces	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100	0.001500
Parking Lot	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100	0.001500

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	23.4921	23.4921	1.0600e-003	2.2000e-004	23.5842
Electricity Unmitigated											0.0000	23.4921	23.4921	1.0600e-003	2.2000e-004	23.5842
NaturalGas Mitigated											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521
NaturalGas Unmitigated											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521

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					
Convenience Market With Gas Pumps	32638.2											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**1.7417**	**1.7417**	**3.0000e-005**	**3.0000e-005**	**1.7521**

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					
Convenience Market With Gas Pumps	32638.2											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**1.7417**	**1.7417**	**3.0000e-005**	**3.0000e-005**	**1.7521**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	58290.7	16.9574	7.7000e-004	1.6000e-004	17.0239
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	22462.8	6.5347	3.0000e-004	6.0000e-005	6.5603
Total		**23.4921**	**1.0700e-003**	**2.2000e-004**	**23.5842**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	58290.7	16.9574	7.7000e-004	1.6000e-004	17.0239
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	22462.8	6.5347	3.0000e-004	6.0000e-005	6.5603
Total		**23.4921**	**1.0700e-003**	**2.2000e-004**	**23.5842**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Unmitigated											0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Total											**0.0000**	**1.5100e-003**	**1.5100e-003**	**0.0000**	**0.0000**	**1.6100e-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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Total											**0.0000**	**1.5100e-003**	**1.5100e-003**	**0.0000**	**0.0000**	**1.6100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.0676	0.0139	3.4000e-004	1.5144
Unmitigated	1.0676	0.0139	3.4000e-004	1.5144

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.424436 / 0.260138	1.0676	0.0139	3.4000e-004	1.5144
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.0676**	**0.0139**	**3.4000e-004**	**1.5144**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.424436 / 0.260138	1.0676	0.0139	3.4000e-004	1.5144
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.0676**	**0.0139**	**3.4000e-004**	**1.5144**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.4955	0.2066	0.0000	8.6600
Unmitigated	3.4955	0.2066	0.0000	8.6600

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	17.22	3.4955	0.2066	0.0000	8.6600
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**3.4955**	**0.2066**	**0.0000**	**8.6600**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	17.22	3.4955	0.2066	0.0000	8.6600
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**3.4955**	**0.2066**	**0.0000**	**8.6600**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	24.7800	0.0000	0.0000	24.7800

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	35	24.7800	0.0000	0.0000	24.7800
Total		**24.7800**	**0.0000**	**0.0000**	**24.7800**

Wible-Hosking Commercial - Remaining Buildout

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	238.33	1000sqft	5.47	238,329.00	0
Parking Lot	126.12	1000sqft	2.90	126,121.00	0
Fast Food Restaurant with Drive Thru	2.73	1000sqft	0.06	2,726.00	0
High Turnover (Sit Down Restaurant)	6.08	1000sqft	0.14	6,076.00	0
Strip Mall	60.47	1000sqft	1.39	60,474.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	7			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Wible-Hosking Commercial - Remaining Buildout - San Joaquin Valley Air Basin, Annual

Project Characteristics -

Land Use - Other Non-Asphalt Surfaces: Pedestrian pavement, landscaping, cement pad.

Construction Phase - Estimated excavation required for retention basin.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Estimated equipment for excavation of retention basin.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Estimate for required equipment to excavate retention basin.

Demolition -

Vehicle Trips - Values known from Traffic Study.

Sequestration -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - Low VOC paint.

Fleet Mix - Commercial development serves surrounding residential.

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	150	75
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.11	0.02

tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	LDA	0.50	0.54
tblFleetMix	LDA	0.50	0.54
tblFleetMix	LDA	0.50	0.54
tblFleetMix	LDA	0.50	0.54
tblFleetMix	LDA	0.50	0.54
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.6000e-003
tblFleetMix	LHD1	0.02	1.6000e-003
tblFleetMix	LHD1	0.02	1.6000e-003
tblFleetMix	LHD1	0.02	1.6000e-003
tblFleetMix	LHD1	0.02	1.6000e-003
tblFleetMix	LHD2	5.6900e-003	9.0000e-004
tblFleetMix	LHD2	5.6900e-003	9.0000e-004
tblFleetMix	LHD2	5.6900e-003	9.0000e-004

tblFleetMix	LHD2	5.6900e-003	9.0000e-004
tblFleetMix	LHD2	5.6900e-003	9.0000e-004
tblFleetMix	MCY	5.3970e-003	2.6000e-003
tblFleetMix	MCY	5.3970e-003	2.6000e-003
tblFleetMix	MCY	5.3970e-003	2.6000e-003
tblFleetMix	MCY	5.3970e-003	2.6000e-003
tblFleetMix	MCY	5.3970e-003	2.6000e-003
tblFleetMix	MDV	0.13	0.05
tblFleetMix	MDV	0.13	0.05
tblFleetMix	MDV	0.13	0.05
tblFleetMix	MDV	0.13	0.05
tblFleetMix	MDV	0.13	0.05
tblFleetMix	MH	8.4800e-004	1.5000e-003
tblFleetMix	MH	8.4800e-004	1.5000e-003
tblFleetMix	MH	8.4800e-004	1.5000e-003
tblFleetMix	MH	8.4800e-004	1.5000e-003
tblFleetMix	MH	8.4800e-004	1.5000e-003
tblFleetMix	MHD	0.02	9.1000e-003
tblFleetMix	MHD	0.02	9.1000e-003
tblFleetMix	MHD	0.02	9.1000e-003
tblFleetMix	MHD	0.02	9.1000e-003
tblFleetMix	MHD	0.02	9.1000e-003
tblFleetMix	OBUS	1.7990e-003	0.00
tblFleetMix	OBUS	1.7990e-003	0.00
tblFleetMix	OBUS	1.7990e-003	0.00
tblFleetMix	OBUS	1.7990e-003	0.00
tblFleetMix	OBUS	1.7990e-003	0.00

tblFleetMix	SBUS	9.8700e-004	1.1000e-003
tblFleetMix	SBUS	9.8700e-004	1.1000e-003
tblFleetMix	SBUS	9.8700e-004	1.1000e-003
tblFleetMix	SBUS	9.8700e-004	1.1000e-003
tblFleetMix	SBUS	9.8700e-004	1.1000e-003
tblFleetMix	UBUS	1.6900e-003	4.4000e-003
tblFleetMix	UBUS	1.6900e-003	4.4000e-003
tblFleetMix	UBUS	1.6900e-003	4.4000e-003
tblFleetMix	UBUS	1.6900e-003	4.4000e-003
tblFleetMix	UBUS	1.6900e-003	4.4000e-003
tblLandUse	LandUseSquareFeet	238,330.00	238,329.00
tblLandUse	LandUseSquareFeet	126,120.00	126,121.00
tblLandUse	LandUseSquareFeet	2,730.00	2,726.00
tblLandUse	LandUseSquareFeet	6,080.00	6,076.00
tblLandUse	LandUseSquareFeet	60,470.00	60,474.00
tblSequestration	NumberOfNewTrees	0.00	148.00
tblVehicleTrips	ST_TR	722.03	470.95
tblVehicleTrips	ST_TR	158.37	112.18
tblVehicleTrips	SU_TR	542.72	470.95
tblVehicleTrips	SU_TR	131.84	112.18
tblVehicleTrips	WD_TR	496.12	470.95
tblVehicleTrips	WD_TR	127.15	112.18

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020											0.0000	666.0091	666.0091	0.1039	0.0000	668.6065
2021											0.0000	74.9596	74.9596	0.0134	0.0000	75.2938
Maximum											**0.0000**	**666.0091**	**666.0091**	**0.1039**	**0.0000**	**668.6065**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020											0.0000	666.0088	666.0088	0.1039	0.0000	668.6061
2021											0.0000	74.9596	74.9596	0.0134	0.0000	75.2938
Maximum											**0.0000**	**666.0088**	**666.0088**	**0.1039**	**0.0000**	**668.6061**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2700e-003
Energy											0.0000	342.6266	342.6266	0.0138	3.7900e-003	344.1005
Mobile											0.0000	2,451.1290	2,451.1290	0.1809	0.0000	2,455.6504
Waste											33.9584	0.0000	33.9584	2.0069	0.0000	84.1304
Water											2.2694	14.2292	16.4986	0.2337	5.6400e-003	24.0217
Total											**36.2278**	**2,807.9925**	**2,844.2203**	**2.4353**	**9.4300e-003**	**2,907.9113**

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											0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2700e-003
Energy											0.0000	342.6266	342.6266	0.0138	3.7900e-003	344.1005
Mobile											0.0000	2,451.1290	2,451.1290	0.1809	0.0000	2,455.6504
Waste											33.9584	0.0000	33.9584	2.0069	0.0000	84.1304
Water											2.2694	14.2292	16.4986	0.2337	5.6400e-003	24.0217
Total											**36.2278**	**2,807.9925**	**2,844.2203**	**2.4353**	**9.4300e-003**	**2,907.9113**

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

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	104.7840
Total	**104.7840**

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	1/1/2020	1/28/2020	5	20	
2	Site Preparation	Site Preparation	1/29/2020	2/11/2020	5	10	
3	Grading	Grading	2/12/2020	3/10/2020	5	20	
4	Excavating Retention Basin	Trenching	2/12/2020	2/13/2020	5	2	
5	Building Construction	Building Construction	3/11/2020	1/26/2021	5	230	
6	Paving	Paving	1/27/2021	2/23/2021	5	20	
7	Architectural Coating	Architectural Coating	2/24/2021	3/23/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 8.37

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 103,914; Non-Residential Outdoor: 34,638; Striped Parking Area: 21,867 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Excavating Retention Basin	Excavators	1	8.00	158	0.38
Excavating Retention Basin	Rubber Tired Dozers	1	8.00	247	0.40
Excavating Retention Basin	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	59.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Excavating Retention Basin	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	176.00	71.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386
Total											**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2386**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	2.2413	2.2413	1.3000e-004	0.0000	2.2445
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**3.3182**	**3.3182**	**1.6000e-004**	**0.0000**	**3.3221**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385
Total											**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2385**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	2.2413	2.2413	1.3000e-004	0.0000	2.2445
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**3.3182**	**3.3182**	**1.6000e-004**	**0.0000**	**3.3221**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total											**0.0000**	**16.7153**	**16.7153**	**5.4100e-003**	**0.0000**	**16.8505**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.6461	0.6461	2.0000e-005	0.0000	0.6466
Total											**0.0000**	**0.6461**	**0.6461**	**2.0000e-005**	**0.0000**	**0.6466**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total											**0.0000**	**16.7153**	**16.7153**	**5.4100e-003**	**0.0000**	**16.8505**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.6461	0.6461	2.0000e-005	0.0000	0.6466
Total											**0.0000**	**0.6461**	**0.6461**	**2.0000e-005**	**0.0000**	**0.6466**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	26.0588	26.0588	8.4300e-003	0.0000	26.2694
Total											**0.0000**	**26.0588**	**26.0588**	**8.4300e-003**	**0.0000**	**26.2694**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											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
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	26.0587	26.0587	8.4300e-003	0.0000	26.2694
Total											**0.0000**	**26.0587**	**26.0587**	**8.4300e-003**	**0.0000**	**26.2694**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											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
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

3.5 Excavating Retention Basin - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	1.4771	1.4771	4.8000e-004	0.0000	1.4891
Total											**0.0000**	**1.4771**	**1.4771**	**4.8000e-004**	**0.0000**	**1.4891**

3.5 Excavating Retention Basin - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0574	0.0574	0.0000	0.0000	0.0575
Total											**0.0000**	**0.0574**	**0.0574**	**0.0000**	**0.0000**	**0.0575**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	1.4771	1.4771	4.8000e-004	0.0000	1.4891
Total											**0.0000**	**1.4771**	**1.4771**	**4.8000e-004**	**0.0000**	**1.4891**

3.5 Excavating Retention Basin - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0574	0.0574	0.0000	0.0000	0.0575
Total											**0.0000**	**0.0574**	**0.0574**	**0.0000**	**0.0000**	**0.0575**

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	245.5066	245.5066	0.0599	0.0000	247.0040
Total											**0.0000**	**245.5066**	**245.5066**	**0.0599**	**0.0000**	**247.0040**

3.6 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	203.2169	203.2169	0.0160	0.0000	203.6180
Worker											0.0000	133.9372	133.9372	3.8400e-003	0.0000	134.0331
Total											**0.0000**	**337.1541**	**337.1541**	**0.0199**	**0.0000**	**337.6511**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	245.5063	245.5063	0.0599	0.0000	247.0037
Total											**0.0000**	**245.5063**	**245.5063**	**0.0599**	**0.0000**	**247.0037**

3.6 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	203.2169	203.2169	0.0160	0.0000	203.6180
Worker											0.0000	133.9372	133.9372	3.8400e-003	0.0000	134.0331
Total											**0.0000**	**337.1541**	**337.1541**	**0.0199**	**0.0000**	**337.6511**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.8474	20.8474	5.0300e-003	0.0000	20.9731
Total											**0.0000**	**20.8474**	**20.8474**	**5.0300e-003**	**0.0000**	**20.9731**

3.6 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	17.0940	17.0940	1.3100e-003	0.0000	17.1266
Worker											0.0000	10.9767	10.9767	2.9000e-004	0.0000	10.9840
Total											**0.0000**	**28.0707**	**28.0707**	**1.6000e-003**	**0.0000**	**28.1106**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.8473	20.8473	5.0300e-003	0.0000	20.9731
Total											**0.0000**	**20.8473**	**20.8473**	**5.0300e-003**	**0.0000**	**20.9731**

3.6 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	17.0940	17.0940	1.3100e-003	0.0000	17.1266
Worker											0.0000	10.9767	10.9767	2.9000e-004	0.0000	10.9840
Total											**0.0000**	**28.0707**	**28.0707**	**1.6000e-003**	**0.0000**	**28.1106**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.7 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0395	1.0395	3.0000e-005	0.0000	1.0402
Total											**0.0000**	**1.0395**	**1.0395**	**3.0000e-005**	**0.0000**	**1.0402**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.7 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0395	1.0395	3.0000e-005	0.0000	1.0402
Total											**0.0000**	**1.0395**	**1.0395**	**3.0000e-005**	**0.0000**	**1.0402**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total											**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.8 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.4254	2.4254	6.0000e-005	0.0000	2.4270
Total											**0.0000**	**2.4254**	**2.4254**	**6.0000e-005**	**0.0000**	**2.4270**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total											**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.8 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.4254	2.4254	6.0000e-005	0.0000	2.4270
Total											**0.0000**	**2.4254**	**2.4254**	**6.0000e-005**	**0.0000**	**2.4270**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	2,451.1290	2,451.1290	0.1809	0.0000	2,455.6504
Unmitigated											0.0000	2,451.1290	2,451.1290	0.1809	0.0000	2,455.6504

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	1,285.69	1,285.69	1285.69	1,201,256	1,201,256
High Turnover (Sit Down Restaurant)	682.05	682.05	682.05	791,364	791,364
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	2,680.03	2,542.16	1235.40	3,779,178	3,779,178
Total	4,647.78	4,509.91	3,203.15	5,771,797	5,771,797

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100	0.001500
High Turnover (Sit Down Restaurant)	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100	0.001500
Other Non-Asphalt Surfaces	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100	0.001500
Parking Lot	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100	0.001500
Strip Mall	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100	0.001500

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	277.6886	277.6886	0.0126	2.6000e-003	278.7766
Electricity Unmitigated											0.0000	277.6886	277.6886	0.0126	2.6000e-003	278.7766
NaturalGas Mitigated											0.0000	64.9380	64.9380	1.2400e-003	1.1900e-003	65.3239
NaturalGas Unmitigated											0.0000	64.9380	64.9380	1.2400e-003	1.1900e-003	65.3239

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	270119											0.0000	14.4146	14.4146	2.8000e-004	2.6000e-004	14.5003
High Turnover (Sit Down Restaurant)	602071											0.0000	32.1288	32.1288	6.2000e-004	5.9000e-004	32.3197
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	344702											0.0000	18.3946	18.3946	3.5000e-004	3.4000e-004	18.5039
Total												**0.0000**	**64.9380**	**64.9380**	**1.2500e-003**	**1.1900e-003**	**65.3239**

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	270119											0.0000	14.4146	14.4146	2.8000e-004	2.6000e-004	14.5003
High Turnover (Sit Down Restaurant)	602071											0.0000	32.1288	32.1288	6.2000e-004	5.9000e-004	32.3197
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	344702											0.0000	18.3946	18.3946	3.5000e-004	3.4000e-004	18.5039
Total												**0.0000**	**64.9380**	**64.9380**	**1.2500e-003**	**1.1900e-003**	**65.3239**

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	91293.7	26.5584	1.2000e-003	2.5000e-004	26.6625
High Turnover (Sit Down Restaurant)	203485	59.1962	2.6800e-003	5.5000e-004	59.4281
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	44142.3	12.8415	5.8000e-004	1.2000e-004	12.8918
Strip Mall	615625	179.0925	8.1000e-003	1.6800e-003	179.7942
Total		**277.6886**	**0.0126**	**2.6000e-003**	**278.7766**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	91293.7	26.5584	1.2000e-003	2.5000e-004	26.6625
High Turnover (Sit Down Restaurant)	203485	59.1962	2.6800e-003	5.5000e-004	59.4281
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	44142.3	12.8415	5.8000e-004	1.2000e-004	12.8918
Strip Mall	615625	179.0925	8.1000e-003	1.6800e-003	179.7942
Total		**277.6886**	**0.0126**	**2.6000e-003**	**278.7766**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2700e-003
Unmitigated											0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2700e-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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2700e-003
Total											**0.0000**	**7.7500e-003**	**7.7500e-003**	**2.0000e-005**	**0.0000**	**8.2700e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2700e-003
Total											**0.0000**	**7.7500e-003**	**7.7500e-003**	**2.0000e-005**	**0.0000**	**8.2700e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.4986	0.2337	5.6400e-003	24.0217
Unmitigated	16.4986	0.2337	5.6400e-003	24.0217

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	0.828647 / 0.0528924	1.6211	0.0271	6.5000e-004	2.4915
High Turnover (Sit Down Restaurant)	1.84548 / 0.117797	3.6105	0.0603	1.4500e-003	5.5488
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.47917 / 2.74529	11.2670	0.1464	3.5400e-003	15.9814
Total		**16.4986**	**0.2337**	**5.6400e-003**	**24.0217**

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	0.828647 / 0.0528924	1.6211	0.0271	6.5000e-004	2.4915
High Turnover (Sit Down Restaurant)	1.84548 / 0.117797	3.6105	0.0603	1.4500e-003	5.5488
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.47917 / 2.74529	11.2670	0.1464	3.5400e-003	15.9814
Total		**16.4986**	**0.2337**	**5.6400e-003**	**24.0217**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	33.9584	2.0069	0.0000	84.1304
Unmitigated	33.9584	2.0069	0.0000	84.1304

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	31.45	6.3841	0.3773	0.0000	15.8163
High Turnover (Sit Down Restaurant)	72.35	14.6864	0.8679	0.0000	36.3849
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	63.49	12.8879	0.7617	0.0000	31.9292
Total		**33.9584**	**2.0069**	**0.0000**	**84.1304**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	31.45	6.3841	0.3773	0.0000	15.8163
High Turnover (Sit Down Restaurant)	72.35	14.6864	0.8679	0.0000	36.3849
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	63.49	12.8879	0.7617	0.0000	31.9292
Total		**33.9584**	**2.0069**	**0.0000**	**84.1304**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	104.7840	0.0000	0.0000	104.7840

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	148	104.7840	0.0000	0.0000	104.7840
Total		**104.7840**	**0.0000**	**0.0000**	**104.7840**

Wible-Hosking Commercial - Gas Station

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	14.75	1000sqft	0.34	14,751.00	0
Parking Lot	64.18	1000sqft	1.47	64,179.29	0
Convenience Market With Gas Pumps	5.73	1000sqft	0.13	5,726.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	7			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use - Other Non-Asphalt Surfaces: Pedestrian pavement, landscaping, cement pads.

Demolition -

Vehicle Trips - From Traffic Study.

Sequestration -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - Low VOC paints.

Fleet Mix - Commercial development serves surrounding residential.

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	150	75
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	LDA	0.54	0.51
tblFleetMix	LDA	0.54	0.51
tblFleetMix	LDA	0.54	0.51
tblFleetMix	LDT1	0.03	0.22
tblFleetMix	LDT1	0.03	0.22
tblFleetMix	LDT1	0.03	0.22

tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LHD1	0.01	8.0000e-004
tblFleetMix	LHD1	0.01	8.0000e-004
tblFleetMix	LHD1	0.01	8.0000e-004
tblFleetMix	LHD2	3.7490e-003	1.0000e-003
tblFleetMix	LHD2	3.7490e-003	1.0000e-003
tblFleetMix	LHD2	3.7490e-003	1.0000e-003
tblFleetMix	MCY	4.7940e-003	2.5000e-003
tblFleetMix	MCY	4.7940e-003	2.5000e-003
tblFleetMix	MCY	4.7940e-003	2.5000e-003
tblFleetMix	MDV	0.10	0.06
tblFleetMix	MDV	0.10	0.06
tblFleetMix	MDV	0.10	0.06
tblFleetMix	MH	5.0000e-004	3.0000e-003
tblFleetMix	MH	5.0000e-004	3.0000e-003
tblFleetMix	MH	5.0000e-004	3.0000e-003
tblFleetMix	MHD	0.02	7.4000e-003
tblFleetMix	MHD	0.02	7.4000e-003
tblFleetMix	MHD	0.02	7.4000e-003
tblFleetMix	OBUS	1.7370e-003	0.00
tblFleetMix	OBUS	1.7370e-003	0.00
tblFleetMix	OBUS	1.7370e-003	0.00
tblFleetMix	SBUS	8.5500e-004	1.2000e-003
tblFleetMix	SBUS	8.5500e-004	1.2000e-003
tblFleetMix	SBUS	8.5500e-004	1.2000e-003

tblFleetMix	UBUS	1.2540e-003	4.4000e-003
tblFleetMix	UBUS	1.2540e-003	4.4000e-003
tblFleetMix	UBUS	1.2540e-003	4.4000e-003
tblLandUse	LandUseSquareFeet	14,750.00	14,751.00
tblLandUse	LandUseSquareFeet	64,180.00	64,179.29
tblLandUse	LandUseSquareFeet	5,730.00	5,726.00
tblSequestration	NumberOfNewTrees	0.00	35.00
tblVehicleTrips	ST_TR	1,448.33	624.20
tblVehicleTrips	SU_TR	1,182.08	624.20
tblVehicleTrips	WD_TR	845.60	624.20

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					
2019											0.0000	281.9465	281.9465	0.0480	0.0000	283.1463
Maximum											**0.0000**	**281.9465**	**281.9465**	**0.0480**	**0.0000**	**283.1463**

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					
2019											0.0000	281.9463	281.9463	0.0480	0.0000	283.1460
Maximum											**0.0000**	**281.9463**	**281.9463**	**0.0480**	**0.0000**	**283.1460**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Energy											0.0000	25.2338	25.2338	1.1000e-003	2.5000e-004	25.3362
Mobile											0.0000	710.3532	710.3532	0.0545	0.0000	711.7155
Waste											3.4955	0.0000	3.4955	0.2066	0.0000	8.6600
Water											0.1347	0.9330	1.0676	0.0139	3.4000e-004	1.5144
Total											**3.6302**	**736.5215**	**740.1517**	**0.2760**	**5.9000e-004**	**747.2276**

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											0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Energy											0.0000	25.2338	25.2338	1.1000e-003	2.5000e-004	25.3362
Mobile											0.0000	710.3532	710.3532	0.0545	0.0000	711.7155
Waste											3.4955	0.0000	3.4955	0.2066	0.0000	8.6600
Water											0.1347	0.9330	1.0676	0.0139	3.4000e-004	1.5144
Total											**3.6302**	**736.5215**	**740.1517**	**0.2760**	**5.9000e-004**	**747.2276**

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

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	24.7800
Total	**24.7800**

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	1/1/2019	1/28/2019	5	20	
2	Site Preparation	Site Preparation	1/29/2019	1/30/2019	5	2	
3	Grading	Grading	1/31/2019	2/5/2019	5	4	
4	Building Construction	Building Construction	2/6/2019	11/12/2019	5	200	
5	Paving	Paving	11/13/2019	11/26/2019	5	10	
6	Architectural Coating	Architectural Coating	11/27/2019	12/10/2019	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.81

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 8,589; Non-Residential Outdoor: 2,863; Striped Parking Area: 4,736 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	35.00	14.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total											**0.0000**	**21.4161**	**21.4161**	**5.4500e-003**	**0.0000**	**21.5524**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.1537	0.1537	1.0000e-005	0.0000	0.1540
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.9631	0.9631	3.0000e-005	0.0000	0.9639
Total											**0.0000**	**1.1169**	**1.1169**	**4.0000e-005**	**0.0000**	**1.1178**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total											**0.0000**	**21.4161**	**21.4161**	**5.4500e-003**	**0.0000**	**21.5524**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.1537	0.1537	1.0000e-005	0.0000	0.1540
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.9631	0.9631	3.0000e-005	0.0000	0.9639
Total											**0.0000**	**1.1169**	**1.1169**	**4.0000e-005**	**0.0000**	**1.1178**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.5467	1.5467	4.9000e-004	0.0000	1.5589
Total											**0.0000**	**1.5467**	**1.5467**	**4.9000e-004**	**0.0000**	**1.5589**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0593	0.0593	0.0000	0.0000	0.0593
Total											**0.0000**	**0.0593**	**0.0593**	**0.0000**	**0.0000**	**0.0593**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.5467	1.5467	4.9000e-004	0.0000	1.5589
Total											**0.0000**	**1.5467**	**1.5467**	**4.9000e-004**	**0.0000**	**1.5589**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0593	0.0593	0.0000	0.0000	0.0593
Total											**0.0000**	**0.0593**	**0.0593**	**0.0000**	**0.0000**	**0.0593**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5336	2.5336	8.0000e-004	0.0000	2.5536
Total											**0.0000**	**2.5336**	**2.5336**	**8.0000e-004**	**0.0000**	**2.5536**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1185	0.1185	0.0000	0.0000	0.1186
Total											**0.0000**	**0.1185**	**0.1185**	**0.0000**	**0.0000**	**0.1186**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5336	2.5336	8.0000e-004	0.0000	2.5536
Total											**0.0000**	**2.5336**	**2.5336**	**8.0000e-004**	**0.0000**	**2.5536**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1185	0.1185	0.0000	0.0000	0.1186
Total											**0.0000**	**0.1185**	**0.1185**	**0.0000**	**0.0000**	**0.1186**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	183.0719	183.0719	0.0352	0.0000	183.9518
Total											**0.0000**	**183.0719**	**183.0719**	**0.0352**	**0.0000**	**183.9518**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	38.1255	38.1255	3.1800e-003	0.0000	38.2050
Worker											0.0000	25.9301	25.9301	8.3000e-004	0.0000	25.9508
Total											**0.0000**	**64.0556**	**64.0556**	**4.0100e-003**	**0.0000**	**64.1559**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	183.0717	183.0717	0.0352	0.0000	183.9515
Total											**0.0000**	**183.0717**	**183.0717**	**0.0352**	**0.0000**	**183.9515**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	38.1255	38.1255	3.1800e-003	0.0000	38.2050
Worker											0.0000	25.9301	25.9301	8.3000e-004	0.0000	25.9508
Total											**0.0000**	**64.0556**	**64.0556**	**4.0100e-003**	**0.0000**	**64.1559**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	6.0105	6.0105	1.8700e-003	0.0000	6.0572
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**6.0105**	**6.0105**	**1.8700e-003**	**0.0000**	**6.0572**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4816	0.4816	2.0000e-005	0.0000	0.4819
Total											**0.0000**	**0.4816**	**0.4816**	**2.0000e-005**	**0.0000**	**0.4819**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	6.0105	6.0105	1.8700e-003	0.0000	6.0572
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**6.0105**	**6.0105**	**1.8700e-003**	**0.0000**	**6.0572**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4816	0.4816	2.0000e-005	0.0000	0.4819
Total											**0.0000**	**0.4816**	**0.4816**	**2.0000e-005**	**0.0000**	**0.4819**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2793
Total											**0.0000**	**1.2766**	**1.2766**	**1.1000e-004**	**0.0000**	**1.2793**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2593	0.2593	1.0000e-005	0.0000	0.2595
Total											**0.0000**	**0.2593**	**0.2593**	**1.0000e-005**	**0.0000**	**0.2595**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2793
Total											**0.0000**	**1.2766**	**1.2766**	**1.1000e-004**	**0.0000**	**1.2793**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2593	0.2593	1.0000e-005	0.0000	0.2595
Total											**0.0000**	**0.2593**	**0.2593**	**1.0000e-005**	**0.0000**	**0.2595**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	710.3532	710.3532	0.0545	0.0000	711.7155
Unmitigated											0.0000	710.3532	710.3532	0.0545	0.0000	711.7155

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	3,576.67	3,576.67	3576.67	1,918,539	1,918,539
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	3,576.67	3,576.67	3,576.67	1,918,539	1,918,539

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.511000	0.223100	0.169000	0.059300	0.000800	0.001000	0.007400	0.017300	0.000000	0.004400	0.002500	0.001200	0.003000
Other Non-Asphalt Surfaces	0.511000	0.223100	0.169000	0.059300	0.000800	0.001000	0.007400	0.017300	0.000000	0.004400	0.002500	0.001200	0.003000
Parking Lot	0.511000	0.223100	0.169000	0.059300	0.000800	0.001000	0.007400	0.017300	0.000000	0.004400	0.002500	0.001200	0.003000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	23.4921	23.4921	1.0600e-003	2.2000e-004	23.5842
Electricity Unmitigated											0.0000	23.4921	23.4921	1.0600e-003	2.2000e-004	23.5842
NaturalGas Mitigated											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521
NaturalGas Unmitigated											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521

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					
Convenience Market With Gas Pumps	32638.2											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**1.7417**	**1.7417**	**3.0000e-005**	**3.0000e-005**	**1.7521**

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					
Convenience Market With Gas Pumps	32638.2											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**1.7417**	**1.7417**	**3.0000e-005**	**3.0000e-005**	**1.7521**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	58290.7	16.9574	7.7000e-004	1.6000e-004	17.0239
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	22462.8	6.5347	3.0000e-004	6.0000e-005	6.5603
Total		**23.4921**	**1.0700e-003**	**2.2000e-004**	**23.5842**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	58290.7	16.9574	7.7000e-004	1.6000e-004	17.0239
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	22462.8	6.5347	3.0000e-004	6.0000e-005	6.5603
Total		**23.4921**	**1.0700e-003**	**2.2000e-004**	**23.5842**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Unmitigated											0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Total											**0.0000**	**1.5100e-003**	**1.5100e-003**	**0.0000**	**0.0000**	**1.6100e-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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Total											**0.0000**	**1.5100e-003**	**1.5100e-003**	**0.0000**	**0.0000**	**1.6100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.0676	0.0139	3.4000e-004	1.5144
Unmitigated	1.0676	0.0139	3.4000e-004	1.5144

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.424436 / 0.260138	1.0676	0.0139	3.4000e-004	1.5144
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.0676**	**0.0139**	**3.4000e-004**	**1.5144**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.424436 / 0.260138	1.0676	0.0139	3.4000e-004	1.5144
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.0676**	**0.0139**	**3.4000e-004**	**1.5144**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.4955	0.2066	0.0000	8.6600
Unmitigated	3.4955	0.2066	0.0000	8.6600

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	17.22	3.4955	0.2066	0.0000	8.6600
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**3.4955**	**0.2066**	**0.0000**	**8.6600**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	17.22	3.4955	0.2066	0.0000	8.6600
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**3.4955**	**0.2066**	**0.0000**	**8.6600**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	24.7800	0.0000	0.0000	24.7800

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	35	24.7800	0.0000	0.0000	24.7800
Total		**24.7800**	**0.0000**	**0.0000**	**24.7800**

Wible-Hosking Commercial - Remaining Buildout

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	238.33	1000sqft	5.47	238,329.00	0
Parking Lot	126.12	1000sqft	2.90	126,121.00	0
Fast Food Restaurant with Drive Thru	2.73	1000sqft	0.06	2,726.00	0
High Turnover (Sit Down Restaurant)	6.08	1000sqft	0.14	6,076.00	0
Strip Mall	60.47	1000sqft	1.39	60,474.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	7			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Wible-Hosking Commercial - Remaining Buildout - San Joaquin Valley Air Basin, Annual

Project Characteristics -

Land Use - Other Non-Asphalt Surfaces: Pedestrian pavement, landscaping, cement pad.

Construction Phase - Estimated excavation required for retention basin.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Estimated equipment for excavation of retention basin.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Estimate for required equipment to excavate retention basin.

Demolition -

Vehicle Trips - Values known from Traffic Study.

Sequestration -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - Low VOC paint.

Fleet Mix - Commercial development serves surrounding residential.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	150	75

Wible-Hosking Commercial - Remaining Buildout - San Joaquin Valley Air Basin, Annual

tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	150	75
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	LDA	0.54	0.51
tblFleetMix	LDA	0.54	0.51
tblFleetMix	LDA	0.54	0.51
tblFleetMix	LDA	0.54	0.51
tblFleetMix	LDA	0.54	0.51
tblFleetMix	LDT1	0.03	0.22
tblFleetMix	LDT1	0.03	0.22
tblFleetMix	LDT1	0.03	0.22
tblFleetMix	LDT1	0.03	0.22
tblFleetMix	LDT1	0.03	0.22
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LHD1	0.01	8.0000e-004
tblFleetMix	LHD1	0.01	8.0000e-004
tblFleetMix	LHD1	0.01	8.0000e-004
tblFleetMix	LHD1	0.01	8.0000e-004

tblFleetMix	LHD1	0.01	8.0000e-004
tblFleetMix	LHD2	3.7490e-003	1.0000e-003
tblFleetMix	LHD2	3.7490e-003	1.0000e-003
tblFleetMix	LHD2	3.7490e-003	1.0000e-003
tblFleetMix	LHD2	3.7490e-003	1.0000e-003
tblFleetMix	LHD2	3.7490e-003	1.0000e-003
tblFleetMix	MCY	4.7940e-003	2.5000e-003
tblFleetMix	MCY	4.7940e-003	2.5000e-003
tblFleetMix	MCY	4.7940e-003	2.5000e-003
tblFleetMix	MCY	4.7940e-003	2.5000e-003
tblFleetMix	MCY	4.7940e-003	2.5000e-003
tblFleetMix	MDV	0.10	0.06
tblFleetMix	MDV	0.10	0.06
tblFleetMix	MDV	0.10	0.06
tblFleetMix	MDV	0.10	0.06
tblFleetMix	MDV	0.10	0.06
tblFleetMix	MH	5.0000e-004	3.0000e-003
tblFleetMix	MH	5.0000e-004	3.0000e-003
tblFleetMix	MH	5.0000e-004	3.0000e-003
tblFleetMix	MH	5.0000e-004	3.0000e-003
tblFleetMix	MH	5.0000e-004	3.0000e-003
tblFleetMix	MHD	0.02	7.4000e-003
tblFleetMix	MHD	0.02	7.4000e-003
tblFleetMix	MHD	0.02	7.4000e-003
tblFleetMix	MHD	0.02	7.4000e-003
tblFleetMix	MHD	0.02	7.4000e-003
tblFleetMix	OBUS	1.7370e-003	0.00

tblFleetMix	OBUS	1.7370e-003	0.00
tblFleetMix	OBUS	1.7370e-003	0.00
tblFleetMix	OBUS	1.7370e-003	0.00
tblFleetMix	OBUS	1.7370e-003	0.00
tblFleetMix	SBUS	8.5500e-004	1.2000e-003
tblFleetMix	SBUS	8.5500e-004	1.2000e-003
tblFleetMix	SBUS	8.5500e-004	1.2000e-003
tblFleetMix	SBUS	8.5500e-004	1.2000e-003
tblFleetMix	SBUS	8.5500e-004	1.2000e-003
tblFleetMix	UBUS	1.2540e-003	4.4000e-003
tblFleetMix	UBUS	1.2540e-003	4.4000e-003
tblFleetMix	UBUS	1.2540e-003	4.4000e-003
tblFleetMix	UBUS	1.2540e-003	4.4000e-003
tblFleetMix	UBUS	1.2540e-003	4.4000e-003
tblLandUse	LandUseSquareFeet	238,330.00	238,329.00
tblLandUse	LandUseSquareFeet	126,120.00	126,121.00
tblLandUse	LandUseSquareFeet	2,730.00	2,726.00
tblLandUse	LandUseSquareFeet	6,080.00	6,076.00
tblLandUse	LandUseSquareFeet	60,470.00	60,474.00
tblSequestration	NumberOfNewTrees	0.00	148.00
tblVehicleTrips	ST_TR	722.03	470.95
tblVehicleTrips	ST_TR	158.37	112.18
tblVehicleTrips	SU_TR	542.72	470.95
tblVehicleTrips	SU_TR	131.84	112.18
tblVehicleTrips	WD_TR	496.12	470.95
tblVehicleTrips	WD_TR	127.15	112.18

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020											0.0000	666.0091	666.0091	0.1039	0.0000	668.6065
2021											0.0000	74.9596	74.9596	0.0134	0.0000	75.2938
Maximum											**0.0000**	**666.0091**	**666.0091**	**0.1039**	**0.0000**	**668.6065**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020											0.0000	666.0088	666.0088	0.1039	0.0000	668.6061
2021											0.0000	74.9596	74.9596	0.0134	0.0000	75.2938
Maximum											**0.0000**	**666.0088**	**666.0088**	**0.1039**	**0.0000**	**668.6061**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2500e-003
Energy											0.0000	342.6266	342.6266	0.0138	3.7900e-003	344.1005
Mobile											0.0000	1,804.7479	1,804.7479	0.0970	0.0000	1,807.1740
Waste											33.9584	0.0000	33.9584	2.0069	0.0000	84.1304
Water											2.2694	14.2292	16.4986	0.2337	5.6400e-003	24.0217
Total											**36.2278**	**2,161.6114**	**2,197.8392**	**2.3515**	**9.4300e-003**	**2,259.4349**

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											0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2500e-003
Energy											0.0000	342.6266	342.6266	0.0138	3.7900e-003	344.1005
Mobile											0.0000	1,804.7479	1,804.7479	0.0970	0.0000	1,807.1740
Waste											33.9584	0.0000	33.9584	2.0069	0.0000	84.1304
Water											2.2694	14.2292	16.4986	0.2337	5.6400e-003	24.0217
Total											**36.2278**	**2,161.6114**	**2,197.8392**	**2.3515**	**9.4300e-003**	**2,259.4349**

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

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	104.7840
Total	**104.7840**

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	1/1/2020	1/28/2020	5	20	
2	Site Preparation	Site Preparation	1/29/2020	2/11/2020	5	10	
3	Grading	Grading	2/12/2020	3/10/2020	5	20	
4	Excavating Retention Basin	Trenching	2/12/2020	2/13/2020	5	2	
5	Building Construction	Building Construction	3/11/2020	1/26/2021	5	230	
6	Paving	Paving	1/27/2021	2/23/2021	5	20	
7	Architectural Coating	Architectural Coating	2/24/2021	3/23/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 8.37

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 103,914; Non-Residential Outdoor: 34,638; Striped Parking Area: 21,867 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Excavating Retention Basin	Excavators	1	8.00	158	0.38
Excavating Retention Basin	Rubber Tired Dozers	1	8.00	247	0.40
Excavating Retention Basin	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	59.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Excavating Retention Basin	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	176.00	71.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386
Total											**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2386**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	2.2413	2.2413	1.3000e-004	0.0000	2.2445
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**3.3182**	**3.3182**	**1.6000e-004**	**0.0000**	**3.3221**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385
Total											**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2385**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	2.2413	2.2413	1.3000e-004	0.0000	2.2445
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**3.3182**	**3.3182**	**1.6000e-004**	**0.0000**	**3.3221**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total											**0.0000**	**16.7153**	**16.7153**	**5.4100e-003**	**0.0000**	**16.8505**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.6461	0.6461	2.0000e-005	0.0000	0.6466
Total											**0.0000**	**0.6461**	**0.6461**	**2.0000e-005**	**0.0000**	**0.6466**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total											**0.0000**	**16.7153**	**16.7153**	**5.4100e-003**	**0.0000**	**16.8505**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.6461	0.6461	2.0000e-005	0.0000	0.6466
Total											**0.0000**	**0.6461**	**0.6461**	**2.0000e-005**	**0.0000**	**0.6466**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	26.0588	26.0588	8.4300e-003	0.0000	26.2694
Total											**0.0000**	**26.0588**	**26.0588**	**8.4300e-003**	**0.0000**	**26.2694**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											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
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	26.0587	26.0587	8.4300e-003	0.0000	26.2694
Total											**0.0000**	**26.0587**	**26.0587**	**8.4300e-003**	**0.0000**	**26.2694**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											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
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

3.5 Excavating Retention Basin - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	1.4771	1.4771	4.8000e-004	0.0000	1.4891
Total											**0.0000**	**1.4771**	**1.4771**	**4.8000e-004**	**0.0000**	**1.4891**

3.5 Excavating Retention Basin - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0574	0.0574	0.0000	0.0000	0.0575
Total											**0.0000**	**0.0574**	**0.0574**	**0.0000**	**0.0000**	**0.0575**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	1.4771	1.4771	4.8000e-004	0.0000	1.4891
Total											**0.0000**	**1.4771**	**1.4771**	**4.8000e-004**	**0.0000**	**1.4891**

3.5 Excavating Retention Basin - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0574	0.0574	0.0000	0.0000	0.0575
Total											**0.0000**	**0.0574**	**0.0574**	**0.0000**	**0.0000**	**0.0575**

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	245.5066	245.5066	0.0599	0.0000	247.0040
Total											**0.0000**	**245.5066**	**245.5066**	**0.0599**	**0.0000**	**247.0040**

3.6 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	203.2169	203.2169	0.0160	0.0000	203.6180
Worker											0.0000	133.9372	133.9372	3.8400e-003	0.0000	134.0331
Total											**0.0000**	**337.1541**	**337.1541**	**0.0199**	**0.0000**	**337.6511**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	245.5063	245.5063	0.0599	0.0000	247.0037
Total											**0.0000**	**245.5063**	**245.5063**	**0.0599**	**0.0000**	**247.0037**

3.6 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	203.2169	203.2169	0.0160	0.0000	203.6180
Worker											0.0000	133.9372	133.9372	3.8400e-003	0.0000	134.0331
Total											**0.0000**	**337.1541**	**337.1541**	**0.0199**	**0.0000**	**337.6511**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.8474	20.8474	5.0300e-003	0.0000	20.9731
Total											**0.0000**	**20.8474**	**20.8474**	**5.0300e-003**	**0.0000**	**20.9731**

3.6 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	17.0940	17.0940	1.3100e-003	0.0000	17.1266
Worker											0.0000	10.9767	10.9767	2.9000e-004	0.0000	10.9840
Total											**0.0000**	**28.0707**	**28.0707**	**1.6000e-003**	**0.0000**	**28.1106**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.8473	20.8473	5.0300e-003	0.0000	20.9731
Total											**0.0000**	**20.8473**	**20.8473**	**5.0300e-003**	**0.0000**	**20.9731**

3.6 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	17.0940	17.0940	1.3100e-003	0.0000	17.1266
Worker											0.0000	10.9767	10.9767	2.9000e-004	0.0000	10.9840
Total											**0.0000**	**28.0707**	**28.0707**	**1.6000e-003**	**0.0000**	**28.1106**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.7 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0395	1.0395	3.0000e-005	0.0000	1.0402
Total											**0.0000**	**1.0395**	**1.0395**	**3.0000e-005**	**0.0000**	**1.0402**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.7 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0395	1.0395	3.0000e-005	0.0000	1.0402
Total											**0.0000**	**1.0395**	**1.0395**	**3.0000e-005**	**0.0000**	**1.0402**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total											**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.8 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.4254	2.4254	6.0000e-005	0.0000	2.4270
Total											**0.0000**	**2.4254**	**2.4254**	**6.0000e-005**	**0.0000**	**2.4270**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total											**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.8 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.4254	2.4254	6.0000e-005	0.0000	2.4270
Total											**0.0000**	**2.4254**	**2.4254**	**6.0000e-005**	**0.0000**	**2.4270**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	1,804.7479	1,804.7479	0.0970	0.0000	1,807.1740
Unmitigated											0.0000	1,804.7479	1,804.7479	0.0970	0.0000	1,807.1740

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	1,285.69	1,285.69	1285.69	1,201,256	1,201,256
High Turnover (Sit Down Restaurant)	682.05	682.05	682.05	791,364	791,364
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	2,680.03	2,542.16	1235.40	3,779,178	3,779,178
Total	4,647.78	4,509.91	3,203.15	5,771,797	5,771,797

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.511000	0.223100	0.169000	0.059300	0.000800	0.001000	0.007400	0.017300	0.000000	0.004400	0.002500	0.001200	0.003000
High Turnover (Sit Down Restaurant)	0.511000	0.223100	0.169000	0.059300	0.000800	0.001000	0.007400	0.017300	0.000000	0.004400	0.002500	0.001200	0.003000
Other Non-Asphalt Surfaces	0.511000	0.223100	0.169000	0.059300	0.000800	0.001000	0.007400	0.017300	0.000000	0.004400	0.002500	0.001200	0.003000
Parking Lot	0.511000	0.223100	0.169000	0.059300	0.000800	0.001000	0.007400	0.017300	0.000000	0.004400	0.002500	0.001200	0.003000
Strip Mall	0.511000	0.223100	0.169000	0.059300	0.000800	0.001000	0.007400	0.017300	0.000000	0.004400	0.002500	0.001200	0.003000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	277.6886	277.6886	0.0126	2.6000e-003	278.7766
Electricity Unmitigated											0.0000	277.6886	277.6886	0.0126	2.6000e-003	278.7766
NaturalGas Mitigated											0.0000	64.9380	64.9380	1.2400e-003	1.1900e-003	65.3239
NaturalGas Unmitigated											0.0000	64.9380	64.9380	1.2400e-003	1.1900e-003	65.3239

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	270119											0.0000	14.4146	14.4146	2.8000e-004	2.6000e-004	14.5003
High Turnover (Sit Down Restaurant)	602071											0.0000	32.1288	32.1288	6.2000e-004	5.9000e-004	32.3197
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	344702											0.0000	18.3946	18.3946	3.5000e-004	3.4000e-004	18.5039
Total												**0.0000**	**64.9380**	**64.9380**	**1.2500e-003**	**1.1900e-003**	**65.3239**

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	270119											0.0000	14.4146	14.4146	2.8000e-004	2.6000e-004	14.5003
High Turnover (Sit Down Restaurant)	602071											0.0000	32.1288	32.1288	6.2000e-004	5.9000e-004	32.3197
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	344702											0.0000	18.3946	18.3946	3.5000e-004	3.4000e-004	18.5039
Total												**0.0000**	**64.9380**	**64.9380**	**1.2500e-003**	**1.1900e-003**	**65.3239**

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	91293.7	26.5584	1.2000e-003	2.5000e-004	26.6625
High Turnover (Sit Down Restaurant)	203485	59.1962	2.6800e-003	5.5000e-004	59.4281
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	44142.3	12.8415	5.8000e-004	1.2000e-004	12.8918
Strip Mall	615625	179.0925	8.1000e-003	1.6800e-003	179.7942
Total		**277.6886**	**0.0126**	**2.6000e-003**	**278.7766**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	91293.7	26.5584	1.2000e-003	2.5000e-004	26.6625
High Turnover (Sit Down Restaurant)	203485	59.1962	2.6800e-003	5.5000e-004	59.4281
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	44142.3	12.8415	5.8000e-004	1.2000e-004	12.8918
Strip Mall	615625	179.0925	8.1000e-003	1.6800e-003	179.7942
Total		**277.6886**	**0.0126**	**2.6000e-003**	**278.7766**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2500e-003
Unmitigated											0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2500e-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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2500e-003
Total											**0.0000**	**7.7500e-003**	**7.7500e-003**	**2.0000e-005**	**0.0000**	**8.2500e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2500e-003
Total											**0.0000**	**7.7500e-003**	**7.7500e-003**	**2.0000e-005**	**0.0000**	**8.2500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.4986	0.2337	5.6400e-003	24.0217
Unmitigated	16.4986	0.2337	5.6400e-003	24.0217

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	0.828647 / 0.0528924	1.6211	0.0271	6.5000e-004	2.4915
High Turnover (Sit Down Restaurant)	1.84548 / 0.117797	3.6105	0.0603	1.4500e-003	5.5488
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.47917 / 2.74529	11.2670	0.1464	3.5400e-003	15.9814
Total		**16.4986**	**0.2337**	**5.6400e-003**	**24.0217**

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	0.828647 / 0.0528924	1.6211	0.0271	6.5000e-004	2.4915
High Turnover (Sit Down Restaurant)	1.84548 / 0.117797	3.6105	0.0603	1.4500e-003	5.5488
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.47917 / 2.74529	11.2670	0.1464	3.5400e-003	15.9814
Total		**16.4986**	**0.2337**	**5.6400e-003**	**24.0217**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	33.9584	2.0069	0.0000	84.1304
Unmitigated	33.9584	2.0069	0.0000	84.1304

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	31.45	6.3841	0.3773	0.0000	15.8163
High Turnover (Sit Down Restaurant)	72.35	14.6864	0.8679	0.0000	36.3849
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	63.49	12.8879	0.7617	0.0000	31.9292
Total		**33.9584**	**2.0069**	**0.0000**	**84.1304**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	31.45	6.3841	0.3773	0.0000	15.8163
High Turnover (Sit Down Restaurant)	72.35	14.6864	0.8679	0.0000	36.3849
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	63.49	12.8879	0.7617	0.0000	31.9292
Total		**33.9584**	**2.0069**	**0.0000**	**84.1304**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	104.7840	0.0000	0.0000	104.7840

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	148	104.7840	0.0000	0.0000	104.7840
Total		**104.7840**	**0.0000**	**0.0000**	**104.7840**

Wible-Hosking Commercial - Gas Station

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	14.75	1000sqft	0.34	14,751.00	0
Parking Lot	64.18	1000sqft	1.47	64,179.29	0
Convenience Market With Gas Pumps	5.73	1000sqft	0.13	5,726.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	7			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Wible-Hosking Commercial - Gas Station - San Joaquin Valley Air Basin, Annual

Project Characteristics -

Land Use - Other Non-Asphalt Surfaces: Pedestrian pavement, landscaping, cement pads.

Demolition -

Vehicle Trips - From Traffic Study.

Sequestration -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - Low VOC paints.

Fleet Mix - Commercial development serves surrounding residential.

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	150	75
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	LDA	0.55	0.50
tblFleetMix	LDA	0.55	0.50
tblFleetMix	LDA	0.55	0.50
tblFleetMix	LDT1	0.03	0.23
tblFleetMix	LDT1	0.03	0.23
tblFleetMix	LDT1	0.03	0.23

tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LHD1	9.0090e-003	8.0000e-004
tblFleetMix	LHD1	9.0090e-003	8.0000e-004
tblFleetMix	LHD1	9.0090e-003	8.0000e-004
tblFleetMix	LHD2	3.4950e-003	1.0000e-003
tblFleetMix	LHD2	3.4950e-003	1.0000e-003
tblFleetMix	LHD2	3.4950e-003	1.0000e-003
tblFleetMix	MCY	4.7180e-003	2.7000e-003
tblFleetMix	MCY	4.7180e-003	2.7000e-003
tblFleetMix	MCY	4.7180e-003	2.7000e-003
tblFleetMix	MDV	0.09	0.06
tblFleetMix	MDV	0.09	0.06
tblFleetMix	MDV	0.09	0.06
tblFleetMix	MH	4.5000e-004	3.8000e-003
tblFleetMix	MH	4.5000e-004	3.8000e-003
tblFleetMix	MH	4.5000e-004	3.8000e-003
tblFleetMix	MHD	0.02	7.6000e-003
tblFleetMix	MHD	0.02	7.6000e-003
tblFleetMix	MHD	0.02	7.6000e-003
tblFleetMix	OBUS	1.7200e-003	0.00
tblFleetMix	OBUS	1.7200e-003	0.00
tblFleetMix	OBUS	1.7200e-003	0.00
tblFleetMix	SBUS	8.0100e-004	1.2000e-003
tblFleetMix	SBUS	8.0100e-004	1.2000e-003
tblFleetMix	SBUS	8.0100e-004	1.2000e-003

tblFleetMix	UBUS	1.1730e-003	4.4000e-003
tblFleetMix	UBUS	1.1730e-003	4.4000e-003
tblFleetMix	UBUS	1.1730e-003	4.4000e-003
tblLandUse	LandUseSquareFeet	14,750.00	14,751.00
tblLandUse	LandUseSquareFeet	64,180.00	64,179.29
tblLandUse	LandUseSquareFeet	5,730.00	5,726.00
tblSequestration	NumberOfNewTrees	0.00	35.00
tblVehicleTrips	ST_TR	1,448.33	624.20
tblVehicleTrips	SU_TR	1,182.08	624.20
tblVehicleTrips	WD_TR	845.60	624.20

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					
2019											0.0000	281.9465	281.9465	0.0480	0.0000	283.1463
Maximum											**0.0000**	**281.9465**	**281.9465**	**0.0480**	**0.0000**	**283.1463**

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					
2019											0.0000	281.9463	281.9463	0.0480	0.0000	283.1460
Maximum											**0.0000**	**281.9463**	**281.9463**	**0.0480**	**0.0000**	**283.1460**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Energy											0.0000	25.2338	25.2338	1.1000e-003	2.5000e-004	25.3362
Mobile											0.0000	675.8964	675.8964	0.0522	0.0000	677.2012
Waste											3.4955	0.0000	3.4955	0.2066	0.0000	8.6600
Water											0.1347	0.9330	1.0676	0.0139	3.4000e-004	1.5144
Total											**3.6302**	**702.0647**	**705.6948**	**0.2737**	**5.9000e-004**	**712.7133**

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											0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Energy											0.0000	25.2338	25.2338	1.1000e-003	2.5000e-004	25.3362
Mobile											0.0000	675.8964	675.8964	0.0522	0.0000	677.2012
Waste											3.4955	0.0000	3.4955	0.2066	0.0000	8.6600
Water											0.1347	0.9330	1.0676	0.0139	3.4000e-004	1.5144
Total											**3.6302**	**702.0647**	**705.6948**	**0.2737**	**5.9000e-004**	**712.7133**

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

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	24.7800
Total	**24.7800**

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	1/1/2019	1/28/2019	5	20	
2	Site Preparation	Site Preparation	1/29/2019	1/30/2019	5	2	
3	Grading	Grading	1/31/2019	2/5/2019	5	4	
4	Building Construction	Building Construction	2/6/2019	11/12/2019	5	200	
5	Paving	Paving	11/13/2019	11/26/2019	5	10	
6	Architectural Coating	Architectural Coating	11/27/2019	12/10/2019	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.81

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 8,589; Non-Residential Outdoor: 2,863; Striped Parking Area: 4,736 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	35.00	14.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total											**0.0000**	**21.4161**	**21.4161**	**5.4500e-003**	**0.0000**	**21.5524**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.1537	0.1537	1.0000e-005	0.0000	0.1540
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.9631	0.9631	3.0000e-005	0.0000	0.9639
Total											**0.0000**	**1.1169**	**1.1169**	**4.0000e-005**	**0.0000**	**1.1178**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total											**0.0000**	**21.4161**	**21.4161**	**5.4500e-003**	**0.0000**	**21.5524**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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	0.1537	0.1537	1.0000e-005	0.0000	0.1540
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.9631	0.9631	3.0000e-005	0.0000	0.9639
Total											**0.0000**	**1.1169**	**1.1169**	**4.0000e-005**	**0.0000**	**1.1178**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.5467	1.5467	4.9000e-004	0.0000	1.5589
Total											**0.0000**	**1.5467**	**1.5467**	**4.9000e-004**	**0.0000**	**1.5589**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0593	0.0593	0.0000	0.0000	0.0593
Total											**0.0000**	**0.0593**	**0.0593**	**0.0000**	**0.0000**	**0.0593**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.5467	1.5467	4.9000e-004	0.0000	1.5589
Total											**0.0000**	**1.5467**	**1.5467**	**4.9000e-004**	**0.0000**	**1.5589**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0593	0.0593	0.0000	0.0000	0.0593
Total											**0.0000**	**0.0593**	**0.0593**	**0.0000**	**0.0000**	**0.0593**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5336	2.5336	8.0000e-004	0.0000	2.5536
Total											**0.0000**	**2.5336**	**2.5336**	**8.0000e-004**	**0.0000**	**2.5536**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1185	0.1185	0.0000	0.0000	0.1186
Total											**0.0000**	**0.1185**	**0.1185**	**0.0000**	**0.0000**	**0.1186**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5336	2.5336	8.0000e-004	0.0000	2.5536
Total											**0.0000**	**2.5336**	**2.5336**	**8.0000e-004**	**0.0000**	**2.5536**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1185	0.1185	0.0000	0.0000	0.1186
Total											**0.0000**	**0.1185**	**0.1185**	**0.0000**	**0.0000**	**0.1186**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	183.0719	183.0719	0.0352	0.0000	183.9518
Total											**0.0000**	**183.0719**	**183.0719**	**0.0352**	**0.0000**	**183.9518**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	38.1255	38.1255	3.1800e-003	0.0000	38.2050
Worker											0.0000	25.9301	25.9301	8.3000e-004	0.0000	25.9508
Total											**0.0000**	**64.0556**	**64.0556**	**4.0100e-003**	**0.0000**	**64.1559**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	183.0717	183.0717	0.0352	0.0000	183.9515
Total											**0.0000**	**183.0717**	**183.0717**	**0.0352**	**0.0000**	**183.9515**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	38.1255	38.1255	3.1800e-003	0.0000	38.2050
Worker											0.0000	25.9301	25.9301	8.3000e-004	0.0000	25.9508
Total											**0.0000**	**64.0556**	**64.0556**	**4.0100e-003**	**0.0000**	**64.1559**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	6.0105	6.0105	1.8700e-003	0.0000	6.0572
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**6.0105**	**6.0105**	**1.8700e-003**	**0.0000**	**6.0572**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4816	0.4816	2.0000e-005	0.0000	0.4819
Total											**0.0000**	**0.4816**	**0.4816**	**2.0000e-005**	**0.0000**	**0.4819**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	6.0105	6.0105	1.8700e-003	0.0000	6.0572
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**6.0105**	**6.0105**	**1.8700e-003**	**0.0000**	**6.0572**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4816	0.4816	2.0000e-005	0.0000	0.4819
Total											**0.0000**	**0.4816**	**0.4816**	**2.0000e-005**	**0.0000**	**0.4819**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2793
Total											**0.0000**	**1.2766**	**1.2766**	**1.1000e-004**	**0.0000**	**1.2793**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2593	0.2593	1.0000e-005	0.0000	0.2595
Total											**0.0000**	**0.2593**	**0.2593**	**1.0000e-005**	**0.0000**	**0.2595**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2793
Total											**0.0000**	**1.2766**	**1.2766**	**1.1000e-004**	**0.0000**	**1.2793**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2593	0.2593	1.0000e-005	0.0000	0.2595
Total											**0.0000**	**0.2593**	**0.2593**	**1.0000e-005**	**0.0000**	**0.2595**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	675.8964	675.8964	0.0522	0.0000	677.2012
Unmitigated											0.0000	675.8964	675.8964	0.0522	0.0000	677.2012

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	3,576.67	3,576.67	3576.67	1,918,539	1,918,539
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	3,576.67	3,576.67	3,576.67	1,918,539	1,918,539

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.496000	0.232300	0.170700	0.061300	0.000800	0.001000	0.007600	0.018200	0.000000	0.004400	0.002700	0.001200	0.003800
Other Non-Asphalt Surfaces	0.496000	0.232300	0.170700	0.061300	0.000800	0.001000	0.007600	0.018200	0.000000	0.004400	0.002700	0.001200	0.003800
Parking Lot	0.496000	0.232300	0.170700	0.061300	0.000800	0.001000	0.007600	0.018200	0.000000	0.004400	0.002700	0.001200	0.003800

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	23.4921	23.4921	1.0600e-003	2.2000e-004	23.5842
Electricity Unmitigated											0.0000	23.4921	23.4921	1.0600e-003	2.2000e-004	23.5842
NaturalGas Mitigated											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521
NaturalGas Unmitigated											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521

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					
Convenience Market With Gas Pumps	32638.2											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**1.7417**	**1.7417**	**3.0000e-005**	**3.0000e-005**	**1.7521**

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					
Convenience Market With Gas Pumps	32638.2											0.0000	1.7417	1.7417	3.0000e-005	3.0000e-005	1.7521
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**1.7417**	**1.7417**	**3.0000e-005**	**3.0000e-005**	**1.7521**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	58290.7	16.9574	7.7000e-004	1.6000e-004	17.0239
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	22462.8	6.5347	3.0000e-004	6.0000e-005	6.5603
Total		**23.4921**	**1.0700e-003**	**2.2000e-004**	**23.5842**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	58290.7	16.9574	7.7000e-004	1.6000e-004	17.0239
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	22462.8	6.5347	3.0000e-004	6.0000e-005	6.5603
Total		**23.4921**	**1.0700e-003**	**2.2000e-004**	**23.5842**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Unmitigated											0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Total											**0.0000**	**1.5100e-003**	**1.5100e-003**	**0.0000**	**0.0000**	**1.6100e-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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	1.5100e-003	1.5100e-003	0.0000	0.0000	1.6100e-003
Total											**0.0000**	**1.5100e-003**	**1.5100e-003**	**0.0000**	**0.0000**	**1.6100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.0676	0.0139	3.4000e-004	1.5144
Unmitigated	1.0676	0.0139	3.4000e-004	1.5144

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.424436 / 0.260138	1.0676	0.0139	3.4000e-004	1.5144
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.0676**	**0.0139**	**3.4000e-004**	**1.5144**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.424436 / 0.260138	1.0676	0.0139	3.4000e-004	1.5144
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.0676**	**0.0139**	**3.4000e-004**	**1.5144**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.4955	0.2066	0.0000	8.6600
Unmitigated	3.4955	0.2066	0.0000	8.6600

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	17.22	3.4955	0.2066	0.0000	8.6600
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**3.4955**	**0.2066**	**0.0000**	**8.6600**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	17.22	3.4955	0.2066	0.0000	8.6600
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**3.4955**	**0.2066**	**0.0000**	**8.6600**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	24.7800	0.0000	0.0000	24.7800

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	35	24.7800	0.0000	0.0000	24.7800
Total		**24.7800**	**0.0000**	**0.0000**	**24.7800**

Wible-Hosking Commercial - Remaining Buildout

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	238.33	1000sqft	5.47	238,329.00	0
Parking Lot	126.12	1000sqft	2.90	126,121.00	0
Fast Food Restaurant with Drive Thru	2.73	1000sqft	0.06	2,726.00	0
High Turnover (Sit Down Restaurant)	6.08	1000sqft	0.14	6,076.00	0
Strip Mall	60.47	1000sqft	1.39	60,474.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	7			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Wible-Hosking Commercial - Remaining Buildout - San Joaquin Valley Air Basin, Annual

Project Characteristics -

Land Use - Other Non-Asphalt Surfaces: Pedestrian pavement, landscaping, cement pad.

Construction Phase - Estimated excavation required for retention basin.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Estimated equipment for excavation of retention basin.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Estimate for required equipment to excavate retention basin.

Demolition -

Vehicle Trips - Values known from Traffic Study.

Sequestration -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - Low VOC paint.

Fleet Mix - Commercial development serves surrounding residential.

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	75
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	150	75
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.11	0.02

tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	HHD	0.11	0.02
tblFleetMix	LDA	0.55	0.50
tblFleetMix	LDA	0.55	0.50
tblFleetMix	LDA	0.55	0.50
tblFleetMix	LDA	0.55	0.50
tblFleetMix	LDA	0.55	0.50
tblFleetMix	LDT1	0.03	0.23
tblFleetMix	LDT1	0.03	0.23
tblFleetMix	LDT1	0.03	0.23
tblFleetMix	LDT1	0.03	0.23
tblFleetMix	LDT1	0.03	0.23
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LHD1	9.0090e-003	8.0000e-004
tblFleetMix	LHD1	9.0090e-003	8.0000e-004
tblFleetMix	LHD1	9.0090e-003	8.0000e-004
tblFleetMix	LHD1	9.0090e-003	8.0000e-004
tblFleetMix	LHD1	9.0090e-003	8.0000e-004
tblFleetMix	LHD2	3.4950e-003	1.0000e-003
tblFleetMix	LHD2	3.4950e-003	1.0000e-003
tblFleetMix	LHD2	3.4950e-003	1.0000e-003

tblFleetMix	LHD2	3.4950e-003	1.0000e-003
tblFleetMix	LHD2	3.4950e-003	1.0000e-003
tblFleetMix	MCY	4.7180e-003	2.7000e-003
tblFleetMix	MCY	4.7180e-003	2.7000e-003
tblFleetMix	MCY	4.7180e-003	2.7000e-003
tblFleetMix	MCY	4.7180e-003	2.7000e-003
tblFleetMix	MCY	4.7180e-003	2.7000e-003
tblFleetMix	MDV	0.09	0.06
tblFleetMix	MDV	0.09	0.06
tblFleetMix	MDV	0.09	0.06
tblFleetMix	MDV	0.09	0.06
tblFleetMix	MDV	0.09	0.06
tblFleetMix	MH	4.5000e-004	3.8000e-003
tblFleetMix	MH	4.5000e-004	3.8000e-003
tblFleetMix	MH	4.5000e-004	3.8000e-003
tblFleetMix	MH	4.5000e-004	3.8000e-003
tblFleetMix	MH	4.5000e-004	3.8000e-003
tblFleetMix	MHD	0.02	7.6000e-003
tblFleetMix	MHD	0.02	7.6000e-003
tblFleetMix	MHD	0.02	7.6000e-003
tblFleetMix	MHD	0.02	7.6000e-003
tblFleetMix	MHD	0.02	7.6000e-003
tblFleetMix	OBUS	1.7200e-003	0.00
tblFleetMix	OBUS	1.7200e-003	0.00
tblFleetMix	OBUS	1.7200e-003	0.00
tblFleetMix	OBUS	1.7200e-003	0.00
tblFleetMix	OBUS	1.7200e-003	0.00

tblFleetMix	SBUS	8.0100e-004	1.2000e-003
tblFleetMix	SBUS	8.0100e-004	1.2000e-003
tblFleetMix	SBUS	8.0100e-004	1.2000e-003
tblFleetMix	SBUS	8.0100e-004	1.2000e-003
tblFleetMix	SBUS	8.0100e-004	1.2000e-003
tblFleetMix	UBUS	1.1730e-003	4.4000e-003
tblFleetMix	UBUS	1.1730e-003	4.4000e-003
tblFleetMix	UBUS	1.1730e-003	4.4000e-003
tblFleetMix	UBUS	1.1730e-003	4.4000e-003
tblFleetMix	UBUS	1.1730e-003	4.4000e-003
tblLandUse	LandUseSquareFeet	238,330.00	238,329.00
tblLandUse	LandUseSquareFeet	126,120.00	126,121.00
tblLandUse	LandUseSquareFeet	2,730.00	2,726.00
tblLandUse	LandUseSquareFeet	6,080.00	6,076.00
tblLandUse	LandUseSquareFeet	60,470.00	60,474.00
tblSequestration	NumberOfNewTrees	0.00	148.00
tblVehicleTrips	ST_TR	722.03	470.95
tblVehicleTrips	ST_TR	158.37	112.18
tblVehicleTrips	SU_TR	542.72	470.95
tblVehicleTrips	SU_TR	131.84	112.18
tblVehicleTrips	WD_TR	496.12	470.95
tblVehicleTrips	WD_TR	127.15	112.18

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020											0.0000	666.0091	666.0091	0.1039	0.0000	668.6065
2021											0.0000	74.9596	74.9596	0.0134	0.0000	75.2938
Maximum											**0.0000**	**666.0091**	**666.0091**	**0.1039**	**0.0000**	**668.6065**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020											0.0000	666.0088	666.0088	0.1039	0.0000	668.6061
2021											0.0000	74.9596	74.9596	0.0134	0.0000	75.2938
Maximum											**0.0000**	**666.0088**	**666.0088**	**0.1039**	**0.0000**	**668.6061**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2500e-003
Energy											0.0000	342.6266	342.6266	0.0138	3.7900e-003	344.1005
Mobile											0.0000	1,701.3763	1,701.3763	0.0891	0.0000	1,703.6028
Waste											33.9584	0.0000	33.9584	2.0069	0.0000	84.1304
Water											2.2694	14.2292	16.4986	0.2337	5.6400e-003	24.0217
Total											**36.2278**	**2,058.2398**	**2,094.4676**	**2.3435**	**9.4300e-003**	**2,155.8637**

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											0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2500e-003
Energy											0.0000	342.6266	342.6266	0.0138	3.7900e-003	344.1005
Mobile											0.0000	1,701.3763	1,701.3763	0.0891	0.0000	1,703.6028
Waste											33.9584	0.0000	33.9584	2.0069	0.0000	84.1304
Water											2.2694	14.2292	16.4986	0.2337	5.6400e-003	24.0217
Total											**36.2278**	**2,058.2398**	**2,094.4676**	**2.3435**	**9.4300e-003**	**2,155.8637**

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

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	104.7840
Total	**104.7840**

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	1/1/2020	1/28/2020	5	20	
2	Site Preparation	Site Preparation	1/29/2020	2/11/2020	5	10	
3	Grading	Grading	2/12/2020	3/10/2020	5	20	
4	Excavating Retention Basin	Trenching	2/12/2020	2/13/2020	5	2	
5	Building Construction	Building Construction	3/11/2020	1/26/2021	5	230	
6	Paving	Paving	1/27/2021	2/23/2021	5	20	
7	Architectural Coating	Architectural Coating	2/24/2021	3/23/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 8.37

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 103,914; Non-Residential Outdoor: 34,638; Striped Parking Area: 21,867 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Excavating Retention Basin	Excavators	1	8.00	158	0.38
Excavating Retention Basin	Rubber Tired Dozers	1	8.00	247	0.40
Excavating Retention Basin	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	59.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Excavating Retention Basin	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	176.00	71.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386
Total											**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2386**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	2.2413	2.2413	1.3000e-004	0.0000	2.2445
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**3.3182**	**3.3182**	**1.6000e-004**	**0.0000**	**3.3221**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385
Total											**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2385**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	2.2413	2.2413	1.3000e-004	0.0000	2.2445
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**3.3182**	**3.3182**	**1.6000e-004**	**0.0000**	**3.3221**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total											**0.0000**	**16.7153**	**16.7153**	**5.4100e-003**	**0.0000**	**16.8505**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.6461	0.6461	2.0000e-005	0.0000	0.6466
Total											**0.0000**	**0.6461**	**0.6461**	**2.0000e-005**	**0.0000**	**0.6466**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total											**0.0000**	**16.7153**	**16.7153**	**5.4100e-003**	**0.0000**	**16.8505**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.6461	0.6461	2.0000e-005	0.0000	0.6466
Total											**0.0000**	**0.6461**	**0.6461**	**2.0000e-005**	**0.0000**	**0.6466**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	26.0588	26.0588	8.4300e-003	0.0000	26.2694
Total											**0.0000**	**26.0588**	**26.0588**	**8.4300e-003**	**0.0000**	**26.2694**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											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
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	26.0587	26.0587	8.4300e-003	0.0000	26.2694
Total											**0.0000**	**26.0587**	**26.0587**	**8.4300e-003**	**0.0000**	**26.2694**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											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
Worker											0.0000	1.0769	1.0769	3.0000e-005	0.0000	1.0777
Total											**0.0000**	**1.0769**	**1.0769**	**3.0000e-005**	**0.0000**	**1.0777**

3.5 Excavating Retention Basin - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	1.4771	1.4771	4.8000e-004	0.0000	1.4891
Total											**0.0000**	**1.4771**	**1.4771**	**4.8000e-004**	**0.0000**	**1.4891**

3.5 Excavating Retention Basin - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0574	0.0574	0.0000	0.0000	0.0575
Total											**0.0000**	**0.0574**	**0.0574**	**0.0000**	**0.0000**	**0.0575**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	1.4771	1.4771	4.8000e-004	0.0000	1.4891
Total											**0.0000**	**1.4771**	**1.4771**	**4.8000e-004**	**0.0000**	**1.4891**

3.5 Excavating Retention Basin - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0574	0.0574	0.0000	0.0000	0.0575
Total											**0.0000**	**0.0574**	**0.0574**	**0.0000**	**0.0000**	**0.0575**

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	245.5066	245.5066	0.0599	0.0000	247.0040
Total											**0.0000**	**245.5066**	**245.5066**	**0.0599**	**0.0000**	**247.0040**

3.6 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	203.2169	203.2169	0.0160	0.0000	203.6180
Worker											0.0000	133.9372	133.9372	3.8400e-003	0.0000	134.0331
Total											**0.0000**	**337.1541**	**337.1541**	**0.0199**	**0.0000**	**337.6511**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	245.5063	245.5063	0.0599	0.0000	247.0037
Total											**0.0000**	**245.5063**	**245.5063**	**0.0599**	**0.0000**	**247.0037**

3.6 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	203.2169	203.2169	0.0160	0.0000	203.6180
Worker											0.0000	133.9372	133.9372	3.8400e-003	0.0000	134.0331
Total											**0.0000**	**337.1541**	**337.1541**	**0.0199**	**0.0000**	**337.6511**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.8474	20.8474	5.0300e-003	0.0000	20.9731
Total											**0.0000**	**20.8474**	**20.8474**	**5.0300e-003**	**0.0000**	**20.9731**

3.6 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	17.0940	17.0940	1.3100e-003	0.0000	17.1266
Worker											0.0000	10.9767	10.9767	2.9000e-004	0.0000	10.9840
Total											**0.0000**	**28.0707**	**28.0707**	**1.6000e-003**	**0.0000**	**28.1106**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.8473	20.8473	5.0300e-003	0.0000	20.9731
Total											**0.0000**	**20.8473**	**20.8473**	**5.0300e-003**	**0.0000**	**20.9731**

3.6 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	17.0940	17.0940	1.3100e-003	0.0000	17.1266
Worker											0.0000	10.9767	10.9767	2.9000e-004	0.0000	10.9840
Total											**0.0000**	**28.0707**	**28.0707**	**1.6000e-003**	**0.0000**	**28.1106**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.7 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0395	1.0395	3.0000e-005	0.0000	1.0402
Total											**0.0000**	**1.0395**	**1.0395**	**3.0000e-005**	**0.0000**	**1.0402**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.7 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0395	1.0395	3.0000e-005	0.0000	1.0402
Total											**0.0000**	**1.0395**	**1.0395**	**3.0000e-005**	**0.0000**	**1.0402**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total											**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.8 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.4254	2.4254	6.0000e-005	0.0000	2.4270
Total											**0.0000**	**2.4254**	**2.4254**	**6.0000e-005**	**0.0000**	**2.4270**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total											**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.8 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.4254	2.4254	6.0000e-005	0.0000	2.4270
Total											**0.0000**	**2.4254**	**2.4254**	**6.0000e-005**	**0.0000**	**2.4270**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	1,701.3763	1,701.3763	0.0891	0.0000	1,703.6028
Unmitigated											0.0000	1,701.3763	1,701.3763	0.0891	0.0000	1,703.6028

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	1,285.69	1,285.69	1285.69	1,201,256	1,201,256
High Turnover (Sit Down Restaurant)	682.05	682.05	682.05	791,364	791,364
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	2,680.03	2,542.16	1235.40	3,779,178	3,779,178
Total	4,647.78	4,509.91	3,203.15	5,771,797	5,771,797

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.496000	0.232300	0.170700	0.061300	0.000800	0.001000	0.007600	0.018200	0.000000	0.004400	0.002700	0.001200	0.003800
High Turnover (Sit Down Restaurant)	0.496000	0.232300	0.170700	0.061300	0.000800	0.001000	0.007600	0.018200	0.000000	0.004400	0.002700	0.001200	0.003800
Other Non-Asphalt Surfaces	0.496000	0.232300	0.170700	0.061300	0.000800	0.001000	0.007600	0.018200	0.000000	0.004400	0.002700	0.001200	0.003800
Parking Lot	0.496000	0.232300	0.170700	0.061300	0.000800	0.001000	0.007600	0.018200	0.000000	0.004400	0.002700	0.001200	0.003800
Strip Mall	0.496000	0.232300	0.170700	0.061300	0.000800	0.001000	0.007600	0.018200	0.000000	0.004400	0.002700	0.001200	0.003800

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	277.6886	277.6886	0.0126	2.6000e-003	278.7766
Electricity Unmitigated											0.0000	277.6886	277.6886	0.0126	2.6000e-003	278.7766
NaturalGas Mitigated											0.0000	64.9380	64.9380	1.2400e-003	1.1900e-003	65.3239
NaturalGas Unmitigated											0.0000	64.9380	64.9380	1.2400e-003	1.1900e-003	65.3239

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	270119											0.0000	14.4146	14.4146	2.8000e-004	2.6000e-004	14.5003
High Turnover (Sit Down Restaurant)	602071											0.0000	32.1288	32.1288	6.2000e-004	5.9000e-004	32.3197
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	344702											0.0000	18.3946	18.3946	3.5000e-004	3.4000e-004	18.5039
Total												**0.0000**	**64.9380**	**64.9380**	**1.2500e-003**	**1.1900e-003**	**65.3239**

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	270119											0.0000	14.4146	14.4146	2.8000e-004	2.6000e-004	14.5003
High Turnover (Sit Down Restaurant)	602071											0.0000	32.1288	32.1288	6.2000e-004	5.9000e-004	32.3197
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	344702											0.0000	18.3946	18.3946	3.5000e-004	3.4000e-004	18.5039
Total												**0.0000**	**64.9380**	**64.9380**	**1.2500e-003**	**1.1900e-003**	**65.3239**

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	91293.7	26.5584	1.2000e-003	2.5000e-004	26.6625
High Turnover (Sit Down Restaurant)	203485	59.1962	2.6800e-003	5.5000e-004	59.4281
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	44142.3	12.8415	5.8000e-004	1.2000e-004	12.8918
Strip Mall	615625	179.0925	8.1000e-003	1.6800e-003	179.7942
Total		**277.6886**	**0.0126**	**2.6000e-003**	**278.7766**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	91293.7	26.5584	1.2000e-003	2.5000e-004	26.6625
High Turnover (Sit Down Restaurant)	203485	59.1962	2.6800e-003	5.5000e-004	59.4281
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	44142.3	12.8415	5.8000e-004	1.2000e-004	12.8918
Strip Mall	615625	179.0925	8.1000e-003	1.6800e-003	179.7942
Total		**277.6886**	**0.0126**	**2.6000e-003**	**278.7766**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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											0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2500e-003
Unmitigated											0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2500e-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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2500e-003
Total											**0.0000**	**7.7500e-003**	**7.7500e-003**	**2.0000e-005**	**0.0000**	**8.2500e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	7.7500e-003	7.7500e-003	2.0000e-005	0.0000	8.2500e-003
Total											**0.0000**	**7.7500e-003**	**7.7500e-003**	**2.0000e-005**	**0.0000**	**8.2500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.4986	0.2337	5.6400e-003	24.0217
Unmitigated	16.4986	0.2337	5.6400e-003	24.0217

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	0.828647 / 0.0528924	1.6211	0.0271	6.5000e-004	2.4915
High Turnover (Sit Down Restaurant)	1.84548 / 0.117797	3.6105	0.0603	1.4500e-003	5.5488
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.47917 / 2.74529	11.2670	0.1464	3.5400e-003	15.9814
Total		**16.4986**	**0.2337**	**5.6400e-003**	**24.0217**

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	0.828647 / 0.0528924	1.6211	0.0271	6.5000e-004	2.4915
High Turnover (Sit Down Restaurant)	1.84548 / 0.117797	3.6105	0.0603	1.4500e-003	5.5488
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.47917 / 2.74529	11.2670	0.1464	3.5400e-003	15.9814
Total		**16.4986**	**0.2337**	**5.6400e-003**	**24.0217**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	33.9584	2.0069	0.0000	84.1304
Unmitigated	33.9584	2.0069	0.0000	84.1304

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	31.45	6.3841	0.3773	0.0000	15.8163
High Turnover (Sit Down Restaurant)	72.35	14.6864	0.8679	0.0000	36.3849
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	63.49	12.8879	0.7617	0.0000	31.9292
Total		**33.9584**	**2.0069**	**0.0000**	**84.1304**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	31.45	6.3841	0.3773	0.0000	15.8163
High Turnover (Sit Down Restaurant)	72.35	14.6864	0.8679	0.0000	36.3849
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	63.49	12.8879	0.7617	0.0000	31.9292
Total		**33.9584**	**2.0069**	**0.0000**	**84.1304**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	104.7840	0.0000	0.0000	104.7840

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	148	104.7840	0.0000	0.0000	104.7840
Total		**104.7840**	**0.0000**	**0.0000**	**104.7840**