

CITY VIEW PLAZA AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT

San José, California

February 19, 2020



Prepared for:

**Shannon George
David J. Powers
& Associates, Inc.
1871 The Alameda, Suite 200
San José, California 95126**

Prepared by:

**Mimi McNamara,
James A. Reyff &
Bill Popenuck**

ILLINGWORTH & RODKIN, INC.
■■■ Acoustics • Air Quality ■■■

429 E. Cotati Avenue
Cotati, CA 94931
(707) 794-0400

I&R Project: #19-223

Introduction

The purpose of this report is to address air quality, community health risk, and greenhouse gas (GHG) impacts associated with the proposed office-retail mixed-use development located at 150 Almaden Boulevard in San José, California. The air quality impacts from this project would be associated with demolition of the existing uses at the site, construction of the new buildings and infrastructure, and operation of the project. Air pollutants and GHG emissions associated with construction and operation of the project were predicted using models. In addition, the potential project health risk impacts (includes construction and operation) and the impact of existing toxic air contaminant (TAC) sources affecting the nearby sensitive receptors were evaluated. The analysis was conducted following guidance provided by the Bay Area Air Quality Management District (BAAQMD).¹

Project Description

The project site is located in downtown San José, California (see Figure 1). There is a total of nine buildings existing at the project site. The project proposes to demolish all existing buildings on an approximately 8.1-acre site and construct a 19-story office building totaling approximately 3.6 million square feet (sf) of office space. The office tower would be a maximum height of 293 feet tall to the top of the parapet. The project proposes 15,449 sf of retail and would include five levels of below-grade parking and up to 6,246 parking spaces. The project is part of the San José Downtown Strategy (DTS) 2040 Plan, which is an urban design plan that guides development activities planned within the Downtown area.²

Figure 1. Project Location



¹ Bay Area Air Quality Management District, *CEQA Air Quality Guidelines*, May 2017.

² Since this analysis was completed, the square footage for this project has changed. The retail has increased to a total of 32,500 sf and the office space has been reduced to 3,574,533 sf. The total building square footage would remain the same. Since the overall building square footage remains the same, then the operational impacts and conclusions would also remain the same.

AIR POLLUTANTS AND CONTAMINANTS

Air pollutants are governed by multiple federal and state standards to regulate and mitigate health impacts. At the federal level, there are six criteria pollutants for which National Ambient Air Quality Standards (NAAQS) have been established: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), suspended particulate matter (PM: PM_{2.5} and PM₁₀), and sulfur dioxide (SO₂). California sets standards, similar to the NAAQS as California Ambient Air Quality Standards (CAAQS). Health effects of the primary criteria pollutants (i.e., the NAAQS) and their potential sources are described below and summarized in Table 1. Note that California includes pollutants or contaminants that are specific to certain industries and not associated with this project. These include hydrogen sulfide and vinyl chloride.

Ozone

Ozone is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and oxides of nitrogen (NO_x). The main sources of ROG and NO_x, often referred to as ozone precursors, are combustion processes (including combustion in motor vehicle engines) and the evaporation of solvents, paints, and fuels. In the Bay Area, automobiles are the single largest source of ozone precursors. Ozone is referred to as a regional air pollutant because its precursors are transported and diffused by wind concurrently with ozone production through the photochemical reaction process. Ozone causes eye irritation, airway constriction, shortness of breath, and can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema.

Carbon Monoxide

Carbon monoxide is an odorless, colorless gas usually formed as the result of the incomplete combustion of fuels. The single largest source of CO is motor vehicles. While CO transport is limited, it disperses with distance from the source under normal meteorological conditions. However, under certain extreme meteorological conditions, CO concentrations near congested roadways or intersections may reach unhealthful levels that adversely affect local sensitive receptors (e.g., residents, schoolchildren, the elderly, hospital patients, etc.). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service (LOS) or with extremely high traffic volumes. Exposure to high concentrations of CO reduces the oxygen-carrying capacity of the blood and can cause headaches, nausea, dizziness, fatigue, impair central nervous system function, and induce angina (chest pain) in persons with serious heart disease. Very high levels of CO can be fatal.

Nitrogen Dioxide

Nitrogen Dioxide is a reddish-brown gas that is a byproduct of combustion processes. Automobiles and industrial operations are the main sources of NO₂. Aside from its contribution to ozone formation, NO₂ also contribute to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition. NO₂ may be visible as a coloring component on high pollution days, especially in conjunction with high ozone levels. NO₂ decreases lung

function and may reduce resistance to infection. On January 22, 2010 the U.S. Environmental Protection Agency (EPA) strengthened the health-based NAAQS for NO₂.

Sulfur Dioxide

Sulfur dioxide is a colorless, irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO₂ levels in the region. SO₂ irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight.

Particulate Matter

Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse particles are those that are larger than 2.5 microns but smaller than 10 microns (PM₁₀). PM_{2.5} refers to fine suspended particulate matter with an aerodynamic diameter of 2.5 microns or less that is not readily filtered out by the lungs. Nitrates, sulfates, dust, and combustion particulates are major components of PM₁₀ and PM_{2.5}. These small particles can be directly emitted into the atmosphere as by-products of fuel combustion, through abrasion, such as tire or brake lining wear, or through fugitive dust (wind or mechanical erosion of soil). They can also be formed in the atmosphere through chemical reactions. Particulates may transport carcinogens and other toxic compounds that adhere to the particle surfaces and can enter the human body through the lungs.

Lead

Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been mobile and industrial sources. As a result of the phase-out of leaded gasoline, metal processing is currently the primary source of lead emissions. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers.

Twenty years ago, mobile sources were the main contributor to ambient lead concentrations in the air. In the early 1970s, the U.S. EPA established national regulations to gradually reduce the lead content in gasoline. In 1975, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. The EPA banned the use of leaded gasoline in highway vehicles in December 1995. As a result of the EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector and levels of lead in the air decreased dramatically.

Toxic Air Contaminants (TACs)

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated by the EPA and the California Air Resources Board (CARB). Some examples of TACs include: benzene, butadiene, formaldehyde, and hydrogen sulfide. The identification, regulation, and monitoring of TACs is relatively recent compared to that for criteria pollutants.

High volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic (distribution centers, truck stops) were identified as posing the highest risk to adjacent receptors. Other facilities associated with increased risk include warehouse distribution centers, large retail or industrial facilities, high volume transit centers, or schools with a high volume of bus traffic. Health risks from TACs are a function of both concentration and duration of exposure.

Table 1. Health Effects of Air Pollutants

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	<ul style="list-style-type: none"> Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. Natural events, such as decomposition of organic matter. 	<ul style="list-style-type: none"> Reduced tolerance for exercise. Impairment of mental function. Impairment of fetal development. Death at high levels of exposure. Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO ₂)	<ul style="list-style-type: none"> Motor vehicle exhaust. High temperature stationary combustion. Atmospheric reactions. 	<ul style="list-style-type: none"> Aggravation of respiratory illness. Reduced visibility. Reduced plant growth. Formation of acid rain.
Ozone (O ₃)	<ul style="list-style-type: none"> Atmospheric reaction of organic gases with nitrogen oxides in sunlight. 	<ul style="list-style-type: none"> Aggravation of respiratory and cardiovascular diseases. Irritation of eyes. Impairment of cardiopulmonary function. Plant leaf injury.
Lead (Pb)	<ul style="list-style-type: none"> Contaminated soil. 	<ul style="list-style-type: none"> Impairment of blood functions and nerve construction. Behavioral and hearing problems in children.
Suspended Particulate Matter (PM _{2.5} and PM ₁₀)	<ul style="list-style-type: none"> Stationary combustion of solid fuels. Construction activities. Industrial processes. Atmospheric chemical reactions. 	<ul style="list-style-type: none"> Reduced lung function. Aggravation of the effects of gaseous pollutants. Aggravation of respiratory and cardiorespiratory diseases. Increased cough and chest discomfort. Soiling. Reduced visibility.
Sulfur Dioxide (SO ₂)	<ul style="list-style-type: none"> Combustion of sulfur-containing fossil fuels. Smelting of sulfur-bearing metal ores. Industrial processes. 	<ul style="list-style-type: none"> Aggravation of respiratory diseases (asthma, emphysema). Reduced lung function. Irritation of eyes. Reduced visibility. Plant injury. Deterioration of metals, textiles, leather, finishes, coatings, etc.
Toxic Air Contaminants	<ul style="list-style-type: none"> Cars and trucks, especially diesels. Industrial sources such as chrome platers. Neighborhood businesses such as dry cleaners and service stations. Building materials and product. 	<ul style="list-style-type: none"> Cancer. Chronic eye, lung, or skin irritation. Neurological and reproductive disorders.

Source: CARB, 2009. ARB Fact Sheet: Air Pollution and Health, see: <https://www.arb.ca.gov/research/health/fs/fs1/fs1.htm> accessed May 1, 2018

SETTING

The City View Plaza Project is in the San Francisco Bay Area Air Basin. The Air Basin includes the counties of San Francisco, Santa Clara, San Mateo, Marin, Napa, Contra Costa, and Alameda, along with the southeast portion of Sonoma County and the southwest portion of Solano County.

This Project is within the jurisdiction of the BAAQMD. Air quality conditions in the San Francisco Bay Area have improved significantly since the BAAQMD was created in 1955. Ambient concentrations of air pollutants, and the number of days during which the region exceeds air quality standards, have fallen dramatically. Exceedances of air quality standards occur primarily during meteorological conditions conducive to high pollution levels, such as cold, windless winter nights or hot, sunny summer afternoons.

Local Climate and Air Quality

Air quality is a function of both local climate and local sources of air pollution. Air quality is the balance of the natural dispersal capacity of the atmosphere and emissions of air pollutants from human uses of the environment. Climate and topography are major influences on air quality.

Climate and Meteorology

During the summer, mostly clear skies result in warm daytime temperatures and cool nights in the Santa Clara Valley. Winter temperatures are mild, except for very cool but generally frost-less mornings. Further inland where the moderating effect of the bay is not as strong, temperature extremes are greater. Wind patterns are influenced by local terrain, with a northwesterly sea breeze typically developing during the daytime. Winds are usually stronger in the spring and summer. Rainfall amounts are modest, ranging from 13 inches in the lowlands to 20 inches in the hills.

Air Pollution Potential

Ozone and fine particle pollution, or PM_{2.5}, are the major regional air pollutants of concern in the San Francisco Bay Area. Ozone is primarily a problem in the summer, and fine particle pollution in the winter. Most of Santa Clara County is well south of the cooler waters of the San Francisco Bay and far from the cooler marine air which usually reaches across San Mateo County in summer. Ozone frequently forms on hot summer days when the prevailing seasonal northerly winds carry ozone precursors southward across the county, causing health standards to be exceeded. Santa Clara County experiences many exceedances of the PM_{2.5} standard each winter. This is due to the high population density, wood smoke, industrial and freeway traffic, and poor wintertime air circulation caused by extensive hills to the east and west that block wind flow into the region.

Attainment Status Designations

The CARB is required to designate areas of the state as attainment, nonattainment, or unclassified for all state standards. An “attainment” designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant in that area. A “nonattainment”

designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. An “unclassified” designation signifies that data does not support either an attainment or nonattainment status. The California Clean Air Act (CCAA) divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

Table 2 shows the state and federal standards for criteria pollutants and provides a summary of the attainment status for the San Francisco Bay Area with respect to national and state ambient air quality standards.

Table 2. NAAQS, CAAQS, and San Francisco Bay Area Attainment Status

Pollutant	Averaging Time	California Standards		National Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Carbon Monoxide (CO)	8-Hour	9 ppm (10 mg/m ³)	Attainment	9 ppm (10 mg/m ³)	Attainment
	1-Hour	20 ppm (23 mg/m ³)	Attainment	35 ppm (40 mg/m ³)	Attainment
Nitrogen Dioxide (NO ₂)	Annual Mean	0.030 ppm (57 mg/m ³)	Attainment	0.053 ppm (100 µg/m ³)	Attainment
	1-Hour	0.18 ppm (338 µg/m ³)	Attainment	0.100 ppm	Unclassified
Ozone (O ₃)	8-Hour	0.07 ppm (137 µg/m ³)	Nonattainment	0.070 ppm	Nonattainment
	1-Hour	0.09 ppm (180 µg/m ³)	Nonattainment	Not Applicable	Not Applicable
Suspended Particulate Matter (PM ₁₀)	Annual Mean	20 µg/m ³	Nonattainment	Not Applicable	Not Applicable
	24-Hour	50 µg/m ³	Nonattainment	150 µg/m ³	Unclassified
Suspended Particulate Matter (PM _{2.5})	Annual Mean	12 µg/m ³	Nonattainment	12 µg/m ³	Attainment
	24-Hour	Not Applicable	Not Applicable	35 µg/m ³	Nonattainment
Sulfur Dioxide (SO ₂)	Annual Mean	Not Applicable	Not Applicable	80 µg/m ³ (0.03 ppm)	Attainment
	24-Hour	0.04 ppm (105 µg/m ³)	Attainment	365 µg/m ³ (0.14 ppm)	Attainment
	1-Hour	0.25 ppm (655 µg/m ³)	Attainment	0.075 ppm (196 µg/m ³)	Attainment

Lead (Pb) is not listed in the above table because it has been in attainment since the 1980s.

ppm = parts per million, mg/m³ = milligrams per cubic meter, µg/m³ = micrograms per cubic meter

Source: Bay Area Air Quality Management District, 2017. *Air Quality Standards and Attainment Status*. January 5.

Existing Air Pollutant Levels

BAAQMD monitors air pollution at various sites within the Bay Area. The closest air monitoring station (158 Jackson Street) that monitored O₃, CO, NO, NO₂, PM₁₀, and PM_{2.5} over the past 5

years (2014 through 2018) is in the City of San José approximately 5 miles southwest of the project site. The data shows that during the past few years, the project area has exceeded the state and/or federal O₃, PM₁₀, and PM_{2.5} ambient air quality standards. Table 3 lists air quality trends in data collected at the San José Station for the past 5 years and published by the BAAQMD, which is the most recent time-period available. Ozone standards are exceeded on 0 to 4 days annually in San José and 3 to 15 days throughout the Bay Area. Measured 24-hour PM₁₀ and PM_{2.5} concentrations are exceeded on 0 to 6 monitoring days in San José and up to 18 days at any place in the Bay Area (note these levels were influenced by smoke from wildfires).

Table 3. Ambient Air Quality Concentrations from 2014 through 2018

Pollutant	Standard	2014	2015	2016	2017	2018
Ozone						
Max 1-hr concentration		89 ppb	94 ppb	87 ppb	121 ppb	78 ppb
No. days exceeded: State	0	0	0	0	3	0
Max 8-hr concentration		66 ppb	81 ppb	66 ppb	98 ppb	61 ppb
No. days exceeded: State	0	0	2	0	4	0
Federal	0	0	2	0	4	0
Carbon Monoxide						
Max 1-hr concentration		2.4 ppm	2.4 ppm	2.0 ppm	2.1 ppm	2.5 ppm
No. days exceeded: State	0	0	0	0	0	0
Federal	0	0	0	0	0	0
Max 8-hr concentration		1.9 ppm	1.8 ppm	1.4 ppm	1.8 ppm	2.1 ppm
No. days exceeded: State	0	0	0	0	0	0
Federal	0	0	0	0	0	0
PM₁₀						
Max 24-hr concentration		55 µg/m ³	58 µg/m ³	41 µg/m ³	70 µg/m ³	122 µg/m ³
No. days exceeded: State	1	1	1	0	6	4
Federal	0	0	0	0	0	0
Max annual concentration		19.9 µg/m ³	22.0 µg/m ³	18.5 µg/m ³	21.6 µg/m ³	23.1 µg/m ³
No. days exceeded: State	-	-	-	-	-	-
PM_{2.5}						
Max 24-hr concentration		60.4 µg/m ³	49.4 µg/m ³	22.6µg/m ³	49.7 g/m ³	133.9µg/m ³
No. days exceeded: Federal	2	2	2	0	6	4
Annual Concentration		8.4 µg/m ³	10.0 g/m ³	8.4 µg/m ³	9.5 µg/m ³	12.8µg/m ³
No. days exceeded: State	-	-	-	-	-	-
Federal	-	-	-	-	-	-
Nitrogen Dioxide						
Max 1-hr concentration		58 ppb	49 ppb	51 ppb	68 ppb	86 ppb
No. days exceeded: State	0	0	0	0	0	0
Federal	0	0	0	0	0	0
Annual Concentration		13 ppb	13 ppb	11 ppb	12 ppb	13 ppb
No. days exceeded: State	-	-	-	-	-	-
Federal	-	-	-	-	-	-

Source: Bay Area Air Quality Management District, 2019

Regulatory Framework

Pursuant to the Federal Clean Air Act (FCAA) of 1970, the EPA established the NAAQS. The NAAQS were established for major pollutants, termed “criteria” pollutants. Criteria pollutants are defined as those pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations in order to protect public health.

Both the EPA and the CARB have established ambient air quality standards for common pollutants: CO, O₃, NO₂, SO₂, Pb, and PM. In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. These standards are designed to protect the health and welfare of the public with a reasonable margin of safety. These ambient air quality standards are levels of contaminants which represent safe levels that avoid specific adverse health effects associated with each criteria pollutant.

Federal Air Quality Regulations

At the federal level, the EPA has been charged with implementing national air quality programs. EPA’s air quality mandates are drawn primarily from the FCAA, which was enacted in 1963. The FCAA was amended in 1970, 1977, and 1990.

The FCAA required EPA to establish primary and secondary NAAQS and required each state to prepare an air quality control plan referred to as a State Implement Plan (SIP). Federal standards include both primary and secondary standards. Primary standards set limits to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings.³ The Federal Clean Air Act Amendments of 1990 (FCAAA) added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies. EPA has responsibility to review all state SIPs to determine conformity with the mandates of the FCAAA and determine if implementation will achieve air quality goals. If the EPA determines a SIP to be inadequate, a Federal Implementation Plan (FIP) may be prepared for the nonattainment area which imposes additional control measures. Failure to submit an approvable SIP or to implement the Plan within the mandated timeframe may result in the application of sanctions on transportation funding and stationary air pollution sources in the air basin.

The 1970 FCAA authorized the establishment of national health-based air quality standards and also set deadlines for their attainment. The FCAA Amendments of 1990 changed deadlines for attaining NAAQS as well as the remedial actions required of areas of the nation that exceed the standards. Under the FCAA, state and local agencies in areas that exceed the NAAQS are required to develop SIPs to show how they will achieve the NAAQS by specific dates. The FCAA requires that projects receiving federal funds demonstrate conformity to the approved SIP and local air

³ U.S. Environmental Protection Agency, 2013. Website: www.epa.gov/air/criteria.html. February.

quality attainment Plan for the region. Conformity with the SIP requirements would satisfy the FCAA requirements.

State Air Quality Regulations

The CARB is the agency responsible for the coordination and oversight of state and local air pollution control programs in California and for implementing the CCAA, adopted in 1988. The CCAA requires that all air districts in the state achieve and maintain the CAAQS by the earliest practical date. The CCAA specifies that districts should focus on reducing the emissions from transportation and area-wide emission sources and provides districts with the authority to regulate indirect sources.

CARB is also responsible for developing and implementing air pollution control plans to achieve and maintain the NAAQS. CARB is primarily responsible for statewide pollution sources and produces a major part of the SIP. Local air districts provide additional strategies for sources under their jurisdiction. CARB combines this data and submits the completed SIP to the EPA.

Other CARB duties include monitoring air quality (in conjunction with air monitoring networks maintained by air pollution control and air quality management districts), establishing CAAQS (which in many cases are more stringent than the NAAQS), determining and updating area designations and maps, and setting emissions standards for new mobile sources, consumer products, small utility engines, and off-road vehicles.

California Clean Air Act

In 1988, the CCAA required that all air districts in the state endeavor to achieve and maintain CAAQS for CO, O₃, SO₂, and NO₂ by the earliest practical date. The CCAA provides districts with authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and area-wide emission sources. Each nonattainment district is required to adopt a plan to achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each nonattainment pollutant or its precursors. A Clean Air Plan shows how a district would reduce emissions to achieve air quality standards. Generally, the state standards for these pollutants are more stringent than the national standards.

California Air Resources Board Handbook

In 1998, CARB identified particulate matter from diesel-fueled engines as a toxic air contaminant. CARB has completed a risk management process that identified potential cancer risks for a range of activities using diesel-fueled engines.⁴ CARB subsequently developed an Air Quality and Land Use Handbook⁵ (Handbook) in 2005 that is intended to serve as a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land

⁴ California Air Resources Board, 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. October.

⁵ California Air Resources Board, 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. April.

use decision-making process. The 2005 CARB Handbook recommends that planning agencies consider proximity to air pollution sources when considering new locations for “sensitive” land uses, such as residences, medical facilities, daycare centers, schools, and playgrounds.

Air pollution sources of concern include freeways, rail yards, ports, refineries, distribution centers, chrome plating facilities, dry cleaners, and large gasoline service stations. Key recommendations in the Handbook relative to the Plan Area include taking steps to consider or avoid siting new, sensitive land uses:

- Within 500 feet of a freeway, urban roads with 100,000 vehicles/day or rural roads with 50,000 vehicles/day.
- Within 300 feet of gasoline fueling stations (note that new fueling stations utilize enhanced vapor recovery systems that substantially reduce emissions).
- Within 300 feet of dry-cleaning operations (note that dry cleaning with TACs is being phased out and will be prohibited in 2023).

Bay Area Air Quality Management District

The BAAQMD seeks to attain and maintain air quality conditions in the San Francisco Bay Area Air Basin (SFBAAB) through a comprehensive program of planning, regulation, enforcement, technical innovation, and education. The clean air strategy includes the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources. The BAAQMD also inspects stationary sources and responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements programs and regulations required by law.

Clean Air Plan

The BAAQMD is responsible for developing a Clean Air Plan which guides the region’s air quality planning efforts to attain the CAAQS. The BAAQMD’s 2017 Clean Air Plan is the latest Clean Air Plan which contains district-wide control measures to reduce ozone precursor emissions (i.e., ROG and NO_x), particulate matter and greenhouse gas emissions. The Bay Area 2017 Clean Air Plan, which was adopted on April 19, 2017 by the BAAQMD’s board of directors:

- Updates the Bay Area 2010 Clean Air Plan in accordance with the requirements of the California Clean Air Act to implement “all feasible measures” to reduce ozone;
- Provides a control strategy to reduce ozone, particulate matter (PM), air toxics, and greenhouse gases in a single, integrated plan;
- Reviews progress in improving air quality in recent years; and
- Continues and updates emission control measures.

BAAQMD CARE Program

The Community Air Risk Evaluation (CARE) program was initiated in 2004 to evaluate and reduce health risks associated with exposures to outdoor TACs in the Bay Area. The program examines TAC emissions from point sources, area sources and on-road and off-road mobile

sources with an emphasis on diesel exhaust, which is a major contributor to airborne health risk in California. The CARE program is an on-going program that encourages community involvement and input. The technical analysis portion of the CARE program is being implemented in three phases that includes an assessment of the sources of TAC emissions, modeling and measurement programs to estimate concentrations of TAC, and an assessment of exposures and health risks. Throughout the program, information derived from the technical analyses will be used to focus emission reduction measures in areas with high TAC exposures and high density of sensitive populations. Risk reduction activities associated with the CARE program are focused on the most at-risk communities in the Bay Area. The BAAQMD has identified six communities as impacted: Concord, Richmond/San Pablo, Western Alameda County, San José, Redwood City/East Palo Alto, and Eastern San Francisco.

Planning Healthy Places

BAAQMD developed a guidebook that provides air quality and public health information intended to assist local governments in addressing potential air quality issues related to exposure of sensitive receptors to exposure of emissions from local sources of air pollutants. The guidance provides tools and recommended best practices that can be implemented to reduce exposures. The information is provided as recommendations to develop policies and implementing measures in city or county General Plans, neighborhood or specific plans, land use development ordinances, or into projects.

BAAQMD California Environmental Quality Act Air Quality Guidelines

The BAAQMD California Environmental Quality Act (CEQA) Air Quality Guidelines⁶ were prepared to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process consistent with CEQA requirements including thresholds of significance, mitigation measures, and background air quality information. They also include assessment methodologies for air toxics, odors, and greenhouse gas emissions. In June 2010, the BAAQMD's Board of Directors adopted CEQA thresholds of significance and an update of their CEQA Guidelines. In May 2011, the updated BAAQMD CEQA Air Quality Guidelines were amended to include a risk and hazards threshold for new receptors and modify procedures for assessing impacts related to risk and hazard impacts. A recent update to the Guidelines was published in May 2017.

BAAQMD Rules and Regulations

Combustion equipment associated with the proposed project that includes new diesel engines to power generators and possibly new natural gas-fired boilers would establish new sources of particulate matter and gaseous emissions. Emissions would primarily result from the testing of the emergency backup generators, operation of the boilers for space and water heating and some minor emissions from cooling towers. The project would also generate emissions from vehicles traveling to and from the project.

⁶ Bay Area Air Quality Management District, 2017. *CEQA Air Quality Guidelines*. May.

Certain emission sources would be subject to BAAQMD Regulations and Rules. The District's rules and regulations that may apply to the project include:

- Regulation 2 – Permits
 - Rule 2-1: General Requirements
 - Rule 2-2: New Source Review
- Regulation 6 – Particulate Matter and Visible Emissions
- Regulation 9 – Inorganic Gaseous Pollutants
 - Rule 9-1: Sulfur Dioxide
 - Rule 9-7: Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, And Process Heaters
 - Rule 9-8: Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines

Permits

Rule 2-1-301 requires that any person installing, modifying, or replacing any equipment, the use of which may reduce or control the emission of air contaminants, shall first obtain an Authority to Construct (ATC).

Rule 2-1-302 requires that written authorization from the BAAQMD in the form of a Permit to Operate (PTO) be secured before any such equipment is used or operated.

Rule 2-1 lists sources that are exempt from permitting. At the proposed facility, the diesel fuel storage tanks are expected to be exempt from permitting.

New Source Review

Rule 2-2, New Source Review (NSR), applies to all new and modified sources or facilities that are subject to the requirements of Rule 2-1-301. The purpose of the rule is to provide for review of such sources and to provide mechanisms by which no net increase in emissions will result.

Rule 2-2-301 requires that an applicant for an ATC or PTO apply Best Available Control Technology (BACT) to any new or modified source that results in an increase in emissions and has emissions of precursor organic compounds, non-precursor organic compounds, NO_x, SO₂, PM₁₀, or CO of 10.0 pounds or more per highest day. Based on the estimated emissions from the proposed project, BACT will be required for NO_x emissions from the diesel-fueled generator engines.

BACT for Diesel Generator Engines

Since the generators will be used exclusively for emergency use during involuntary loss of power, the BACT 2 levels listed for IC compression engines in the BAAQMD BACT Guidelines would apply. The BACT 2 NO_x emission factor limit is 6.9 grams per horsepower hour (g/hp-hr). The project's proposed engines will have emissions lower than the BACT 2 level and, as such, will comply with the BACT requirements.

Offsets

Rule 2-2-302 require that offsets be provided for a new or modified source that emits more than 10 tons per year of NOx or precursor organic compounds. It is not expected that emissions of any pollutant will exceed the offset thresholds. Thus, is not expected that offsets for the proposed project would be required.

Prohibitory Rules

Regulation 6 pertains to particulate matter and visible emissions. Although the engines will be fueled with diesel, they will be modern, low emission engines. Thus, the engines are expected to comply with Regulation 6.

Rule 9-1 applies to sulfur dioxide. The engines will use ultra-low sulfur diesel fuel (less than 15 ppm sulfur) and will not be a significant source of sulfur dioxide emissions and are expected to comply with the requirements of Rule 9-1.

Rule 9-7 limits the emissions of NOx CO from industrial, institutional and commercial boilers, steam generators and process heaters. This regulation typically applies to boilers with a heat rating of 2 million British Thermal Units (BTU) per hour

Rule 9-8 prescribes NOx and CO emission limits for stationary internal combustion engines. Since the proposed engines will be used with emergency standby generators, Regulation 9-8-110 exempts the engines from the requirements of this Rule, except for the recordkeeping requirements (9-8-530) and limitations on hours of operation for reliability-related operation (maintenance and testing). The engines will not operate more than 50 hours per year, which will satisfy the requirements of 9-8-111.

Stationary Diesel Airborne Toxic Control Measure

The BAAQMD administers the state's Airborne Toxic Control Measure (ACTM) for Stationary Diesel engines (section 93115, title 17 CA Code of Regulations). The project's stationary sources will be new stationary emergency standby diesel engines larger than 50 hp. Since the engines will have an uncontrolled PM emission factor of less than 0.15 g/hp-hour and operate no more than 50 hours per year, the engines will comply with the requirements of the ACTM.

Air Pollutants of Concern

High ozone levels are caused by the cumulative emissions of ROG and NOx. These precursor pollutants react under certain meteorological conditions to form high ozone levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ozone levels. The highest ozone levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources. High ozone levels aggravate respiratory and cardiovascular diseases, reduced lung function, and increase coughing and chest discomfort.

Particulate matter is another problematic air pollutant of the Bay Area. Particulate matter is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$). Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide (or cumulative) emissions and localized emissions. High particulate matter levels aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

Toxic Air Contaminants

Toxic air contaminants are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer) and include, but are not limited to, the criteria air pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average). According to the CARB, diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the state's Proposition 65 or under the Federal Hazardous Air Pollutants programs.

CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of DPM. Several of these regulatory programs affect medium and heavy-duty diesel trucks that represent the bulk of DPM emissions from California highways. These regulations include the solid waste collection vehicle (SWCV) rule, in-use public and utility fleets, and the heavy-duty diesel truck and bus regulations. In 2008, CARB approved a new regulation to reduce emissions of DPM and nitrogen oxides from existing on-road heavy-duty diesel fueled vehicles.⁷ The regulation requires affected vehicles to meet specific performance requirements between 2014 and 2023, with all affected diesel vehicles required to have 2010 model-year engines or equivalent by 2023. These requirements are phased in over the compliance period and depend on the model year of the vehicle.

The BAAQMD is the regional agency tasked with managing air quality in the region. At the state level, the CARB (a part of the California EPA) oversees regional air district activities and regulates air quality at the state level. The BAAQMD has published CEQA Air Quality Guidelines that are used in this assessment to evaluate air quality impacts of projects.⁸ Projects that have TAC emissions that could adversely affect sensitive receptors prepare health risk assessments to quantify the potential and, if appropriate, identify mitigation measures to reduce impacts. This report includes a health risk assessment that evaluates impacts from temporary project

⁷ Available online: <http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>. Accessed: November 21, 2014.

⁸ Bay Area Air Quality Management District. 2017. *BAAQMD CEQA Air Quality Guidelines*. May.

construction, long-term use of stationary equipment, and long-term traffic activity generated by the project. The detailed health risk modeling methodology used in this assessment is contained in *Attachment 1*.

City of San José

San José Envision 2040 General Plan

The San José Envision 2040 General Plan includes goals, policies, and actions to reduce exposure of the City's sensitive population to exposure of air pollution and toxic air contaminants or TACs. The following goals, policies, and actions are applicable to the proposed project and this assessment:

Applicable Goals – Air Pollutant Emission Reduction

Goal MS-10 Minimize emissions from new development.

Applicable Policies – Air Pollutant Emission Reduction

- MS-10.1 Assess projected air emissions from new development in conformance with the BAAQMD CEQA Guidelines and relative to state and federal standards. Identify and implement feasible air emission reduction measures.
- MS-10.2 Consider the cumulative air quality impacts from proposed developments for proposed land use designation changes and new development, consistent with the region's Clean Air Plan and state law.
- MS-10.3 Promote the expansion and improvement of public transportation services and facilities, where appropriate, to both encourage energy conservation and reduce air pollution.

Applicable Goals – Toxic Air Contaminants

Goal MS-11 Minimize exposure of people to air pollution and toxic air contaminants such as ozone, carbon monoxide, lead, and particulate matter.

Applicable Policies – Toxic Air Contaminants

- MS-11.2 For projects that emit toxic air contaminants, require project proponents to prepare health risk assessments in accordance with BAAQMD-recommended procedures as part of environmental review and employ effective mitigation to reduce possible health risks to a less than significant level. Alternatively, require new projects (such as, but not limited to, industrial, manufacturing, and processing facilities) that are sources of TACs to be located an adequate distance from residential areas and other sensitive receptors.

MS-11.5 Encourage the use of pollution absorbing trees and vegetation in buffer areas between substantial sources of TACs and sensitive land uses.

Actions – Toxic Air Contaminants

MS-11.7 Consult with BAAQMD to identify stationary and mobile TAC sources and determine the need for and requirements of a health risk assessment for proposed developments.

MS-11.8 For new projects that generate truck traffic, require signage which reminds drivers that the state truck idling law limits truck idling to five minutes.

Downtown Strategy 2040 Plan

The San José DTS 2040 Plan is an urban design plan that guides development activities planned within the Downtown area. This strategy would increase the amount of new commercial office by an additional three million sf (approximately 10,000 jobs) with the new total being 14.2 million sf of commercial by the year 2040. The residential capacity would be increased up to 4,360 units. The amount of new retail development (1.4 million sf) and hotel room (3,600 rooms) capacities of the Downtown Strategy 2000 would be maintained. The integrated Final Environmental Impact Report was published December 2018.

The DTS identified less-than-significant construction period emissions if development projects are in conformance with 2017 BAAQMD CEQA Guidelines, GP Policy MS-13.1, and current City requirements that include various levels of construction emissions control measures. All projects are required to implement the following control measures:

City requirements, all projects will be required to implement the following control measures:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.

- Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Future projects developed under the DTS that incorporate these measures and are below the screening levels would not result in a significant impact related to construction emissions of regional criteria pollutants. Projects that exceed the screening levels would be required to complete additional project level analysis of construction-related emissions of criteria pollutants and may require additional measures to ensure that construction emissions would not exceed the threshold for average daily emissions.

Operational emissions of regional criteria air pollutants with measures included to reduce emissions under the DTS were identified as significant and unavoidable. To reduce operational emissions associated with vehicle travel, future development will be required to implement a Transportation Demand Management (TDM) program, consistent with the Downtown Transportation Plan.

The TDM programs may incorporate, but would not be limited to, the following Transportation Control Measures (TCMs):

- Rideshare Measures:
 - Implement carpool/vanpool program (e.g., carpool ride matching for employees, assistance with vanpool formation, provision of vanpool vehicles, etc.).
- Transit Measures:
 - Construct transit facilities such as bus turnouts/bus bulbs, benches, shelters, etc.
 - Design and locate buildings to facilitate transit access (e.g., locate building entrances near transit stops, eliminate building setbacks, etc.)
- Services Measures:
 - Provide on-site shops and services for employees, such as cafeteria, bank/ATM, dry cleaners, convenience market, etc.
 - Provide on-site child care or contribute to off-site childcare within walking distance.
- Shuttle Measures:
 - Establish mid-day shuttle service from work site to food service establishments/commercial areas.
 - Provide shuttle service to transit stations/multimodal centers.
- Parking Measures:
 - Provide preferential parking (e.g., near building entrance, sheltered area, etc.) for carpool and vanpool vehicles.
 - Implement parking fees for single occupancy vehicle commuters.
 - Implement parking cash-out program for employees (i.e., non-driving employees receive transportation allowance equivalent to value of subsidized parking).
- Bicycle and Pedestrian Measures:
 - Provide secure, weather-protected bicycle parking for employees.
 - Provide safe, direct access for bicyclists to adjacent bicycle routes.
 - Provide showers and lockers for employees bicycling or walking to work.

- Provide secure short-term bicycle parking for retail customers or non-commute trips.
- Provide direct, safe, attractive pedestrian access from Planning Area to transit stops and adjacent development.
- Other Measures:
 - Implement compressed work week schedule (e.g., 4 days/40 hours, 9 days/80 hours).
 - Implement home-based telecommuting program.

During project-level supplemental review of future individual development projects, the measures will be evaluated for consistency with the DTS 2040 and General Plan policies. All feasible and applicable measures will be required as part of project design or as conditions of approval.

Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools. The closest sensitive receptors to the project site would be new future residences in the proposed Greyhound residential development located at 70 South Almaden Avenue. Additional residential developments that have been approved within the area include the Post and San Pedro Tower (171 Post Street) and the 27 West development at 27 South 1st Street. There are also existing residential developments located at farther distances, including apartments at 1 South Market Street and 200 South Market Street. Note that receptors were also included at the site of the defunct Plaza Hotel (96 Almaden Avenue) because it has been converted into interim housing for the homeless.

Significance Thresholds

In June 2010, BAAQMD adopted thresholds of significance to assist in the review of projects under CEQA and these significance thresholds were contained in the District's 2011 CEQA Air Quality Guidelines. These thresholds were designed to establish the level at which BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA. The thresholds were challenged through a series of court challenges and were mostly upheld. BAAQMD updated the CEQA Air Quality Guidelines in 2017 to include the latest significance thresholds, which were used in this analysis and are summarized in Table 4. Note that the Downtown Strategy Plan Draft Environmental Impact Report (DEIR) evaluated emissions of criteria air pollutants (and their precursors) and greenhouse gases from planned development that includes the Proposed Project. Operational emissions from the Proposed Project are predicted in this assessment for informational purposes only.

Table 4. BAAQMD Air Quality Exceedance Thresholds

Criteria Air Pollutant	Construction Thresholds	Operational Thresholds							
	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Annual Average Emissions (tons/year)						
ROG	54	<i>Evaluated in DSP Strategy DEIR</i>							
NO _x	54								
PM ₁₀	82 (Exhaust)								
PM _{2.5}	54 (Exhaust)								
CO	Not Applicable								
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable							
Health Risks and Hazards	Single Sources Within 1,000-foot Zone of Influence	Combined Sources (Cumulative from all sources within 1,000-foot zone of influence)							
Excess Cancer Risk	>10.0 per one million	>100 per one million							
Hazard Index	>1.0	>10.0							
Incremental annual PM _{2.5}	>0.3 µg/m ³	>0.8 µg/m ³							
Greenhouse Gas Emissions									
Land Use Projects – direct and indirect emissions	<i>Evaluated in DSP Strategy DEIR</i>								
Note: ROG = reactive organic gases, NOx = nitrogen oxides, PM ₁₀ = coarse particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, PM _{2.5} = fine particulate matter or particulates with an aerodynamic diameter of 2.5µm or less. GHG = greenhouse gases.									
*BAAQMD does not have a recommended post-2020 GHG threshold.									

AIR QUALITY IMPACTS AND MITIGATION MEASURES

Impact AIR-1: **Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?**

The Bay Area is considered a non-attainment area for ground-level ozone and PM_{2.5} under both the FCAA and the CCAA. The area is also considered non-attainment for PM₁₀ under the CCAA, but not the federal act. The area has attained both state and federal ambient air quality standards for carbon monoxide. As part of an effort to attain and maintain ambient air quality standards for ozone and PM₁₀, the BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for ozone precursor pollutants (ROG and NOx), PM₁₀, and PM_{2.5} and apply to both construction period and operational period impacts.

Construction Period Emissions

The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to estimate emissions from on-site construction activity, worker construction vehicle trips, and operation of the site assuming full build-out of the project. The project land use types and size, and anticipated construction schedule were input to CalEEMod. The EMission FACtors 2017 model (EMFAC2017) model was used to predict emissions from construction truck traffic.⁹ The model output from CalEEMod along with construction inputs are included as *Attachment 2* and EMFAC2017 emissions modeling outputs are included in *Attachment 3*.

CalEEMod Inputs

Land Use Inputs

The proposed project land uses were input into CalEEMod as follows:

- 3,648,584 sf entered as “Office Park” on 8.10 acres to represent office uses;
- 112,314 sf entered as “General Light Industry” to represent mechanical penthouse;
- 15,499 sf entered as “Strip Mall” to represent the proposed retail; and
- 6,246 parking spaces and 1,870,905 sf entered as “Enclosed Parking with Elevator”.

Construction Inputs

CalEEMod computes annual emissions for construction that are based on the project type, size and acreage. Inputs to CalEEMod were developed that take into account demolition of the on-site uses, excavation, and the tall building construction. CalEEMod provides emission estimates for both on-site and off-site construction activities. On-site activities are primarily made up of construction equipment emissions, while off-site activity included worker traffic. The construction build-out scenario, including equipment list and schedule, were based on information provided by the project applicant.

⁹ CalEEMod does not have the ability to predict mitigation effects for construction traffic emissions.

Construction phases include demolition, site preparation, shoring, grading/mass excavation, trenching/foundation, exterior building construction, paving/hardscape, and architectural coatings. For demolition, it was estimated that 1,475,000 sf of buildings along with 500 tons of pavement materials would be demolished and hauled from the site. For grading, 1,037,689 cubic yards of material would be excavated and hauled from the site. Cement truck trips were assumed to be included in the model's estimate of vendor trips.

The provided construction equipment worksheet included the schedule for each phase. Within each phase, the quantity of equipment to be used along with the average hours per day and total number of workdays was provided. Since different equipment would have different estimates of the working days per phase, the hours per day for each phase was computed by dividing the total number of hours that the equipment would be used by the total number of days in that phase.

The construction schedule assumed that the earliest possible start date would be March 2020¹⁰ and the project would be built out over a period of approximately 69 months, or 1,796 construction workdays (based on construction six days/week).¹¹ The first earliest operational year was assumed to be 2026.

CalEEMod predicted the amount of worker traffic, vendor trips, and haul trips. Haul trips were computed by CalEEMod based on the amount of demolition material and excavated dirt that would be hauled from the site. CalEEMod assumes haul trip lengths of 20 miles. Since CalEEMod does not have the capability of computing the effectiveness of mitigation on truck hauling emission, truck emissions were computed separately using CARB's EMFAC2017 model.

Construction Truck Traffic Emissions

The truck-related emissions are based on vendor trip estimates produced by CalEEMod and haul trip that were computed based on the estimate of demolition material to be exported, soil material to be exported. CalEEMod provides daily estimates of vendor trips and the total estimate of haul truck trips, by phase. The total vendor trips for each phase were computed by multiplying the daily rate by the number of days in that phase. Overall, the truck traffic for the project would be comprised of Medium-Heavy Duty Trucks (MHDT) and Heavy-Heavy Duty Trucks (HHDT).

The truck traffic information was combined with motor vehicle emissions factors, based on the state's latest on-road mobile emission factor model. The latest version of the model made available by CARB is EMFAC2017.¹² EMFAC2017 provides aggregate emission rates in grams per mile for each vehicle type. The vehicle mix for this study was based on CalEEMod default assumptions, where vendor trips are comprised of delivery and large trucks (i.e., EMFAC category MHDT and HHDT) and haul trucks are comprised of large trucks (EMFAC category HHDT). Travel distances are based on CalEEMod default lengths, which are 7.3 miles for vendor trips and 20 miles for

¹⁰ Note that the time of the analysis, construction was estimated to begin March 2020. This was a conservative estimate. A later start date would not change the construction emissions since the proposed construction length would not change.

¹¹ Construction is proposed to be running seven days per week. However, to align with the proposed construction schedule, construction was modeled as occurring six days per week. The seven days per week assumption underestimated the construction timeline.

¹² See CARB's EMFAC2017 Web Database at <https://www.arb.ca.gov/emfac/2017/>, accessed December 13, 2019.

hauling (demolition export and soil import). Emissions associated with vehicle starts and idle time were also included by computing these emissions associated with each truck trip. Table 5 provides the traffic inputs that were combined with the EMFAC2017 emission database to compute vehicle emissions.

Table 5. CalEEMod Computed Traffic Data Used for EMFAC2017 Model Runs

CalEEMod Run/Land Uses and Construction Phase	Total Trips by Trip Type			Notes
	Worker ¹	Vendor	Haul	
Vehicle mix ¹	50% LDA 25% LDT1 25% LDT2	50% MHDT 50% HHDT	100% HDDT	CalEEMod default
Trip Length (miles)	10.8	7.3	20.0	CalEEMod default
Demolition	16,506	--	8,532	Export materials from 1,475,000sf of buildings plus 500 tons of pavement
Site Preparation	1,710	--	--	
Shoring	18,042	--	--	
Grading/Mass Excavation	13,756	--	129,836	Export of 1,037,689 cubic yards of soil
Building/Exterior	2,480,952	1,146,388	--	Based on estimated vendor trips that are assumed to include cement truck trips
Paving/Hardscape	10,695	--	--	

¹ Note that worker trips were modeled using CalEEMod.

Summary of Computed Construction Period Emissions

The on-site construction equipment, worker travel and architectural/pavement emissions computed by CalEEMod were added to the truck traffic emissions computed using EMFAC2017. Average daily emissions were computed by dividing the total construction emissions by the number of construction days. Table 6 shows average daily construction emissions of ROG, NOx, PM₁₀ exhaust, and PM_{2.5} exhaust during construction of the project. As indicated in Table 6, predicted project emissions of NOx would exceed the BAAQMD significance thresholds with and without mitigation. Emissions of other pollutants would be below the thresholds. Construction period emissions are considered *significant*.

Table 6. Construction Period Emissions

Scenario	ROG	NOx	Mitigated NOx	PM ₁₀ Exhaust	PM _{2.5} Exhaust
Equipment, traffic and evaporative:	33.25 tons	83.69 tons	28.39 tons	4.07 tons	3.84 tons
Truck traffic: running, start and idle:	1.50 tons	41.83 tons	29.19 tons	1.82 tons	0.96 tons
Total construction emissions (tons)	34.76 tons	125.52 tons	57.58 tons	5.89 tons	4.80 tons
Average daily emissions (pounds) ¹	39 lbs.	140 lbs.	64 lbs.	7 lbs.	5 lbs.
BAAQMD Thresholds (pounds per day)	54 lbs.	54 lbs.	54 lbs.	82 lbs.	54 lbs.
Exceed Threshold?	No	Yes	Yes	No	No

¹ Assumes 5.8 years or 1,796 workdays.

Mitigation Measure AQ-1: Implement BAAQMD-Recommended Measures to Control Particulate Matter Emissions during Construction. Measures to reduce DPM and PM₁₀ from construction are recommended to ensure that short-term health impacts to nearby sensitive receptors are avoided.

Dust (PM₁₀) Control Measures:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.
9. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph and visible dust extends beyond site boundaries.
10. Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction adjacent to sensitive receptors. Wind breaks should have at maximum 50 percent air porosity.
11. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
12. The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.

13. Avoid tracking of visible soil material on to public roadways by employing the following measures if necessary: (1) Site accesses to a distance of 100 feet from public paved roads shall be treated with a 6 to 12-inch compacted layer of wood chips, mulch, or gravel and (2) washing truck tires and construction equipment of prior to leaving the site.
14. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.

Mitigation Measure AQ-2: Use Construction equipment that has low diesel particulate matter exhaust and NOx emissions.

Exhaust Emission (NOx and PM) Control Measures:

1. All construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total shall meet U.S. EPA Tier 4 emission standards for NOx and PM (PM_{10} and $PM_{2.5}$), if feasible, otherwise,
2. If use of Tier 4 equipment is not available, alternatively use equipment that meets U.S. EPA emission standards for Tier 3 engines and include particulate matter emissions control equivalent to CARB Level 3 verifiable diesel emission control devices that altogether achieve an 85 percent reduction in particulate matter exhaust in comparison to uncontrolled equipment; alternatively (or in combination).
3. Use of alternatively-fueled equipment with lower NOx emissions that meet the NOx and PM reduction requirements above.
4. Diesel engines, whether for off-road equipment or on-road vehicles, shall not be left idling for more than 2 minutes, except as provided in exceptions to the applicable state regulations (e.g., traffic conditions, safe operating conditions). The construction sites shall have posted legible and visible signs in designated queuing areas and at the construction site to clearly notify operators of idling limit.
5. All on-road heavy-duty diesel trucks with a gross vehicle weight rating of 33,000 pounds or greater (EMFAC Category MHDDT or HHDDT) used at the project site (such as haul trucks, water trucks, dump trucks, and concrete trucks) shall be model year 2011 or newer.
6. Provide line power to the site during the early phases of construction to minimize the use of diesel-powered stationary equipment, such as generators.

Effectiveness of Mitigation:

MM AQ-1 represents enhanced dust control mitigation measures that would achieve greater than a 60 percent reduction in on-site fugitive PM_{10} and $PM_{2.5}$ emissions. These measures are consistent with recommendations in the BAAMQD CEQA Guidance for providing “best management practices” to control construction emissions.

The effectiveness of MM AQ-2 was based on additional modeling. The CalEEMod model was used to estimate the effectiveness of this mitigation measure using Tier 4 interim and Tier 4 final¹³

¹³ Tier 4 interim and Tier 4 final are EPA diesel engine standards to regulate the amount of PM and NO_x emitted from diesel powered equipment.

construction equipment. This was found to reduce on-site construction NO_x emissions by 66-percent. The EMFAC2017 model was used by distributing the fleet for 2011 or newer model trucks. Use of a newer model year trucks for material/soil hauling and vendor hauling would reduce traffic-related emissions by 30 percent. A TDM program for workers could reduce NOx emissions by about 1 percent. Overall, up to a 54 percent reduction in NOx emissions could be achieved. However, emissions of NOx would continue to exceed the thresholds with the mitigation measures incorporated.

Significant and Unavoidable NOx Construction Emissions

Construction of the project would have significant emissions of NOx when evaluated using the thresholds contained in the 2017 version of the BAAQMD CEQA Air Quality Guidelines. Significant emissions of this pollutant results in a cumulatively considerable net increase of criteria pollutants for which the project region is nonattainment under an applicable ambient air quality standard. Because the project would have emissions of NOx that would exceed emission-based significance thresholds, the project would result in a cumulatively considerable net increase in pollutant emissions that contribute to elevated ozone concentrations that exceed ambient air quality standards.

Ozone is a powerful oxidant that is harmful to public health at high concentrations. Ozone, at high levels, can damage the tissues of the lungs and respiratory tract. High concentrations of ozone irritate the nose, throat, and respiratory system and constrict the airways. Ozone also can aggravate other respiratory conditions such as asthma, bronchitis, and emphysema, causing increased hospital admissions. Repeated exposure to high ozone levels can make people more susceptible to respiratory infection and lung inflammation and permanently damage lung tissue. Ozone can also have negative cardiovascular impacts, including chronic hardening of the arteries and acute triggering of heart attacks. Children are most at risk, as they tend to be active and outdoors in the summer, when ozone levels are highest. Seniors and people with respiratory illnesses are also especially sensitive to ozone's effects. Even healthy adults, working or exercising outdoors during high ozone levels, can be affected. Ozone is not emitted directly from pollution sources. Instead, ozone is formed in the atmosphere through complex chemical reactions in the presence of sunlight between two types of precursor chemicals: hydrocarbons, often referred to as ROG and NOx. As air temperatures rise, the formation of ground-level ozone increases at an accelerated pace. Ozone levels are usually highest on clear, hot, windless summer afternoons, especially in inland valleys that are downwind of pollution sources.

Ozone is a regional pollutant. Emissions of ROG and NOx throughout the Bay Area contribute to ozone formation. Because emissions in one part of the region can impact air quality miles downwind, efforts to reduce ozone levels focus on reducing emissions of ROG and NOx throughout the region. The relationship between ROG and NOx in ozone formation is complex; the ratio between the precursor pollutants influences how ozone forms. BAAQMD's ozone modeling indicates that the Bay Area is "ROG-limited" for ozone formation. This means that reducing ROG emissions in the Bay Area will be more productive in reducing ozone, at least in the near term. However, modeling also suggests that large reductions in NOx emissions will be needed to achieve the ozone reductions required to attain the current health-based ozone standards.

A certain amount of ozone formation occurs naturally, even in the absence of anthropogenic emissions of ROG and NOx.

As stated in the BAAQMD CEQA Air Quality Guidelines, air pollution by its nature is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality is considered significant. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions.

The project emissions from construction are compared against regional emissions that lead to elevated concentrations of ozone in Table 7. By comparing project emissions to regional emissions, one gets the sense of the magnitude of the project effects on regional air quality. Project emissions in comparison to regional emissions are such a small portion of the regional inventory (i.e., less than 0.1 percent unmitigated) that the effect of the project would not cause regional pollutant levels to measurably change. As a result, the project would not measurably increase ozone levels. Therefore, the health effects associated with the project NOx emissions are not measurable. However, it would increase emissions above the threshold of 54 pounds per average day, such that the emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions.

Table 7. Comparison of Project Emissions to Air Basin Emissions

Scenario	NO _x
Bay Area Air Basin in 2015 ¹	298 tons/day
Unmitigated Project Construction	0.07 tons/day
% of Basin	0.02%
Mitigated Project Construction	0.03 tons/day
% of Basin	0.01%

¹Based on Bay Area Air Quality Management District | Clean Air Plan 2017 at <http://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a -proposed-final-cap-vol-1-pdf.pdf?la=en>, accessed December 18, 2019)

Operational Period Emissions

The impact of operational emissions were addressed in the DSP DEIR and found to be significant and unavoidable. Emissions from the project were computed for information purposes. Operational air emissions from the project would be generated primarily from autos driven by future employees, customers, and vendors. Evaporative emissions from architectural coatings and maintenance products (classified as consumer products) are typical emissions from these types of uses. CalEEMod was used to estimate emissions from operation of the proposed project assuming full build-out.

Operational Trip Generation Rates

CalEEMod allows the user to enter specific vehicle trip generation rates, which were input to the model using the daily trip generation rate provided in the project trip generation table.¹⁴ The Saturday and Sunday trip rates were assumed to be the weekday rate adjusted by multiplying the ratio of the CalEEMod default rates for Saturday and Sunday trips to the default weekday rate. The default trip lengths and trip types specified by CalEEMod were used.

Energy

CalEEMod defaults for energy use were used, which include the 2016 Title 24 Building Standards. Indirect emissions from electricity were computed in CalEEMod. The model has a default rate of 641.3 pounds of CO₂ per megawatt of electricity produced, which is based on PG&E's 2008 emissions rate. The rate was adjusted to account for PG&E's projected 2020 CO₂ intensity rate. This 2020 rate is based, in part, on the requirement of a renewable energy portfolio standard of 33 percent by the year 2020. The derived 2020 rate for PG&E was estimated at 290 pounds of CO₂ per megawatt of electricity delivered.¹⁵

Development of the Project is anticipated to begin in 2021. Therefore, new construction would be subject to the new 2019 Title 24 building standards that would greatly increase energy efficiency and require rooftop solar energy production. According to the California Energy Commission, nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrade and other energy efficiency measures versus those built under the 2016 standards.¹⁶ To account for these new standards, an overall improvement of 30 percent in Title 24 energy usage was assumed for the project.

Project Generators

The project would include three roof-top mounted emergency generators – one generator per tower. These would be powered by diesel engines. One diesel engine would be 2,000 kilowatts

¹⁴ Hexagon Transportation Consultants, Inc. 2019. "Cityview Plaza Office Development VMT Trip Generation Estiamtes". December.

¹⁵ Pacific Gas & Electric, 2015. *Greenhouse Gas Emission Factors: Guidance for PG&E Customers*. November. https://www.ca-ilg.org/sites/main/files/file-attachments/ghg_emission_factor_guidance.pdf

¹⁶ California CEC. 2018. 2019 Building Energy Efficiency Standards. See: https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf accessed December 9, 2019.

(kW), while the other two diesel engines would be 1,500 kW. These generators would be tested periodically and power the buildings in the event of a power failure. For modeling purposes, it was assumed that the generators would be operated primarily for testing and maintenance purposes. CARB and BAAQMD requirements limit these engine operations to 50 hours each per year of non-emergency operation. During testing periods, the engine would typically be run for less than one hour. The engine would be required to meet CARB and EPA emission standards and consume commercially available California low-sulfur diesel fuel. The generator emissions were modeled using CalEEMod.

Other Inputs

Default model assumptions for emissions associated with solid waste generation and water/wastewater use were applied to the project. Water/wastewater use was changed to 100 percent aerobic conditions to represent wastewater treatment plant conditions.

Existing Uses

The project would replace existing land uses that are currently in operation. The existing uses were modeled as 1,006,210 sf entered as “General Office Building” in CalEEMod. Trip generation was based on peak hour traffic counts performed by the traffic consultant and converted to average daily trips assuming daily trips are 10 times higher than peak hour trips. Since the existing uses were constructed prior to 2008, historical energy usage rates were assigned by CalEEMod.

Summary of Computed Operational Emissions

As shown in Table 8, operational emissions would exceed the BAAQMD significance thresholds with the exception of PM_{2.5} emissions.

Table 8. Operational Period Emissions

Scenario	ROG	NOx	PM ₁₀	PM _{2.5}
2026 Project Operational Emissions (tons/year)	18.16 tons	17.67 tons	17.38 tons	4.92 tons
2026 Existing Use Emissions (tons/year)	4.25 tons	2.59 tons	2.04 tons	0.61 tons
Net Annual Emissions (tons/year)	13.92 tons	15.08 tons	15.34 tons	4.31 tons
BAAQMD Thresholds (tons/year)	10 tons	10 tons	15 tons	10 tons
<i>Exceed Threshold?</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>No</i>
2022 Project Operational Emissions (lbs/day) ¹	76.3 lbs.	82.6 lbs.	84.1 lbs.	23.6 lbs.
BAAQMD Thresholds (pounds/day)	54 lbs.	54 lbs.	82 lbs.	54 lbs.
<i>Exceed Threshold?</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>No</i>

Notes: ¹ Assumes 365-day operation.

Impact AIR-2: Expose sensitive receptors to substantial pollutant concentrations?

Project impacts related to increased community risk can occur either by introducing a new source of TACs with the potential to adversely affect existing sensitive receptors in the project vicinity or by significantly exacerbating existing cumulative TAC impacts. This project would introduce new sources of TACs during construction (i.e. on-site construction and truck hauling emissions) and operation (i.e. emergency diesel generators and project traffic).

Project construction activity would generate dust and equipment exhaust that would affect nearby sensitive receptors. This project operation would increase traffic in the area that would increase the air pollutant and TAC emissions in the area. In addition, the project would include the installation of emergency generators powered by diesel engines that would also have TACs and air pollutants emissions.

Project impacts to existing sensitive receptors were addressed for temporary construction activities and long-term operational conditions. There are also several sources of existing TACs and localized air pollutants in the vicinity of the project. The impact of the existing sources of TAC was also assessed in terms of the cumulative risk that includes the project contribution.

Community risk impacts were addressed by predicting increased lifetime cancer risk, the increase in annual PM_{2.5} concentrations and computing the Hazard Index (HI) for non-cancer health risks. The methodology for computing community risks impacts is contained in *Attachment 1*. This involved the modeling of TAC and PM_{2.5} emissions, dispersion modeling and cancer risk computations.

Modeled Sensitive Receptors

Receptors for this assessment included locations where sensitive populations would be present for extended periods of time (i.e., chronic exposures). These include existing and planning approved (but not yet constructed) residences to the north and east, as shown in Figure 2. Note that a majority of the residential developments are mixed-use buildings with a commercial component on the ground level and the residential units starting on the second or third floors. Therefore, unique breathing heights were used for each residential development to account for the variances between all the multi-story buildings. Residential receptors are assumed to include all receptor types with almost continuous exposure. Additionally, receptors were identified on the first and second floors of the Plaza Hotel, which is interim housing for the homeless in San José. However, these receptors were all assumed to be adults. Figure 2 shows locations of modeled receptors and the new approved development that has yet to be constructed.

Community Risks from Project Construction – On-Site and Hauling Activity

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. Construction exhaust emissions may pose health risks for sensitive receptors such as surrounding residents. The primary community risk impact issues associated with construction emissions are cancer risk and exposure to PM_{2.5}. Diesel exhaust poses both a potential health and nuisance impact to nearby receptors. A health risk assessment of the project construction activities,

which includes on-site construction and hauling activity, was conducted. The assessment evaluated potential health effects to nearby sensitive receptors from construction emissions of DPM and PM_{2.5}.¹⁷ This assessment included dispersion modeling to predict the off-site concentrations resulting from project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated.

On-Site Construction Emissions

The CalEEMod model provided total annual PM₁₀ exhaust emissions (assumed to be DPM) for the off-road construction equipment and for exhaust emissions from on-road worker vehicles. Total emissions from all construction stages are reported in Table 9 and are on an annual basis. The on-road emissions that are included result from haul truck travel during demolition and grading activities, worker travel, and vendor deliveries during construction. A trip length of one mile was used to represent vehicle travel while at or near the construction site to represent localized air emissions from construction. It was assumed that these emissions from on-road vehicles traveling at or near the site would occur at the construction sites. Fugitive PM_{2.5} dust emissions were calculated by CalEEMod for the overall construction period and are included as part of the Total PM_{2.5} emissions reported in Table 9.

Table 9. On-site Project Construction Emissions of DPM and Fugitive PM_{2.5} (in tons)

Description	2020	2021	2022	2023	2024	2025
PM ₁₀ Exhaust (DPM)	1.155	0.994	0.646	0.470	0.451	0.360
PM _{2.5} Fugitive	0.741	0.091	0.676	0.662	0.679	0.584

Off-Site Truck Emissions

Emission rates in grams per mile were developed using the EMFAC2017 model. A mix of 30 percent MHDT and 70 percent HHDT were computed based on the CalEEMod assumed truck mix for vendor trucks and hauling trucks. EMFAC2017 was used to generate the running emissions rate for aggregate speeds in the San Francisco Air Basin. Calendar years 2020 through 2025 were used in the modeling, as emissions rates and truck traffic vary by year. While there may be some gasoline or natural gas-powered trucks, the PM₁₀ exhaust emission rate derived from EMFAC2017 was assumed to be all DPM. PM_{2.5} emission rates were the combination of running exhaust, tire and brake wear, and re-entrained roadway dust.

Dispersion Modeling

The U.S. EPA AERMOD dispersion model was used to predict concentrations of DPM and PM_{2.5} concentrations at sensitive receptors (residences) in the vicinity of the project construction area and construction haul routes. The AERMOD dispersion model is a BAAQMD-recommended model for use in modeling analysis of these types of emission activities for CEQA projects.¹⁸

¹⁷ DPM is identified by California as a toxic air contaminant due to the potential to cause cancer.

¹⁸ Bay Area Air Quality Management District (BAAQMD), 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0*. May.

Construction Sources

Emission sources for the construction site were grouped into two categories: exhaust emissions of DPM and fugitive PM_{2.5} dust emissions. Combustion equipment exhaust emissions were modeled as a series of point sources with a nine-foot release height (construction equipment exhaust stack height) placed at 12-meter (39-feet) intervals throughout the construction site. This resulted in 209 individual point sources being used to represent mobile equipment DPM exhaust emissions in the construction area, with DPM emissions occurring throughout the project construction site. The locations of the point sources used for the modeling are identified in Figure 2. Emissions from vehicle travel on- and off-site were distributed among the point sources throughout the site. Construction fugitive PM_{2.5} dust emissions were modeled as an area source encompassing the entire construction site with a near ground level release height of 2 meters (6.6 feet). Construction emissions were modeled as occurring daily for 24 hours for the entire construction period..

Construction Truck Traffic and Operational Roadway Sources

Emissions from truck traffic in the area was modeled along the anticipated truck traffic routes. Off-site truck travel was modeled with the AERMOD model using line-volume sources representing the expected truck travel routes. Figure 2 shows the point sources, area sources, hauling routes, and receptors modeled.

Meteorological Data

The modeling used a 5-year meteorological data set (2006-2010) from the San José Airport prepared for use with the AERMOD model by the BAAQMD. Annual DPM and PM_{2.5} concentrations from construction activities during the 2020-2025 period were calculated using the model. DPM and PM_{2.5} concentrations were calculated at nearby sensitive receptor locations. Receptor heights of 1.5 meters, 4.5 meters, 6.1 meters, 7.6 meters, 7.8 meters, 10 meters, and 12.9 meters were used to represent the breathing heights of residents in nearby multi-story mixed-use residential developments. These breathing heights account for residents on the respective first, second, and third residential floors.

Figure 2 shows the locations where the maximum-modeled DPM and PM_{2.5} concentrations from construction activities occurred. The maximum concentrations occurred at the second-level of the planning approved Greyhound residential development located at 70 South Almaden Boulevard. The breathing receptor height used at this location was 7.8 meters. The maximum increased cancer risk at the location of the maximally exposed individual (MEI) was calculated using the annual modeled DPM concentration and using BAAQMD recommended methods. The cancer risk calculations were based on applying the BAAQMD recommended age sensitivity factors to the TAC concentrations. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing TACs. BAAQMD-recommended exposure parameters were used for the cancer risk calculations, as described in *Attachment 1*. Infant and adult exposures were assumed to occur at all residences (except for the interim housing at the Plaza Hotel where only adult exposure were assumed) during the entire construction period. *Attachment 4* to this report includes the emission calculations used for the construction modeling and the cancer risk calculations.

Predicted Cancer Risk and Hazards

Results of this assessment indicate that the maximum excess residential cancer risks would be 246.48 in one million for an infant exposure (246.38 per million for on-site construction and 0.10 per million for truck hauling) and 6.9 in one million for an adult exposure (6.9 per million for on-site construction and >0.1 per million for truck hauling). The maximum residential excess cancer risk would exceed the BAAQMD significance threshold of 10.0 in one million.

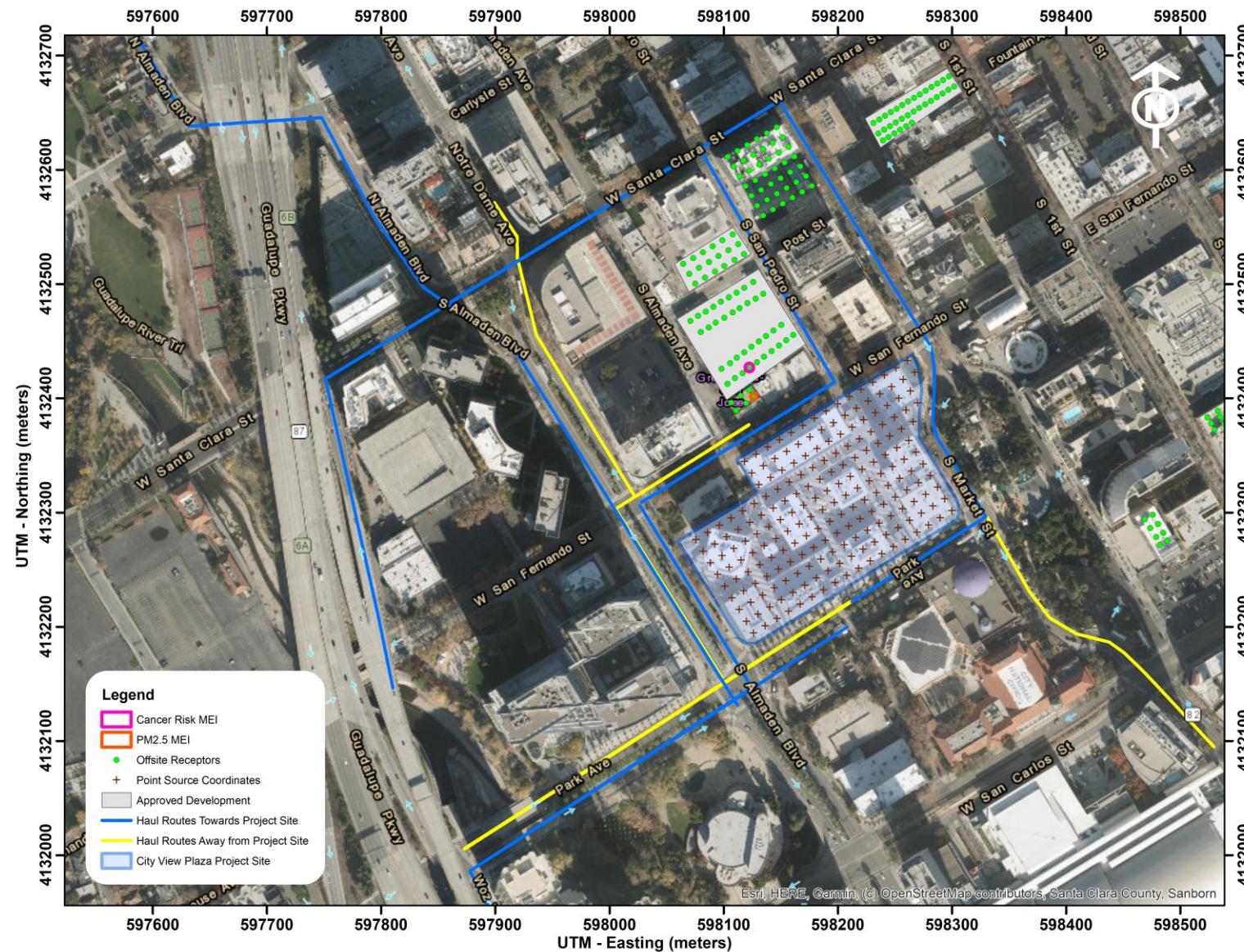
Predicted Annual PM_{2.5} Concentration

The maximum-modeled annual PM_{2.5} concentration, which is based on combined exhaust and fugitive dust emissions, would be 2.57 $\mu\text{g}/\text{m}^3$ on the first-floor of the Plaza Hotel. The maximum annual PM_{2.5} concentration would exceed the BAAQMD significance threshold of 0.3 $\mu\text{g}/\text{m}^3$.

Non-Cancer Hazards

The maximum modeled annual residential DPM concentration (i.e., from construction exhaust) was 0.6799 $\mu\text{g}/\text{m}^3$ at the construction MEI. The maximum computed Hazard Index (HI) based on this DPM concentration is 0.14. This does not exceed the BAAQMD significance criterion of a HI greater than 1.0.

Figure 2. Project Construction Site, Hauling Routes, Locations of Off-Site Sensitive Receptors and Maximum TAC Impacts



Community Risks from Project Operation – Traffic and Generators

Operation of the project would have long-term emissions from mobile sources (i.e. traffic) and stationary sources (i.e. generators). While these emissions would not be as intensive (at or near the site) as construction activity, they would contribute to long-term effects to sensitive receptors.

Local Roadway Traffic

An analysis was conducted of the impacts of TACs and PM_{2.5} from local roadways, which include Park Avenue, West San Fernando Street, West San Carlos Street, West Santa Clara, South Almaden Boulevard, South Almaden Avenue, South San Pedro Street, and South Market Street (Project Area Roads). TAC and PM_{2.5} concentrations were modeled from project traffic. Traffic volumes were based on the predicted project peak-hour traffic volumes along these roadway segments. Figure 3 shows the modeling roadway segments.

This analysis involved the development of DPM, organic TACs, and PM_{2.5} roadway emissions in the project area using the California Department of Transportation EMFAC2017 (CT-EMFAC2017) emission factor model, based on the increased local project-related traffic volumes contained in the traffic report.¹⁹ The average daily traffic (ADT) was estimated from the background and incremental project a.m. and p.m. peak hours, assuming the ADT is five times the sum of the AM and PM peak hour volumes. The modeling reflects that DPM emissions are projected to decrease in the future as provided in the CT-EMFAC2017 emissions data.

Project operation was assumed to begin in 2026 or thereafter. In order to estimate TAC and PM_{2.5} emissions over a 24-year exposure period (2026-2049) for calculating increased cancer risks to new residents from traffic on the Project Area Roads, the CT-EMFAC2017 model was used to develop vehicle emission factors for the year 2026. Year 2026 emissions were conservatively assumed as being representative of future conditions over the time period that cancer risks are evaluated (24 years), since, as discussed above, overall vehicle emissions, and in particular diesel truck emissions will decrease in the future.

The CT-EMFAC2017 model was used to develop vehicle emission factors using an estimated mix of cars and trucks. The project area roads were assumed to carry primarily cars and some trucks. A vehicle mix including 6.2 percent trucks was based on a default EMFAC2017 fleet mix truck percentages for major/collector roads in Santa Clara County.²⁰ Traffic volumes were assumed to increase one percent per year. Average travel speeds of 20 mph were assumed for all roadways.

Organic TACs are those TACs that are emitted from gasoline combustion, based on emissions of total organic gases (TOG). The TOG emissions from gasoline-powered vehicles were computed using the EMFAC2017 model. These TOG emissions were then used in modeling the TACs associated with motor vehicle exhaust emissions and evaporative emissions. TOG emissions from exhaust and for running evaporative losses from gasoline vehicles were calculated using CT-EMFAC2017 default model values for Santa Clara County along with the traffic volumes, speeds, and vehicle mixes.

¹⁹ Hexagon Transportation Consultants, 2019. *City View Plaza*. December

²⁰ BAAQMD. 2012. *Recommended Methods for Screening and Modeling Local Risks and Hazards*. May

PM_{2.5} emissions for vehicles traveling on project area roads were calculated using the same basic approach that was used for assessing TAC emissions. All PM_{2.5} emissions from all vehicles were used, rather than just the PM_{2.5} fraction from diesel powered vehicles, because all vehicle types (i.e., gasoline and diesel powered) produce PM_{2.5}. Additionally, PM_{2.5} emissions from vehicle tire and brake wear and from re-entrained roadway dust were included in these emissions. The assessment involved, first, calculating PM_{2.5} emission rates from traffic traveling on the roadway. These emissions were computed using the CT-EMFAC2017 model and traffic volumes and were calculated in the same manner as discussed above. PM_{2.5} re-entrained dust emissions from vehicles traffic were calculated using CARB emission calculation procedures.²¹

To calculate the increased cancer risk from increased traffic volumes due to the project traffic, the community risks were adjusted for exposure duration to account for the MEI being exposed to construction for the first six years of the 30-year period. The exposure duration was adjusted for 24 years of exposure. The modeled DPM and PM_{2.5} concentrations at the same MEI identified in the construction dispersion modeling (see Figure 2) were used to calculate the community risks. Based on this duration, the increased cancer risk would be 0.47 per million, the maximum annual PM_{2.5} concentration would be 0.11 µg/m³, and the HI value would be less than 0.01. The emissions and health risk calculations for the proposed generators are included in *Attachment 4*.

Operational Emergency Generator Modeling

The project proposes three emergency generators for each office tower. All three generators would be located on the rooftop of each tower in an emergency generator room, and the generators would vary in size with one generator being 2,000 kW and the other two generators being 1,500 kW. The emergency back-up generators would also be powered by a diesel engine (approximately 2,681 horsepower [hp] for the 2,000 kW generator and 2,011 hp for the 1,500 kW generators. Figure 3 also shows the modeling locations for the generators.

Operation of a diesel generator would be a source of TAC emissions. The generator would be operated for testing and maintenance purposes, with a maximum of 50 hours per year of non-emergency operation under normal conditions. During testing periods, the engine would typically be run for less than one hour under light engine loads. The generator engine would be required to meet U.S. EPA emission standards and consume commercially available California low sulfur diesel fuel. The emissions from the operation of the generator were calculated using the CalEEMod model.

This diesel engine would be subject to CARB's Stationary Diesel Airborne Toxics Control Measure (ATCM) and require permits from the BAAQMD, since it will be equipped with an engine larger than 50 hp. As part of the BAAQMD permit requirements for toxics screening analysis, the engine emissions will have to meet Best Available Control Technology for Toxics (TBACT) and pass the toxic risk screening level of less than ten in a million. The risk assessment would be prepared by BAAQMD. Depending on results, BAAQMD would set limits for DPM emissions (e.g., more restricted engine operation periods). Sources of air pollutant emissions

²¹ CARB 2018, Miscellaneous Process Methodology 7.9, Entrained Road Travel, Paved Road Dust. Revised and updated, March 2018.

complying with all applicable BAAQMD regulations generally will not be considered to have a significant air quality community risk impact.

To obtain an estimate of potential cancer risks and PM_{2.5} impacts from operation of the emergency generators the U.S. EPA AERMOD dispersion model was used to calculate the maximum annual DPM concentration at off-site sensitive receptor locations (nearby residences). The same receptors and breathing heights used in the construction dispersion modeling were used for the generator dispersion model. Additionally, the same BAAQMD San José Airport meteorological data was used. Stack parameters (stack height, exhaust flow rate, and exhaust gas temperature) for modeling the generators were based on project-specific information. The stack diameter was based on BAAQMD default parameters for emergency generators.²² Annual average DPM and PM_{2.5} concentrations were modeled assuming that generator testing could occur at any time of the day.

Increased cancer risks from use of the generators were calculated using the modeled maximum annual DPM concentrations and BAAQMD recommended risk assessment methods and parameters described in *Attachment 1*. These methods evaluate cancer risk due to DPM exposure and incorporate age sensitivity factors methods for infant (third trimester to two years of age) and children (two years of age to 16 years). The PM_{2.5} concentration and non-cancerous (i.e. Hazard Index) health risk impacts were also calculated.

To calculate the increased cancer risk from the generators, the community risks were adjusted for exposure duration to account for the MEI being exposed to construction for the first six years of the 30-year period. The exposure duration was adjusted for 24 years of exposure. The modeled DPM and PM_{2.5} concentrations at the same MEI identified in the construction dispersion modeling (see Figure 2) were used to calculate the community risks. Based on this duration, the increased cancer risk would be 0.40 per million, the maximum annual PM_{2.5} concentration would be 0.01 µg/m³, and the HI value would be 0.01. The emissions and health risk calculations for the proposed generators are included in *Attachment 4*.

²² The San Francisco Community Risk Reduction Plan: Technical Support Document, BAAQMD, San Francisco Dept. of Public Health, and San Francisco Planning Dept., December 2012

Figure 3. Modeled Local Roadways, Location of Project Generators, Locations of Off-Site Sensitive Receptors and Maximum TAC Impacts



Summary of Project-Related Community Risks at MEI

The cumulative risk impacts from a project is the combination of construction and operation sources. These sources include on-site construction activity, construction truck hauling, project generators, and increased traffic from the project. The project impact is computed by adding the construction cancer risk for an infant to the lifetime cancer risk for the project operational conditions for the roadway at the MEI over a 30-year period. The project MEI is identified as the sensitive receptor that is most impacted by the project's construction and operation. For this project, the sensitive receptor identified in Figure 2 as the construction MEI is also the project MEI. At this location, the MEI would be exposed to six years of construction cancer risks and 24 years of operational (includes traffic and emergency backup generators) cancer risks. The cancer risks from construction and operation of the project were summed together. Unlike, the increased maximum cancer risk, the annual PM_{2.5} concentration, and HI risks are not additive but based on an annual maximum risk for the entirety of the project. The maximum cancer risks and annual PM_{2.5} concentrations from construction and operation activities would exceed the single-source significance thresholds. The non-cancer hazards (HI) from construction and operation activities would not exceed the single-source significance threshold, as seen in Table 10.

Table 10. Construction and Operation Risk Impacts at the Offsite Project MEI

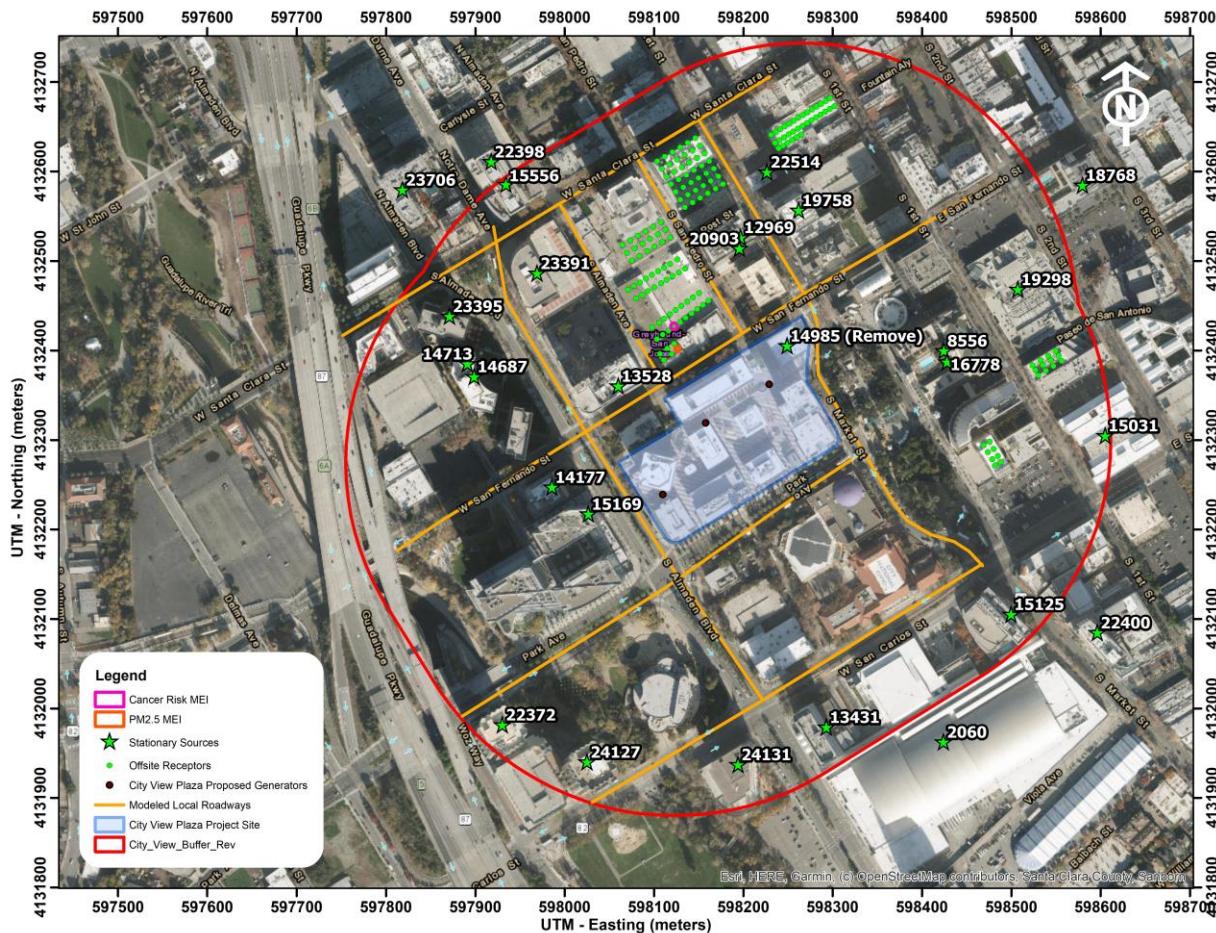
Source	Cancer Risk (per million)	Annual PM _{2.5} ($\mu\text{g}/\text{m}^3$)	Hazard Index
Unmitigated Project Construction (Years 0-6)*	246.48	2.57	0.14
Mitigated Project Construction (Years 0-6) *	14.14	0.44	0.01
Project Traffic (Years 7-30)	0.47	0.11	<0.01
Project Generators (Years 7-30)	0.40	<0.01	<0.01
Unmitigated Total/Maximum Project (Years 0-30)	247.35	2.57	0.14
Mitigated Total/Maximum Project (Years 0-30)	15.01	0.44	0.01
BAAQMD Single-Source Threshold	>10.0	>0.3	>1.0
<i>Exceed Threshold?</i>			
Unmitigated/Mitigated	<i>Yes/Yes</i>	<i>Yes/Yes</i>	<i>No/No</i>

*Includes the construction hauling cancer risk value (0.10 per million)

Cumulative Community Risks of all TAC Sources at Project MEI

Community health risk assessments typically look at all substantial sources of TACs that can affect sensitive receptors that are located within 1,000 feet of a project site (i.e. influence area). These sources include rail lines, freeways or highways, busy surface streets, and stationary sources identified by BAAQMD. A review of the project area indicates that traffic on State Route (SR) 87, SR 87 on and off ramps, and the Project Roadways would be near or exceed 10,000 vehicles per day. Other nearby streets are assumed to have significantly less than 10,000 vehicles per day. A review of BAAQMD's stationary source Google Earth map tool identified 27 stationary sources with the potential to affect the MEI. In addition, there are development projects whose construction would contribute to the cumulative risk. The risk impacts from these developments are included within the analysis. Figure 4 shows the location of the sources affecting the MEI. Community risk impacts from these sources upon the MEI reported in Table 11. Details of the modeling and community risk calculations are included in *Attachment 5*.

Figure 4. Project Site and Nearby TAC and PM_{2.5} Sources



Highways – State Route 87

SR 87 is a freeway that lies over 800 feet west of the project site and over 1,000 feet west of the project MEI. The BAAQMD Highway Screening Tool was used to predict the contribution of risk and PM_{2.5} concentrations from this traffic.

Local Roadways

The contribution of existing plus project plus background traffic was modeled in the same manner that operational project traffic was modeled.

Stationary Sources

Permitted stationary sources of air pollution near the project site were identified using BAAQMD's *Stationary Source Risk & Hazard Analysis Tool*. These stationary sources (i.e. plants) are facilities that contain single emission sources of TACs, like a generator or gas station. These facilities or

plants can have multiple stationary sources on-site.²³ This mapping tool uses Google Earth and identified the location of 27 stationary sources and their estimated risk and hazard impacts. A Stationary Source Information Form (SSIF) containing the identified sources was prepared and submitted to BAAQMD. They provided updated plant ownership, plant number in addition to source emissions and adjustments to account for new OEHHA guidance.²⁴ The adjusted risk values were then adjusted with the *Beta Health Risk Calculator* provided by BAAQMD. Emissions data provided by BAAQMD was used in the modeling. The District also noted that Jeppesen (Plant #15556) had been shut down. Additionally, the Wells Fargo Bank stationary source (i.e. generator) is located on the project site and would be removed due to the project. It was not included in the cumulative risk table. Note that the BAAQMD's *Risk and Hazards Emissions Screening Calculator* uses meters instead of feet to adjust for distance. Therefore, the distances given in Table 11 are in meters not feet.

Construction Risk Impacts from Nearby Developments

Within the 1,000-ft influence area, there are six developments that are planning approved or under construction.²⁵ The developments under construction include the office development at 200 Park Avenue (File Number H18-045), and the Parkside Hall/Museum Place office development at 180 Park Avenue (File Number H16-024). The developments that have been approved include the Greyhound residential buildings at 70 S. Almaden Avenue (File Number SP16-021), the Post and San Pedro Towers at 171 Post Street (File Number H14-023, HA14-023-02), 27 West at 27 South 1st Street (File Number SP18-016), and the Tribute Hotel at 211 South 1st Street File Number Hp17-003 & H16-042). Note that the Greyhound residential development was not included in the cumulative risk analysis because the Project MEI was identified at this building. Therefore, it was assumed that this development would be fully constructed and operational when City View Plaza is under construction.

For the remaining five projects, it was assumed the construction risks from all these developments would be less than the BAAQMD single-source thresholds for community risks and hazards. This approach likely provides an overestimate of the community risk and hazard levels because it assumes that maximum impacts from these projects occur concurrently with the proposed project.

Summary of Cumulative Risks at MEI

Table 11 reports both the project and cumulative community risk impacts. The project would have a *significant* impact with respect to community risk caused by project construction and operation activities, since the maximum cancer risk and annual PM_{2.5} concentration exceed the BAAQMD single-source thresholds for community risks. Additionally, the combined increased cancer risk and annual PM_{2.5} concentration, which includes unmitigated and mitigated, would exceed their respective cumulative thresholds. The HI, unmitigated and mitigated, does not exceed its cumulative threshold. Therefore, the project would a *significant* impact with respect to cumulative community risk.

²³ Bay Area Air Quality Management District, 2017. *CEQA Air Quality Guidelines*. May.

²⁴ Correspondence with Areana Flores, BAAQMD, 6 December 2019.

²⁵ Developments under planning review are not included within the cumulative analysis since it is speculative to include construction emissions from projects that may or may not be approved.

Table 11. Cumulative Community Risks from TAC Sources

Source	Maximum Cancer Risk (per million)	PM _{2.5} concentration ($\mu\text{g}/\text{m}^3$)	Hazard Index
Project Impacts			
Project (Construction and Operation)	Unmitigated 247.35 Mitigated 15.01	2.57 0.44	0.14 0.01
		>10.0	>1.0
BAAQMD Single-Source Threshold			
Cumulative Sources			
SR 87, Link 202 (6ft elevation) at 400 feet east	<2.2	<0.02	<0.01
Local Roadways (modeled using AERMOD with existing plus project plus background traffic)	3.79	0.19	0.01
Verizon Business (Plant #12969) at 75m	7.07	0.01	0.01
60 South Market Investors LLC (Plant #19758) at 160m	0.63	0.01	0.01
CoreSite (Plant #20903) at 75m	10.85	0.01	0.02
Fairmont Hotel, San José (Plant #8556) at 235m	2.02	0.10	0.01
Owl Energy Resources Inc (Plant #16778) at 235m	0.87	0.17	0.01
DataPipe Inc (Plant #19298) at >300m	2.5	0.01	0.01
88 Master Association (Plant #18768) at >300m	0.11	0.01	0.01
US General Services Administration (Plant #15031) at >300m	0.03	0.01	0.01
San José Marriott Hotel (Plant #15125) at >300m	0.17	0.02	0.01
360 Residences c/o Gateway Nathaniel, Inc (Plant #22400) at >300m	0.01	-	-
Dept of Convention & Cultural Affairs-San José (Plant #2060) at >300m	1.32	0.07	0.01
San José Hilton & Towers (Plant #13431) at >300m	0.33	0.01	0.01
303 Almaden Fee Owner, LLC (Plant #24131) at >300m	0.15	0.01	0.01
Riverpark I, LLC (Plant #24127) at >300m	0.22	0.01	0.01
Riverpark Tower II, LLC, a Delaware LLC (Plant #22372) at >300m	0.16	0.01	0.01
Adobe Systems, Inc (Plant #15169) at 215m	10.22	0.01	0.01
Pacific Gas and Electric (Plant #14177) at 220m	0.06	0.01	0.01
Pacific Bell (Plant #13528) at 65m	24.24	0.03	0.04
CenturyLink Communications, LLC (Plant #14687) at 210m	0.12	0.01	0.01
KBS 111 Ten Almaden (Plant #23391) at 125m	0.57	0.01	0.01
Verizon Business (Plant #14713) at 210m	0.11	0.01	0.01
KBS 111 Almaden Financial Plaza (Plant #23395) at 230m	0.32	0.01	0.01
AXIS HOA (Plant #23706) at >300m	0.09	0.01	0.01
San José Evergreen Community College District (Plant #22514) at 180m*	-	-	-
225 West Santa Clara LLC c/o Harvest Properties (Plant #22398) at 225m	0.26	0.01	0.01
Nearby Construction Development - Mitigated Emissions	25	0.75	2.5
Combined Sources	Unmitigated 340.77 Mitigated 108.43	4.10 1.97	2.93 2.80
	BAAQMD Cumulative Source Threshold	>100	>0.8
	Exceed Threshold?		
	Unmitigated Yes	Yes	<i>No</i>
	Mitigated Yes	Yes	<i>No</i>

*BAAQMD reported zero daily average emissions for this stationary source

Mitigation: Implement Mitigation Measures AQ-1 and AQ-2

Effectiveness of Mitigation Measures AQ-1 and AQ-2

CalEEMod was used to compute emissions associated with his mitigation measure assuming that all equipment met U.S. EPA Tier 4 final standards. Truck emission factors were obtained from EMFAC2017 assuming the fleet mix was 2011 or newer (aggregated over the period between 2011 and the calendar year modeled). The computed maximum increased lifetime residential cancer risk from construction would be 15.01 in one million or less, the maximum annual PM_{2.5} concentration would be 0.44 µg/m³, and the HI value would be 0.01. Even with the implementation of Mitigation Measures AQ-1 and AQ-2, the cumulative cancer (131.23 per million) and PM_{2.5} risk levels (2.70 µg/m³) would exceed the BAAQMD significance thresholds of greater than 100 per million and 0.8 µg/m³, respectively. As a result, impacts would be ***significant*** with respect to community risk caused by construction activities.

Significant and Unavoidable Construction Health Risks

Mitigation measures AQ-1 and AQ-2 would substantially reduce cancer risk, annual PM_{2.5} concentrations and hazards posed by unmitigated construction activities. However, the project impacts would remain above the single source thresholds as well as the cumulative thresholds. In terms of cancer risk, the majority of the cumulative risk with mitigation is made up of background sources (87%). Annual PM_{2.5} concentrations caused by sources within 1,000 feet without the project would exceed the cumulative threshold.

Figure 5 shows the extent of the increased cancer risk caused by the project at sensitive receptors (i.e., cancer risk exceeding 10 chances per million). With mitigation, sensitive receptors located within 450 feet of the project site to the north would be subject to excess cancer risk that exceeds 10 chances per million and is as high as 15 chances per million. Those same receptors would have cumulative cancer risk from the project and sources within 1,000 feet (including potential construction projects assumed to mostly occur concurrently) that would exceed the cumulative threshold of 100 chances per million.

Figure 6 shows the extent of mitigated annual PM_{2.5} concentrations associated with the project at sensitive receptors (i.e., annual PM_{2.5} concentrations caused by the project exceeding 0.3µg/m³). The extent of mitigated annual PM_{2.5} concentrations that exceed the single source threshold (i.e., annual PM_{2.5} concentrations exceeding 0.3µg/m³) is similar to the extent of project cancer risk impacts described above. Based on the screening analysis conducted for cumulative sources, much of the project area affected by the project (i.e., area within 1,000 feet) would have cumulative annual PM_{2.5} concentrations above the cumulative threshold of 0.8µg/m³ without the project contribution.

Figure 5. Risk by Receptor of Mitigated Construction Cancer Risk

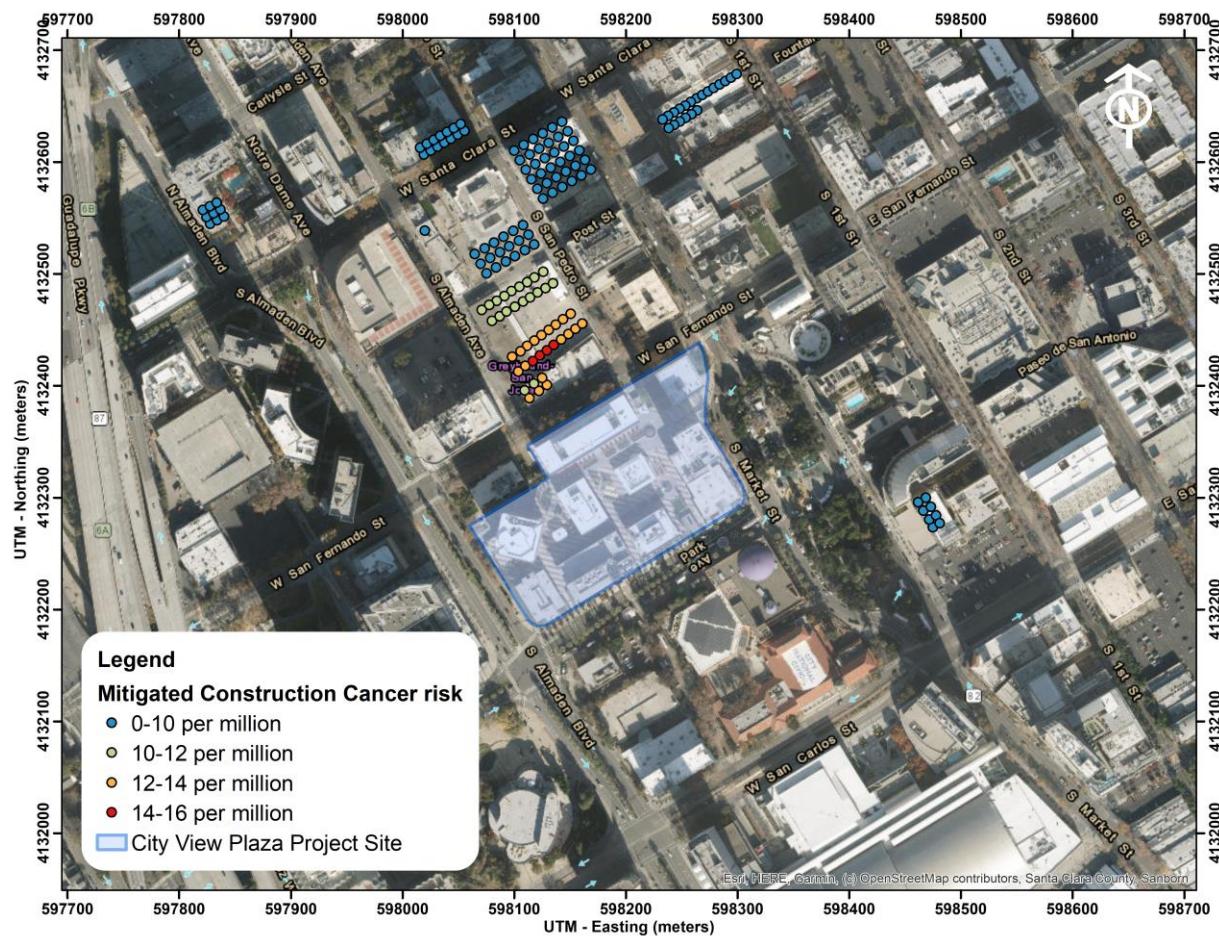


Figure 6 Risk by Receptor of Mitigated Construction 2021 PM_{2.5} (Maximum Year)



Greenhouse Gases Emission Calculations

Setting

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. The most common GHGs are carbon dioxide (CO₂) and water vapor but there are also several others, most importantly methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO₂ and N₂O are byproducts of fossil fuel combustion.
- N₂O is associated with agricultural operations such as fertilization of crops.
- CH₄ is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations.
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents but their production has been stopped by international treaty.
- HFCs are now used as a substitute for CFCs in refrigeration and cooling.
- PFCs and sulfur hexafluoride emissions are commonly created by industries such as aluminum production and semi-conductor manufacturing.

Each GHG has its own potency and effect upon the earth's energy balance. This is expressed in terms of a global warming potential (GWP), with CO₂ being assigned a value of 1 and sulfur hexafluoride being several orders of magnitude stronger. In GHG emission inventories, the weight of each gas is multiplied by its GWP and is measured in units of CO₂ equivalents (CO₂e).

An expanding body of scientific research supports the theory that global climate change is currently affecting changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

Recent Regulatory Actions

Assembly Bill 32 (AB 32), California Global Warming Solutions Act (2006)

AB 32, the Global Warming Solutions Act of 2006, codified the state's GHG emissions target by directing CARB to reduce the state's global warming emissions to 1990 levels by 2020. AB 32 was signed and passed into law by Governor Schwarzenegger on September 27, 2006. Since that time, the CARB, CEC, California Public Utilities Commission (CPUC), and Building Standards

Commission have all been developing regulations that will help meet the goals of AB 32 and Executive Order S-3-05.

A Scoping Plan for AB 32 was adopted by CARB in December 2008. It contains the state's main strategies to reduce GHGs from business-as-usual emissions projected in 2020 back down to 1990 levels. Business-as-usual (BAU) is the projected emissions in 2020, including increases in emissions caused by growth, without any GHG reduction measures. The Scoping Plan has a range of GHG reduction actions, including direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system.

Senate Bill 375, California's Regional Transportation and Land Use Planning Efforts (2008)

California enacted legislation (SB 375) to expand the efforts of AB 32 by controlling indirect GHG emissions caused by urban sprawl. SB 375 provides incentives for local governments and applicants to implement new conscientiously planned growth patterns. This includes incentives for creating attractive, walkable, and sustainable communities and revitalizing existing communities. The legislation also allows applicants to bypass certain environmental reviews under CEQA if they build projects consistent with the new sustainable community strategies. Development of more alternative transportation options that would reduce vehicle trips and miles traveled, along with traffic congestion, would be encouraged. SB 375 enhances CARB's ability to reach the AB 32 goals by directing the agency in developing regional GHG emission reduction targets to be achieved from the transportation sector for 2020 and 2035. CARB works with the metropolitan planning organizations (e.g. Association of Bay Area Governments [ABAG] and Metropolitan Transportation Commission [MTC]) to align their regional transportation, housing, and land use plans to reduce vehicle miles traveled and demonstrate the region's ability to attain its GHG reduction targets. A similar process is used to reduce transportation emissions of ozone precursor pollutants in the Bay Area.

SB 350 Renewable Portfolio Standards

In September 2015, the California Legislature passed SB 350, which increases the states Renewables Portfolio Standard (RPS) for content of electrical generation from the 33 percent target for 2020 to a 50 percent renewables target by 2030.

Executive Order EO-B-30-15 (2015) and SB 32 GHG Reduction Targets

In April 2015, Governor Brown signed Executive Order which extended the goals of AB 32, setting a greenhouse gas emissions target at 40 percent of 1990 levels by 2030. On September 8, 2016, Governor Brown signed SB 32, which legislatively established the GHG reduction target of 40 percent of 1990 levels by 2030. In November 2017, CARB issued *California's 2017 Climate Change Scoping Plan*. While the state is on track to exceed the AB 32 scoping plan 2020 targets, this plan is an update to reflect the enacted SB 32 reduction target.

The new Scoping Plan establishes a strategy that will reduce GHG emissions in California to meet the 2030 target (note that the AB 32 Scoping Plan only addressed 2020 targets and a long-term

goal). Key features of this plan are:

- Cap and Trade program places a firm limit on 80 percent of the state's emissions;
- Achieving a 50-percent Renewable Portfolio Standard by 2030 (currently at about 29 percent statewide);
- Increase energy efficiency in existing buildings;
- Develop fuels with an 18-percent reduction in carbon intensity;
- Develop more high-density, transit oriented housing;
- Develop walkable and bikable communities;
- Greatly increase the number of electric vehicles on the road and reduce oil demand in half;
- Increase zero-emissions transit so that 100 percent of new buses are zero emissions;
- Reduce freight-related emissions by transitioning to zero emissions where feasible and near-zero emissions with renewable fuels everywhere else; and
- Reduce “super pollutants” by reducing methane and hydrofluorocarbons or HFCs by 40 percent.

In the updated Scoping Plan, CARB recommends statewide targets of no more than 6 metric tons CO₂e per capita (statewide) by 2030 and no more than 2 metric tons CO₂e per capita by 2050. The statewide per capita targets account for all emissions sectors in the state, statewide population forecasts, and the statewide reductions necessary to achieve the 2030 statewide target under SB 32 and the longer-term state emissions reduction goal of 80 percent below 1990 levels by 2050.

GHG Emissions

The U.S. EPA reported that in 2017, total gross nationwide GHG emissions were 6,457 MMT. These emissions were lower than peak levels of 7,370 MMT that were emitted in 2008. Relative to 1990 levels, these emissions were CARB updates the statewide GHG emission inventory on an annual basis where the latest inventory includes 2000 through 2017 emissions²⁶. In 2017, GHG emissions from statewide emitting activities were 424 MMT. The 2017 emissions have decreased by 14 percent since peak levels in 2004 and are 7 MMT below the 1990 emissions level and the State’s 2020 GHG limit. Per capita GHG emissions in California have dropped from a 2001 peak of 14.1 MT per person to 10.7 MT per person in 2017. The most recent Bay Area emission inventory was completed for the year 2011²⁷. GHG emission in were 87 MMT. As a point of comparison, statewide emissions were about 444 MMT in 2011.

Significance Thresholds

The BAAQMD’s CEQA Air Quality Guidelines recommended a GHG threshold of 1,100 metric tons or 4.6 metric tons (MT) per capita. These thresholds were developed based on meeting the

²⁶ CARB. 2019. *2019 Edition, California Greenhouse Gas Emission Inventory: 2000 – 2017*. Available at https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2017/ghg_inventory_trends_00-17.pdf accessed on Nov. 26, 2019.

²⁷ BAAQMD. 2015. *Bay Area Emissions Inventory Summary Report: Greenhouse Gases Base Year 2011*. January. Available at http://www.baaqmd.gov/~/media/files/planning-and-research/emission-inventory/by2011_ghgsummary.pdf accessed Nov. 26, 2019.

2020 GHG targets set in the scoping plan that addressed AB 32. Development of the project would occur beyond 2020, so a threshold that addresses a future target is appropriate. Although BAAQMD has not published a quantified threshold for 2030 yet, this assessment uses a “Substantial Progress” efficiency metric of 2.6 MT CO_{2e}/year/service population and a bright-line threshold of 660 MT CO_{2e}/year based on the GHG reduction goals of EO B-30-15. The service population metric of 2.6 is calculated for 2030 based on the 1990 inventory and the projected 2030 statewide population and employment levels.²⁸ The 2030 bright-line threshold is a 40 percent reduction of the 2020 1,100 MT CO_{2e}/year threshold.

Impact-GHG 1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

GHG emissions associated with development of the proposed project would occur over the short-term from construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. There would also be long-term operational emissions associated with vehicular traffic within the project vicinity, the generator, energy and water usage, and solid waste disposal. The impact of GHG emissions were addressed in the DSP DEIR and found to be significant and unavoidable under 2040 conditions. Emissions from the project were computed for information purposes. Emissions for the proposed project are discussed below and were analyzed using the methodology recommended in the BAAQMD CEQA Air Quality Guidelines.

CalEEMod Modeling

CalEEMod was used to predict GHG emissions from operation of the site assuming full build-out of the project. The project land use types and size and other project-specific information were input to the model, as described above. CalEEMod output is included in *Attachment 2*.

Service Population Emissions

The project service population efficiency rate is based on the number of future full-time commercial and retail employees. The number of workers was estimated based on approximately one office worker per 175 sf of office space and 1 retail worker per 250 sf of small retail space.²⁹ Based on the project’s proposed 3,648,584 sf for office use and 15,499 sf for retail use, there would be 20,911 future full-time employees.

Construction Emissions

GHG emissions associated with construction were computed to be a total of 20,099 MT of CO_{2e} for the total construction period of 5.8 years. These are the emissions from on-site operation of construction equipment, vendor and hauling truck trips, and worker trips. Neither the City nor BAAQMD have an adopted threshold of significance for construction-related GHG emissions, though BAAQMD recommends quantifying emissions and disclosing that GHG emissions would

²⁸ Association of Environmental Professionals, 2016. *Beyond 2020 and Newhall: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California*. April.

²⁹ Strategic Economics. 2016. *San José Market Overview and Employment Lands Analysis*. January 20.

occur during construction. BAAQMD also encourages the incorporation of best management practices to reduce GHG emissions during construction where feasible and applicable.

Operational Emissions

The CalEEMod model, along with the project vehicle trip generation rates, was used to estimate daily emissions associated with operation of the fully-developed site under the proposed project. The GHG emissions for both the existing land uses and the project are shown in Table 12. Annual net emissions resulting from operation of the proposed project along with the service population emissions for the year 2026 and 2030 are reported. The net emissions of the project would exceed the 2030 operational annual emissions bright-line threshold of 660 MT CO₂e/year in 2026 and 2030, but the project's per capita emissions would not exceed the service population emissions "Substantial Progress" efficiency metric of 2.6 MT CO₂e/year/service population for either year.

Table 12. Annual Project GHG Emissions (CO₂e) in Metric Tons

Source Category	Existing Uses in 2026	Proposed Project in 2026	Existing Uses in 2030	Proposed Project in 2030
Area	0	0	0	0
Energy Consumption	3,824	12,731	3,824	12,731
Mobile	1,697	14,758	1,547	13,454
Solid Waste Generation	471	1,785	471	1,785
Water Usage	289	893	289	893
Total (MT CO ₂ e)	6,281	30,168	6,131	28,864
Net Emissions (MT CO ₂ e)		23,887		22,733
<i>Bright Line Threshold</i>		<i>660 MT CO₂e/year</i>		<i>660 MT CO₂e/year</i>
Service Population Emissions (MT CO ₂ e/year/service population)		1.44		1.38
<i>Per Capita Threshold</i>		<i>2.6 in 2030</i>		<i>2.6 in 2030</i>
Exceeds both thresholds?		No		No
Stationary Source ¹	--	128		128

¹The annual GHG emissions for the proposed generators are also included for informational purposes.

Supporting Documentation

Attachment 1 is the methodology used to compute community risk impacts, including the methods to compute lifetime cancer risk from exposure to project emissions.

Attachment 2 includes the CalEEMod output for project construction and operational criteria air pollutant and GHG emissions. The operational output for existing uses and 2030 project uses are also included in this attachment. Also included are any modeling assumptions.

Attachment 3 includes the EMFAC2017 emissions modeling.

Attachment 4 is the health risk assessment. This includes the summary of the dispersion modeling and the cancer risk calculations for construction and operation. The AERMOD dispersion modeling files for this assessment, which are quite voluminous, are available upon request and would be provided in digital format.

Attachment 5 includes the screening community risk calculations from sources affecting the MEI. Due to the large size of the BAAQMD health risk calculators, these files were not included but are available upon request and would be provided in digital format.

Attachment 1: Health Risk Calculation Methodology

Health Risk Calculation Methodology

A health risk assessment (HRA) for exposure to Toxic Air Contaminates (TACs) requires the application of a risk characterization model to the results from the air dispersion model to estimate potential health risk at each sensitive receptor location. The State of California Office of Environmental Health Hazard Assessment (OEHHA) and California Air Resources Board (CARB) develop recommended methods for conducting health risk assessments. The most recent OEHHA risk assessment guidelines were published in February of 2015.³⁰ These guidelines incorporate substantial changes designed to provide for enhanced protection of children, as required by State law, compared to previous published risk assessment guidelines. CARB has provided additional guidance on implementing OEHHA's recommended methods.³¹ This HRA used the 2015 OEHHA risk assessment guidelines and CARB guidance. The BAAQMD has adopted recommended procedures for applying the newest OEHHA guidelines as part of Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants.³² Exposure parameters from the OEHHA guidelines and the recent BAAQMD HRA Guidelines were used in this evaluation.

Cancer Risk

Potential increased cancer risk from inhalation of TACs is calculated based on the TAC concentration over the period of exposure, inhalation dose, the TAC cancer potency factor, and an age sensitivity factor to reflect the greater sensitivity of infants and children to cancer causing TACs. The inhalation dose depends on a person's breathing rate, exposure time and frequency and duration of exposure. These parameters vary depending on the age, or age range, of the persons being exposed and whether the exposure is considered to occur at a residential location or other sensitive receptor location.

The current OEHHA guidance recommends that cancer risk be calculated by age groups to account for different breathing rates and sensitivity to TACs. Specifically, they recommend evaluating risks for the third trimester of pregnancy to age zero, ages zero to less than two (infant exposure), ages two to less than 16 (child exposure), and ages 16 to 70 (adult exposure). Age sensitivity factors (ASFs) associated with the different types of exposure are an ASF of 10 for the third trimester and infant exposures, an ASF of 3 for a child exposure, and an ASF of 1 for an adult exposure. Also associated with each exposure type are different breathing rates, expressed as liters per kilogram of body weight per day (L/kg-day) or liters per kilogram of body weight per 8-hour period for the case of worker or school child exposures. As recommended by the BAAQMD for residential exposures, 95th percentile breathing rates are used for the third trimester and infant

³⁰ OEHHA, 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. Office of Environmental Health Hazard Assessment. February.

³¹ CARB, 2015. *Risk Management Guidance for Stationary Sources of Air Toxics*. July 23.

³² BAAQMD, 2016. *BAAQMD Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines*. December 2016.

exposures, and 80th percentile breathing rates for child and adult exposures. For children at schools and daycare facilities, BAAQMD recommends using the 95th percentile 8-hour breathing rates. Additionally, CARB and the BAAQMD recommend the use of a residential exposure duration of 30 years for sources with long-term emissions (e.g., roadways). For workers, assumed to be adults, a 25-year exposure period is recommended by the BAAQMD. For school children a 9-year exposure period is recommended by the BAAQMD.

Under previous OEHHA and BAAQMD HRA guidance, residential receptors are assumed to be at their home 24 hours a day, or 100 percent of the time. In the 2015 Risk Assessment Guidance, OEHHA includes adjustments to exposure duration to account for the fraction of time at home (FAH), which can be less than 100 percent of the time, based on updated population and activity statistics. The FAH factors are age-specific and are: 0.85 for third trimester of pregnancy to less than 2 years old, 0.72 for ages 2 to less than 16 years, and 0.73 for ages 16 to 70 years. Use of the FAH factors is allowed by the BAAQMD if there are no schools in the project vicinity have a cancer risk of one in a million or greater assuming 100 percent exposure (FAH = 1.0).

Functionally, cancer risk is calculated using the following parameters and formulas:

$$\text{Cancer Risk (per million)} = \text{CPF} \times \text{Inhalation Dose} \times \text{ASF} \times \text{ED/AT} \times \text{FAH} \times 10^6$$

Where:

CPF = Cancer potency factor (mg/kg-day)⁻¹

ASF = Age sensitivity factor for specified age group

ED = Exposure duration (years)

AT = Averaging time for lifetime cancer risk (years)

FAH = Fraction of time spent at home (unitless)

$$\text{Inhalation Dose} = C_{\text{air}} \times DBR^* \times A \times (EF/365) \times 10^{-6}$$

Where:

C_{air} = concentration in air ($\mu\text{g/m}^3$)

DBR = daily breathing rate (L/kg body weight-day)

8HrBR = 8-hour breathing rate (L/kg body weight-8 hours)

A = Inhalation absorption factor

EF = Exposure frequency (days/year)

10^{-6} = Conversion factor

* An 8-hour breathing rate (8HrBR) is used for worker and school child exposures.

The health risk parameters used in this evaluation are summarized as follows:

Parameter	<i>Exposure Type →</i>	Infant		Child	Adult
	<i>Age Range →</i>	3rd Trimester	0<2	2 < 16	16 - 30
DPM Cancer Potency Factor (mg/kg-day) ⁻¹		1.10E+00	1.10E+00	1.10E+00	1.10E+00
Daily Breathing Rate (L/kg-day) 80 th Percentile Rate		273	758	572	261
Daily Breathing Rate (L/kg-day) 95 th Percentile Rate		361	1,090	745	335
8-hour Breathing Rate (L/kg-8 hours) 95 th Percentile Rate		-	1,200	520	240
Inhalation Absorption Factor		1	1	1	1
Averaging Time (years)		70	70	70	70
Exposure Duration (years)		0.25	2	14	14*
Exposure Frequency (days/year)		350	350	350	350*
Age Sensitivity Factor		10	10	3	1
Fraction of Time at Home (FAH)		0.85-1.0	0.85-1.0	0.72-1.0	0.73*

* For worker exposures (adult) the exposure duration and frequency are 25 years 250 days/year and FAH is not applicable.

Non-Cancer Hazards

Non-cancer health risk is usually determined by comparing the predicted level of exposure to a chemical to the level of exposure that is not expected to cause any adverse effects (reference exposure level), even to the most susceptible people. Potential non-cancer health hazards from TAC exposure are expressed in terms of a hazard index (HI), which is the ratio of the TAC concentration to a reference exposure level (REL). OEHHA has defined acceptable concentration levels for contaminants that pose non-cancer health hazards. TAC concentrations below the REL are not expected to cause adverse health impacts, even for sensitive individuals. The total HI is calculated as the sum of the HIs for each TAC evaluated and the total HI is compared to the BAAQMD significance thresholds to determine whether a significant non-cancer health impact from a project would occur.

Typically, for residential projects located near roadways with substantial TAC emissions, the primary TAC of concern with non-cancer health effects is diesel particulate matter (DPM). For DPM, the chronic inhalation REL is 5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).

Annual PM_{2.5} Concentrations

While not a TAC, fine particulate matter (PM_{2.5}) has been identified by the BAAQMD as a pollutant with potential non-cancer health effects that should be included when evaluating potential community health impacts under the California Environmental Quality Act (CEQA). The thresholds of significance for PM_{2.5} (project level and cumulative) are in terms of an increase in the annual average concentration. When considering PM_{2.5} impacts, the contribution from all sources of PM_{2.5} emissions should be included. For projects with potential impacts from nearby local roadways, the PM_{2.5} impacts should include those from vehicle exhaust emissions, PM_{2.5} generated from vehicle tire and brake wear, and fugitive emissions from re-suspended dust on the roads.

Attachment 2: CalEEMod Modeling Output

Air Quality/Noise Construction Information Data Request

Project Name:	Cityview	Complete ALL Portions in Yellow																								
See Equipment Type TAB for type, horsepower and load factor																										
<table border="1"> <tr> <td>Project Size</td> <td>0 Dwelling Units</td> <td>8.1 total project acres disturbed</td> </tr> <tr> <td></td> <td>0 s.f. residential</td> <td></td> </tr> <tr> <td></td> <td>25229 s.f. retail</td> <td></td> </tr> <tr> <td></td> <td>3634804 s.f. office/commercial</td> <td></td> </tr> <tr> <td></td> <td>112,314 s.f. other, specify: Mech Penthouse</td> <td></td> </tr> <tr> <td></td> <td>1870905 s.f. parking garage</td> <td>6230 spaces</td> </tr> <tr> <td></td> <td>0 s.f. parking lot</td> <td>0 spaces</td> </tr> <tr> <td>Construction Hours</td> <td>12:00 am to</td> <td>11:59 pm</td> </tr> </table>		Project Size	0 Dwelling Units	8.1 total project acres disturbed		0 s.f. residential			25229 s.f. retail			3634804 s.f. office/commercial			112,314 s.f. other, specify: Mech Penthouse			1870905 s.f. parking garage	6230 spaces		0 s.f. parking lot	0 spaces	Construction Hours	12:00 am to	11:59 pm	<p>Pile Driving? N</p> <p>Project include GENERATOR on-site? Y IF YES --> For welding and shoring as listed below Kilowatts/Horsepower: _____ Fuel Type: Diesel Location in project: Staged between Towers 1-2, 2-3</p>
Project Size	0 Dwelling Units	8.1 total project acres disturbed																								
	0 s.f. residential																									
	25229 s.f. retail																									
	3634804 s.f. office/commercial																									
	112,314 s.f. other, specify: Mech Penthouse																									
	1870905 s.f. parking garage	6230 spaces																								
	0 s.f. parking lot	0 spaces																								
Construction Hours	12:00 am to	11:59 pm																								
Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	Annual Hours	Comments																		
Overall Import/Export Volumes																										
Demolition		Start Date: 3/1/2020	Total phase:	206																						
		End Date: 6/1/2021																								
4	Concrete/Industrial Saws	81	0.73	8	20	0.77669903	640	Demolition Volume																		
8	Excavators	158	0.38	16	206	16	26368	Square footage of buildings to be demolished																		
2	Rubber-Tired Dozers	247	0.4	16	180	13.9805825	5760	(or total tons to be hauled)																		
4	Tractors/Loaders/Backhoes	97	0.37	16	206	16	13184	1,475,000 square feet or																		
1	Sweeper / Scrubber	64	0.46	16	206	16	3296																			
6	Skid Steers	65	0.37	16	206	16	19776																			
Site Preparation		Start Date: 6/1/2020	Total phase:	45				Any pavement demolished and hauled? 500 tons																		
		End Date: 6/1/2021																								
4	Graders	187	0.41	16	45	16	2880																			
4	Rubber Tired Dozers	247	0.4	16	45	16	2880																			
1	Sweeper / Scrubber	64	0.46	16	45	16	720																			
6	Tractors/Loaders/Backhoes	97	0.37	16	45	16	4320																			
Shoring		Start Date: 8/1/2020	Total phase:	194																						
		Start Date: 10/1/2021																								
3	Generators	84	0.74	16	194	16	9312	for dewatering back up power																		
3	Forklifts	89	0.20	16	194	16	9312																			
1	Cranes	231	0.29	16	194	16	3104																			
3	Excavators	158	0.38	16	194	16	9312																			
3	Drill Rigs	221	0.50	16	194	16	9312																			
3	Loaders	97	0.37	16	194	16	9312																			
3	Air Compressors	78	0.48	16	194	16	9312																			
Grading / Mass Excavation		Start Date: 1/1/2021	Total phase:	362																						
		End Date: 2/1/2022																								
Soil Hauling Volume																										
6	Excavators	158	0.38	24	362	24	52128	Export volume = 1,037,689 cubic yards?																		
0	Graders	187	0.41	0	0	0	0	Import volume = 0 cubic yards?																		
0	Rubber Tired Dozers	247	0.4	0	0	0	0																			
0	Concrete/Industrial Saws	81	0.73	0	0	0	0																			
1	Sweeper / Scrubber	64	0.46	24	362	24	8688																			
8	Tractors/Loaders/Backhoes	97	0.37	24	362	24	69504																			
Other Equipment?								0 0																		
Trenching/Foundation		Start Date:	Total phase:					In mass excavation above																		
		End Date:																								
Tractor/Loader/Backhoe		97	0.37			#DIV/0!	0																			
Excavators		158	0.38			#DIV/0!	0																			
Street Sweeper		64	0.46			#DIV/0!	0																			
Building - Exterior		Start Date: 12/1/2021	Total phase:	1238				Cement Trucks? 27,780 Total Round-Trips																		
		End Date: 12/1/2025																								
0	Cranes	231	0.29		0	0	0	Electric? (Y/N) Y Otherwise assumed diesel																		
9	Forklifts	89	0.2	16	1238	16	178272	Liquid Propane (LPG)? (Y/N) N Otherwise Assumed diesel																		
3	Generator Sets	84	0.74	16	310	4,00646204	14880	Or temporary line power? (Y/N) N																		
0	Tractors/Loaders/Backhoes	97	0.37	0	0	0	0																			
45	Welders	46	0.45	16	310	4,00646204	223200																			
1	Sweeper / Scrubber	64	0.46	16	1238	16	19808																			
2	concrete pumps	84	0.74	16	452	5,84168013	14464	Standard concrete pours																		
4	concrete pumps	84	0.74	24	24	0,46526656	2304	This is the quantity of 20, 24 hour mat slab pours. To take place on Friday or Saturday nights																		
18	Aerial Lifts	63	0.31	16	928	329,955556	267264																			
Paving / Hardscape		Start Date: 6/1/2024	Total phase:	465																						
		Start Date: 12/1/2025																								
2	Plate compactor	8	0.43	10	232	4,98924731	4640																			
1	Pumps	84	0.74	10	116	2,49462366	1160	Asphalt? N cubic yards or 0 round trips? No, Concrete hardscape																		
2	Forklifts	89	0.2	10	465	10	9300																			
1	Rollers	80	0.38	10	232	4,98924731	2320																			
2	Tractors/Loaders/Backhoes	97	0.37	10	232	4,98924731	4640																			
1	Street Sweeper	64	0.46	10	465	10	4650																			
Other Equipment?																										

Equipment types listed in "Equipment Types" worksheet tab.

Equipment listed in this sheet is to provide an example of inputs

It is assumed that water trucks would be used during grading

Add or subtract phases and equipment, as appropriate

Modify horsepower or load factor, as appropriate

Complete one sheet for each project component

Cityview Plaza Office Development VMT Trip Generation Estimates

Land Use	ITE Land Use Code	Location	% of Vehicle Mode Share	% Reduction	Size	Daily Rate	Trip	AQ Trip Rate	AM Peak Hour				PM Peak Hour							
									Pk-Hr	Split	In	Out	Trip	Pk-Hr	Split	In	Out	Trip		
Proposed Land Use																				
General Office Building ¹	710		3,648,584 Square Feet	9.74	35,537			1.160	86%	14%	3,640	592	4,232	1.15	16%	84%	671	3,525	4,196	
- Office - Retail Internal Reduction ²						-292			-3	-5	-8				-15	-14	-29			
- Location Based Reduction ³	Urban High-Transit	69%	31%			-10,926		6.67						-1,127	-162	-1,309		-203	-1,088	-1,291
Shopping Center ¹	820		15,449 Square Feet	37.75	583			0.940	62%	38%	9	6	15	3.81	48%	52%	28	31	59	
- Office - Retail Internal Reduction ²			50%			-292			-5	-3	-8				-14	-15	-29			
- Location Based Reduction ³	Urban High-Transit	83%	17%			-50		15.66						-1	-1	-2		-2	-3	-5
Baseline Vehicle Trips (Before Reductions)						36,120			3,649	598	4,247				699	3,556	4,255			
Project Trips After Reductions						24,561		24,561						2,513	407	2,920		464	2,435	2,901

Notes:

¹ Source: ITE Trip Generation Manual, 10th Edition 2017, average trip generation rates.

² As prescribed by the Transportation Impact Analysis Guidelines from VTA (October 2014), the maximum trip reduction for a mixed-use development project with employment and employee-serving retail uses is equal to 3% off the office component. However, a 3% reduction of office trips would exceed the total number of trips generated by the retail use for both peak-hours. Therefore, a 50% reduction off the retail trips was applied.

³ The project site is located within an urban high-transit area based on the City of San Jose VMT Evaluation Tool (February 29, 2019). The location-based vehicle mode shares are obtained from Table 6 of the City of San Jose Transportation Analysis Handbook (April 2018). The trip reductions are based on the percent of mode share for all of the other modes of travel beside vehicle.

Note: Hexagon estimates 2,885 daily trips based on peak hour volumes from 11-27-19 email

City View (EMFAC for Truck Activity), Tier 4 Final - Santa Clara County, Annual

City View (EMFAC for Truck Activity), Tier 4 Final
Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	3,648.58	1000sqft	8.10	3,648,584.00	0
General Light Industry	112.31	1000sqft	0.00	112,314.00	0
Enclosed Parking with Elevator	6,246.00	Space	0.00	1,870,905.00	0
Strip Mall	15.45	1000sqft	0.00	15,449.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E rate

Land Use - 3,648,584-sf office, 15,449-sf retail, 112,314-sf mech penthouse, 1,870,905-sf parking garage

Construction Phase - Based on construction worksheet, start dates and total workdays

Off-road Equipment - Based on construction worksheet

Trips and VMT - No Truck Activity for vendor or hauling --> Using EMFAC, keep workers

Demolition - Based on construction worksheet

Grading - Based on construction worksheet

Vehicle Trips - Traffic Trip Generation Rate

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Consumer Products - Rate for SC County in 2027

Energy Use -

Water And Wastewater - 100% aerobic

Construction Off-road Equipment Mitigation - BACT, tier 4 final

Energy Mitigation - Using CEC estimates for future Title 24

Water Mitigation - Water reductions

Fleet Mix -

Off-road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps - 1. Tower 1: 2000kW, 480/277V, 3-phase, 4-wire

2. Tower 2: 1500kW, 480/277V, 3-phase, 4-wire

3. Tower 3: 1500kW, 480/277V, 3-phase, 4-wire

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	18.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	17.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	14.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	23.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	45.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	230.00	1,238.00
tblConstructionPhase	NumDays	20.00	206.00
tblConstructionPhase	NumDays	20.00	362.00

tblConstructionPhase	NumDays	20.00	465.00
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConsumerProducts	ROG_EF	2.14E-05	1.75E-05
tblGrading	AcresOfGrading	0.00	10.00
tblGrading	AcresOfGrading	180.00	10.00
tblGrading	MaterialExported	0.00	1,037,689.00
tblGrading	MaterialImported	0.00	1,000.00
tblLandUse	LandUseSquareFeet	3,648,580.00	3,648,584.00
tblLandUse	LandUseSquareFeet	112,310.00	112,314.00
tblLandUse	LandUseSquareFeet	2,498,400.00	1,870,905.00
tblLandUse	LandUseSquareFeet	15,450.00	15,449.00
tblLandUse	LotAcreage	83.76	8.10
tblLandUse	LotAcreage	2.58	0.00
tblLandUse	LotAcreage	56.21	0.00
tblLandUse	LotAcreage	0.35	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	9.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	45.00
tblOffRoadEquipment	UsageHours	8.00	0.80
tblOffRoadEquipment	UsageHours	8.00	16.00
tblOffRoadEquipment	UsageHours	8.00	24.00
tblOffRoadEquipment	UsageHours	8.00	16.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	14.00
tblOffRoadEquipment	UsageHours	8.00	16.00
tblOffRoadEquipment	UsageHours	8.00	24.00
tblOffRoadEquipment	UsageHours	8.00	16.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,681.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,011.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	2.00

tblTripsAndVMT	HaulingTripNumber	6,709.00	0.00
tblTripsAndVMT	HaulingTripNumber	129,836.00	0.00
tblTripsAndVMT	VendorTripNumber	926.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	ST_TR	1.64	0.96
tblVehicleTrips	ST_TR	42.04	14.80
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	SU_TR	0.76	0.44
tblVehicleTrips	SU_TR	20.43	7.19
tblVehicleTrips	WD_TR	6.97	0.00
tblVehicleTrips	WD_TR	11.42	6.67
tblVehicleTrips	WD_TR	44.32	15.60
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPerce nt	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPerce nt	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPerce nt	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPerce nt	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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	2.2878	23.3716	21.2341	0.0376	1.9218	1.1530	3.0748	0.7347	1.0723	1.8069	0.0000	3,296.7603	3,296.7603	0.9409	0.0000	3,320.2833	
2021	2.0438	18.5156	24.3189	0.0389	0.3491	0.9922	1.3413	0.0853	0.9196	1.0049	0.0000	3,410.4123	3,410.4123	0.9694	0.0000	3,434.6475	
2022	2.6175	12.5519	21.0407	0.0434	2.5601	0.6445	3.2045	0.6733	0.6165	1.2898	0.0000	3,740.2300	3,740.2300	0.4012	0.0000	3,750.2607	
2023	2.2257	10.0096	17.4547	0.0381	2.4807	0.4695	2.9502	0.6598	0.4522	1.1120	0.0000	3,271.2998	3,271.2998	0.2658	0.0000	3,277.9444	
2024	22.2661	10.3185	18.1546	0.0394	2.5451	0.4506	2.9957	0.6769	0.4326	1.1095	0.0000	3,375.8169	3,375.8169	0.2929	0.0000	3,383.1382	
2025	1.8136	8.9256	15.9039	0.0341	2.1884	0.3592	2.5476	0.5820	0.3442	0.9262	0.0000	2,926.1469	2,926.1469	0.2683	0.0000	2,932.8542	
Maximum	22.2661	23.3716	24.3189	0.0434	2.5601	1.1530	3.2045	0.7347	1.0723	1.8069	0.0000	3,740.2300	3,740.2300	0.9694	0.0000	3,750.2607	

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	0.5602	5.0717	24.2943	0.0376	0.8145	0.0593	0.8738	0.1661	0.0593	0.2253	0	3,296.76	3,296.76	0.9409	0	3,320.28	
2021	0.5882	3.6156	27.1976	0.0389	0.3101	0.0602	0.3702	0.0777	0.06	0.1377	0	3,410.41	3,410.41	0.9694	0	3,434.64	
2022	1.217	5.2671	20.8802	0.0434	2.521	0.0451	2.5661	0.6657	0.0439	0.7096	0	3,740.23	3,740.23	0.4012	0	3,750.26	
2023	1.0984	4.8665	17.0325	0.0381	2.4807	0.0376	2.5183	0.6598	0.0364	0.6962	0	3,271.30	3,271.30	0.2658	0	3,277.94	
2024	21.1725	5.0728	17.8095	0.0394	2.5451	0.04	2.5851	0.6769	0.0388	0.7157	0	3,375.82	3,375.82	0.2929	0	3,383.14	
2025	0.915	4.4968	15.6745	0.0341	2.1884	0.0358	2.2242	0.582	0.0348	0.6168	0	2,926.15	2,926.15	0.2683	0	2,932.85	
Maximum	21.1725	5.2671	27.1976	0.0434	2.5451	0.0602	2.5851	0.6769	0.0600	0.7157	0.0000	3,740.2279	3,740.2279	0.9694	0.0000	3,750.2586	

	ROG	NOx	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	23.16	66.08	-4.05	0.00	9.84	93.17	30.88	17.11	92.88	57.22	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	3-1-2020	5-31-2020	4.9379	1.0655
2	6-1-2020	8-31-2020	10.8376	1.8826
3	9-1-2020	11-30-2020	8.1551	2.1768
4	12-1-2020	2-28-2021	7.2404	1.8947
5	3-1-2021	5-31-2021	4.6973	0.8656
6	6-1-2021	8-31-2021	3.9402	0.6155
7	9-1-2021	11-30-2021	3.8980	0.6094
8	12-1-2021	2-28-2022	6.7730	2.1448
9	3-1-2022	5-31-2022	3.3007	1.5469
10	6-1-2022	8-31-2022	3.2851	1.5313
11	9-1-2022	11-30-2022	3.2801	1.5453
12	12-1-2022	2-28-2023	3.1297	1.5224
13	3-1-2023	5-31-2023	3.1015	1.5167
14	6-1-2023	8-31-2023	3.0871	1.5023
15	9-1-2023	11-30-2023	3.0819	1.5144
16	12-1-2023	2-29-2024	2.9847	1.5102
17	3-1-2024	5-31-2024	2.9327	1.4907
18	6-1-2024	8-31-2024	23.9628	22.2560
19	9-1-2024	11-30-2024	3.2679	1.5922
20	12-1-2024	2-28-2025	3.1283	1.5723
21	3-1-2025	5-31-2025	3.1097	1.5735
22	6-1-2025	8-31-2025	3.0968	1.5606
23	9-1-2025	9-30-2025	1.0098	0.5089
		Highest	23.9628	22.2560

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	14.1983	8.3000e-004	0.0919	1.0000e-005		3.3000e-004	3.3000e-004	3.3000e-004	3.3000e-004	0.0000	0.1791	0.1791	4.7000e-004	0.0000	0.1907		
Energy	0.4317	3.9244	3.2965	0.0236		0.2983	0.2983	0.2983	0.2983	0.0000	15,240.9435	15,240.9435	1.1788	0.3053	15,361.3810		
Mobile	3.3849	13.6768	40.3966	0.1606	17.0040	0.1249	17.1289	4.5510	0.1162	4.6671	0.0000	14,747.2561	14,747.2561	0.4395	0.0000	14,758.2430	
Stationary	0.2750	1.2298	0.7012	1.3200e-003		0.0405	0.0405	0.0405	0.0405	0.0000	127.6242	127.6242	0.0179	0.0000	128.0715		
Waste						0.0000	0.0000	0.0000	0.0000	720.3459	0.0000	720.3459	42.5712	0.0000	1,784.6265		
Water						0.0000	0.0000	0.0000	0.0000	239.0255	664.1766	903.2021	0.8891	0.5335	1,084.4261		
Total	18.2898	18.8318	44.4861	0.1855	17.0040	0.4640	17.4679	4.5510	0.4552	5.0062	959.3714	30,780.1794	31,739.5508	45.0969	0.8388	33,116.9387	

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	14.1983	8.3000e-004	0.0919	1.0000e-005		3.3000e-004	3.3000e-004	3.3000e-004	3.3000e-004	0.0000	0.1791	0.1791	4.7000e-004	0.0000	0.1907		
Energy	0.3039	2.7624	2.3204	0.0166		0.2099	0.2099	0.2099	0.2099	0.0000	12,630.1064	12,630.1064	1.0199	0.2542	12,731.3642		
Mobile	3.3849	13.6768	40.3966	0.1606	17.0040	0.1249	17.1289	4.5510	0.1162	4.6671	0.0000	14,747.2561	14,747.2561	0.4395	0.0000	14,758.2430	
Stationary	0.2750	1.2298	0.7012	1.3200e-003		0.0405	0.0405	0.0405	0.0405	0.0000	127.6242	127.6242	0.0179	0.0000	128.0715		
Waste						0.0000	0.0000	0.0000	0.0000	720.3459	0.0000	720.3459	42.5712	0.0000	1,784.6265		

Water						0.0000	0.0000		0.0000	0.0000	191.2204	556.8212	748.0416	0.7138	0.4274	893.2416
Total	18.1620	17.6698	43.5100	0.1785	17.0040	0.3757	17.3796	4.5510	0.3669	4.9179	911.5663	28,061.98	28,973.553	44.7628	0.6816	30,295.73
<hr/>																
	ROG	NOx	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	0.70	6.17	2.19	3.76	0.00	19.03	0.51	0.00	19.40	1.76	4.98	8.83	8.71	0.74	18.74	8.52

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	3/1/2020	10/27/2020	6	206	
2	Site Preparation	Site Preparation	6/1/2020	7/22/2020	6	45	
3	Shoring	Trenching	8/1/2020	3/15/2021	6	194	
4	Grading	Grading	1/1/2021	2/26/2022	6	362	
5	Building Exterior	Building Construction	12/1/2021	11/13/2025	6	1238	
6	Paving/Hardscape	Paving	6/1/2024	11/25/2025	6	465	
7	Building Interior	Architectural Coating	6/1/2024	6/24/2024	6	20	

Acres of Grading (Site Preparation Phase): 10

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,664,521; Non-Residential Outdoor: 1,888,174; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	4	0.80	81	0.73
Demolition	Excavators	8	16.00	158	0.38
Demolition	Rubber Tired Dozers	2	14.00	247	0.40
Demolition	Skid Steer Loaders	6	16.00	65	0.37

Demolition	Sweepers/Scrubbers	1	16.00	64	0.46
Demolition	Tractors/Loaders/Backhoes	4	16.00	97	0.37
Site Preparation	Graders	4	16.00	187	0.41
Site Preparation	Rubber Tired Dozers	4	16.00	247	0.40
Site Preparation	Sweepers/Scrubbers	1	16.00	64	0.46
Site Preparation	Tractors/Loaders/Backhoes	6	16.00	97	0.37
Shoring	Aerial Lifts	18	12.00	63	0.31
Shoring	Air Compressors	3	16.00	78	0.48
Shoring	Bore/Drill Rigs	3	16.00	221	0.50
Shoring	Cranes	1	16.00	231	0.29
Shoring	Excavators	3	16.00	158	0.38
Shoring	Forklifts	3	16.00	89	0.20
Shoring	Generator Sets	3	16.00	84	0.74
Shoring	Tractors/Loaders/Backhoes	3	16.00	97	0.37
Grading	Excavators	6	24.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Sweepers/Scrubbers	1	24.00	64	0.46
Grading	Tractors/Loaders/Backhoes	8	24.00	97	0.37
Building Exterior	Cranes	0	7.00	231	0.29
Building Exterior	Forklifts	9	16.00	89	0.20
Building Exterior	Generator Sets	3	4.00	84	0.74
Building Exterior	Pumps	2	5.80	84	0.74
Building Exterior	Sweepers/Scrubbers	1	16.00	64	0.46
Building Exterior	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Exterior	Welders	45	4.00	46	0.45
Paving/Hardscape	Forklifts	2	10.00	89	0.20
Paving/Hardscape	Pavers	0	8.00	130	0.42
Paving/Hardscape	Paving Equipment	0	8.00	132	0.36
Paving/Hardscape	Plate Compactors	2	5.00	8	0.43

Paving/Hardscape	Pumps	1	2.50	84	0.74
Paving/Hardscape	Rollers	1	5.00	80	0.38
Paving/Hardscape	Sweepers/Scrubbers	1	10.00	64	0.46
Paving/Hardscape	Tractors/Loaders/Backhoes	2	5.00	97	0.31
Building Interior	Air Compressors	1	6.00	78	0.46

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	25	63.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	15	38.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Shoring	37	93.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	15	38.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Exterior	60	2,005.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving/Hardscape	9	23.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Interior	1	401.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed

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				0.7260	0.0000	0.7260	0.1099	0.0000	0.1099	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1371	11.7244	11.0327	0.0175		0.6059	0.6059		0.5581	0.5581	0.0000	1,535.704 2	1,535.7042	0.4909	0.0000	1,547.977 1		
Total	1.1371	11.7244	11.0327	0.0175	0.7260	0.6059	1.3318	0.1099	0.5581	0.6680	0.0000	1,535.704 2	1,535.7042	0.4909	0.0000	1,547.977 1		

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0216	0.0155	0.1624	4.9000e-004	0.0515	3.3000e-004	0.0518	0.0137	3.1000e-004	0.0140	0.0000	44.1349	44.1349	1.0800e-003	0.0000	44.1620	
Total	0.0216	0.0155	0.1624	4.9000e-004	0.0515	3.3000e-004	0.0518	0.0137	3.1000e-004	0.0140	0.0000	44.1349	44.1349	1.0800e-003	0.0000	44.1620	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.2831	0.0000	0.2831	0.0214	0.0000	0.0214	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.2520	2.4934	12.2633	0.0175		0.0286	0.0286		0.0286	0.0286	0.0000	1,535.702 3	1,535.7023	0.4909	0.0000	1,547.975 2		

Total	0.2520	2.4934	12.2633	0.0175	0.2831	0.0286	0.3117	0.0214	0.0286	0.0500	0.0000	1,535.702 3	1,535.7023	0.4909	0.0000	1,547.975 2
-------	--------	--------	---------	--------	--------	--------	--------	--------	--------	--------	--------	----------------	------------	--------	--------	----------------

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0216	0.0155	0.1624	4.9000e-004	0.0515	3.3000e-004	0.0518	0.0137	3.1000e-004	0.0140	0.0000	44.1349	44.1349	1.0800e-003	0.0000	44.1620
Total	0.0216	0.0155	0.1624	4.9000e-004	0.0515	3.3000e-004	0.0518	0.0137	3.1000e-004	0.0140	0.0000	44.1349	44.1349	1.0800e-003	0.0000	44.1620

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					1.0893	0.0000	1.0893	0.5964	0.0000	0.5964	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.3487	3.8515	1.7752	3.6800e-003		0.1807	0.1807		0.1662	0.1662	0.0000	323.7710	323.7710	0.1047	0.0000	326.3889
Total	0.3487	3.8515	1.7752	3.6800e-003	1.0893	0.1807	1.2699	0.5964	0.1662	0.7626	0.0000	323.7710	323.7710	0.1047	0.0000	326.3889

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.8400e-003	2.0400e-003	0.0214	6.0000e-005	6.7800e-003	4.0000e-005	6.8200e-003	1.8000e-003	4.0000e-005	1.8400e-003	0.0000	5.8153	5.8153	1.4000e-004	0.0000	5.8188	
Total	2.8400e-003	2.0400e-003	0.0214	6.0000e-005	6.7800e-003	4.0000e-005	6.8200e-003	1.8000e-003	4.0000e-005	1.8400e-003	0.0000	5.8153	5.8153	1.4000e-004	0.0000	5.8188	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.4248	0.0000	0.4248	0.1163	0.0000	0.1163	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0465	0.2533	1.9443	3.6800e-003		6.0100e-003	6.0100e-003		6.0100e-003	6.0100e-003	0.0000	323.7706	323.7706	0.1047	0.0000	326.3885	
Total	0.0465	0.2533	1.9443	3.6800e-003	0.4248	6.0100e-003	0.4308	0.1163	6.0100e-003	0.1223	0.0000	323.7706	323.7706	0.1047	0.0000	326.3885	

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8400e-003	2.0400e-003	0.0214	6.0000e-005	6.7800e-005	4.0000e-005	6.8200e-003	1.8000e-003	4.0000e-005	1.8400e-003	0.0000	5.8153	5.8153	1.4000e-004	0.0000	5.8188	
Total	2.8400e-003	2.0400e-003	0.0214	6.0000e-005	6.7800e-003	4.0000e-005	6.8200e-003	1.8000e-003	4.0000e-005	1.8400e-003	0.0000	5.8153	5.8153	1.4000e-004	0.0000	5.8188	

3.4 Shoring - 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	0.7574	7.7636	8.0900	0.0154			0.3658	0.3658		0.3474	0.3474	0.0000	1,345.9036	1,345.9036	0.3431	0.0000	1,354.4798
Total	0.7574	7.7636	8.0900	0.0154			0.3658	0.3658		0.3474	0.3474	0.0000	1,345.9036	1,345.9036	0.3431	0.0000	1,354.4798

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0202	0.0145	0.1525	4.6000e-004	0.0483	3.1000e-004	0.0486	0.0129	2.9000e-004	0.0131	0.0000	41.4313	41.4313	1.0200e-003	0.0000	41.4567
Total	0.0202	0.0145	0.1525	4.6000e-004	0.0483	3.1000e-004	0.0486	0.0129	2.9000e-004	0.0131	0.0000	41.4313	41.4313	1.0200e-003	0.0000	41.4567

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2171	2.2929	9.7504	0.0154		0.0241	0.0241		0.0241	0.0241	0.0000	1,345.9020	1,345.9020	0.3431	0.0000	1,354.4782
Total	0.2171	2.2929	9.7504	0.0154		0.0241	0.0241		0.0241	0.0241	0.0000	1,345.9020	1,345.9020	0.3431	0.0000	1,354.4782

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0202	0.0145	0.1525	4.6000e-004	0.0483	3.1000e-004	0.0486	0.0129	2.9000e-004	0.0131	0.0000	41.4313	41.4313	1.0200e-003	0.0000	41.4567
Total	0.0202	0.0145	0.1525	4.6000e-004	0.0483	3.1000e-004	0.0486	0.0129	2.9000e-004	0.0131	0.0000	41.4313	41.4313	1.0200e-003	0.0000	41.4567

3.4 Shoring - 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	0.3326	3.3590	3.8681	7.4200e-003		0.1516	0.1516		0.1439	0.1439	0.0000	647.6856	647.6856	0.1640	0.0000	651.7852	
Total	0.3326	3.3590	3.8681	7.4200e-003		0.1516	0.1516		0.1439	0.1439	0.0000	647.6856	647.6856	0.1640	0.0000	651.7852	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	9.0200e-003	6.2500e-003	0.0670	2.1000e-004	0.0232	1.5000e-004	0.0234	6.1800e-003	1.3000e-004	6.3100e-003	0.0000	19.2334	19.2334	4.4000e-004	0.0000	19.2443	
Total	9.0200e-003	6.2500e-003	0.0670	2.1000e-004	0.0232	1.5000e-004	0.0234	6.1800e-003	1.3000e-004	6.3100e-003	0.0000	19.2334	19.2334	4.4000e-004	0.0000	19.2443	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Off-Road	0.1044	1.1027	4.6891	7.4200e-003		0.0116	0.0116		0.0116	0.0116	0.0000	647.6849	647.6849	0.1640	0.0000	651.7844	

Total	0.1044	1.1027	4.6891	7.4200e-003		0.0116	0.0116		0.0116	0.0116	0.0000	647.6849	647.6849	0.1640	0.0000	651.7844
-------	--------	--------	--------	-------------	--	--------	--------	--	--------	--------	--------	----------	----------	--------	--------	----------

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	9.0200e-003	6.2500e-003	0.0670	2.1000e-004	0.0232	1.5000e-004	0.0234	6.1800e-003	1.3000e-004	6.3100e-003	0.0000	19.2334	19.2334	4.4000e-004	0.0000	19.2443
Total	9.0200e-003	6.2500e-003	0.0670	2.1000e-004	0.0232	1.5000e-004	0.0234	6.1800e-003	1.3000e-004	6.3100e-003	0.0000	19.2334	19.2334	4.4000e-004	0.0000	19.2443

3.5 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0640	0.0000	0.0640	9.4700e-003	0.0000	9.4700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.4563	14.1526	18.6221	0.0274		0.7851	0.7851		0.7223	0.7223	0.0000	2,408.3952	2,408.3952	0.7789	0.0000	2,427.8683
Total	1.4563	14.1526	18.6221	0.0274	0.0640	0.7851	0.8491	9.4700e-003	0.7223	0.7317	0.0000	2,408.3952	2,408.3952	0.7789	0.0000	2,427.8683

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0183	0.0127	0.1360	4.3000e-004	0.0472	3.0000e-004	0.0475	0.0125	2.7000e-004	0.0128	0.0000	39.0445	39.0445	8.9000e-004	0.0000	39.0667
Total	0.0183	0.0127	0.1360	4.3000e-004	0.0472	3.0000e-004	0.0475	0.0125	2.7000e-004	0.0128	0.0000	39.0445	39.0445	8.9000e-004	0.0000	39.0667

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0250	0.0000	0.0250	1.8500e-003	0.0000	1.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.3509	2.0617	20.7358	0.0274		0.0448	0.0448		0.0448	0.0448	0.0000	2,408.3924	2,408.3924	0.7789	0.0000	2,427.8654	
Total	0.3509	2.0617	20.7358	0.0274	0.0250	0.0448	0.0698	1.8500e-003	0.0448	0.0467	0.0000	2,408.3924	2,408.3924	0.7789	0.0000	2,427.8654	

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0183	0.0127	0.1360	4.3000e-004	0.0472	3.0000e-004	0.0475	0.0125	2.7000e-004	0.0128	0.0000	39.0445	39.0445	8.9000e-004	0.0000	0.0000	39.0667
Total	0.0183	0.0127	0.1360	4.3000e-004	0.0472	3.0000e-004	0.0475	0.0125	2.7000e-004	0.0128	0.0000	39.0445	39.0445	8.9000e-004	0.0000	0.0000	39.0667

3.5 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0640	0.0000	0.0640	9.4700e-003	0.0000	9.4700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2003	1.9014	2.8923	4.2900e-003		0.0997	0.0997		0.0918	0.0918	0.0000	377.1432	377.1432	0.1220	0.0000	380.1926
Total	0.2003	1.9014	2.8923	4.2900e-003	0.0640	0.0997	0.1638	9.4700e-003	0.0918	0.1012	0.0000	377.1432	377.1432	0.1220	0.0000	380.1926

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6800e-003	1.7800e-003	0.0196	7.0000e-005	7.3800e-003	5.0000e-005	7.4300e-003	1.9600e-003	4.0000e-005	2.0100e-003	0.0000	5.8904	5.8904	1.2000e-004	0.0000	5.8935
Total	2.6800e-003	1.7800e-003	0.0196	7.0000e-005	7.3800e-003	5.0000e-005	7.4300e-003	1.9600e-003	4.0000e-005	2.0100e-003	0.0000	5.8904	5.8904	1.2000e-004	0.0000	5.8935

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0250	0.0000	0.0250	1.8500e-003	0.0000	1.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0549	0.3228	3.2462	4.2900e-003		7.0200e-003	7.0200e-003		7.0200e-003	7.0200e-003	0.0000	377.1427	377.1427	0.1220	0.0000	380.1921	
Total	0.0549	0.3228	3.2462	4.2900e-003	0.0250	7.0200e-003	0.0320	1.8500e-003	7.0200e-003	8.8700e-003	0.0000	377.1427	377.1427	0.1220	0.0000	380.1921	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.6800e-003	1.7800e-003	0.0196	7.0000e-005	7.3800e-003	5.0000e-005	7.4300e-003	1.9600e-003	4.0000e-005	2.0100e-003	0.0000	5.8904	5.8904	1.2000e-004	0.0000	5.8935	
Total	2.6800e-003	1.7800e-003	0.0196	7.0000e-005	7.3800e-003	5.0000e-005	7.4300e-003	1.9600e-003	4.0000e-005	2.0100e-003	0.0000	5.8904	5.8904	1.2000e-004	0.0000	5.8935	

3.6 Building Exterior - 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	0.1442	0.9274	1.0064	1.4800e-003		0.0538	0.0538		0.0519	0.0519	0.0000	118.3441	118.3441	0.0211	0.0000	118.8725	
Total	0.1442	0.9274	1.0064	1.4800e-003		0.0538	0.0538		0.0519	0.0519	0.0000	118.3441	118.3441	0.0211	0.0000	118.8725	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0834	0.0577	0.6192	1.9700e-003	0.2147	1.3500e-003	0.2160	0.0571	1.2400e-003	0.0583	0.0000	177.7095	177.7095	4.0400e-003	0.0000	177.8105	
Total	0.0834	0.0577	0.6192	1.9700e-003	0.2147	1.3500e-003	0.2160	0.0571	1.2400e-003	0.0583	0.0000	177.7095	177.7095	4.0400e-003	0.0000	177.8105	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Off-Road	0.0222	0.3746	0.9504	1.4800e-003		1.9600e-003	1.9600e-003		1.9600e-003	1.9600e-003	0.0000	118.3439	118.3439	0.0211	0.0000	118.8723	

Total	0.0222	0.3746	0.9504	1.4800e-003		1.9600e-003	1.9600e-003		1.9600e-003	1.9600e-003	0.0000	118.3439	118.3439	0.0211	0.0000	118.8723
-------	--------	--------	--------	-------------	--	-------------	-------------	--	-------------	-------------	--------	----------	----------	--------	--------	----------

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0834	0.0577	0.6192	1.9700e-003	0.2147	1.3500e-003	0.2160	0.0571	1.2400e-003	0.0583	0.0000	177.7095	177.7095	4.0400e-003	0.0000	177.8105
Total	0.0834	0.0577	0.6192	1.9700e-003	0.2147	1.3500e-003	0.2160	0.0571	1.2400e-003	0.0583	0.0000	177.7095	177.7095	4.0400e-003	0.0000	177.8105

3.6 Building Exterior - 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	1.5123	10.0483	11.5313	0.0171		0.5294	0.5294		0.5106	0.5106	0.0000	1,371.9142	1,371.9142	0.2371	0.0000	1,377.8419
Total	1.5123	10.0483	11.5313	0.0171		0.5294	0.5294		0.5106	0.5106	0.0000	1,371.9142	1,371.9142	0.2371	0.0000	1,377.8419

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.9022	0.6005	6.5975	0.0220	2.4887	0.0153	2.5040	0.6619	0.0141	0.6760	0.0000	1,985.2823	1,985.2823	0.0420	0.0000	1,986.3327	
Total	0.9022	0.6005	6.5975	0.0220	2.4887	0.0153	2.5040	0.6619	0.0141	0.6760	0.0000	1,985.2823	1,985.2823	0.0420	0.0000	1,986.3327	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.2572	4.3421	11.0170	0.0171		0.0227	0.0227		0.0227	0.0227	0.0000	1,371.9125	1,371.9125	0.2371	0.0000	1,377.8403	
Total	0.2572	4.3421	11.0170	0.0171		0.0227	0.0227		0.0227	0.0227	0.0000	1,371.9125	1,371.9125	0.2371	0.0000	1,377.8403	

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.9022	0.6005	6.5975	0.0220	2.4887	0.0153	2.5040	0.6619	0.0141	0.6760	0.0000	1,985.2823	1,985.2823	0.0420	0.0000	1,986.3327	3
Total	0.9022	0.6005	6.5975	0.0220	2.4887	0.0153	2.5040	0.6619	0.0141	0.6760	0.0000	1,985.2823	1,985.2823	0.0420	0.0000	1,986.3327	3

3.6 Building Exterior - 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	1.3836	9.4713	11.4040	0.0171			0.4545	0.4545		0.4385	0.4385	0.0000	1,367.5311	1,367.5311	0.2282	0.0000	1,373.2370
Total	1.3836	9.4713	11.4040	0.0171			0.4545	0.4545		0.4385	0.4385	0.0000	1,367.5311	1,367.5311	0.2282	0.0000	1,373.2370

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.8421	0.5383	6.0507	0.0210	2.4807	0.0150	2.4957	0.6598	0.0138	0.6735	0.0000	1,903.7687	1,903.7687	0.0376	0.0000	1,904.7074	7
Total	0.8421	0.5383	6.0507	0.0210	2.4807	0.0150	2.4957	0.6598	0.0138	0.6735	0.0000	1,903.7687	1,903.7687	0.0376	0.0000	1,904.7074	7

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Off-Road	0.2564	4.3282	10.9818	0.0171		0.0226	0.0226		0.0226	0.0226	0.0000	1,367.5294	1,367.5294	0.2282	0.0000	1,373.2353	
Total	0.2564	4.3282	10.9818	0.0171		0.0226	0.0226		0.0226	0.0226	0.0000	1,367.5294	1,367.5294	0.2282	0.0000	1,373.2353	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.8421	0.5383	6.0507	0.0210	2.4807	0.0150	2.4957	0.6598	0.0138	0.6735	0.0000	1,903.7687	1,903.7687	0.0376	0.0000	1,904.7074	
Total	0.8421	0.5383	6.0507	0.0210	2.4807	0.0150	2.4957	0.6598	0.0138	0.6735	0.0000	1,903.7687	1,903.7687	0.0376	0.0000	1,904.7074	

3.6 Building Exterior - 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	1.2902	9.0658	11.4084	0.0172		0.3954	0.3954		0.3814	0.3814	0.0000	1,376.2973	1,376.2973	0.2243	0.0000	1,381.9054	
Total	1.2902	9.0658	11.4084	0.0172		0.3954	0.3954		0.3814	0.3814	0.0000	1,376.2973	1,376.2973	0.2243	0.0000	1,381.9054	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.7977	0.4897	5.6466	0.0203	2.4966	0.0148	2.5114	0.6640	0.0136	0.6776	0.0000	1,840.7144	1,840.7144	0.0341	0.0000	1,841.5657	
Total	0.7977	0.4897	5.6466	0.0203	2.4966	0.0148	2.5114	0.6640	0.0136	0.6776	0.0000	1,840.7144	1,840.7144	0.0341	0.0000	1,841.5657	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Off-Road	0.2580	4.3560	11.0522	0.0172		0.0228	0.0228		0.0228	0.0228	0.0000	1,376.2956	1,376.2956	0.2243	0.0000	1,381.9038	

Total	0.2580	4.3560	11.0522	0.0172		0.0228	0.0228		0.0228	0.0228	0.0000	1,376.295 6	1,376.2956	0.2243	0.0000	1,381.903 8
-------	--------	--------	---------	--------	--	--------	--------	--	--------	--------	--------	----------------	------------	--------	--------	----------------

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.7977	0.4897	5.6466	0.0203	2.4966	0.0148	2.5114	0.6640	0.0136	0.6776	0.0000	1,840.714 4	1,840.7144	0.0341	0.0000	1,841.565 7
Total	0.7977	0.4897	5.6466	0.0203	2.4966	0.0148	2.5114	0.6640	0.0136	0.6776	0.0000	1,840.714 4	1,840.7144	0.0341	0.0000	1,841.565 7

3.6 Building Exterior - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.0388	7.4755	9.8262	0.0149		0.2943	0.2943		0.2839	0.2839	0.0000	1,192.206 6	1,192.2066	0.1895	0.0000	1,196.943 3
Total	1.0388	7.4755	9.8262	0.0149		0.2943	0.2943		0.2839	0.2839	0.0000	1,192.206 6	1,192.2066	0.1895	0.0000	1,196.943 3

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.6536	0.3856	4.5324	0.0169	2.1627	0.0126	2.1753	0.5752	0.0116	0.5868	0.0000	1,530.0199	1,530.0199	0.0267	0.0000	1,530.6874
Total	0.6536	0.3856	4.5324	0.0169	2.1627	0.0126	2.1753	0.5752	0.0116	0.5868	0.0000	1,530.0199	1,530.0199	0.0267	0.0000	1,530.6874

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2235	3.7733	9.5739	0.0149		0.0197	0.0197		0.0197	0.0197	0.0000	1,192.2051	1,192.2051	0.1895	0.0000	1,196.9418
Total	0.2235	3.7733	9.5739	0.0149		0.0197	0.0197		0.0197	0.0197	0.0000	1,192.2051	1,192.2051	0.1895	0.0000	1,196.9418

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.6536	0.3856	4.5324	0.0169	2.1627	0.0126	2.1753	0.5752	0.0116	0.5868	0.0000	1,530.0199	1,530.0199	0.0267	0.0000	1,530.6874	9
Total	0.6536	0.3856	4.5324	0.0169	2.1627	0.0126	2.1753	0.5752	0.0116	0.5868	0.0000	1,530.0199	1,530.0199	0.0267	0.0000	1,530.6874	9

3.7 Paving/Hardscape - 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	0.0794	0.7414	0.9719	1.3900e-003			0.0396	0.0396		0.0368	0.0368	0.0000	120.4973	120.4973	0.0337	0.0000	121.3390
Paving	0.0000						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0794	0.7414	0.9719	1.3900e-003			0.0396	0.0396		0.0368	0.0368	0.0000	120.4973	120.4973	0.0337	0.0000	121.3390

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3300e-003	3.2700e-003	0.0378	1.4000e-004	0.0167	1.0000e-004	0.0168	4.4400e-003	9.0000e-005	4.5300e-003	0.0000	12.3061	12.3061	2.3000e-004	0.0000	12.3118
Total	5.3300e-003	3.2700e-003	0.0378	1.4000e-004	0.0167	1.0000e-004	0.0168	4.4400e-003	9.0000e-005	4.5300e-003	0.0000	12.3061	12.3061	2.3000e-004	0.0000	12.3118

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0195	0.2163	0.9828	1.3900e-003		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	120.4971	120.4971	0.0337	0.0000	121.3389	
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0195	0.2163	0.9828	1.3900e-003		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	120.4971	120.4971	0.0337	0.0000	121.3389	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	5.3300e-003	3.2700e-003	0.0378	1.4000e-004	0.0167	1.0000e-004	0.0168	4.4400e-003	9.0000e-005	4.5300e-003	0.0000	12.3061	12.3061	2.3000e-004	0.0000	12.3118	
Total	5.3300e-003	3.2700e-003	0.0378	1.4000e-004	0.0167	1.0000e-004	0.0168	4.4400e-003	9.0000e-005	4.5300e-003	0.0000	12.3061	12.3061	2.3000e-004	0.0000	12.3118	

3.7 Paving/Hardscape - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1134	1.0600	1.4915	2.1400e-003		0.0522	0.0522		0.0485	0.0485	0.0000	185.7238	185.7238	0.0518	0.0000	187.0191	
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.1134	1.0600	1.4915	2.1400e-003		0.0522	0.0522		0.0485	0.0485	0.0000	185.7238	185.7238	0.0518	0.0000	187.0191	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	7.7700e-003	4.5900e-003	0.0539	2.0000e-004	0.0257	1.5000e-004	0.0259	6.8400e-003	1.4000e-004	6.9800e-003	0.0000	18.1966	18.1966	3.2000e-004	0.0000	18.2046	
Total	7.7700e-003	4.5900e-003	0.0539	2.0000e-004	0.0257	1.5000e-004	0.0259	6.8400e-003	1.4000e-004	6.9800e-003	0.0000	18.1966	18.1966	3.2000e-004	0.0000	18.2046	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0301	0.3334	1.5144	2.1400e-003		3.2700e-003	3.2700e-003		3.2700e-003	3.2700e-003	0.0000	185.7236	185.7236	0.0518	0.0000	187.0188	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7700e-003	4.5900e-003	0.0539	2.0000e-004	0.0257	1.5000e-004	0.0259	6.8400e-003	1.4000e-004	6.9800e-003	0.0000	18.1966	18.1966	3.2000e-004	0.0000	18.2046
Total	7.7700e-003	4.5900e-003	0.0539	2.0000e-004	0.0257	1.5000e-004	0.0259	6.8400e-003	1.4000e-004	6.9800e-003	0.0000	18.1966	18.1966	3.2000e-004	0.0000	18.2046

3.8 Building Interior - 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	20.0815						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569	
Total	20.0833	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0102	6.2400e-003	0.0719	2.6000e-004	0.0318	1.9000e-004	0.0320	8.4600e-003	1.7000e-004	8.6300e-003	0.0000	23.4486	23.4486	4.3000e-004	0.0000	23.4594	
Total	0.0102	6.2400e-003	0.0719	2.6000e-004	0.0318	1.9000e-004	0.0320	8.4600e-003	1.7000e-004	8.6300e-003	0.0000	23.4486	23.4486	4.3000e-004	0.0000	23.4594	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	20.0815						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	3.0000e-004	1.2900e-003	0.0183	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568	
Total	20.0818	1.2900e-003	0.0183	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568	

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0102	6.2400e-003	0.0719	2.6000e-004	0.0318	1.9000e-004	0.0320	8.4600e-003	1.7000e-004	8.6300e-003	0.0000	23.4486	23.4486	4.3000e-004	0.0000	23.4594	
Total	0.0102	6.2400e-003	0.0719	2.6000e-004	0.0318	1.9000e-004	0.0320	8.4600e-003	1.7000e-004	8.6300e-003	0.0000	23.4486	23.4486	4.3000e-004	0.0000	23.4594	

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	3.3849	13.6768	40.3966	0.1606	17.0040	0.1249	17.1289	4.5510	0.1162	4.6671	0.0000	14,747.2561	14,747.2561	0.4395	0.0000	14,758.2430	
Unmitigated	3.3849	13.6768	40.3966	0.1606	17.0040	0.1249	17.1289	4.5510	0.1162	4.6671	0.0000	14,747.2561	14,747.2561	0.4395	0.0000	14,758.2430	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00				
General Light Industry	0.00	0.00	0.00				
Office Park	24,336.03	3,502.64	1605.38	45,394,640		45,394,640	
Strip Mall	241.02	228.66	111.09	339,873		339,873	
Total	24,577.05	3,731.30	1,716.46	45,734,513		45,734,513	

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Office Park	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
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
Enclosed Parking with Elevator	0.618126	0.034987	0.181060	0.102744	0.012808	0.005030	0.012887	0.022139	0.002195	0.001502	0.005204	0.000638	0.000681
General Light Industry	0.618126	0.034987	0.181060	0.102744	0.012808	0.005030	0.012887	0.022139	0.002195	0.001502	0.005204	0.000638	0.000681
Office Park	0.618126	0.034987	0.181060	0.102744	0.012808	0.005030	0.012887	0.022139	0.002195	0.001502	0.005204	0.000638	0.000681
Strip Mall	0.618126	0.034987	0.181060	0.102744	0.012808	0.005030	0.012887	0.022139	0.002195	0.001502	0.005204	0.000638	0.000681

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	9,622.917	5	9,622.9175	0.9623	0.1991	9,706.3050	
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	10,968.76	77	10,968.767	1.0969	0.2269	11,063.8177	
NaturalGas Mitigated	0.3039	2.7624	2.3204	0.0166		0.2099	0.2099		0.2099	0.2099	0.0000	9	3,007.188	3,007.1889	0.0576	0.0551	3,025.0592

NaturalGas Unmitigated	0.4317	3.9244	3.2965	0.0236		0.2983	0.2983		0.2983	0.2983	0.0000	4,272.175 8	4,272.1758	0.0819	0.0783	4,297.563 2
------------------------	--------	--------	--------	--------	--	--------	--------	--	--------	--------	--------	----------------	------------	--------	--------	----------------

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				
Enclosed Parking with Elevator	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0
General Light Industry	2.96E+06	0.016	0.1452	0.122	8.70E-04		0.011	0.011		0.011	0.011	0	158.1086	158.1086	3.03E-03	2.90E-03	159.0482
Office Park	7.71E+07	0.4155	3.7774	3.173	0.0227		0.2871	0.2871		0.2871	0.2871	0	4,112.11	4,112.11	0.0788	0.0754	4,136.55
Strip Mall	36614.1	2.00E-04	1.79E-03	1.51E-03	1.00E-05		1.40E-04	1.40E-04		1.40E-04	1.40E-04	0	1.9539	1.9539	4.00E-05	4.00E-05	1.9655
Total		0.4317	3.9244	3.2965	0.0235		0.2983	0.2983		0.2983	0.2983	0	4,272.18	4,272.18	0.0819	0.0783	4,297.56

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				
Enclosed Parking with Elevator	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0
General Light Industry	2.30E+06	0.0124	0.1127	0.0947	6.80E-04		8.56E-03	8.56E-03		8.56E-03	8.56E-03	0	122.669	122.669	2.35E-03	2.25E-03	123.398
Office Park	5.40E+07	0.2913	2.6484	2.2247	0.0159		0.2013	0.2013		0.2013	0.2013	0	2,883.15	2,883.15	0.0553	0.0529	2,900.29
Strip Mall	25629.9	1.40E-04	1.26E-03	1.06E-03	1.00E-05		1.00E-04	1.00E-04		1.00E-04	1.00E-04	0	1.3677	1.3677	3.00E-05	3.00E-05	1.3758
Total		0.3039	2.7624	2.3204	0.0166		0.2099	0.2099		0.2099	0.2099	0	3,007.19	3,007.19	0.0576	0.0551	3,025.06

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	1.10E+07	1,442.16	0.1442	0.0298	1,454.66
General Light Industry	927714	122.0331	0.0122	2.52E-03	123.0906
Office Park	7.13E+07	9,382.85	0.9383	0.1941	9,464.16
Strip Mall	165150	21.7241	2.17E-03	4.50E-04	21.9124
Total		10,968.77	1.0969	0.2269	11,063.82

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	8.76332e+006	1,152.7427	0.1153	0.0239	1,162.7318
General Light Industry	877846	115.4735	0.0116	2.3900e-003	116.4741
Office Park	6.33613e+007	8,334.6599	0.8335	0.1724	8,406.8841
Strip Mall	152358	20.0415	2.0000e-003	4.1000e-004	20.2151
Total		9,622.9175	0.9623	0.1991	9,706.3051

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	14.1983	8.3000e-004	0.0919	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.1791	0.1791	4.7000e-004	0.0000	0.1907	
Unmitigated	14.1983	8.3000e-004	0.0919	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.1791	0.1791	4.7000e-004	0.0000	0.1907	

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	2.0082						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.1817						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.4600e-003	8.3000e-004	0.0919	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.1791	0.1791	4.7000e-004	0.0000	0.1907	
Total	14.1983	8.3000e-004	0.0919	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.1791	0.1791	4.7000e-004	0.0000	0.1907	

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	2.0082						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.1817						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.4600e-003	8.3000e-004	0.0919	1.0000e-005		3.3000e-004	3.3000e-004	3.3000e-004	3.3000e-004	0.0000	0.1791	0.1791	4.7000e-004	0.0000	0.1907		
Total	14.1983	8.3000e-004	0.0919	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.1791	0.1791	4.7000e-004	0.0000	0.1907	

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	748.0416	0.7138	0.4274	893.2416
Unmitigated	903.2021	0.8891	0.5335	1,084.4261

7.2 Water by Land Use

Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Light Industry	25.9717 / 0	27.6748	0.0335	0.0204	34.5805
Office Park	648.476 / 397.453	873.9849	0.8541	0.5123	1,047.996 1
Strip Mall	1.14442 / 0.701419	1.5424	1.5100e- 003	9.0000e- 004	1.8495
Total		903.2021	0.8891	0.5335	1,084.426 1

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Light Industry	20.7773 / 0	22.1398	0.0268	0.0163	27.6644
Office Park	518.781 / 373.208	724.6230	0.6859	0.4104	864.0524
Strip Mall	0.915536 / 0.658632	1.2788	1.2100e- 003	7.2000e- 004	1.5249
Total		748.0416	0.7138	0.4274	893.2416

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
MT/yr				
Mitigated	720.3459	42.5712	0.0000	1,784.6265
Unmitigated	720.3459	42.5712	0.0000	1,784.6265

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	139.26	28.2685	1.6706	0.0000	70.0341
Office Park	3393.18	688.7849	40.7060	0.0000	1,706.4354
Strip Mall	16.22	3.2925	0.1946	0.0000	8.1571
Total		720.3459	42.5712	0.0000	1,784.6265

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	139.26	28.2685	1.6706	0.0000	70.0341
Office Park	3393.18	688.7849	40.7060	0.0000	1,706.4354
Strip Mall	16.22	3.2925	0.1946	0.0000	8.1571
Total		720.3459	42.5712	0.0000	1,784.6265

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
Emergency Generator	1	0	50	2681	0.73	Diesel
Emergency Generator	2	0	50	2011	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

10.1 Stationary Sources

Unmitigated/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	
Equipment Type	tons/yr										MT/yr						
Emergency Generator - Diesel (750 - 9999 HP)	0.2750	1.2298	0.7012	1.3200e-003			0.0405	0.0405		0.0405	0.0405	0.0000	127.6242	127.6242	0.0179	0.0000	128.0715
Total	0.2750	1.2298	0.7012	1.3200e-003			0.0405	0.0405		0.0405	0.0405	0.0000	127.6242	127.6242	0.0179	0.0000	128.0715

*Emissions for three total generators

11.0 Vegetation

City View (EMFAC for Truck Activity) - Santa Clara County, Annual

City View (EMFAC for Truck Activity)
Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	3,648.58	1000sqft	8.10	3,648,584.00	0
General Light Industry	112.31	1000sqft	0.00	112,314.00	0
Enclosed Parking with Elevator	6,246.00	Space	0.00	1,870,905.00	0
Strip Mall	15.45	1000sqft	0.00	15,449.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E rate

Land Use - 3,648,584-sf office, 15,449-sf retail, 112,314-sf mech penthouse, 1,870,905-sf parking garage

Construction Phase - Based on construction worksheet, start dates and total workdays

Off-road Equipment - Based on construction worksheet

Trips and VMT - No Truck Activity for vendor or hauling --> Using EMFAC, keep workers

Demolition - Based on construction worksheet

Grading - Based on construction worksheet

Vehicle Trips - Traffic Trip Generation Rate

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Consumer Products - Rate for SC County in 2027

Energy Use -

Water And Wastewater - 100% aerobic

Construction Off-road Equipment Mitigation - BACT, tier 4 interim

Energy Mitigation - Using CEC estimates for future Title 24

Water Mitigation - Water reductions

Fleet Mix -

Off-road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps - 1. Tower 1: 2000kW, 480/277V, 3-phase, 4-wire

2. Tower 2: 1500kW, 480/277V, 3-phase, 4-wire

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	18.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	17.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	14.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	23.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	45.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	230.00	1,238.00
tblConstructionPhase	NumDays	20.00	206.00
tblConstructionPhase	NumDays	20.00	362.00
tblConstructionPhase	NumDays	20.00	465.00

tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConsumerProducts	ROG_EF	2.14E-05	1.75E-05
tblGrading	AcresOfGrading	0.00	10.00
tblGrading	AcresOfGrading	180.00	10.00
tblGrading	MaterialExported	0.00	1,037,689.00
tblGrading	MaterialImported	0.00	1,000.00
tblLandUse	LandUseSquareFeet	3,648,580.00	3,648,584.00
tblLandUse	LandUseSquareFeet	112,310.00	112,314.00
tblLandUse	LandUseSquareFeet	2,498,400.00	1,870,905.00
tblLandUse	LandUseSquareFeet	15,450.00	15,449.00
tblLandUse	LotAcreage	83.76	8.10
tblLandUse	LotAcreage	2.58	0.00
tblLandUse	LotAcreage	56.21	0.00
tblLandUse	LotAcreage	0.35	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	9.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	45.00
tblOffRoadEquipment	UsageHours	8.00	0.80
tblOffRoadEquipment	UsageHours	8.00	16.00
tblOffRoadEquipment	UsageHours	8.00	24.00
tblOffRoadEquipment	UsageHours	8.00	16.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	14.00
tblOffRoadEquipment	UsageHours	8.00	16.00
tblOffRoadEquipment	UsageHours	8.00	24.00
tblOffRoadEquipment	UsageHours	8.00	16.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,681.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,011.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	2.00
tblTripsAndVMT	HaulingTripNumber	6,709.00	0.00

tblTripsAndVMT	HaulingTripNumber	129,836.00	0.00
tblTripsAndVMT	VendorTripNumber	926.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	ST_TR	1.64	0.96
tblVehicleTrips	ST_TR	42.04	14.80
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	SU_TR	0.76	0.44
tblVehicleTrips	SU_TR	20.43	7.19
tblVehicleTrips	WD_TR	6.97	0.00
tblVehicleTrips	WD_TR	11.42	6.67
tblVehicleTrips	WD_TR	44.32	15.60
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	tons/yr											MT/yr					
2020	2.2878	23.3716	21.2341	0.0376	1.9218	1.1530	3.0748	0.7347	1.0723	1.8069	0.0000	3,296.7603	3,296.7603	0.9409	0.0000	3,320.2833	
2021	2.0438	18.5156	24.3189	0.0389	0.3491	0.9922	1.3413	0.0853	0.9196	1.0049	0.0000	3,410.4123	3,410.4123	0.9694	0.0000	3,434.6475	
2022	2.6175	12.5519	21.0407	0.0434	2.5601	0.6445	3.2045	0.6733	0.6165	1.2898	0.0000	3,740.2300	3,740.2300	0.4012	0.0000	3,750.2607	
2023	2.2257	10.0096	17.4547	0.0381	2.4807	0.4695	2.9502	0.6598	0.4522	1.1120	0.0000	3,271.2998	3,271.2998	0.2658	0.0000	3,277.9444	
2024	22.2661	10.3185	18.1546	0.0394	2.5451	0.4506	2.9957	0.6769	0.4326	1.1095	0.0000	3,375.8169	3,375.8169	0.2929	0.0000	3,383.1382	
2025	1.8136	8.9256	15.9039	0.0341	2.1884	0.3592	2.5476	0.5820	0.3442	0.9262	0.0000	2,926.1469	2,926.1469	0.2683	0.0000	2,932.8542	
Maximum	22.2661	23.3716	24.3189	0.0434	2.5601	1.1530	3.2045	0.7347	1.0723	1.8069	0.0000	3,740.2300	3,740.2300	0.9694	0.0000	3,750.2607	

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	0.6922	14.7058	25.1367	0.0376	0.8145	0.1908	1.0053	0.1661	0.1907	0.3568	0.0000	3,296.7565	3,296.7565	0.9409	0.0000	3,320.2794	
2021	0.7475	15.9433	27.3747	0.0389	0.3101	0.1308	0.4408	0.0777	0.1306	0.2083	0.0000	3,410.4085	3,410.4085	0.9694	0.0000	3,434.6437	
2022	1.3051	11.7776	20.8802	0.0434	2.5210	0.2202	2.7412	0.6657	0.2190	0.8847	0.0000	3,740.2279	3,740.2279	0.4012	0.0000	3,750.2586	
2023	1.1677	9.7790	17.0325	0.0381	2.4807	0.2082	2.6889	0.6598	0.2070	0.8668	0.0000	3,271.2982	3,271.2982	0.2658	0.0000	3,277.9427	
2024	21.2528	10.4137	17.8095	0.0394	2.5451	0.2179	2.7630	0.6769	0.2167	0.8936	0.0000	3,375.8151	3,375.8151	0.2929	0.0000	3,383.1364	
2025	0.9913	9.3769	15.6745	0.0341	2.1884	0.1941	2.3824	0.5820	0.1930	0.7751	0.0000	2,926.1452	2,926.1452	0.2683	0.0000	2,932.8526	
Maximum	21.2528	15.9433	27.3747	0.0434	2.5451	0.2202	2.7630	0.6769	0.2190	0.8936	0.0000	3,740.2279	3,740.2279	0.9694	0.0000	3,750.2586	

	ROG	NOx	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	21.34	13.98	-4.91	0.00	9.84	71.44	25.40	17.11	69.85	45.03	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	3-1-2020	5-31-2020	4.9379	2.9976
2	6-1-2020	8-31-2020	10.8376	5.4924
3	9-1-2020	11-30-2020	8.1551	5.6388
4	12-1-2020	2-28-2021	7.2404	5.7871
5	3-1-2021	5-31-2021	4.6973	3.8154
6	6-1-2021	8-31-2021	3.9402	3.1920
7	9-1-2021	11-30-2021	3.8980	3.1579
8	12-1-2021	2-28-2022	6.7730	5.8410
9	3-1-2022	5-31-2022	3.3007	2.8060
10	6-1-2022	8-31-2022	3.2851	2.7904
11	9-1-2022	11-30-2022	3.2801	2.7907
12	12-1-2022	2-28-2023	3.1297	2.7542
13	3-1-2023	5-31-2023	3.1015	2.7758
14	6-1-2023	8-31-2023	3.0871	2.7614
15	9-1-2023	11-30-2023	3.0819	2.7598
16	12-1-2023	2-29-2024	2.9847	2.7556
17	3-1-2024	5-31-2024	2.9327	2.7498
18	6-1-2024	8-31-2024	23.9628	23.6964
19	9-1-2024	11-30-2024	3.2679	3.0073
20	12-1-2024	2-28-2025	3.1283	2.9718
21	3-1-2025	5-31-2025	3.1097	3.0041
22	6-1-2025	8-31-2025	3.0968	2.9912
23	9-1-2025	9-30-2025	1.0098	0.9754
		Highest	23.9628	23.6964

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	14.1982	8.3000e-004	0.0916	1.0000e-005		3.2000e-004	3.2000e-004	3.2000e-004	3.2000e-004	0.0000	0.1791	0.1791	4.6000e-004	0.0000	0.1906		
Energy	0.4317	3.9244	3.2965	0.0236		0.2983	0.2983	0.2983	0.2983	0.0000	15,240.94	15,240.943	1.1788	0.3053	15,361.38		
Mobile	2.8225	12.2385	33.4944	0.1461	17.0025	0.0974	17.0999	4.5502	0.0905	4.6407	0.0000	13,444.78	13,444.781	0.3822	0.0000	13,454.33	
Stationary	0.2750	1.2298	0.7012	1.3200e-003		0.0405	0.0405	0.0405	0.0405	0.0405	0.0000	127.6242	127.6242	0.0179	0.0000	128.0715	
Waste						0.0000	0.0000	0.0000	0.0000	0.0000	720.3459	0.0000	720.3459	42.5712	0.0000	1,784.626	
Water						0.0000	0.0000	0.0000	0.0000	0.0000	239.0255	664.1766	903.2021	0.8891	0.5335	1,084.426	
Total	17.7273	17.3935	37.5837	0.1710	17.0025	0.4364	17.4389	4.5502	0.4295	4.9797	959.3714	29,477.70	30,437.076	45.0396	0.8388	31,813.03	
												48	2				

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	14.1982	8.3000e-004	0.0916	1.0000e-005		3.2000e-004	3.2000e-004	3.2000e-004	3.2000e-004	0.0000	0.1791	0.1791	4.6000e-004	0.0000	0.1906		
Energy	0.3039	2.7624	2.3204	0.0166		0.2099	0.2099	0.2099	0.2099	0.0000	12,630.10	12,630.106	1.0199	0.2542	12,731.36		
Mobile	2.8225	12.2385	33.4944	0.1461	17.0025	0.0974	17.0999	4.5502	0.0905	4.6407	0.0000	13,444.78	13,444.781	0.3822	0.0000	13,454.33	
Stationary	0.2750	1.2298	0.7012	1.3200e-003		0.0405	0.0405	0.0405	0.0405	0.0405	0.0000	127.6242	127.6242	0.0179	0.0000	128.0715	
Waste						0.0000	0.0000	0.0000	0.0000	0.0000	720.3459	0.0000	720.3459	42.5712	0.0000	1,784.626	
Total	17.7273	17.3935	37.5837	0.1710	17.0025	0.4364	17.4389	4.5502	0.4295	4.9797	959.3714	29,477.70	30,437.076	45.0396	0.8388	31,813.03	
												48	2				

Water					0.0000	0.0000		0.0000	0.0000	191.2204	556.8212	748.0416	0.7138	0.4274	893.2416	
Total	17.5995	16.2315	36.6076	0.1640	17.0025	0.3481	17.3506	4.5502	0.3412	4.8914	911.5663	26,759.51	27,671.078	44.7055	0.6816	28,991.83
										23	6				00	
	ROG	NOx	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	0.72	6.68	2.60	4.08	0.00	20.24	0.51	0.00	20.56	1.77	4.98	9.22	9.09	0.74	18.74	8.87

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	3/1/2020	10/27/2020	6	206	
2	Site Preparation	Site Preparation	6/1/2020	7/22/2020	6	45	
3	Shoring	Trenching	8/1/2020	3/15/2021	6	194	
4	Grading	Grading	1/1/2021	2/26/2022	6	362	
5	Building Exterior	Building Construction	12/1/2021	11/13/2025	6	1238	
6	Paving/Hardscape	Paving	6/1/2024	11/25/2025	6	465	
7	Building Interior	Architectural Coating	6/1/2024	6/24/2024	6	20	

Acres of Grading (Site Preparation Phase): 10

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,664,521; Non-Residential Outdoor: 1,888,174; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	4	0.80	81	0.73
Demolition	Excavators	8	16.00	158	0.38
Demolition	Rubber Tired Dozers	2	14.00	247	0.40
Demolition	Skid Steer Loaders	6	16.00	65	0.37

Demolition	Sweepers/Scrubbers	1	16.00	64	0.46
Demolition	Tractors/Loaders/Backhoes	4	16.00	97	0.37
Site Preparation	Graders	4	16.00	187	0.41
Site Preparation	Rubber Tired Dozers	4	16.00	247	0.40
Site Preparation	Sweepers/Scrubbers	1	16.00	64	0.46
Site Preparation	Tractors/Loaders/Backhoes	6	16.00	97	0.37
Shoring	Aerial Lifts	18	12.00	63	0.31
Shoring	Air Compressors	3	16.00	78	0.48
Shoring	Bore/Drill Rigs	3	16.00	221	0.50
Shoring	Cranes	1	16.00	231	0.29
Shoring	Excavators	3	16.00	158	0.38
Shoring	Forklifts	3	16.00	89	0.20
Shoring	Generator Sets	3	16.00	84	0.74
Shoring	Tractors/Loaders/Backhoes	3	16.00	97	0.37
Grading	Excavators	6	24.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Sweepers/Scrubbers	1	24.00	64	0.46
Grading	Tractors/Loaders/Backhoes	8	24.00	97	0.37
Building Exterior	Cranes	0	7.00	231	0.29
Building Exterior	Forklifts	9	16.00	89	0.20
Building Exterior	Generator Sets	3	4.00	84	0.74
Building Exterior	Pumps	2	5.80	84	0.74
Building Exterior	Sweepers/Scrubbers	1	16.00	64	0.46
Building Exterior	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Exterior	Welders	45	4.00	46	0.45
Paving/Hardscape	Forklifts	2	10.00	89	0.20
Paving/Hardscape	Pavers	0	8.00	130	0.42
Paving/Hardscape	Paving Equipment	0	8.00	132	0.36
Paving/Hardscape	Plate Compactors	2	5.00	8	0.43

Paving/Hardscape	Pumps		1	2.50	84	0.74
Paving/Hardscape	Rollers		1	5.00	80	0.38
Paving/Hardscape	Sweepers/Scrubbers		1	10.00	64	0.46
Paving/Hardscape	Tractors/Loaders/Backhoes		2	5.00	97	0.37
Building Interior	Air Compressors		1	6.00	78	0.46

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	25	63.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	15	38.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Shoring	37	93.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	15	38.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Exterior	60	2,005.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving/Hardscape	9	23.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Interior	1	401.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed

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						0.7260	0.0000	0.7260	0.1099	0.0000	0.1099	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1371	11.7244	11.0327	0.0175			0.6059	0.6059		0.5581	0.5581	0.0000	1,535.704 2	1,535.7042	0.4909	0.0000	1,547.977 1	
Total	1.1371	11.7244	11.0327	0.0175	0.7260	0.6059	1.3318	0.1099	0.5581	0.6680	0.0000	1,535.704 2	1,535.7042	0.4909	0.0000	1,547.977 1		

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0216	0.0155	0.1624	4.9000e-004	0.0515	3.3000e-004	0.0518	0.0137	3.1000e-004	0.0140	0.0000	44.1349	44.1349	1.0800e-003	0.0000	44.1620	
Total	0.0216	0.0155	0.1624	4.9000e-004	0.0515	3.3000e-004	0.0518	0.0137	3.1000e-004	0.0140	0.0000	44.1349	44.1349	1.0800e-003	0.0000	44.1620	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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							0.2831	0.0000	0.2831	0.0214	0.0000	0.0214	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.2928	7.5001	12.5146	0.0175			0.0942	0.0942		0.0942	0.0942	0.0000	1,535.702 3	1,535.7023	0.4909	0.0000	1,547.975 2	

Total	0.2928	7.5001	12.5146	0.0175	0.2831	0.0942	0.3773	0.0214	0.0942	0.1156	0.0000	1,535.702 3	1,535.7023	0.4909	0.0000	1,547.975 2
-------	--------	--------	---------	--------	--------	--------	--------	--------	--------	--------	--------	----------------	------------	--------	--------	----------------

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0216	0.0155	0.1624	4.9000e-004	0.0515	3.3000e-004	0.0518	0.0137	3.1000e-004	0.0140	0.0000	44.1349	44.1349	1.0800e-003	0.0000	44.1620	
Total	0.0216	0.0155	0.1624	4.9000e-004	0.0515	3.3000e-004	0.0518	0.0137	3.1000e-004	0.0140	0.0000	44.1349	44.1349	1.0800e-003	0.0000	44.1620	

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					1.0893	0.0000	1.0893	0.5964	0.0000	0.5964	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.3487	3.8515	1.7752	3.6800e-003		0.1807	0.1807		0.1662	0.1662	0.0000	323.7710	323.7710	0.1047	0.0000	326.3889	
Total	0.3487	3.8515	1.7752	3.6800e-003	1.0893	0.1807	1.2699	0.5964	0.1662	0.7626	0.0000	323.7710	323.7710	0.1047	0.0000	326.3889	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8400e-003	2.0400e-003	0.0214	6.0000e-005	6.7800e-003	4.0000e-005	6.8200e-003	1.8000e-003	4.0000e-005	1.8400e-003	0.0000	5.8153	5.8153	1.4000e-004	0.0000	5.8188
Total	2.8400e-003	2.0400e-003	0.0214	6.0000e-005	6.7800e-003	4.0000e-005	6.8200e-003	1.8000e-003	4.0000e-005	1.8400e-003	0.0000	5.8153	5.8153	1.4000e-004	0.0000	5.8188

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.4248	0.0000	0.4248	0.1163	0.0000	0.1163	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0662	1.1484	2.1672	3.6800e-003	8.4400e-003	8.4400e-003	8.4400e-003	8.4400e-003	8.4400e-003	0.0000	323.7706	323.7706	0.1047	0.0000	326.3885		
Total	0.0662	1.1484	2.1672	3.6800e-003	0.4248	8.4400e-003	0.4333	0.1163	8.4400e-003	0.1247	0.0000	323.7706	323.7706	0.1047	0.0000	326.3885	

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8400e-003	2.0400e-003	0.0214	6.0000e-005	6.7800e-005	4.0000e-005	6.8200e-003	1.8000e-003	4.0000e-005	1.8400e-003	0.0000	5.8153	5.8153	1.4000e-004	0.0000	5.8188	
Total	2.8400e-003	2.0400e-003	0.0214	6.0000e-005	6.7800e-003	4.0000e-005	6.8200e-003	1.8000e-003	4.0000e-005	1.8400e-003	0.0000	5.8153	5.8153	1.4000e-004	0.0000	5.8188	

3.4 Shoring - 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	0.7574	7.7636	8.0900	0.0154		0.3658	0.3658		0.3474	0.3474	0.0000	1,345.9036	1,345.9036	0.3431	0.0000	1,354.4798
Total	0.7574	7.7636	8.0900	0.0154		0.3658	0.3658		0.3474	0.3474	0.0000	1,345.9036	1,345.9036	0.3431	0.0000	1,354.4798

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0202	0.0145	0.1525	4.6000e-004	0.0483	3.1000e-004	0.0486	0.0129	2.9000e-004	0.0131	0.0000	41.4313	41.4313	1.0200e-003	0.0000	41.4567
Total	0.0202	0.0145	0.1525	4.6000e-004	0.0483	3.1000e-004	0.0486	0.0129	2.9000e-004	0.0131	0.0000	41.4313	41.4313	1.0200e-003	0.0000	41.4567

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.2886	6.0253	10.1187	0.0154		0.0874	0.0874		0.0874	0.0874	0.0000	1,345.9020	1,345.9020	0.3431	0.0000	1,354.4782	
Total	0.2886	6.0253	10.1187	0.0154		0.0874	0.0874		0.0874	0.0874	0.0000	1,345.9020	1,345.9020	0.3431	0.0000	1,354.4782	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0202	0.0145	0.1525	4.6000e-004	0.0483	3.1000e-004	0.0486	0.0129	2.9000e-004	0.0131	0.0000	41.4313	41.4313	1.0200e-003	0.0000	41.4567	
Total	0.0202	0.0145	0.1525	4.6000e-004	0.0483	3.1000e-004	0.0486	0.0129	2.9000e-004	0.0131	0.0000	41.4313	41.4313	1.0200e-003	0.0000	41.4567	

3.4 Shoring - 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	0.3326	3.3590	3.8681	7.4200e-003		0.1516	0.1516		0.1439	0.1439	0.0000	647.6856	647.6856	0.1640	0.0000	651.7852	
Total	0.3326	3.3590	3.8681	7.4200e-003		0.1516	0.1516		0.1439	0.1439	0.0000	647.6856	647.6856	0.1640	0.0000	651.7852	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	9.0200e-003	6.2500e-003	0.0670	2.1000e-004	0.0232	1.5000e-004	0.0234	6.1800e-003	1.3000e-004	6.3100e-003	0.0000	19.2334	19.2334	4.4000e-004	0.0000	19.2443	
Total	9.0200e-003	6.2500e-003	0.0670	2.1000e-004	0.0232	1.5000e-004	0.0234	6.1800e-003	1.3000e-004	6.3100e-003	0.0000	19.2334	19.2334	4.4000e-004	0.0000	19.2443	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1388	2.8977	4.8663	7.4200e-003		0.0420	0.0420		0.0420	0.0420	0.0000	647.6849	647.6849	0.1640	0.0000	651.7844	

Total	0.1388	2.8977	4.8663	7.4200e-003		0.0420	0.0420		0.0420	0.0420	0.0000	647.6849	647.6849	0.1640	0.0000	651.7844
-------	--------	--------	--------	-------------	--	--------	--------	--	--------	--------	--------	----------	----------	--------	--------	----------

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0200e-003	6.2500e-003	0.0670	2.1000e-004	0.0232	1.5000e-004	0.0234	6.1800e-003	1.3000e-004	6.3100e-003	0.0000	19.2334	19.2334	4.4000e-004	0.0000	19.2443
Total	9.0200e-003	6.2500e-003	0.0670	2.1000e-004	0.0232	1.5000e-004	0.0234	6.1800e-003	1.3000e-004	6.3100e-003	0.0000	19.2334	19.2334	4.4000e-004	0.0000	19.2443

3.5 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0640	0.0000	0.0640	9.4700e-003	0.0000	9.4700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.4563	14.1526	18.6221	0.0274		0.7851	0.7851		0.7223	0.7223	0.0000	2,408.395	2,408.3952	0.7789	0.0000	2,427.868
Total	1.4563	14.1526	18.6221	0.0274	0.0640	0.7851	0.8491	9.4700e-003	0.7223	0.7317	0.0000	2,408.395	2,408.3952	0.7789	0.0000	2,427.868

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0183	0.0127	0.1360	4.3000e-004	0.0472	3.0000e-004	0.0475	0.0125	2.7000e-004	0.0128	0.0000	39.0445	39.0445	8.9000e-004	0.0000	39.0667
Total	0.0183	0.0127	0.1360	4.3000e-004	0.0472	3.0000e-004	0.0475	0.0125	2.7000e-004	0.0128	0.0000	39.0445	39.0445	8.9000e-004	0.0000	39.0667

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0250	0.0000	0.0250	1.8500e-003	0.0000	1.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.4698	12.1693	20.7358	0.0274		0.0702	0.0702		0.0702	0.0702	0.0000	2,408.3924	2,408.3924	0.7789	0.0000	2,427.8654	
Total	0.4698	12.1693	20.7358	0.0274	0.0250	0.0702	0.0952	1.8500e-003	0.0702	0.0720	0.0000	2,408.3924	2,408.3924	0.7789	0.0000	2,427.8654	

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0183	0.0127	0.1360	4.3000e-004	0.0472	3.0000e-004	0.0475	0.0125	2.7000e-004	0.0128	0.0000	39.0445	39.0445	8.9000e-004	0.0000	0.0000	39.0667
Total	0.0183	0.0127	0.1360	4.3000e-004	0.0472	3.0000e-004	0.0475	0.0125	2.7000e-004	0.0128	0.0000	39.0445	39.0445	8.9000e-004	0.0000	0.0000	39.0667

3.5 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0640	0.0000	0.0640	9.4700e-003	0.0000	9.4700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2003	1.9014	2.8923	4.2900e-003		0.0997	0.0997		0.0918	0.0918	0.0000	377.1432	377.1432	0.1220	0.0000	380.1926
Total	0.2003	1.9014	2.8923	4.2900e-003	0.0640	0.0997	0.1638	9.4700e-003	0.0918	0.1012	0.0000	377.1432	377.1432	0.1220	0.0000	380.1926

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6800e-003	1.7800e-003	0.0196	7.0000e-005	7.3800e-003	5.0000e-005	7.4300e-003	1.9600e-003	4.0000e-005	2.0100e-003	0.0000	5.8904	5.8904	1.2000e-004	0.0000	5.8935
Total	2.6800e-003	1.7800e-003	0.0196	7.0000e-005	7.3800e-003	5.0000e-005	7.4300e-003	1.9600e-003	4.0000e-005	2.0100e-003	0.0000	5.8904	5.8904	1.2000e-004	0.0000	5.8935

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0250	0.0000	0.0250	1.8500e-003	0.0000	1.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0735	1.9051	3.2462	4.2900e-003		0.0110	0.0110		0.0110	0.0110	0.0000	377.1427	377.1427	0.1220	0.0000	380.1921	
Total	0.0735	1.9051	3.2462	4.2900e-003	0.0250	0.0110	0.0360	1.8500e-003	0.0110	0.0128	0.0000	377.1427	377.1427	0.1220	0.0000	380.1921	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.6800e-003	1.7800e-003	0.0196	7.0000e-005	7.3800e-003	5.0000e-005	7.4300e-003	1.9600e-003	4.0000e-005	2.0100e-003	0.0000	5.8904	5.8904	1.2000e-004	0.0000	5.8935	
Total	2.6800e-003	1.7800e-003	0.0196	7.0000e-005	7.3800e-003	5.0000e-005	7.4300e-003	1.9600e-003	4.0000e-005	2.0100e-003	0.0000	5.8904	5.8904	1.2000e-004	0.0000	5.8935	

3.6 Building Exterior - 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	0.1442	0.9274	1.0064	1.4800e-003			0.0538	0.0538		0.0519	0.0519	0.0000	118.3441	118.3441	0.0211	0.0000	118.8725
Total	0.1442	0.9274	1.0064	1.4800e-003			0.0538	0.0538		0.0519	0.0519	0.0000	118.3441	118.3441	0.0211	0.0000	118.8725

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0834	0.0577	0.6192	1.9700e-003	0.2147	1.3500e-003	0.2160	0.0571	1.2400e-003	0.0583	0.0000	177.7095	177.7095	4.0400e-003	0.0000	177.8105	
Total	0.0834	0.0577	0.6192	1.9700e-003	0.2147	1.3500e-003	0.2160	0.0571	1.2400e-003	0.0583	0.0000	177.7095	177.7095	4.0400e-003	0.0000	177.8105	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0282	0.7997	0.9504	1.4800e-003			0.0167	0.0167		0.0167	0.0167	0.0000	118.3439	118.3439	0.0211	0.0000	118.8723

Total	0.0282	0.7997	0.9504	1.4800e-003		0.0167	0.0167		0.0167	0.0167	0.0000	118.3439	118.3439	0.0211	0.0000	118.8723
-------	--------	--------	--------	-------------	--	--------	--------	--	--------	--------	--------	----------	----------	--------	--------	----------

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr											MT/yr				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0834	0.0577	0.6192	1.9700e-003	0.2147	1.3500e-003	0.2160	0.0571	1.2400e-003	0.0583	0.0000	177.7095	177.7095	4.0400e-003	0.0000	177.8105
Total	0.0834	0.0577	0.6192	1.9700e-003	0.2147	1.3500e-003	0.2160	0.0571	1.2400e-003	0.0583	0.0000	177.7095	177.7095	4.0400e-003	0.0000	177.8105

3.6 Building Exterior - 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	1.5123	10.0483	11.5313	0.0171		0.5294	0.5294		0.5106	0.5106	0.0000	1,371.9142	1,371.9142	0.2371	0.0000	1,377.8419
Total	1.5123	10.0483	11.5313	0.0171		0.5294	0.5294		0.5106	0.5106	0.0000	1,371.9142	1,371.9142	0.2371	0.0000	1,377.8419

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.9022	0.6005	6.5975	0.0220	2.4887	0.0153	2.5040	0.6619	0.0141	0.6760	0.0000	1,985.2823	1,985.2823	0.0420	0.0000	1,986.3327
Total	0.9022	0.6005	6.5975	0.0220	2.4887	0.0153	2.5040	0.6619	0.0141	0.6760	0.0000	1,985.2823	1,985.2823	0.0420	0.0000	1,986.3327

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3267	9.2703	11.0170	0.0171		0.1939	0.1939		0.1939	0.1939	0.0000	1,371.9125	1,371.9125	0.2371	0.0000	1,377.8403
Total	0.3267	9.2703	11.0170	0.0171		0.1939	0.1939		0.1939	0.1939	0.0000	1,371.9125	1,371.9125	0.2371	0.0000	1,377.8403

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.9022	0.6005	6.5975	0.0220	2.4887	0.0153	2.5040	0.6619	0.0141	0.6760	0.0000	1,985.2823	1,985.2823	0.0420	0.0000	1,986.3327	3
Total	0.9022	0.6005	6.5975	0.0220	2.4887	0.0153	2.5040	0.6619	0.0141	0.6760	0.0000	1,985.2823	1,985.2823	0.0420	0.0000	1,986.3327	3

3.6 Building Exterior - 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	1.3836	9.4713	11.4040	0.0171		0.4545	0.4545		0.4385	0.4385	0.0000	1,367.5311	1,367.5311	0.2282	0.0000	1,373.2370	1
Total	1.3836	9.4713	11.4040	0.0171		0.4545	0.4545		0.4385	0.4385	0.0000	1,367.5311	1,367.5311	0.2282	0.0000	1,373.2370	1

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.8421	0.5383	6.0507	0.0210	2.4807	0.0150	2.4957	0.6598	0.0138	0.6735	0.0000	1,903.7687	1,903.7687	0.0376	0.0000	1,904.7074	7
Total	0.8421	0.5383	6.0507	0.0210	2.4807	0.0150	2.4957	0.6598	0.0138	0.6735	0.0000	1,903.7687	1,903.7687	0.0376	0.0000	1,904.7074	7

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.3257	9.2406	10.9818	0.0171		0.1933	0.1933		0.1933	0.1933	0.0000	1,367.5294	1,367.5294	0.2282	0.0000	1,373.2353	
Total	0.3257	9.2406	10.9818	0.0171		0.1933	0.1933		0.1933	0.1933	0.0000	1,367.5294	1,367.5294	0.2282	0.0000	1,373.2353	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.8421	0.5383	6.0507	0.0210	2.4807	0.0150	2.4957	0.6598	0.0138	0.6735	0.0000	1,903.7687	1,903.7687	0.0376	0.0000	1,904.7074	
Total	0.8421	0.5383	6.0507	0.0210	2.4807	0.0150	2.4957	0.6598	0.0138	0.6735	0.0000	1,903.7687	1,903.7687	0.0376	0.0000	1,904.7074	

3.6 Building Exterior - 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	1.2902	9.0658	11.4084	0.0172		0.3954	0.3954		0.3814	0.3814	0.0000	1,376.297 3	1,376.2973	0.2243	0.0000	1,381.905 4	
Total	1.2902	9.0658	11.4084	0.0172		0.3954	0.3954		0.3814	0.3814	0.0000	1,376.297 3	1,376.2973	0.2243	0.0000	1,381.905 4	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.7977	0.4897	5.6466	0.0203	2.4966	0.0148	2.5114	0.6640	0.0136	0.6776	0.0000	1,840.714 4	1,840.7144	0.0341	0.0000	1,841.565 7	
Total	0.7977	0.4897	5.6466	0.0203	2.4966	0.0148	2.5114	0.6640	0.0136	0.6776	0.0000	1,840.714 4	1,840.7144	0.0341	0.0000	1,841.565 7	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.3278	9.2999	11.0522	0.0172		0.1945	0.1945		0.1945	0.1945	0.0000	1,376.295 6	1,376.2956	0.2243	0.0000	1,381.903 8	

Total	0.3278	9.2999	11.0522	0.0172		0.1945	0.1945		0.1945	0.1945	0.0000	1,376.295 6	1,376.2956	0.2243	0.0000	1,381.903 8
-------	--------	--------	---------	--------	--	--------	--------	--	--------	--------	--------	----------------	------------	--------	--------	----------------

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr											MT/yr				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.7977	0.4897	5.6466	0.0203	2.4966	0.0148	2.5114	0.6640	0.0136	0.6776	0.0000	1,840.714 4	1,840.7144	0.0341	0.0000	1,841.565 7
Total	0.7977	0.4897	5.6466	0.0203	2.4966	0.0148	2.5114	0.6640	0.0136	0.6776	0.0000	1,840.714 4	1,840.7144	0.0341	0.0000	1,841.565 7

3.6 Building Exterior - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr											MT/yr				
Off-Road	1.0388	7.4755	9.8262	0.0149		0.2943	0.2943		0.2839	0.2839	0.0000	1,192.206 6	1,192.2066	0.1895	0.0000	1,196.943 3
Total	1.0388	7.4755	9.8262	0.0149		0.2943	0.2943		0.2839	0.2839	0.0000	1,192.206 6	1,192.2066	0.1895	0.0000	1,196.943 3

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.6536	0.3856	4.5324	0.0169	2.1627	0.0126	2.1753	0.5752	0.0116	0.5868	0.0000	1,530.0199	1,530.0199	0.0267	0.0000	1,530.6874
Total	0.6536	0.3856	4.5324	0.0169	2.1627	0.0126	2.1753	0.5752	0.0116	0.5868	0.0000	1,530.0199	1,530.0199	0.0267	0.0000	1,530.6874

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2839	8.0560	9.5739	0.0149		0.1685	0.1685		0.1685	0.1685	0.0000	1,192.2051	1,192.2051	0.1895	0.0000	1,196.9418
Total	0.2839	8.0560	9.5739	0.0149		0.1685	0.1685		0.1685	0.1685	0.0000	1,192.2051	1,192.2051	0.1895	0.0000	1,196.9418

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.6536	0.3856	4.5324	0.0169	2.1627	0.0126	2.1753	0.5752	0.0116	0.5868	0.0000	1,530.0199	1,530.0199	0.0267	0.0000	1,530.6874	9
Total	0.6536	0.3856	4.5324	0.0169	2.1627	0.0126	2.1753	0.5752	0.0116	0.5868	0.0000	1,530.0199	1,530.0199	0.0267	0.0000	1,530.6874	9

3.7 Paving/Hardscape - 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	0.0794	0.7414	0.9719	1.3900e-003			0.0396	0.0396		0.0368	0.0368	0.0000	120.4973	120.4973	0.0337	0.0000	121.3390
Paving	0.0000						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0794	0.7414	0.9719	1.3900e-003			0.0396	0.0396		0.0368	0.0368	0.0000	120.4973	120.4973	0.0337	0.0000	121.3390

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3300e-003	3.2700e-003	0.0378	1.4000e-004	0.0167	1.0000e-004	0.0168	4.4400e-003	9.0000e-005	4.5300e-003	0.0000	12.3061	12.3061	2.3000e-004	0.0000	12.3118
Total	5.3300e-003	3.2700e-003	0.0378	1.4000e-004	0.0167	1.0000e-004	0.0168	4.4400e-003	9.0000e-005	4.5300e-003	0.0000	12.3061	12.3061	2.3000e-004	0.0000	12.3118

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0298	0.6040	0.9828	1.3900e-003		8.3000e-003	8.3000e-003	8.3000e-003	8.3000e-003	0.0000	120.4971	120.4971	0.0337	0.0000	121.3389		
Paving	0.0000					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Total	0.0298	0.6040	0.9828	1.3900e-003		8.3000e-003	8.3000e-003	8.3000e-003	8.3000e-003	0.0000	120.4971	120.4971	0.0337	0.0000	121.3389		

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	5.3300e-003	3.2700e-003	0.0378	1.4000e-004	0.0167	1.0000e-004	0.0168	4.4400e-003	9.0000e-005	4.5300e-003	0.0000	12.3061	12.3061	2.3000e-004	0.0000	12.3118	
Total	5.3300e-003	3.2700e-003	0.0378	1.4000e-004	0.0167	1.0000e-004	0.0168	4.4400e-003	9.0000e-005	4.5300e-003	0.0000	12.3061	12.3061	2.3000e-004	0.0000	12.3118	

3.7 Paving/Hardscape - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1134	1.0600	1.4915	2.1400e-003			0.0522	0.0522		0.0485	0.0485	0.0000	185.7238	185.7238	0.0518	0.0000	187.0191
Paving	0.0000						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1134	1.0600	1.4915	2.1400e-003			0.0522	0.0522		0.0485	0.0485	0.0000	185.7238	185.7238	0.0518	0.0000	187.0191

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	7.7700e-003	4.5900e-003	0.0539	2.0000e-004	0.0257	1.5000e-004	0.0259	6.8400e-003	1.4000e-004	6.9800e-003	0.0000	18.1966	18.1966	3.2000e-004	0.0000	18.2046	
Total	7.7700e-003	4.5900e-003	0.0539	2.0000e-004	0.0257	1.5000e-004	0.0259	6.8400e-003	1.4000e-004	6.9800e-003	0.0000	18.1966	18.1966	3.2000e-004	0.0000	18.2046	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0459	0.9308	1.5144	2.1400e-003			0.0128	0.0128		0.0128	0.0128	0.0000	185.7236	185.7236	0.0518	0.0000	187.0188

Paving	0.0000					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	0.0459	0.9308	1.5144	2.1400e-003		0.0128	0.0128		0.0128	0.0128	0.0000	185.7236	185.7236	0.0518	0.0000	187.0188		

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	7.7700e-003	4.5900e-003	0.0539	2.0000e-004	0.0257	1.5000e-004	0.0259	6.8400e-003	1.4000e-004	6.9800e-003	0.0000	18.1966	18.1966	3.2000e-004	0.0000	18.2046	
Total	7.7700e-003	4.5900e-003	0.0539	2.0000e-004	0.0257	1.5000e-004	0.0259	6.8400e-003	1.4000e-004	6.9800e-003	0.0000	18.1966	18.1966	3.2000e-004	0.0000	18.2046	

3.8 Building Interior - 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	20.0815					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569
Total	20.0833	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0102	6.2400e-003	0.0719	2.6000e-004	0.0318	1.9000e-004	0.0320	8.4600e-003	1.7000e-004	8.6300e-003	0.0000	23.4486	23.4486	4.3000e-004	0.0000	23.4594
Total	0.0102	6.2400e-003	0.0719	2.6000e-004	0.0318	1.9000e-004	0.0320	8.4600e-003	1.7000e-004	8.6300e-003	0.0000	23.4486	23.4486	4.3000e-004	0.0000	23.4594

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	20.0815				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4000e-004	0.0106	0.0183	3.0000e-005	4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568	
Total	20.0821	0.0106	0.0183	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0102	6.2400e-003	0.0719	2.6000e-004	0.0318	1.9000e-004	0.0320	8.4600e-003	1.7000e-004	8.6300e-003	0.0000	23.4486	23.4486	4.3000e-004	0.0000	23.4594	
Total	0.0102	6.2400e-003	0.0719	2.6000e-004	0.0318	1.9000e-004	0.0320	8.4600e-003	1.7000e-004	8.6300e-003	0.0000	23.4486	23.4486	4.3000e-004	0.0000	23.4594	

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	2.8225	12.2385	33.4944	0.1461	17.0025	0.0974	17.0999	4.5502	0.0905	4.6407	0.0000	13,444.78	13,444.781	0.3822	0.0000	13,454.33	55
Unmitigated	2.8225	12.2385	33.4944	0.1461	17.0025	0.0974	17.0999	4.5502	0.0905	4.6407	0.0000	13,444.78	13,444.781	0.3822	0.0000	13,454.33	55

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00				
General Light Industry	0.00	0.00	0.00				
Office Park	24,336.03	3,502.64	1605.38	45,394,640		45,394,640	
Strip Mall	241.02	228.66	111.09	339,873		339,873	
Total	24,577.05	3,731.30	1,716.46	45,734,513		45,734,513	

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %			
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by	
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0	
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3	
Office Park	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3	
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
Enclosed Parking with Elevator	0.621541	0.034056	0.180136	0.101248	0.011859	0.005060	0.013110	0.022881	0.002221	0.001470	0.005122	0.000646	0.000651
General Light Industry	0.621541	0.034056	0.180136	0.101248	0.011859	0.005060	0.013110	0.022881	0.002221	0.001470	0.005122	0.000646	0.000651
Office Park	0.621541	0.034056	0.180136	0.101248	0.011859	0.005060	0.013110	0.022881	0.002221	0.001470	0.005122	0.000646	0.000651
Strip Mall	0.621541	0.034056	0.180136	0.101248	0.011859	0.005060	0.013110	0.022881	0.002221	0.001470	0.005122	0.000646	0.000651

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	9,622.917	9,622.9175	0.9623	0.1991	9,706.3050
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	10,968.7677	10,968.7677	1.0969	0.2269	11,063.8177
NaturalGas Mitigated	0.3039	2.7624	2.3204	0.0166		0.2099	0.2099		0.2099	0.2099	0.0000	3,007.1889	3,007.1889	0.0576	0.0551	3,025.0592
NaturalGas Unmitigated	0.4317	3.9244	3.2965	0.0236		0.2983	0.2983		0.2983	0.2983	0.0000	4,272.1758	4,272.1758	0.0819	0.0783	4,297.5632

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					
Enclosed Parking with Elevator	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	0.0000	0.0000	
General Light Industry	2.96284e+006	0.0160	0.1452	0.1220	8.7000e-004	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110	158.1086	158.1086	3.0300e-003	2.9000e-003	159.0482		
Office Park	7.70581e+007	0.4155	3.7774	3.1730	0.0227	0.2871	0.2871	0.2871	0.2871	0.2871	0.2871	4,112.1134	4,112.1134	0.0788	0.0754	4,136.5496		
Strip Mall	36614.1	2.0000e-004	1.7900e-003	1.5100e-003	1.0000e-005	1.4000e-004	1.4000e-004	1.4000e-004	1.4000e-004	1.4000e-004	1.4000e-004	1.9539	1.9539	4.0000e-005	4.0000e-005	1.9655		
Total		0.4317	3.9244	3.2965	0.0235		0.2983	0.2983		0.2983	0.2983	0.0000	4,272.1758	4,272.1758	0.0819	0.0783	4,297.5632	8

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					
Enclosed Parking with Elevator	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	0.0000	0.0000	
General Light Industry	2.29873e+006	0.0124	0.1127	0.0947	6.8000e-004	8.5600e-003	8.5600e-003	8.5600e-003	8.5600e-003	8.5600e-003	8.5600e-003	0.0000	122.6690	122.6690	2.3500e-003	2.2500e-003	123.3980	
Office Park	5.40282e+007	0.2913	2.6484	2.2247	0.0159	0.2013	0.2013	0.2013	0.2013	0.2013	0.2013	0.0000	2,883.1522	2,883.1522	0.0553	0.0529	2,900.2853	
Strip Mall	25629.9	1.4000e-004	1.2600e-003	1.0600e-003	1.0000e-005	1.0000e-004	1.0000e-004	1.0000e-004	1.0000e-004	1.0000e-004	1.0000e-004	0.0000	1.3677	1.3677	3.0000e-005	3.0000e-005	1.3758	
Total		0.3039	2.7624	2.3204	0.0166		0.2099	0.2099		0.2099	0.2099	0.0000	3,007.1889	3,007.1889	0.0576	0.0551	3,025.0592	9

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	1.09635e+007	1,442.1588	0.1442	0.0298	1,454.6559
General Light Industry	927714	122.0331	0.0122	2.5200e-003	123.0906
Office Park	7.13298e+007	9,382.8516	0.9383	0.1941	9,464.1589
Strip Mall	165150	21.7241	2.1700e-003	4.5000e-004	21.9124
Total		10,968.7677	1.0969	0.2269	11,063.8177

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	8.76332e+006	1,152.7427	0.1153	0.0239	1,162.7318
General Light Industry	877846	115.4735	0.0116	2.3900e-003	116.4741
Office Park	6.33613e+007	8,334.6599	0.8335	0.1724	8,406.8841
Strip Mall	152358	20.0415	2.0000e-003	4.1000e-004	20.2151
Total		9,622.9175	0.9623	0.1991	9,706.3051

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	14.1982	8.3000e-004	0.0916	1.0000e-005			3.2000e-004	3.2000e-004	3.2000e-004	3.2000e-004	0.0000	0.1791	0.1791	4.6000e-004	0.0000	0.1906	
Unmitigated	14.1982	8.3000e-004	0.0916	1.0000e-005			3.2000e-004	3.2000e-004	3.2000e-004	3.2000e-004	0.0000	0.1791	0.1791	4.6000e-004	0.0000	0.1906	

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	2.0082						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.1817						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.3800e-003	8.3000e-004	0.0916	1.0000e-005			3.2000e-004	3.2000e-004	3.2000e-004	3.2000e-004	0.0000	0.1791	0.1791	4.6000e-004	0.0000	0.1906	
Total	14.1982	8.3000e-004	0.0916	1.0000e-005			3.2000e-004	3.2000e-004		3.2000e-004	0.0000	0.1791	0.1791	4.6000e-004	0.0000	0.1906	

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	2.0082						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.1817						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.3800e-003	8.3000e-004	0.0916	1.0000e-005			3.2000e-004	3.2000e-004	3.2000e-004	3.2000e-004	0.0000	0.1791	0.1791	4.6000e-004	0.0000	0.1906	
Total	14.1982	8.3000e-004	0.0916	1.0000e-005			3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	0.1791	0.1791	4.6000e-004	0.0000	0.1906

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	748.0416	0.7138	0.4274	893.2416
Unmitigated	903.2021	0.8891	0.5335	1,084.4261

7.2 Water by Land Use

Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Light Industry	25.9717 / 0	27.6748	0.0335	0.0204	34.5805
Office Park	648.476 / 397.453	873.9849	0.8541	0.5123	1,047.996 1
Strip Mall	1.14442 / 0.701419	1.5424	1.5100e- 003	9.0000e- 004	1.8495
Total		903.2021	0.8891	0.5335	1,084.426 1

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Light Industry	20.7773 / 0	22.1398	0.0268	0.0163	27.6644
Office Park	518.781 / 373.208	724.6230	0.6859	0.4104	864.0524
Strip Mall	0.915536 / 0.658632	1.2788	1.2100e- 003	7.2000e- 004	1.5249
Total		748.0416	0.7138	0.4274	893.2416

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
MT/yr				
Mitigated	720.3459	42.5712	0.0000	1,784.6265
Unmitigated	720.3459	42.5712	0.0000	1,784.6265

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	139.26	28.2685	1.6706	0.0000	70.0341
Office Park	3393.18	688.7849	40.7060	0.0000	1,706.435
Strip Mall	16.22	3.2925	0.1946	0.0000	8.1571
Total		720.3459	42.5712	0.0000	1,784.626
					5

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	139.26	28.2685	1.6706	0.0000	70.0341
Office Park	3393.18	688.7849	40.7060	0.0000	1,706.4354
Strip Mall	16.22	3.2925	0.1946	0.0000	8.1571
Total		720.3459	42.5712	0.0000	1,784.6265

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
Emergency Generator	1	0	50	2681	0.73	Diesel
Emergency Generator	2	0	50	2011	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

10.1 Stationary Sources

Unmitigated/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	
Equipment Type	tons/yr										MT/yr						
Emergency Generator - Diesel (750,000 L/D)	0.2750	1.2298	0.7012	1.3200e-003		0.0405	0.0405		0.0405	0.0405	0.0000	127.6242	127.6242	0.0179	0.0000	128.0715	
Total	0.2750	1.2298	0.7012	1.3200e-003		0.0405	0.0405		0.0405	0.0405	0.0000	127.6242	127.6242	0.0179	0.0000	128.0715	

11.0 Vegetation

City View (EMFAC for Truck Activity) - Santa Clara County, Annual

City View (EMFAC for Truck Activity) - TAC MODEL

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	3,648.58	1000sqft	8.10	3,648,584.00	0
General Light Industry	112.31	1000sqft	0.00	112,314.00	0
Enclosed Parking with Elevator	6,246.00	Space	0.00	1,870,905.00	0
Strip Mall	15.45	1000sqft	0.00	15,449.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E rate

Land Use - 3,648,584-sf office, 15,449-sf retail, 112,314-sf mech penthouse, 1,870,905-sf parking garage

Construction Phase - Based on construction worksheet, start dates and total workdays

Off-road Equipment - Based on construction worksheet

Off-road Equipment -

Off-road Equipment - Based on construction worksheet

Off-road Equipment - Based on construction worksheet

Off-road Equipment - Based on construction worksheet
 Off-road Equipment - Based on construction worksheet
 Off-road Equipment - Based on construction worksheet
 Trips and VMT - No Truck Activity for vendor or hauling --> Using EMFAC, keep workers, TAC trip length 1 mile
 Demolition - Based on construction worksheet
 Grading - Based on construction worksheet
 Vehicle Trips - Traffic Trip Generation Rate
 Vehicle Emission Factors -
 Vehicle Emission Factors -
 Vehicle Emission Factors -
 Consumer Products - Rate for SC County in 2027
 Energy Use -
 Water And Wastewater - 100% aerobic
 Construction Off-road Equipment Mitigation - BACT, tier 4 interim
 Energy Mitigation - Using CEC estimates for future Title 24
 Water Mitigation - Water reductions
 Fleet Mix -
 Stationary Sources - Emergency Generators and Fire Pumps - 1. Tower 1: 2000kW, 480/277V, 3-phase, 4-wire
 2. Tower 2: 1500kW, 480/277V, 3-phase, 4-wire
 3. Tower 3: 1500kW, 480/277V, 3-phase, 4-wire

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	18.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	17.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	14.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	23.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	45.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	230.00	1,238.00
tblConstructionPhase	NumDays	20.00	206.00
tblConstructionPhase	NumDays	20.00	362.00

tblConstructionPhase	NumDays	20.00	465.00
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConsumerProducts	ROG_EF	2.14E-05	1.75E-05
tblGrading	AcresOfGrading	0.00	10.00
tblGrading	AcresOfGrading	180.00	10.00
tblGrading	MaterialExported	0.00	1,037,689.00
tblGrading	MaterialImported	0.00	1,000.00
tblLandUse	LandUseSquareFeet	3,648,580.00	3,648,584.00
tblLandUse	LandUseSquareFeet	112,310.00	112,314.00
tblLandUse	LandUseSquareFeet	2,498,400.00	1,870,905.00
tblLandUse	LandUseSquareFeet	15,450.00	15,449.00
tblLandUse	LotAcreage	83.76	8.10
tblLandUse	LotAcreage	2.58	0.00
tblLandUse	LotAcreage	56.21	0.00
tblLandUse	LotAcreage	0.35	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	9.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	45.00
tblOffRoadEquipment	UsageHours	8.00	0.80
tblOffRoadEquipment	UsageHours	8.00	16.00
tblOffRoadEquipment	UsageHours	8.00	24.00
tblOffRoadEquipment	UsageHours	8.00	16.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	14.00
tblOffRoadEquipment	UsageHours	8.00	16.00
tblOffRoadEquipment	UsageHours	8.00	24.00
tblOffRoadEquipment	UsageHours	8.00	16.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,011.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,681.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	2.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00

tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripNumber	6,709.00	0.00
tblTripsAndVMT	HaulingTripNumber	129,836.00	0.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripNumber	926.00	0.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	ST_TR	1.64	0.96
tblVehicleTrips	ST_TR	42.04	14.80
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	SU_TR	0.76	0.44
tblVehicleTrips	SU_TR	20.43	7.19
tblVehicleTrips	WD_TR	6.97	0.00
tblVehicleTrips	WD_TR	11.42	6.67
tblVehicleTrips	WD_TR	44.32	15.60
tblWater	AerobicPercent	87.46	100.00

tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	2.2581	23.3463	20.986	0.0367	1.8252	1.1525	2.9777	0.709	1.0718	1.7808	0	3,216.30	3,216.30	0.9392	0	3,239.78
2021	1.9695	18.455	23.709	0.0366	0.0908	0.9908	1.0816	0.0166	0.9183	0.9349	0	3,202.66	3,202.66	0.9652	0	3,226.79
2022	2.0049	12.0743	16.1084	0.0241	0.298	0.6322	0.9301	0.0721	0.6052	0.6772	0	1,987.47	1,987.47	0.3677	0	1,996.66
2023	1.651	9.5813	12.925	0.0196	0.2325	0.4575	0.69	0.0622	0.4412	0.5034	0	1,595.62	1,595.62	0.2358	0	1,601.52
2024	21.7066	9.9203	13.8284	0.0211	0.2385	0.4386	0.6771	0.0638	0.4215	0.4853	0	1,724.29	1,724.29	0.2651	0	1,730.91
2025	1.355	8.6135	12.4466	0.0191	0.2051	0.349	0.5541	0.0549	0.3348	0.3896	0	1,563.61	1,563.61	0.2466	0	1,569.78
Maximum	21.7066	23.3463	23.7090	0.0367	1.8252	1.1525	2.9777	0.7090	1.0718	1.7808	0.0000	3,216.3046	3,216.3046	0.9652	0.0000	3,239.7833

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	0.5304	5.0465	24.0462	0.0367	0.7179	0.0588	0.7767	0.1404	0.0588	0.1992	0	3,216.30	3,216.30	0.9392	0	3,239.78	
2021	0.5138	3.555	26.5877	0.0366	0.0517	0.0587	0.1104	8.99E-03	0.0587	0.0677	0	3,202.66	3,202.66	0.9652	0	3,226.79	
2022	0.6044	4.7894	15.9479	0.0241	0.2589	0.0328	0.2917	0.0644	0.0326	0.097	0	1,987.47	1,987.47	0.3677	0	1,996.66	
2023	0.5237	4.4383	12.5028	0.0196	0.2325	0.0256	0.2581	0.0622	0.0254	0.0876	0	1,595.62	1,595.62	0.2358	0	1,601.51	
2024	20.613	4.6746	13.4832	0.0211	0.2385	0.028	0.2665	0.0638	0.0278	0.0916	0	1,724.29	1,724.29	0.2651	0	1,730.91	
2025	0.4563	4.1847	12.2172	0.0191	0.2051	0.0256	0.2307	0.0549	0.0254	0.0803	0	1,563.61	1,563.61	0.2466	0	1,569.78	
Maximum	20.6130	5.0465	26.5877	0.0367	0.7179	0.0588	0.7767	0.1404	0.0588	0.1992	0.0000	3,216.300 8	3,216.3008	0.9652	0.0000	3,239.779 5	

	ROG	NOx	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	24.89	67.45	-4.78	0.00	41.02	94.29	72.01	59.66	93.97	86.94	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	3-1-2020	5-31-2020	4.9278	1.0553
2	6-1-2020	8-31-2020	10.8202	1.8652
3	9-1-2020	11-30-2020	8.1328	2.1545
4	12-1-2020	2-28-2021	7.2205	1.8749
5	3-1-2021	5-31-2021	4.6892	0.8574
6	6-1-2021	8-31-2021	3.9350	0.6103
7	9-1-2021	11-30-2021	3.8921	0.6035
8	12-1-2021	2-28-2022	6.4533	1.8251
9	3-1-2022	5-31-2022	3.0268	1.2730

10	6-1-2022	8-31-2022	3.0306	1.2768
11	9-1-2022	11-30-2022	2.9902	1.2554
12	12-1-2022	2-28-2023	2.8391	1.2318
13	3-1-2023	5-31-2023	2.8478	1.2630
14	6-1-2023	8-31-2023	2.8515	1.2667
15	9-1-2023	11-30-2023	2.8133	1.2457
16	12-1-2023	2-29-2024	2.7112	1.2367
17	3-1-2024	5-31-2024	2.6964	1.2544
18	6-1-2024	8-31-2024	23.7296	22.0228
19	9-1-2024	11-30-2024	3.0146	1.3389
20	12-1-2024	2-28-2025	2.8721	1.3161
21	3-1-2025	5-31-2025	2.8858	1.3496
22	6-1-2025	8-31-2025	2.8893	1.3531
23	9-1-2025	9-30-2025	0.9422	0.4412
		Highest	23.7296	22.0228

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	3/1/2020	10/27/2020	6	206	
2	Site Preparation	Site Preparation	6/1/2020	7/22/2020	6	45	
3	Shoring	Trenching	8/1/2020	3/15/2021	6	194	
4	Grading	Grading	1/1/2021	2/26/2022	6	362	
5	Building Exterior	Building Construction	12/1/2021	11/13/2025	6	1238	
6	Paving/Hardscape	Paving	6/1/2024	11/25/2025	6	465	
7	Building Interior	Architectural Coating	6/1/2024	6/24/2024	6	20	

Acres of Grading (Site Preparation Phase): 10

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,664,521; Non-Residential Outdoor: 1,888,174; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	4	0.80	81	0.73
Demolition	Excavators	8	16.00	158	0.38
Demolition	Rubber Tired Dozers	2	14.00	247	0.40
Demolition	Skid Steer Loaders	6	16.00	65	0.37
Demolition	Sweepers/Scrubbers	1	16.00	64	0.46
Demolition	Tractors/Loaders/Backhoes	4	16.00	97	0.37
Site Preparation	Graders	4	16.00	187	0.41
Site Preparation	Rubber Tired Dozers	4	16.00	247	0.40
Site Preparation	Sweepers/Scrubbers	1	16.00	64	0.46
Site Preparation	Tractors/Loaders/Backhoes	6	16.00	97	0.37
Shoring	Aerial Lifts	18	12.00	63	0.31
Shoring	Air Compressors	3	16.00	78	0.48
Shoring	Bore/Drill Rigs	3	16.00	221	0.50
Shoring	Cranes	1	16.00	231	0.29
Shoring	Excavators	3	16.00	158	0.38
Shoring	Forklifts	3	16.00	89	0.20
Shoring	Generator Sets	3	16.00	84	0.74
Shoring	Tractors/Loaders/Backhoes	3	16.00	97	0.37
Grading	Excavators	6	24.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Sweepers/Scrubbers	1	24.00	64	0.46
Grading	Tractors/Loaders/Backhoes	8	24.00	97	0.37
Building Exterior	Cranes	0	7.00	231	0.29
Building Exterior	Forklifts	9	16.00	89	0.20
Building Exterior	Generator Sets	3	4.00	84	0.74

Building Exterior	Pumps	2	5.80	84	0.74
Building Exterior	Sweepers/Scrubbers	1	16.00	64	0.46
Building Exterior	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Exterior	Welders	45	4.00	46	0.45
Paving/Hardscape	Forklifts	2	10.00	89	0.20
Paving/Hardscape	Pavers	0	8.00	130	0.42
Paving/Hardscape	Paving Equipment	0	8.00	132	0.36
Paving/Hardscape	Plate Compactors	2	5.00	8	0.43
Paving/Hardscape	Pumps	1	2.50	84	0.74
Paving/Hardscape	Rollers	1	5.00	80	0.38
Paving/Hardscape	Sweepers/Scrubbers	1	10.00	64	0.46
Paving/Hardscape	Tractors/Loaders/Backhoes	2	5.00	97	0.37
Building Interior	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	25	63.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	15	38.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Shoring	37	93.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Grading	15	38.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Building Exterior	60	2,005.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Paving/Hardscape	9	23.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Building Interior	1	401.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

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					0.7260	0.0000	0.7260	0.1099	0.0000	0.1099	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	1.1371	11.7244	11.0327	0.0175		0.6059	0.6059		0.5581	0.5581	0.0000	1,535.704	1,535.7042	0.4909	0.0000	1,547.977	
Total	1.1371	11.7244	11.0327	0.0175	0.7260	0.6059	1.3318	0.1099	0.5581	0.6680	0.0000	1,535.704	1,535.7042	0.4909	0.0000	1,547.977	
											2					1	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	7.1900e-003	3.2900e-003	0.0426	6.0000e-005	4.8200e-003	7.0000e-005	4.8900e-003	1.2900e-003	6.0000e-005	1.3500e-003	0.0000	5.2769	5.2769	2.3000e-004	0.0000	5.2826	
Total	7.1900e-003	3.2900e-003	0.0426	6.0000e-005	4.8200e-003	7.0000e-005	4.8900e-003	1.2900e-003	6.0000e-005	1.3500e-003	0.0000	5.2769	5.2769	2.3000e-004	0.0000	5.2826	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.2831	0.0000	0.2831	0.0214	0.0000	0.0214	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2520	2.4934	12.2633	0.0175		0.0286	0.0286		0.0286	0.0286	0.0000	1,535.7023	1,535.7023	0.4909	0.0000	1,547.9752
Total	0.2520	2.4934	12.2633	0.0175	0.2831	0.0286	0.3117	0.0214	0.0286	0.0500	0.0000	1,535.7023	1,535.7023	0.4909	0.0000	1,547.9752

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	7.1900e-003	3.2900e-003	0.0426	6.0000e-005	4.8200e-003	7.0000e-005	4.8900e-003	1.2900e-003	6.0000e-005	1.3500e-003	0.0000	5.2769	5.2769	2.3000e-004	0.0000	5.2826	
Total	7.1900e-003	3.2900e-003	0.0426	6.0000e-005	4.8200e-003	7.0000e-005	4.8900e-003	1.2900e-003	6.0000e-005	1.3500e-003	0.0000	5.2769	5.2769	2.3000e-004	0.0000	5.2826	

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					

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.5000e-004	4.3000e-004	5.6100e-003	1.0000e-005	6.4000e-004	1.0000e-005	6.4000e-004	1.7000e-004	1.0000e-005	1.8000e-004	0.0000	0.6953	0.6953	3.0000e-005	0.0000	0.6960
Total	9.5000e-004	4.3000e-004	5.6100e-003	1.0000e-005	6.4000e-004	1.0000e-005	6.4000e-004	1.7000e-004	1.0000e-005	1.8000e-004	0.0000	0.6953	0.6953	3.0000e-005	0.0000	0.6960

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.4248	0.0000	0.4248	0.1163	0.0000	0.1163	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0465	0.2533	1.9443	3.6800e-003		6.0100e-003	6.0100e-003		6.0100e-003	6.0100e-003	0.0000	323.7706	323.7706	0.1047	0.0000	326.3885	
Total	0.0465	0.2533	1.9443	3.6800e-003	0.4248	6.0100e-003	0.4308	0.1163	6.0100e-003	0.1223	0.0000	323.7706	323.7706	0.1047	0.0000	326.3885	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	9.5000e-004	4.3000e-004	5.6100e-003	1.0000e-005	6.4000e-004	1.0000e-005	6.4000e-004	1.7000e-004	1.0000e-005	1.8000e-004	0.0000	0.6953	0.6953	3.0000e-005	0.0000	0.6960	
Total	9.5000e-004	4.3000e-004	5.6100e-003	1.0000e-005	6.4000e-004	1.0000e-005	6.4000e-004	1.7000e-004	1.0000e-005	1.8000e-004	0.0000	0.6953	0.6953	3.0000e-005	0.0000	0.6960	

3.4 Shoring - 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	0.7574	7.7636	8.0900	0.0154		0.3658	0.3658		0.3474	0.3474	0.0000	1,345.9036	1,345.9036	0.3431	0.0000	1,354.4798
Total	0.7574	7.7636	8.0900	0.0154		0.3658	0.3658		0.3474	0.3474	0.0000	1,345.9036	1,345.9036	0.3431	0.0000	1,354.4798

Unmitigated Construction Off-Site

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

Category	tons/yr												MT/yr					
	Hauling	Vendor	Worker	Total	Hauling	Vendor	Worker	Total	Hauling	Vendor	Worker	Total	Hauling	Vendor	Worker	Total	Hauling	Vendor
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7500e-003	3.0900e-003	0.0399	6.0000e-005	4.5300e-003	6.0000e-005	4.5900e-003	1.2100e-003	6.0000e-005	1.2700e-003	0.0000	4.9536	4.9536	2.1000e-004	0.0000	4.9590		
Total	6.7500e-003	3.0900e-003	0.0399	6.0000e-005	4.5300e-003	6.0000e-005	4.5900e-003	1.2100e-003	6.0000e-005	1.2700e-003	0.0000	4.9536	4.9536	2.1000e-004	0.0000	4.9590		

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr										MT/yr							
Off-Road	0.2171	2.2929	9.7504	0.0154		0.0241	0.0241		0.0241	0.0241	0.0000	1,345.9020	1,345.9020	0.3431	0.0000	1,354.4782		
Total	0.2171	2.2929	9.7504	0.0154		0.0241	0.0241		0.0241	0.0241	0.0000	1,345.9020	1,345.9020	0.3431	0.0000	1,354.4782		

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr										MT/yr							
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	6.7500e-003	3.0900e-003	0.0399	6.0000e-005	4.5300e-003	6.0000e-005	4.5900e-003	1.2100e-003	6.0000e-005	1.2700e-003	0.0000	4.9536	4.9536	2.1000e-004	0.0000	4.9590		

Total	6.7500e-003	3.0900e-003	0.0399	6.0000e-005	4.5300e-003	6.0000e-005	4.5900e-003	1.2100e-003	6.0000e-005	1.2700e-003	0.0000	4.9536	4.9536	2.1000e-004	0.0000	4.9590
-------	-------------	-------------	--------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	--------	--------	--------	-------------	--------	--------

3.4 Shoring - 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	0.3326	3.3590	3.8681	7.4200e-003			0.1516	0.1516		0.1439	0.1439	0.0000	647.6856	647.6856	0.1640	0.0000	651.7852
Total	0.3326	3.3590	3.8681	7.4200e-003			0.1516	0.1516		0.1439	0.1439	0.0000	647.6856	647.6856	0.1640	0.0000	651.7852

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9700e-003	1.3100e-003	0.0173	3.0000e-005	2.1800e-003	3.0000e-005	2.2100e-003	5.8000e-004	3.0000e-005	6.1000e-004	0.0000	2.3014	2.3014	9.0000e-005	0.0000	2.3037
Total	2.9700e-003	1.3100e-003	0.0173	3.0000e-005	2.1800e-003	3.0000e-005	2.2100e-003	5.8000e-004	3.0000e-005	6.1000e-004	0.0000	2.3014	2.3014	9.0000e-005	0.0000	2.3037

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1044	1.1027	4.6891	7.4200e-003		0.0116	0.0116		0.0116	0.0116	0.0000	647.6849	647.6849	0.1640	0.0000	651.7844	
Total	0.1044	1.1027	4.6891	7.4200e-003		0.0116	0.0116		0.0116	0.0116	0.0000	647.6849	647.6849	0.1640	0.0000	651.7844	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.9700e-003	1.3100e-003	0.0173	3.0000e-005	2.1800e-003	3.0000e-005	2.2100e-003	5.8000e-004	3.0000e-005	6.1000e-004	0.0000	2.3014	2.3014	9.0000e-005	0.0000	2.3037	
Total	2.9700e-003	1.3100e-003	0.0173	3.0000e-005	2.1800e-003	3.0000e-005	2.2100e-003	5.8000e-004	3.0000e-005	6.1000e-004	0.0000	2.3014	2.3014	9.0000e-005	0.0000	2.3037	

3.5 Grading - 2021

Unmitigated Construction On-Site

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

Fugitive Dust					0.0640	0.0000	0.0640	9.4700e-003	0.0000	9.4700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.4563	14.1526	18.6221	0.0274		0.7851	0.7851		0.7223	0.7223	0.0000	2,408.3952	2,408.3952	0.7789	0.0000	2,427.8683		
Total	1.4563	14.1526	18.6221	0.0274	0.0640	0.7851	0.8491	9.4700e-003	0.7223	0.7317	0.0000	2,408.3952	2,408.3952	0.7789	0.0000	2,427.8683		

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	6.0200e-003	2.6600e-003	0.0351	5.0000e-005	4.4200e-003	6.0000e-005	4.4800e-003	1.1800e-003	5.0000e-005	1.2400e-003	0.0000	4.6719	4.6719	1.8000e-004	0.0000	4.6765	
Total	6.0200e-003	2.6600e-003	0.0351	5.0000e-005	4.4200e-003	6.0000e-005	4.4800e-003	1.1800e-003	5.0000e-005	1.2400e-003	0.0000	4.6719	4.6719	1.8000e-004	0.0000	4.6765	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0250	0.0000	0.0250	1.8500e-003	0.0000	1.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3509	2.0617	20.7358	0.0274		0.0448	0.0448		0.0448	0.0448	0.0000	2,408.3924	2,408.3924	0.7789	0.0000	2,427.8654
Total	0.3509	2.0617	20.7358	0.0274	0.0250	0.0448	0.0698	1.8500e-003	0.0448	0.0467	0.0000	2,408.3924	2,408.3924	0.7789	0.0000	2,427.8654

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	6.0200e-003	2.6600e-003	0.0351	5.0000e-005	4.4200e-003	6.0000e-005	4.4800e-003	1.1800e-003	5.0000e-005	1.2400e-003	0.0000	4.6719	4.6719	1.8000e-004	0.0000	4.6765	
Total	6.0200e-003	2.6600e-003	0.0351	5.0000e-005	4.4200e-003	6.0000e-005	4.4800e-003	1.1800e-003	5.0000e-005	1.2400e-003	0.0000	4.6719	4.6719	1.8000e-004	0.0000	4.6765	

3.5 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					0.0640	0.0000	0.0640	9.4700e-003	0.0000	9.4700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.2003	1.9014	2.8923	4.2900e-003		0.0997	0.0997		0.0918	0.0918	0.0000	377.1432	377.1432	0.1220	0.0000	380.1926	
Total	0.2003	1.9014	2.8923	4.2900e-003	0.0640	0.0997	0.1638	9.4700e-003	0.0918	0.1012	0.0000	377.1432	377.1432	0.1220	0.0000	380.1926	

Unmitigated Construction Off-Site

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

Category	tons/yr												MT/yr					
	Hauling	Vendor	Worker	Total	Hauling	Vendor	Worker	Total	Hauling	Vendor	Worker	Total	Hauling	Vendor	Worker	Total	Hauling	Vendor
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.6000e-004	3.7000e-004	4.9800e-003	1.0000e-005	6.9000e-004	1.0000e-005	7.0000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.7053	0.7053	3.0000e-005	0.0000	0.7059		
Total	8.6000e-004	3.7000e-004	4.9800e-003	1.0000e-005	6.9000e-004	1.0000e-005	7.0000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.7053	0.7053	3.0000e-005	0.0000	0.7059		

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Fugitive Dust					0.0250	0.0000	0.0250	1.8500e-003	0.0000	1.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0549	0.3228	3.2462	4.2900e-003		7.0200e-003	7.0200e-003		7.0200e-003	7.0200e-003	0.0000	377.1427	377.1427	0.1220	0.0000	380.1921
Total	0.0549	0.3228	3.2462	4.2900e-003	0.0250	7.0200e-003	0.0320	1.8500e-003	7.0200e-003	8.8700e-003	0.0000	377.1427	377.1427	0.1220	0.0000	380.1921

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.6000e-004	3.7000e-004	4.9800e-003	1.0000e-005	6.9000e-004	1.0000e-005	7.0000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.7053	0.7053	3.0000e-005	0.0000	0.7059

Total	8.6000e-004	3.7000e-004	4.9800e-003	1.0000e-005	6.9000e-004	1.0000e-005	7.0000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.7053	0.7053	3.0000e-005	0.0000	0.7059
-------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	--------	--------	--------	-------------	--------	--------

3.6 Building Exterior - 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	0.1442	0.9274	1.0064	1.4800e-003		0.0538	0.0538		0.0519	0.0519	0.0000	118.3441	118.3441	0.0211	0.0000	118.8725
Total	0.1442	0.9274	1.0064	1.4800e-003		0.0538	0.0538		0.0519	0.0519	0.0000	118.3441	118.3441	0.0211	0.0000	118.8725

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0274	0.0121	0.1599	2.4000e-004	0.0201	2.7000e-004	0.0204	5.3800e-003	2.5000e-004	5.6300e-003	0.0000	21.2641	21.2641	8.4000e-004	0.0000	21.2850
Total	0.0274	0.0121	0.1599	2.4000e-004	0.0201	2.7000e-004	0.0204	5.3800e-003	2.5000e-004	5.6300e-003	0.0000	21.2641	21.2641	8.4000e-004	0.0000	21.2850

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0222	0.3746	0.9504	1.4800e-003		1.9600e-003	1.9600e-003	1.9600e-003	1.9600e-003	0.0000	118.3439	118.3439	0.0211	0.0000	118.8723		
Total	0.0222	0.3746	0.9504	1.4800e-003		1.9600e-003	1.9600e-003		1.9600e-003	1.9600e-003	0.0000	118.3439	118.3439	0.0211	0.0000	118.8723	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0274	0.0121	0.1599	2.4000e-004	0.0201	2.7000e-004	0.0204	5.3800e-003	2.5000e-004	5.6300e-003	0.0000	21.2641	21.2641	8.4000e-004	0.0000	21.2850	
Total	0.0274	0.0121	0.1599	2.4000e-004	0.0201	2.7000e-004	0.0204	5.3800e-003	2.5000e-004	5.6300e-003	0.0000	21.2641	21.2641	8.4000e-004	0.0000	21.2850	

3.6 Building Exterior - 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	1.5123	10.0483	11.5313	0.0171		0.5294	0.5294		0.5106	0.5106	0.0000	1,371.914 2	1,371.9142	0.2371	0.0000	1,377.841 9
Total	1.5123	10.0483	11.5313	0.0171		0.5294	0.5294		0.5106	0.5106	0.0000	1,371.914 2	1,371.9142	0.2371	0.0000	1,377.841 9

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.2914	0.1242	1.6798	2.6400e-003	0.2332	3.0700e-003	0.2363	0.0624	2.8200e-003	0.0652	0.0000	237.7098	237.7098	8.5800e-003	0.0000	237.9245
Total	0.2914	0.1242	1.6798	2.6400e-003	0.2332	3.0700e-003	0.2363	0.0624	2.8200e-003	0.0652	0.0000	237.7098	237.7098	8.5800e-003	0.0000	237.9245

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2572	4.3421	11.0170	0.0171		0.0227	0.0227		0.0227	0.0227	0.0000	1,371.912 5	1,371.9125	0.2371	0.0000	1,377.840 3
Total	0.2572	4.3421	11.0170	0.0171		0.0227	0.0227		0.0227	0.0227	0.0000	1,371.912 5	1,371.9125	0.2371	0.0000	1,377.840 3

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.2914	0.1242	1.6798	2.6400e-003	0.2332	3.0700e-003	0.2363	0.0624	2.8200e-003	0.0652	0.0000	237.7098	237.7098	8.5800e-003	0.0000	237.9245	
Total	0.2914	0.1242	1.6798	2.6400e-003	0.2332	3.0700e-003	0.2363	0.0624	2.8200e-003	0.0652	0.0000	237.7098	237.7098	8.5800e-003	0.0000	237.9245	

3.6 Building Exterior - 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	1.3836	9.4713	11.4040	0.0171		0.4545	0.4545		0.4385	0.4385	0.0000	1,367.5311	1,367.5311	0.2282	0.0000	1,373.2370
Total	1.3836	9.4713	11.4040	0.0171		0.4545	0.4545		0.4385	0.4385	0.0000	1,367.5311	1,367.5311	0.2282	0.0000	1,373.2370

Unmitigated Construction Off-Site

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

Category	tons/yr												MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2674	0.1101	1.5210	2.5400e-003	0.2325	3.0100e-003	0.2355	0.0622	2.7700e-003	0.0650	0.0000	228.0889	228.0889	7.5900e-003	0.0000	228.2786		
Total	0.2674	0.1101	1.5210	2.5400e-003	0.2325	3.0100e-003	0.2355	0.0622	2.7700e-003	0.0650	0.0000	228.0889	228.0889	7.5900e-003	0.0000	228.2786		

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Off-Road	0.2564	4.3282	10.9818	0.0171		0.0226	0.0226		0.0226	0.0226	0.0000	1,367.5294	1,367.5294	0.2282	0.0000	1,373.2353	
Total	0.2564	4.3282	10.9818	0.0171		0.0226	0.0226		0.0226	0.0226	0.0000	1,367.5294	1,367.5294	0.2282	0.0000	1,373.2353	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.2674	0.1101	1.5210	2.5400e-003	0.2325	3.0100e-003	0.2355	0.0622	2.7700e-003	0.0650	0.0000	228.0889	228.0889	7.5900e-003	0.0000	228.2786	

Total	0.2674	0.1101	1.5210	2.5400e-003	0.2325	3.0100e-003	0.2355	0.0622	2.7700e-003	0.0650	0.0000	228.0889	228.0889	7.5900e-003	0.0000	228.2786
-------	--------	--------	--------	-------------	--------	-------------	--------	--------	-------------	--------	--------	----------	----------	-------------	--------	----------

3.6 Building Exterior - 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	1.2902	9.0658	11.4084	0.0172		0.3954	0.3954		0.3814	0.3814	0.0000	1,376.2973	1,376.2973	0.2243	0.0000	1,381.9054
Total	1.2902	9.0658	11.4084	0.0172		0.3954	0.3954		0.3814	0.3814	0.0000	1,376.2973	1,376.2973	0.2243	0.0000	1,381.9054

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2488	0.0990	1.4027	2.4500e-003	0.2340	2.9900e-003	0.2370	0.0626	2.7500e-003	0.0654	0.0000	220.6540	220.6540	6.8000e-003	0.0000	220.8241
Total	0.2488	0.0990	1.4027	2.4500e-003	0.2340	2.9900e-003	0.2370	0.0626	2.7500e-003	0.0654	0.0000	220.6540	220.6540	6.8000e-003	0.0000	220.8241

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.2580	4.3560	11.0522	0.0172		0.0228	0.0228		0.0228	0.0228	0.0000	1,376.2956	1,376.2956	0.2243	0.0000	1,381.9038	
Total	0.2580	4.3560	11.0522	0.0172		0.0228	0.0228		0.0228	0.0228	0.0000	1,376.2956	1,376.2956	0.2243	0.0000	1,381.9038	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.2488	0.0990	1.4027	2.4500e-003	0.2340	2.9900e-003	0.2370	0.0626	2.7500e-003	0.0654	0.0000	220.6540	220.6540	6.8000e-003	0.0000	220.8241	
Total	0.2488	0.0990	1.4027	2.4500e-003	0.2340	2.9900e-003	0.2370	0.0626	2.7500e-003	0.0654	0.0000	220.6540	220.6540	6.8000e-003	0.0000	220.8241	

3.6 Building Exterior - 2025

Unmitigated Construction On-Site

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

Off-Road	1.0388	7.4755	9.8262	0.0149		0.2943	0.2943		0.2839	0.2839	0.0000	1,192.206 6	1,192.2066	0.1895	0.0000	1,196.943 3
Total	1.0388	7.4755	9.8262	0.0149		0.2943	0.2943		0.2839	0.2839	0.0000	1,192.206 6	1,192.2066	0.1895	0.0000	1,196.943 3

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.2004	0.0771	1.1157	2.0400e-003	0.2027	2.5600e-003	0.2053	0.0542	2.3600e-003	0.0566	0.0000	183.5000	183.5000	5.2800e-003	0.0000	183.6319
Total	0.2004	0.0771	1.1157	2.0400e-003	0.2027	2.5600e-003	0.2053	0.0542	2.3600e-003	0.0566	0.0000	183.5000	183.5000	5.2800e-003	0.0000	183.6319

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2235	3.7733	9.5739	0.0149		0.0197	0.0197		0.0197	0.0197	0.0000	1,192.205 1	1,192.2051	0.1895	0.0000	1,196.941 8
Total	0.2235	3.7733	9.5739	0.0149		0.0197	0.0197		0.0197	0.0197	0.0000	1,192.205 1	1,192.2051	0.1895	0.0000	1,196.941 8

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2004	0.0771	1.1157	2.0400e-003	0.2027	2.5600e-003	0.2053	0.0542	2.3600e-003	0.0566	0.0000	183.5000	183.5000	5.2800e-003	0.0000	183.6319
Total	0.2004	0.0771	1.1157	2.0400e-003	0.2027	2.5600e-003	0.2053	0.0542	2.3600e-003	0.0566	0.0000	183.5000	183.5000	5.2800e-003	0.0000	183.6319

3.7 Paving/Hardscape - 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	0.0794	0.7414	0.9719	1.3900e-003		0.0396	0.0396		0.0368	0.0368	0.0000	120.4973	120.4973	0.0337	0.0000	121.3390
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0794	0.7414	0.9719	1.3900e-003		0.0396	0.0396		0.0368	0.0368	0.0000	120.4973	120.4973	0.0337	0.0000	121.3390

Unmitigated Construction Off-Site

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

Category	tons/yr												MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6600e-003	6.6000e-004	9.3800e-003	2.0000e-005	1.5600e-003	2.0000e-005	1.5800e-003	4.2000e-004	2.0000e-005	4.4000e-004	0.0000	1.4752	1.4752	5.0000e-005	0.0000	0.0000	1.4763	
Total	1.6600e-003	6.6000e-004	9.3800e-003	2.0000e-005	1.5600e-003	2.0000e-005	1.5800e-003	4.2000e-004	2.0000e-005	4.4000e-004	0.0000	1.4752	1.4752	5.0000e-005	0.0000	0.0000	1.4763	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr										MT/yr							
Off-Road	0.0195	0.2163	0.9828	1.3900e-003		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	120.4971	120.4971	0.0337	0.0000	0.0000	121.3389	
Paving	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	0.0195	0.2163	0.9828	1.3900e-003		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	120.4971	120.4971	0.0337	0.0000	0.0000	121.3389	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr										MT/yr							
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.6600e-003	6.6000e-004	9.3800e-003	2.0000e-005	1.5600e-003	2.0000e-005	1.5800e-003	4.2000e-004	2.0000e-005	4.4000e-004	0.0000	1.4752	1.4752	5.0000e-005	0.0000	0.0000	1.4763	

Total	1.6600e-003	6.6000e-004	9.3800e-003	2.0000e-005	1.5600e-003	2.0000e-005	1.5800e-003	4.2000e-004	2.0000e-005	4.4000e-004	0.0000	1.4752	1.4752	5.0000e-005	0.0000	1.4763
-------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	--------	--------	--------	-------------	--------	--------

3.7 Paving/Hardscape - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1134	1.0600	1.4915	2.1400e-003		0.0522	0.0522		0.0485	0.0485	0.0000	185.7238	185.7238	0.0518	0.0000	187.0191
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1134	1.0600	1.4915	2.1400e-003		0.0522	0.0522		0.0485	0.0485	0.0000	185.7238	185.7238	0.0518	0.0000	187.0191

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3800e-003	9.2000e-004	0.0133	2.0000e-005	2.4100e-003	3.0000e-005	2.4400e-003	6.4000e-004	3.0000e-005	6.7000e-004	0.0000	2.1824	2.1824	6.0000e-005	0.0000	2.1840
Total	2.3800e-003	9.2000e-004	0.0133	2.0000e-005	2.4100e-003	3.0000e-005	2.4400e-003	6.4000e-004	3.0000e-005	6.7000e-004	0.0000	2.1824	2.1824	6.0000e-005	0.0000	2.1840

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0301	0.3334	1.5144	2.1400e-003		3.2700e-003	3.2700e-003	3.2700e-003	3.2700e-003	0.0000	185.7236	185.7236	0.0518	0.0000	187.0188		
Paving	0.0000					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Total	0.0301	0.3334	1.5144	2.1400e-003		3.2700e-003	3.2700e-003	3.2700e-003	3.2700e-003	0.0000	185.7236	185.7236	0.0518	0.0000	187.0188		

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.3800e-003	9.2000e-004	0.0133	2.0000e-005	2.4100e-003	3.0000e-005	2.4400e-003	6.4000e-004	3.0000e-005	6.7000e-004	0.0000	2.1824	2.1824	6.0000e-005	0.0000	2.1840	
Total	2.3800e-003	9.2000e-004	0.0133	2.0000e-005	2.4100e-003	3.0000e-005	2.4400e-003	6.4000e-004	3.0000e-005	6.7000e-004	0.0000	2.1824	2.1824	6.0000e-005	0.0000	2.1840	

3.8 Building Interior - 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	20.0815					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569	
Total	20.0833	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1700e-003	1.2600e-003	0.0179	3.0000e-005	2.9800e-003	4.0000e-005	3.0200e-003	8.0000e-004	4.0000e-005	8.3000e-004	0.0000	2.8109	2.8109	9.0000e-005	0.0000	2.8131
Total	3.1700e-003	1.2600e-003	0.0179	3.0000e-005	2.9800e-003	4.0000e-005	3.0200e-003	8.0000e-004	4.0000e-005	8.3000e-004	0.0000	2.8109	2.8109	9.0000e-005	0.0000	2.8131

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	20.0815					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0000e-004	1.2900e-003	0.0183	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	2.5533	2.5533	1.4000e-004	0.0000	0.0000	2.5568
Total	20.0818	1.2900e-003	0.0183	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	3.1700e-003	1.2600e-003	0.0179	3.0000e-005	2.9800e-003	4.0000e-005	3.0200e-003	8.0000e-004	4.0000e-005	8.3000e-004	0.0000	2.8109	2.8109	9.0000e-005	0.0000	2.8131	
Total	3.1700e-003	1.2600e-003	0.0179	3.0000e-005	2.9800e-003	4.0000e-005	3.0200e-003	8.0000e-004	4.0000e-005	8.3000e-004	0.0000	2.8109	2.8109	9.0000e-005	0.0000	2.8131	

Attachment 3: EMFAC2017 Emissions Modeling

City View Plaza

Construction Truck Traffic - Traffic Volumes

Truck Traffic Trips

Year	Total	Per route
2020	8,533	853
2021	339,638	33,964
2022	248,753	24,875
2023	229,278	22,928
2024	229,278	22,928
2025	229,278	22,928

City View Plaza

Construction Truck Traffic - Running Emissions

Mix of 30% MHDT and 70%HHDT

from CalEEmod	Worker	Vendor	Haul	Days	0.754		
					Vendor Total	Haul total	Haul Trips
Demolition	63	0	26	262	0	134180	6709
Site Preperation	38	0	0	45	0	0	0
Shoring	93	0	0	194	0	0	0
Grading	38	0	359	362	0	2596720	129836
Building Exterior	2005	926	0	1238	8368632.4	0	
Paving/Hardscape	23	0	0	465	0	0	
					8,368,632	2,730,900	
Truck Traffic Trip	8533	339638	248753	229278	229278	229278	0
Truck Traffic (VMT)	134,180	3,880,938	2,063,234	1,673,726	1,673,726	1,673,726	-
Total	2020	2021	2022	2023	2024	2025	2026
134,180	134,180						
-	-						
2,596,720		2,207,212	389,508				
8,368,632		1,673,726	1,673,726	1,673,726	1,673,726	1,673,726	
11,099,532							

Year	Running Emissions Emissions (in Tons)					Onsite PM10ex	PM2.5tot	with Start/Idle	
	ROG	NOx	PM10	PM2.5	GHG				
2021	0.69	16.33	0.77	0.45	6614	0.000	0.004	0.002	0.006
2022	0.21	6.93	0.33	0.17	3308	0.001	0.002	0.002	0.003
2023	0.05	4.25	0.24	0.11	2562	0.001	0.002	0.001	0.002
2024	0.05	4.26	0.24	0.11	2521	0.000	0.002	0.001	0.002
2025	0.05	4.24	0.24	0.11	2474	0.000	0.002	0.001	0.002
	1.05	36.01	1.81	0.96	17478.63				
Mitigated								remember to add start/Idle	
2021		9.47							
2022		4.87							
2023		3.89							
2024		3.94							
2025		3.95							

City View Plaza

Construction Truck Traffic - Start/Idle Emissions

Mix of 30% MHDT and 70%HHDT

from CalEEmod	Worker/day	Vendor/day	Haul - total	Days	Project Totals		
					Vendor Total	Haul total	Worker Total
Demolition	63	0	33	262	-	8,533	16,506
Site Preparation	38	0	0	45	-	-	1,710
Shoring	93	0	0	194	-	-	18,042
Grading	38	0	359	362	-	129,836	13,756
Building Exterior	2004	926	0	1238	1,146,388	-	2,480,952
Paving/Hardscape	23	0	0	465	-	-	10,695
				Total:	1,146,388	138,369	2,541,661

Worker Traffic

Truck Traffic	8,533	339,638	248,753	229,278	229,278	229,278	-
	2020	2021	2022	2023	2024	2025	2026
Total	8,533	8,533					
-	-						
129,836		110,361	19,475				
1,146,388		229,278	229,278	229,278	229,278	229,278	
-							
1,284,757	8,533	339,638	248,753	229,278	229,278	229,278	-

Year	Start/Idle Emissions Emissions (in Tons)				
	ROG	NOx	PM10	PM2.5	GHG
2021	0.13	1.68	0.00209	0.00200	240
2022	0.09	1.18	0.00067	0.00064	173
2023	0.08	1.00	0.00041	0.00040	154
2024	0.08	0.99	0.00039	0.00038	151
2025	0.08	0.98	0.00037	0.00036	149
	0.45	5.82	0.00	0.00	866.65
Mitigated					
2021		2.36			
2022		1.67			
2023		1.51			
2024		1.50			
2025		1.49			
		8.53			

Attachment 4: Health Risk Calculations for Construction and Operation

Construction Risk Emissions

City View, San Jose, CA

DPM Construction Emissions and Modeling Emission Rates

Construction		DPM (ton/year)	Source	No.	DPM Emissions			Point Source (g/s)	Emissions per Point Source
Year	Activity				Sources	(lb/yr)	(lb/hr)		
2020	Construction	1.1547	Point	209	2309.3	0.26362	3.32E-02	1.59E-04	
2021	Construction	0.9930	Point	209	1985.9	0.22670	2.86E-02	1.37E-04	
2022	Construction	0.6342	Point	209	1268.3	0.14479	1.82E-02	8.73E-05	
2023	Construction	0.4584	Point	209	916.9	0.10467	1.32E-02	6.31E-05	
2024	Construction	0.4395	Point	209	879.0	0.10034	1.26E-02	6.05E-05	
2025	Construction	0.3499	Point	209	699.7	0.07988	1.01E-02	4.82E-05	
Total		4.0296		1254	8059	0.9200			

Construction Hours

hr/day = 24
 days/yr = 365
 hours/year = 8760

PM2.5 Fugitive Construction Emissions and Modeling Emission Rates

Construction		Area Source	(ton/year)	PM2.5 Emissions			Modeled Area (m ²)	Emission Rate g/s/m ²	DPM
Year	Activity			(lb/yr)	(lb/hr)	(g/s)			
2020	Construction	FUG	0.7148	1429.7	0.16320	2.06E-02	31,406	6.55E-07	
2021	Construction	FUG	0.0224	44.9	0.00512	6.45E-04	31,406	2.06E-08	
2022	Construction	FUG	0.0748	149.6	0.01708	2.15E-03	31,406	6.85E-08	
2023	Construction	FUG	0.0641	128.3	0.01464	1.84E-03	31,406	5.87E-08	
2024	Construction	FUG	0.0657	131.4	0.01500	1.89E-03	31,406	6.02E-08	
2025	Construction	FUG	0.0568	113.6	0.01297	1.63E-03	31,406	5.20E-08	
Total			0.9987	1997	0.2280	0.0287			

Construction Hours

hr/day = 24
 days/yr = 365
 hours/year = 8760

Unmitigated Project Risks				2020 CON	2021 CON	2022 CON	2023 CON	2024 CON	2025 CON	2026 GEN	2026 Roads	2026 ROADS	2026 ROADS	Unmitigated Project Total Risk								
Receptor				2020	2021	2022	2023	2024	2025	2026	2026	2026	2026	2020-2025	2020-2025	2026-2049	2026-2049	2026-2049	2026-2049	2026-2049	Total	
No.	UTM-X	UTM-Y	Flagpole	Construction							GEN	Roads	Roads	Roads	Total Con	Haul Trucks	GEN	DPM Roads	Exhaust TOG Roads	EVAP TOG Roads	Total Road	Total
(m)	(m)	(m)	Height (m)	DPM	DPM	DPM	DPM	DPM	DPM	DPM	Exhaust TOG	Evap TOG	Risk	Risk	Risk						Risk	Risk
50	598123.1	4132427.03	7.8	0.67985	0.58522	0.38047	0.27687	0.26572	0.21191	0.00135	0.00111	0.07581	0.09068	246.38	0.10	0.40	0.33	0.13	0.01	0.47	247.35	

Mitigated Project Risks				2020 CON	2021 CON	2022 CON	2023 CON	2024 CON	2025 CON	2026 GEN	2026 Roads	2026 ROADS	2026 ROADS	Mitigated Project Total Risk								
Receptor				2020	2021	2022	2023	2024	2025	2026	2026	2026	2026	2020-2025	2020-2025	2026-2049	2026	2026	2026	2026	2026	2026-2049
No.	UTM-X	UTM-Y	Flagpole	Construction							GEN	Roads	Roads	Roads	Total Con	Haul Trucks	GEN	DPM Roads	Exhaust TOG Roads	EVAP TOG Roads	Total Road	Total
(m)	(m)	(m)	Height (m)	DPM	DPM	DPM	DPM	DPM	DPM	DPM	Exhaust TOG	Evap TOG	Risk	Risk	Risk	Risk	Risk	Risk	Risk	Risk	Risk	Risk
50	598123.1	4132427.03	7.8	0.03587	0.03581	0.02046	0.01562	0.017	0.01558	0.00135	0.00111	0.07581	0.09068	14.04	0.10	0.40	0.33	0.13	0.01	0.47	15.01	

City View Plaza, San Jose CA

Maximum DPM Cancer Risk Calculations From Construction - Unmitigated Emissions

Impacts at MEI (Greyhound Residential Development) - 7.8 meter

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)⁻¹

ASF = Age sensitivity factor for specified age group

ED = Exposure duration (years)

AT = Averaging time for lifetime cancer risk (years)

FAH = Fraction of time spent at home (unless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁻⁶

Where: C_{air} = concentration in air (µg/m³)

DBR = daily breathing rate (L/kg body weight-day)

A = Inhalation absorption factor

EF = Exposure frequency (days/year)

10⁻⁶ = Conversion factor

Values

Parameter	Infant/Child				Adult
	Age -->	3rd Trimester	0 - 2	2 - 9	16 - 30
ASF =	10	10	3	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	631	572	261
A =	1	1	1	1	1
EF =	350	350	350	350	350
AT =	70	70	70	70	70
FAH =	1.00	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Infant/Child - Exposure Information		Cancer Risk (per million)	Adult - Exposure Information		Adult Cancer Risk (per million)	Maximum			
		DPM Conc (ug/m3)			Modeled			Hazard Index	Total PM2.5		
		Year	Annual		Year	Annual					
0	0.25	-0.25 - 0*	2020	0.6799	10	9.25	2020	0.6799	-		
1	1	0 - 1	2020	0.6799	10	111.66	2020	0.6799	1 1.95		
2	1	1 - 2	2021	0.5852	10	96.12	2021	0.5852	1 1.68		
3	1	2 - 3	2022	0.3805	3	9.84	2022	0.3805	1 1.09		
4	1	3 - 4	2023	0.2769	3	7.16	2023	0.2769	1 0.79		
5	1	4 - 5	2024	0.2657	3	6.87	2024	0.2657	1 0.76		
6	1	5 - 6	2025	0.2119	3	5.48	2025	0.2119	1 0.61		
7	1	6 - 7	0.0000	3	0.00	0.0000	1	0.00			
8	1	7 - 8	0.0000	3	0.00	0.0000	1	0.00			
9	1	8 - 9	0.0000	3	0.00	0.0000	1	0.00			
10	1	9 - 10	0.0000	3	0.00	0.0000	1	0.00			
11	1	10 - 11	0.0000	3	0.00	0.0000	1	0.00			
12	1	11 - 12	0.0000	3	0.00	0.0000	1	0.00			
13	1	12 - 13	0.0000	3	0.00	0.0000	1	0.00			
14	1	13 - 14	0.0000	3	0.00	0.0000	1	0.00			
15	1	14 - 15	0.0000	3	0.00	0.0000	1	0.00			
16	1	15 - 16	0.0000	3	0.00	0.0000	1	0.00			
17	1	16-17	0.0000	1	0.00	0.0000	1	0.00			
18	1	17-18	0.0000	1	0.00	0.0000	1	0.00			
19	1	18-19	0.0000	1	0.00	0.0000	1	0.00			
20	1	19-20	0.0000	1	0.00	0.0000	1	0.00			
21	1	20-21	0.0000	1	0.00	0.0000	1	0.00			
22	1	21-22	0.0000	1	0.00	0.0000	1	0.00			
23	1	22-23	0.0000	1	0.00	0.0000	1	0.00			
24	1	23-24	0.0000	1	0.00	0.0000	1	0.00			
25	1	24-25	0.0000	1	0.00	0.0000	1	0.00			
26	1	25-26	0.0000	1	0.00	0.0000	1	0.00			
27	1	26-27	0.0000	1	0.00	0.0000	1	0.00			
28	1	27-28	0.0000	1	0.00	0.0000	1	0.00			
29	1	28-29	0.0000	1	0.00	0.0000	1	0.00			
30	1	29-30	0.0000	1	0.00	0.0000	1	0.00			
Total Increased Cancer Risk				246.38			6.9				

* Third trimester of pregnancy

City View Plaza, San Jose CA

**Maximum DPM Cancer Risk Calculations From Construction Hauling - Unmitigated Emissions
Impacts at MEI (Greyhound Residential Development) - 7.8 meter**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)⁻¹

ASF = Age sensitivity factor for specified age group

ED = Exposure duration (years)

AT = Averaging time for lifetime cancer risk (years)

FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁶

Where: C_{air} = concentration in air (µg/m³)

DBR = daily breathing rate (L/kg body weight-day)

A = Inhalation absorption factor

EF = Exposure frequency (days/year)

10⁶ = Conversion factor

Values

Age -->	Infant/Child					Adult
	3rd Trimester	0 - 2	2 - 9	2 - 16	16 - 30	
Parameter						
ASF =	10	10	3	3	1	
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00	1.10E+00	
DBR* =	361	1090	631	572	261	
A =	1	1	1	1	1	
EF =	350	350	350	350	350	
AT =	70	70	70	70	70	
FAH =	1.00	1.00	1.00	1.00	0.73	

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Infant/Child - Exposure Information			Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Maximum		
		Age	DPM Conc (ug/m3)			Modeled	Age Sensitivity Factor		Hazard Index	Total PM2.5	
			Year	Annual		Year	Annual				
0	0.25	-0.25 - 0*	2020	0.0000	10	0.00	2020	0.00003	-	-	
1	1	0 - 1	2020	0.0000	10	0.00	2020	0.00003	1	0.00	
2	1	1 - 2	2021	0.0004	10	0.06	2021	0.0004	1	0.00	
3	1	2 - 3	2022	0.0005	3	0.01	2022	0.0005	1	0.00	
4	1	3 - 4	2023	0.0002	3	0.01	2023	0.0002	1	0.00	
5	1	4 - 5	2024	0.0003	3	0.01	2024	0.0003	1	0.00	
6	1	5 - 6	2025	0.0002	3	0.01	2025	0.0002	1	0.00	
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00	
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00	
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00	
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00	
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00	
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00	
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00	
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00	
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00	
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00	
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00	
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00	
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00	
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00	
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00	
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00	
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00	
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00	
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00	
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00	
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00	
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00	
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00	
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00	
Total Increased Cancer Risk					0.1				0.005		

* Third trimester of pregnancy

City View Plaza, San Jose CA

**Maximum DPM Cancer Risk Calculations From Project Generators
Impacts at MEI (Greyhound Residential Development) -7.8 meter**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)⁻¹

ASF = Age sensitivity factor for specified age group

ED = Exposure duration (years)

AT = Averaging time for lifetime cancer risk (years)

FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁶

Where: C_{air} = concentration in air (µg/m³)

DBR = daily breathing rate (L/kg body weight-day)

A = Inhalation absorption factor

EF = Exposure frequency (days/year)

10⁶ = Conversion factor

Values

Parameter	Age -->	Infant/Child			Adult
		3rd Trimester	0 - 2	2 - 9	16 - 30
ASF =		10	10	3	3
CPF =		1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =		361	1090	631	572
A =		1	1	1	1
EF =		350	350	350	350
AT =		70	70	70	70
FAH =		1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Infant/Child - Exposure Information			Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Maximum		
		Age	DPM Conc (ug/m3)			Modeled	Age	Sensitivity Factor	Hazard Index	Total PM2.5	
			Year	Annual		DPM Conc (ug/m3)	Year	Annual			
0	0.25	-0.25 - 0*	2020	0.0000	10	0.00	2020	0.0000	-	-	
1	1	0 - 1	2020	0.0000	10	0.00	2020	0.0000	1	0.00	
2	1	1 - 2	2021	0.0000	10	0.00	2021	0.0000	1	0.00	
3	1	2 - 3	2022	0.0000	3	0.00	2022	0.0000	1	0.00	
4	1	3 - 4	2023	0.0000	3	0.00	2023	0.0000	1	0.00	
5	1	4 - 5	2024	0.0000	3	0.00	2024	0.0000	1	0.00	
6	1	5 - 6	2025	0.0000	3	0.00	2025	0.0000	1	0.00	
7	1	6 - 7	2026	0.0014	3	0.03	2026	0.0014	1	0.00	
8	1	7 - 8	2027	0.0014	3	0.03	2027	0.0014	1	0.00	
9	1	8 - 9	2028	0.0014	3	0.03	2028	0.0014	1	0.00	
10	1	9 - 10	2029	0.0014	3	0.03	2029	0.0014	1	0.00	
11	1	10 - 11	2030	0.0014	3	0.03	2030	0.0014	1	0.00	
12	1	11 - 12	2031	0.0014	3	0.03	2031	0.0014	1	0.00	
13	1	12 - 13	2032	0.0014	3	0.03	2032	0.0014	1	0.00	
14	1	13 - 14	2033	0.0014	3	0.03	2033	0.0014	1	0.00	
15	1	14 - 15	2034	0.0014	3	0.03	2034	0.0014	1	0.00	
16	1	15 - 16	2035	0.0014	3	0.03	2035	0.0014	1	0.00	
17	1	16-17	2036	0.0014	1	0.00	2036	0.0014	1	0.00	
18	1	17-18	2037	0.0014	1	0.00	2037	0.0014	1	0.00	
19	1	18-19	2038	0.0014	1	0.00	2038	0.0014	1	0.00	
20	1	19-20	2039	0.0014	1	0.00	2039	0.0014	1	0.00	
21	1	20-21	2040	0.0014	1	0.00	2040	0.0014	1	0.00	
22	1	21-22	2041	0.0014	1	0.00	2041	0.0014	1	0.00	
23	1	22-23	2042	0.0014	1	0.00	2042	0.0014	1	0.00	
24	1	23-24	2043	0.0014	1	0.00	2043	0.0014	1	0.00	
25	1	24-25	2044	0.0014	1	0.00	2044	0.0014	1	0.00	
26	1	25-26	2045	0.0014	1	0.00	2045	0.0014	1	0.00	
27	1	26-27	2046	0.0014	1	0.00	2046	0.0014	1	0.00	
28	1	27-28	2047	0.0014	1	0.00	2047	0.0014	1	0.00	
29	1	28-29	2048	0.0014	1	0.00	2048	0.0014	1	0.00	
30	1	29-30	2049	0.0014	1	0.00	2049	0.0014	1	0.00	
Total Increased Cancer Risk					0.4				0.09		

* Third trimester of pregnancy

City View Plaza, San Jose CA

Maximum DPM Cancer Risk Calculations From - Project Traffic Emissions Impacts at Off-Site Receptors

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)⁻¹

ASF = Age sensitivity factor for specified age group

ED = Exposure duration (years)

AT = Averaging time for lifetime cancer risk (years)

FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁻⁶

Where: C_{air} = concentration in air ($\mu\text{g}/\text{m}^3$)

DBR = daily breathing rate (L/kg body weight-day)

A = Inhalation absorption factor

EF = Exposure frequency (days/year)

10⁻⁶ = Conversion factor

Cancer Potency Factors (mg/kg-day)⁻¹

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

Parameter	Infant/Child					Adult	
	Age -->	3rd Trimester	0 - 2	2 - 9	2 - 16	16 - 30	
ASF =		10	10	3	3	1	
CPF =		1.10E+00	1.10E+00	1.10E+00	1.10E+00	1.10E+00	
DBR* =		361	1090	631	572	261	
A =		1	1	1	1	1	
EF =		350	350	350	350	350	
AT =		70	70	70	70	70	
FAH =		1.00	1.00	1.00	1.00	0.73	

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Duration (years)	Maximum - Exposure Information			Concentration (ug/m ³)			Cancer Risk (per million)			TOTAL	
		Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG		DPM	Exhaust TOG	Evaporative TOG		
0	0.25	-0.25 - 0*	2020	10	0.000	0.000	0.000	0.00	0.00	0.00	0.00	
1	1	0 - 1	2020	10	0.000	0.000	0.000	0.00	0.00	0.00	0.00	
2	1	1 - 2	2021	10	0.000	0.000	0.000	0.00	0.00	0.00	0.00	
3	1	2 - 3	2022	3	0.000	0.000	0.000	0.00	0.00	0.00	0.00	
4	1	3 - 4	2023	3	0.000	0.000	0.000	0.00	0.00	0.00	0.00	
5	1	4 - 5	2024	3	0.000	0.000	0.000	0.00	0.00	0.00	0.00	
6	1	5 - 6	2025	3	0.000	0.000	0.000	0.00	0.00	0.00	0.00	
7	1	6 - 7	2026	3	0.001	0.076	0.091	0.03	0.01	0.00	0.04	
8	1	7 - 8	2027	3	0.001	0.076	0.091	0.03	0.01	0.00	0.04	
9	1	8 - 9	2028	3	0.001	0.076	0.091	0.03	0.01	0.00	0.04	
10	1	9 - 10	2029	3	0.001	0.076	0.091	0.03	0.01	0.00	0.04	
11	1	10 - 11	2030	3	0.001	0.076	0.091	0.03	0.01	0.00	0.04	
12	1	11 - 12	2031	3	0.001	0.076	0.091	0.03	0.01	0.00	0.04	
13	1	12 - 13	2032	3	0.001	0.076	0.091	0.03	0.01	0.00	0.04	
14	1	13 - 14	2033	3	0.001	0.076	0.091	0.03	0.01	0.00	0.04	
15	1	14 - 15	2034	3	0.001	0.076	0.091	0.03	0.01	0.00	0.04	
16	1	15 - 16	2035	3	0.001	0.076	0.091	0.03	0.01	0.00	0.04	
17	1	16-17	2036	1	0.001	0.076	0.091	0.00	0.00	0.00	0.00	
18	1	17-18	2037	1	0.001	0.076	0.091	0.00	0.00	0.00	0.00	
19	1	18-19	2038	1	0.001	0.076	0.091	0.00	0.00	0.00	0.00	
20	1	19-20	2039	1	0.001	0.076	0.091	0.00	0.00	0.00	0.00	
21	1	20-21	2040	1	0.001	0.076	0.091	0.00	0.00	0.00	0.00	
22	1	21-22	2041	1	0.001	0.076	0.091	0.00	0.00	0.00	0.00	
23	1	22-23	2042	1	0.001	0.076	0.091	0.00	0.00	0.00	0.00	
24	1	23-24	2043	1	0.001	0.076	0.091	0.00	0.00	0.00	0.00	
25	1	24-25	2044	1	0.001	0.076	0.091	0.00	0.00	0.00	0.00	
26	1	25-26	2045	1	0.001	0.076	0.091	0.00	0.00	0.00	0.00	
27	1	26-27	2046	1	0.001	0.076	0.091	0.00	0.00	0.00	0.00	
28	1	27-28	2047	1	0.001	0.076	0.091	0.00	0.00	0.00	0.00	
29	1	28-29	2048	1	0.001	0.076	0.091	0.00	0.00	0.00	0.00	
30	1	29-30	2049	1	0.001	0.076	0.091	0.00	0.00	0.00	0.00	
Total Increased Cancer Risk								0.33	0.13	0.01	0.47	

* Third trimester of pregnancy

City View Plaza, San Jose CA

Maximum DPM Cancer Risk Calculations From Construction - Mitigated Emissions Impacts at MEI (Greyhound Residential Development) - 7.8 meter

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)⁻¹

ASF = Age sensitivity factor for specified age group

ED = Exposure duration (years)

AT = Averaging time for lifetime cancer risk (years)

FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁻⁶

Where: C_{air} = concentration in air (µg/m³)

DBR = daily breathing rate (L/kg body weight-day)

A = Inhalation absorption factor

EF = Exposure frequency (days/year)

10⁻⁶ = Conversion factor

Values

Parameter	Infant/Child			Adult	
	Age -->	3rd Trimester	0 - 2	2 - 9	16 - 30
ASF =	10	10	3	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	631	572	261
A =	1	1	1	1	1
EF =	350	350	350	350	350
AT =	70	70	70	70	70
FAH =	1.00	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information		Cancer Risk (per million)	Adult - Exposure Information		Adult Cancer Risk (per million)	Maximum			
			DPM Conc (ug/m3)			Modeled	Age Sensitivity Factor		Hazard Index	Total PM2.5		
			Year	Annual		Year	Annual					
0	0.25	-0.25 - 0*	2020	0.0362	10	0.0362	-	-	0.007	0.510		
1	1	0 - 1	2020	0.0362	10	5.94	2020	0.0362	1	0.10		
2	1	1 - 2	2021	0.0367	10	6.03	2021	0.0367	1	0.11		
3	1	2 - 3	2022	0.0277	3	0.72	2022	0.0277	1	0.08		
4	1	3 - 4	2023	0.0227	3	0.59	2023	0.0227	1	0.07		
5	1	4 - 5	2024	0.0241	3	0.62	2024	0.0241	1	0.07		
6	1	5 - 6	2025	0.0216	3	0.56	2025	0.0216	1	0.06		
7	1	6 - 7	0.0000	0.0000	3	0.00	0.0000	1	0.00			
8	1	7 - 8	0.0000	0.0000	3	0.00	0.0000	1	0.00			
9	1	8 - 9	0.0000	0.0000	3	0.00	0.0000	1	0.00			
10	1	9 - 10	0.0000	0.0000	3	0.00	0.0000	1	0.00			
11	1	10 - 11	0.0000	0.0000	3	0.00	0.0000	1	0.00			
12	1	11 - 12	0.0000	0.0000	3	0.00	0.0000	1	0.00			
13	1	12 - 13	0.0000	0.0000	3	0.00	0.0000	1	0.00			
14	1	13 - 14	0.0000	0.0000	3	0.00	0.0000	1	0.00			
15	1	14 - 15	0.0000	0.0000	3	0.00	0.0000	1	0.00			
16	1	15 - 16	0.0000	0.0000	3	0.00	0.0000	1	0.00			
17	1	16-17	0.0000	0.0000	1	0.00	0.0000	1	0.00			
18	1	17-18	0.0000	0.0000	1	0.00	0.0000	1	0.00			
19	1	18-19	0.0000	0.0000	1	0.00	0.0000	1	0.00			
20	1	19-20	0.0000	0.0000	1	0.00	0.0000	1	0.00			
21	1	20-21	0.0000	0.0000	1	0.00	0.0000	1	0.00			
22	1	21-22	0.0000	0.0000	1	0.00	0.0000	1	0.00			
23	1	22-23	0.0000	0.0000	1	0.00	0.0000	1	0.00			
24	1	23-24	0.0000	0.0000	1	0.00	0.0000	1	0.00			
25	1	24-25	0.0000	0.0000	1	0.00	0.0000	1	0.00			
26	1	25-26	0.0000	0.0000	1	0.00	0.0000	1	0.00			
27	1	26-27	0.0000	0.0000	1	0.00	0.0000	1	0.00			
28	1	27-28	0.0000	0.0000	1	0.00	0.0000	1	0.00			
29	1	28-29	0.0000	0.0000	1	0.00	0.0000	1	0.00			
30	1	29-30	0.0000	0.0000	1	0.00	0.0000	1	0.00			
Total Increased Cancer Risk					14.94				0.5			

* Third trimester of pregnancy

Construction Truck Traffic Emissions

City View Plaza - San Jose

2020 Construction Truck Emissions - DPM

Truck Exhaust DPM Emissions

Road Segment	Road Segment ID	Road Segment Length (ft)	Road Segment Length (m)	Modeled Road Width (ft)	Initial ^a Vertical Height (m)	Initial ^a Vertical Dispersion (m)	Release ^a Height (m)	Percent of Daily Trucks (%)	No. of Daily Trucks	PM10 Exhaust ^b Emission Factor (g/veh-mi)	Truck Travel DPM Emissions			
											Daily (g/day)	Daily (lb/day)	Hourly (lb/hr)	Annual (lb/year)
Truck Arrival Routes														
Route 1	DPM_IN_1	404	399	24	6.8	3.16	3.4	10%	3	0.063	0.016	0.00003	1.44E-06	0.00908
Route 2	DPM_IN_2	519	489	24	6.8	3.16	3.4	10%	3	0.063	0.020	0.00004	1.85E-06	0.01166
Route 3	DPM_IN_3	820	250	24	6.8	3.16	3.4	10%	3	0.063	0.032	0.00007	2.93E-06	0.01840
Route 4	DPM_IN_4	1034	315	24	6.8	3.16	3.4	10%	3	0.063	0.040	0.00009	3.69E-06	0.02320
Route 5	DPM_IN_5	489	149	24	6.8	3.16	3.4	10%	3	0.063	0.019	0.00004	1.75E-06	0.01098
Truck Departure Routes														
Route 6	DPM_OUT_6	292	89	24	6.8	3.16	3.4	10%	3	0.063	0.011	0.00003	1.04E-06	0.00656
Route 7	DPM_OUT_7	384	117	24	6.8	3.16	3.4	10%	3	0.063	0.015	0.00003	1.37E-06	0.00861
Route 8	DPM_OUT_8	384	117	24	6.8	3.16	3.4	10%	3	0.063	0.015	0.00003	1.37E-06	0.00861
Route 9	DPM_OUT_9	404	123	24	6.8	3.16	3.4	10%	3	0.063	0.016	0.00003	1.44E-06	0.00906
Route 10	DPM_OUT_10	318	97	24	6.8	3.16	3.4	10%	3	0.063	0.012	0.00003	1.13E-06	0.00713

^a Line-area source parameters based on EPA 2015

^b Emission factor from EMFAC2017 for running PM10 exhaust emissions.

Truck Fugitive PM2.5 Emissions

Road Segment	Road Segment ID	Road Segment Length (ft)	Road Segment Length (m)	Modeled ^a Road Width (ft)	Initial ^a Vertical Height (m)	Initial ^a Vertical Dispersion (m)	Release ^a Height (m)	Percent of Daily Trucks (%)	No. of Daily Trucks	Fugitive PM10 ^b Emission Factor (g/veh-mi)	Truck Travel DPM Emissions			
											Daily (g/day)	Daily (lb/day)	Hourly (lb/hr)	Annual (lb/year)
Truck Arrival Routes														
Route 1	FUG_IN_1	404	399	24	2.6	1.21	1.3	10%	3	0.103	0.026	0.00006	2.36E-06	0.015
Route 2	FUG_IN_2	519	489	24	2.6	1.21	1.3	10%	3	0.103	0.033	0.00007	3.03E-06	0.019
Route 3	FUG_IN_3	820	250	24	2.6	1.21	1.3	10%	3	0.103	0.052	0.00011	4.78E-06	0.030
Route 4	FUG_IN_4	1034	315	24	2.6	1.21	1.3	10%	3	0.103	0.066	0.00014	6.03E-06	0.038
Route 5	FUG_IN_5	489	149	24	2.6	1.21	1.3	10%	3	0.103	0.031	0.00007	2.86E-06	0.018
Truck Departure Routes														
Route 6	FUG_OUT_6	292	89	24	2.6	1.21	1.3	10%	3	0.103	0.019	0.00004	1.71E-06	0.011
Route 7	FUG_OUT_7	384	117	24	2.6	1.21	1.3	10%	3	0.103	0.024	0.00005	2.24E-06	0.014
Route 8	FUG_OUT_8	384	117	24	2.6	1.21	1.3	10%	3	0.103	0.024	0.00005	2.24E-06	0.014
Route 9	FUG_OUT_9	404	123	24	2.6	1.21	1.3	10%	3	0.103	0.026	0.00006	2.36E-06	0.015
Route 10	FUG_OUT_10	318	97	24	2.6	1.21	1.3	10%	3	0.103	0.020	0.00004	1.85E-06	0.012

^a Line-area source parameters based on EPA 2015

^b Emission factor from EMFAC2017 for PM2.5 exhaust, tire wear, and brake wear emissions.

Truck Information

Total Trucks per year = 8,533

Total Trucks per day = 33

Operation Days = 262

Truck Hours (hrs/day) = 24

Truck Emission Information

Truck PM10 (DPM) exhaust emission factor (g/VMT) 0.063

Truck fugitive PM2.5 emissions (g/VMT) 0.103

References

EPA 2015 - *Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 nonattainment and maintenance Areas*, November 2015

City View Plaza - San Jose
2021 Construction Truck Emissions - DPM

Truck Exhaust DPM Emissions

Road Segment	Road Segment ID	Road Segment Length (ft)	Road Segment Length (m)	Modeled Road Width (ft)	Initial ^a Vertical Height (m)	Initial ^a Vertical Dispersion (m)	Release ^a Height (m)	Percent of Daily Trucks (%)	No. of Daily Trucks	PM10 Exhaust ^b Emission Factor (g/veh-mi)	Truck Travel DPM Emissions			
											Daily (g/day)	Daily (lb/day)	Hourly (lb/hr)	Annual (lb/year)
Truck Arrival Routes														
Route 1	DPM_IN_1	404	399	24	6.8	3.16	3.4	10%	35	0.063	0.171	0.00038	1.57E-05	0.12
Route 2	DPM_IN_2	519	489	24	6.8	3.16	3.4	10%	35	0.063	0.219	0.00048	2.01E-05	0.15
Route 3	DPM_IN_3	820	250	24	6.8	3.16	3.4	10%	35	0.063	0.346	0.00076	3.18E-05	0.24
Route 4	DPM_IN_4	1034	315	24	6.8	3.16	3.4	10%	35	0.063	0.436	0.00096	4.01E-05	0.30
Route 5	DPM_IN_5	489	149	24	6.8	3.16	3.4	10%	35	0.063	0.207	0.00046	1.90E-05	0.14
Truck Departure Routes														
Route 6	DPM_OUT_6	292	89	24	6.8	3.16	3.4	10%	35	0.063	0.123	0.00027	1.13E-05	0.08
Route 7	DPM_OUT_7	384	117	24	6.8	3.16	3.4	10%	35	0.063	0.162	0.00036	1.49E-05	0.11
Route 8	DPM_OUT_8	384	117	24	6.8	3.16	3.4	10%	35	0.063	0.162	0.00036	1.49E-05	0.11
Route 9	DPM_OUT_9	404	123	24	6.8	3.16	3.4	10%	35	0.063	0.170	0.00038	1.57E-05	0.12
Route 10	DPM_OUT_10	318	97	24	6.8	3.16	3.4	10%	35	0.063	0.134	0.00030	1.23E-05	0.09

^a Line-area source parameters based on EPA 2015

^b Emission factor from EMFAC2017 for running PM10 exhaust emissions.

Truck Fugitive PM2.5 Emissions

Road Segment	Road Segment ID	Road Segment Length (ft)	Road Segment Length (m)	Modeled Road Width (ft)	Initial ^a Vertical Height (m)	Initial ^a Vertical Dispersion (m)	Release ^a Height (m)	Percent of Daily Trucks (%)	No. of Daily Trucks	Fugitive PM10 ^b Emission Factor (g/veh-mi)	Truck Travel DPM Emissions			
											Daily (g/day)	Daily (lb/day)	Hourly (lb/hr)	Annual (lb/year)
Truck Arrival Routes														
Route 1	FUG_IN_1	404	399	24	2.6	1.21	1.3	10%	35	0.103	0.279	0.00062	2.56E-05	0.19
Route 2	FUG_IN_2	519	489	24	2.6	1.21	1.3	10%	35	0.103	0.358	0.00079	3.29E-05	0.25
Route 3	FUG_IN_3	820	250	24	2.6	1.21	1.3	10%	35	0.103	0.566	0.00125	5.20E-05	0.39
Route 4	FUG_IN_4	1034	315	24	2.6	1.21	1.3	10%	35	0.103	0.713	0.00157	6.55E-05	0.49
Route 5	FUG_IN_5	489	149	24	2.6	1.21	1.3	10%	35	0.103	0.338	0.00074	3.10E-05	0.23
Truck Departure Routes														
Route 6	FUG_OUT_6	292	89	24	2.6	1.21	1.3	10%	35	0.103	0.202	0.00044	1.85E-05	0.14
Route 7	FUG_OUT_7	384	117	24	2.6	1.21	1.3	10%	35	0.103	0.265	0.00058	2.43E-05	0.18
Route 8	FUG_OUT_8	384	117	24	2.6	1.21	1.3	10%	35	0.103	0.265	0.00058	2.43E-05	0.18
Route 9	FUG_OUT_9	404	123	24	2.6	1.21	1.3	10%	35	0.103	0.279	0.00061	2.56E-05	0.19
Route 10	FUG_OUT_10	318	97	24	2.6	1.21	1.3	10%	35	0.103	0.219	0.00048	2.01E-05	0.15

^a Line-area source parameters based on EPA 2015

^b Emission factor from EMFAC2017 for PM2.5 exhaust, tire wear, and brake wear emissions.

Truck Information

Total Trucks per year = 110,361

Total Trucks per day = 354

Operation Days = 312

Truck Hours (hrs/day) = 24

Truck Emission Information

Truck PM10 (DPM) exhaust emission factor (g/VMT) 0.063

Truck fugitive PM2.5 emissions (g/VMT) 0.103

References

EPA 2015 - *Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 nonattainment and maintenance Areas*, November 2015

City View Plaza - San Jose

2022 Construction Truck Emissions - DPM

Truck Exhaust DPM Emissions

Road Segment	Road Segment ID	Road Segment Length (ft)	Road Segment Length (m)	Modeled Road Width (ft)	Initial ^a Vertical Height (m)	Initial ^a Vertical Dispersion (m)	Release ^a Height (m)	Percent of Daily Trucks (%)	No. of Daily Trucks	PM10 Exhaust ^b Emission Factor (g/veh-mi)	Truck Travel DPM Emissions			
											Daily (g/day)	Daily (lb/day)	Hourly (lb/hr)	Annual (lb/year)
Truck Arrival Routes														
Route 1	DPM_IN_1	404	399	24	6.8	3.16	3.4	10%	80	0.035	0.214	0.00047	1.96E-05	0.15
Route 2	DPM_IN_2	519	489	24	6.8	3.16	3.4	10%	80	0.035	0.275	0.00061	2.52E-05	0.19
Route 3	DPM_IN_3	820	250	24	6.8	3.16	3.4	10%	80	0.035	0.433	0.00096	3.98E-05	0.30
Route 4	DPM_IN_4	1034	315	24	6.8	3.16	3.4	10%	80	0.035	0.546	0.00120	5.02E-05	0.38
Route 5	DPM_IN_5	489	149	24	6.8	3.16	3.4	10%	80	0.035	0.259	0.00057	2.38E-05	0.18
Truck Departure Routes														
Route 6	DPM_OUT_6	292	89	24	6.8	3.16	3.4	10%	80	0.035	0.154	0.00034	1.42E-05	0.11
Route 7	DPM_OUT_7	384	117	24	6.8	3.16	3.4	10%	80	0.035	0.203	0.00045	1.86E-05	0.14
Route 8	DPM_OUT_8	384	117	24	6.8	3.16	3.4	10%	80	0.035	0.203	0.00045	1.86E-05	0.14
Route 9	DPM_OUT_9	404	123	24	6.8	3.16	3.4	10%	80	0.035	0.213	0.00047	1.96E-05	0.15
Route 10	DPM_OUT_10	318	97	24	6.8	3.16	3.4	10%	80	0.035	0.168	0.00037	1.54E-05	0.12

^a Line-area source parameters based on EPA 2015

^b Emission factor from EMFAC2017 for running PM10 exhaust emissions.

Truck Fugitive PM2.5 Emissions

Road Segment	Road Segment ID	Road Segment Length (ft)	Road Segment Length (m)	Modeled ^a Road Width (ft)	Initial ^a Vertical Height (m)	Initial ^a Vertical Dispersion (m)	Release ^a Height (m)	Percent of Daily Trucks (%)	No. of Daily Trucks	Fugitive PM10 ^b Emission Factor (g/veh-mi)	Truck Travel DPM Emissions			
											Daily (g/day)	Daily (lb/day)	Hourly (lb/hr)	Annual (lb/year)
Truck Arrival Routes														
Route 1	FUG_IN_1	404	399	24	2.6	1.21	1.3	10%	80	0.076	0.464	0.00102	4.26E-05	0.32
Route 2	FUG_IN_2	519	489	24	2.6	1.21	1.3	10%	80	0.076	0.596	0.00131	5.48E-05	0.41
Route 3	FUG_IN_3	820	250	24	2.6	1.21	1.3	10%	80	0.076	0.941	0.00207	8.64E-05	0.65
Route 4	FUG_IN_4	1034	315	24	2.6	1.21	1.3	10%	80	0.076	1.186	0.00261	1.09E-04	0.82
Route 5	FUG_IN_5	489	149	24	2.6	1.21	1.3	10%	80	0.076	0.562	0.00124	5.16E-05	0.39
Truck Departure Routes														
Route 6	FUG_OUT_6	292	89	24	2.6	1.21	1.3	10%	80	0.076	0.335	0.00074	3.08E-05	0.23
Route 7	FUG_OUT_7	384	117	24	2.6	1.21	1.3	10%	80	0.076	0.440	0.00097	4.04E-05	0.30
Route 8	FUG_OUT_8	384	117	24	2.6	1.21	1.3	10%	80	0.076	0.440	0.00097	4.04E-05	0.30
Route 9	FUG_OUT_9	404	123	24	2.6	1.21	1.3	10%	80	0.076	0.463	0.00102	4.26E-05	0.32
Route 10	FUG_OUT_10	318	97	24	2.6	1.21	1.3	10%	80	0.076	0.365	0.00080	3.35E-05	0.25

^a Line-area source parameters based on EPA 2015

^b Emission factor from EMFAC2017 for PM2.5 exhaust, tire wear, and brake wear emissions.

Truck Information

Total Trucks per year = 248,753

Total Trucks per day = 797

Operation Days = 312

Truck Hours (hrs/day) = 24

Truck Emission Information

Truck PM10 (DPM) exhaust emission factor (g/VMT) 0.035

Truck fugitive PM2.5 emissons (g/VMT) 0.076

References

EPA 2015 - *Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 nonattainment and maintenance Areas*, November 2015

City View Plaza - San Jose

2023 Construction Truck Emissions - DPM

Truck Exhaust DPM Emissions

Road Segment	Road Segment ID	Road Segment Length (ft)	Road Segment Length (m)	Modeled Road Width (ft)	Initial ^a Vertical Height (m)	Initial ^a Vertical Dispersion (m)	Release ^a Height (m)	Percent of Daily Trucks (%)	No. of Daily Trucks	PM10 Exhaust ^b Emission Factor (g/veh-mi)	Truck Travel DPM Emissions			
											Daily (g/day)	Daily (lb/day)	Hourly (lb/hr)	Annual (lb/year)
Truck Arrival Routes														
Route 1	DPM_IN_1	404	399	24	6.8	3.16	3.4	10%	73	0.019	0.107	0.00024	9.82E-06	0.07
Route 2	DPM_IN_2	519	489	24	6.8	3.16	3.4	10%	73	0.019	0.137	0.00030	1.26E-05	0.09
Route 3	DPM_IN_3	820	250	24	6.8	3.16	3.4	10%	73	0.019	0.217	0.00048	1.99E-05	0.15
Route 4	DPM_IN_4	1034	315	24	6.8	3.16	3.4	10%	73	0.019	0.273	0.00060	2.51E-05	0.19
Route 5	DPM_IN_5	489	149	24	6.8	3.16	3.4	10%	73	0.019	0.129	0.00029	1.19E-05	0.09
Truck Departure Routes														
Route 6	DPM_OUT_6	292	89	24	6.8	3.16	3.4	10%	73	0.019	0.077	0.00017	7.10E-06	0.05
Route 7	DPM_OUT_7	384	117	24	6.8	3.16	3.4	10%	73	0.019	0.101	0.00022	9.32E-06	0.07
Route 8	DPM_OUT_8	384	117	24	6.8	3.16	3.4	10%	73	0.019	0.101	0.00022	9.32E-06	0.07
Route 9	DPM_OUT_9	404	123	24	6.8	3.16	3.4	10%	73	0.019	0.107	0.00024	9.81E-06	0.07
Route 10	DPM_OUT_10	318	97	24	6.8	3.16	3.4	10%	73	0.019	0.084	0.00019	7.72E-06	0.06

^a Line-area source parameters based on EPA 2015

^b Emission factor from EMFAC2017 for running PM10 exhaust emissions.

Truck Fugitive PM2.5 Emissions

Road Segment	Road Segment ID	Road Segment Length (ft)	Road Segment Length (m)	Modeled ^a Road Width (ft)	Initial ^a Vertical Height (m)	Initial ^a Vertical Dispersion (m)	Release ^a Height (m)	Percent of Daily Trucks (%)	No. of Daily Trucks	Fugitive PM10 ^b Emission Factor (g/veh-mi)	Truck Travel DPM Emissions			
											Daily (g/day)	Daily (lb/day)	Hourly (lb/hr)	Annual (lb/year)
Truck Arrival Routes														
Route 1	FUG_IN_1	404	399	24	2.6	1.21	1.3	10%	73	0.061	0.343	0.00076	3.15E-05	0.24
Route 2	FUG_IN_2	519	489	24	2.6	1.21	1.3	10%	73	0.061	0.441	0.00097	4.05E-05	0.30
Route 3	FUG_IN_3	820	250	24	2.6	1.21	1.3	10%	73	0.061	0.696	0.00153	6.39E-05	0.48
Route 4	FUG_IN_4	1034	315	24	2.6	1.21	1.3	10%	73	0.061	0.877	0.00193	8.06E-05	0.60
Route 5	FUG_IN_5	489	149	24	2.6	1.21	1.3	10%	73	0.061	0.415	0.00092	3.82E-05	0.29
Truck Departure Routes														
Route 6	FUG_OUT_6	292	89	24	2.6	1.21	1.3	10%	73	0.061	0.248	0.00055	2.28E-05	0.17
Route 7	FUG_OUT_7	384	117	24	2.6	1.21	1.3	10%	73	0.061	0.326	0.00072	2.99E-05	0.22
Route 8	FUG_OUT_8	384	117	24	2.6	1.21	1.3	10%	73	0.061	0.326	0.00072	2.99E-05	0.22
Route 9	FUG_OUT_9	404	123	24	2.6	1.21	1.3	10%	73	0.061	0.343	0.00076	3.15E-05	0.24
Route 10	FUG_OUT_10	318	97	24	2.6	1.21	1.3	10%	73	0.061	0.270	0.00059	2.48E-05	0.19

^a Line-area source parameters based on EPA 2015

^b Emission factor from EMFAC2017 for PM2.5 exhaust, tire wear, and brake wear emissions.

Truck Information

Total Trucks per year = 229,278

Total Trucks per day = 735

Operation Days = 312

Truck Hours (hrs/day) = 24

Truck Emission Information

Truck PM10 (DPM) exhaust emission factor (g/VMT) 0.019

Truck fugitive PM2.5 emissions (g/VMT) 0.061

References

EPA 2015 - *Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 nonattainment and maintenance Areas*, November 2015

City View Plaza - San Jose

2024 Construction Truck Emissions - DPM

Truck Exhaust DPM Emissions

Road Segment	Road Segment ID	Road Segment Length (ft)	Road Segment Length (m)	Modeled Road Width (ft)	Initial ^a Vertical Height (m)	Initial ^a Vertical Dispersion (m)	Release ^a Height (m)	Percent of Daily Trucks (%)	No. of Daily Trucks	PM10 Exhaust ^b Emission Factor (g/veh-mi)	Truck Travel DPM Emissions			
											Daily (g/day)	Daily (lb/day)	Hourly (lb/hr)	Annual (lb/year)
Truck Arrival Routes														
Route 1	DPM_IN_1	404	399	24	6.8	3.16	3.4	10%	73	0.020	0.113	0.00025	1.03E-05	0.08
Route 2	DPM_IN_2	519	489	24	6.8	3.16	3.4	10%	73	0.020	0.145	0.00032	1.33E-05	0.10
Route 3	DPM_IN_3	820	250	24	6.8	3.16	3.4	10%	73	0.020	0.228	0.00050	2.10E-05	0.16
Route 4	DPM_IN_4	1034	315	24	6.8	3.16	3.4	10%	73	0.020	0.288	0.00063	2.64E-05	0.20
Route 5	DPM_IN_5	489	149	24	6.8	3.16	3.4	10%	73	0.020	0.136	0.00030	1.25E-05	0.09
Truck Departure Routes														
Route 6	DPM_OUT_6	292	89	24	6.8	3.16	3.4	10%	73	0.020	0.081	0.00018	7.47E-06	0.06
Route 7	DPM_OUT_7	384	117	24	6.8	3.16	3.4	10%	73	0.020	0.107	0.00024	9.81E-06	0.07
Route 8	DPM_OUT_8	384	117	24	6.8	3.16	3.4	10%	73	0.020	0.107	0.00024	9.81E-06	0.07
Route 9	DPM_OUT_9	404	123	24	6.8	3.16	3.4	10%	73	0.020	0.112	0.00025	1.03E-05	0.08
Route 10	DPM_OUT_10	318	97	24	6.8	3.16	3.4	10%	73	0.020	0.088	0.00019	8.12E-06	0.06

^a Line-area source parameters based on EPA 2015

^b Emission factor from EMFAC2017 for running PM10 exhaust emissions.

Truck Fugitive PM2.5 Emissions

Road Segment	Road Segment ID	Road Segment Length (ft)	Road Segment Length (m)	Modeled ^a Road Width (ft)	Initial ^a Vertical Height (m)	Initial ^a Vertical Dispersion (m)	Release ^a Height (m)	Percent of Daily Trucks (%)	No. of Daily Trucks	Fugitive PM10 ^b Emission Factor (g/veh-mi)	Truck Travel DPM Emissions			
											Daily (g/day)	Daily (lb/day)	Hourly (lb/hr)	Annual (lb/year)
Truck Arrival Routes														
Route 1	FUG_IN_1	404	399	24	2.6	1.21	1.3	10%	73	0.061	0.343	0.00076	3.15E-05	0.24
Route 2	FUG_IN_2	519	489	24	2.6	1.21	1.3	10%	73	0.061	0.441	0.00097	4.05E-05	0.30
Route 3	FUG_IN_3	820	250	24	2.6	1.21	1.3	10%	73	0.061	0.696	0.00153	6.39E-05	0.48
Route 4	FUG_IN_4	1034	315	24	2.6	1.21	1.3	10%	73	0.061	0.877	0.00193	8.06E-05	0.60
Route 5	FUG_IN_5	489	149	24	2.6	1.21	1.3	10%	73	0.061	0.415	0.00092	3.82E-05	0.29
Truck Departure Routes														
Route 6	FUG_OUT_6	292	89	24	2.6	1.21	1.3	10%	73	0.061	0.248	0.00055	2.28E-05	0.17
Route 7	FUG_OUT_7	384	117	24	2.6	1.21	1.3	10%	73	0.061	0.326	0.00072	2.99E-05	0.22
Route 8	FUG_OUT_8	384	117	24	2.6	1.21	1.3	10%	73	0.061	0.326	0.00072	2.99E-05	0.22
Route 9	FUG_OUT_9	404	123	24	2.6	1.21	1.3	10%	73	0.061	0.343	0.00076	3.15E-05	0.24
Route 10	FUG_OUT_10	318	97	24	2.6	1.21	1.3	10%	73	0.061	0.270	0.00059	2.48E-05	0.19

^a Line-area source parameters based on EPA 2015

^b Emission factor from EMFAC2017 for PM2.5 exhaust, tire wear, and brake wear emissions.

Truck Information

Total Trucks per year = 229,278

Total Trucks per day = 735

Operation Days = 312

Truck Hours (hrs/day) = 24

Truck Emission Information

Truck PM10 (DPM) exhaust emission factor (g/VMT) 0.020

Truck fugitive PM2.5 emissions (g/VMT) 0.061

References

EPA 2015 - *Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 nonattainment and maintenance Areas*, November 2015

City View Plaza - San Jose
2025 Construction Truck Emissions - DPM

Truck Exhaust DPM Emissions

Road Segment	Road Segment ID	Road Segment Length (ft)	Road Segment Length (m)	Modeled Road Width (ft)	Initial ^a Vertical Height (m)	Initial ^a Vertical Dispersion (m)	Release ^a Height (m)	Percent of Daily Trucks (%)	No. of Daily Trucks	PM10 Exhaust ^b Emission Factor (g/veh-mi)	Truck Travel DPM Emissions			
											Daily (g/day)	Daily (lb/day)	Hourly (lb/hr)	Annual (lb/year)
Truck Arrival Routes														
Route 1	DPM_IN_1	404	399	24	6.8	3.16	3.4	10%	73	0.019	0.107	0.00024	9.82E-06	0.07
Route 2	DPM_IN_2	519	489	24	6.8	3.16	3.4	10%	73	0.019	0.137	0.00030	1.26E-05	0.09
Route 3	DPM_IN_3	820	250	24	6.8	3.16	3.4	10%	73	0.019	0.217	0.00048	1.99E-05	0.15
Route 4	DPM_IN_4	1034	315	24	6.8	3.16	3.4	10%	73	0.019	0.273	0.00060	2.51E-05	0.19
Route 5	DPM_IN_5	489	149	24	6.8	3.16	3.4	10%	73	0.019	0.129	0.00029	1.19E-05	0.09
Truck Departure Routes														
Route 6	DPM_OUT_6	292	89	24	6.8	3.16	3.4	10%	73	0.019	0.077	0.00017	7.10E-06	0.05
Route 7	DPM_OUT_7	384	117	24	6.8	3.16	3.4	10%	73	0.019	0.101	0.00022	9.32E-06	0.07
Route 8	DPM_OUT_8	384	117	24	6.8	3.16	3.4	10%	73	0.019	0.101	0.00022	9.32E-06	0.07
Route 9	DPM_OUT_9	404	123	24	6.8	3.16	3.4	10%	73	0.019	0.107	0.00024	9.81E-06	0.07
Route 10	DPM_OUT_10	318	97	24	6.8	3.16	3.4	10%	73	0.019	0.084	0.00019	7.72E-06	0.06

^a Line-area source parameters based on EPA 2015

^b Emission factor from EMFAC2017 for running PM10 exhaust emissions.

Truck Fugitive PM2.5 Emissions

Road Segment	Road Segment ID	Road Segment Length (ft)	Road Segment Length (m)	Modeled ^a Road Width (ft)	Initial ^a Vertical Height (m)	Initial ^a Vertical Dispersion (m)	Release ^a Height (m)	Percent of Daily Trucks (%)	No. of Daily Trucks	Fugitive PM10 ^b Emission Factor (g/veh-mi)	Truck Travel DPM Emissions			
											Daily (g/day)	Daily (lb/day)	Hourly (lb/hr)	Annual (lb/year)
Truck Arrival Routes														
Route 1	FUG_IN_1	404	399	24	2.6	1.21	1.3	10%	73	0.061	0.343	0.00076	3.15E-05	0.24
Route 2	FUG_IN_2	519	489	24	2.6	1.21	1.3	10%	73	0.061	0.441	0.00097	4.05E-05	0.30
Route 3	FUG_IN_3	820	250	24	2.6	1.21	1.3	10%	73	0.061	0.696	0.00153	6.39E-05	0.48
Route 4	FUG_IN_4	1034	315	24	2.6	1.21	1.3	10%	73	0.061	0.877	0.00193	8.06E-05	0.60
Route 5	FUG_IN_5	489	149	24	2.6	1.21	1.3	10%	73	0.061	0.415	0.00092	3.82E-05	0.29
Truck Departure Routes														
Route 6	FUG_OUT_6	292	89	24	2.6	1.21	1.3	10%	73	0.061	0.248	0.00055	2.28E-05	0.17
Route 7	FUG_OUT_7	384	117	24	2.6	1.21	1.3	10%	73	0.061	0.326	0.00072	2.99E-05	0.22
Route 8	FUG_OUT_8	384	117	24	2.6	1.21	1.3	10%	73	0.061	0.326	0.00072	2.99E-05	0.22
Route 9	FUG_OUT_9	404	123	24	2.6	1.21	1.3	10%	73	0.061	0.343	0.00076	3.15E-05	0.24
Route 10	FUG_OUT_10	318	97	24	2.6	1.21	1.3	10%	73	0.061	0.270	0.00059	2.48E-05	0.19

^a Line-area source parameters based on EPA 2015

^b Emission factor from EMFAC2017 for PM2.5 exhaust, tire wear, and brake wear emissions.

Truck Information

Total Trucks per year = 229,278
Total Trucks per day = 735
Operation Days = 312
Truck Hours (hrs/day) = 24

Truck Emission Information

Truck PM10 (DPM) exhaust emission factor (g/VMT) 0.019
Truck fugitive PM2.5 emissons (g/VMT) 0.061

References

EPA 2015 - *Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 nonattainment and maintenance Areas*, November 2015

Project Traffic Emissions

File Name: Santa Clara (SF) - 2026 - City View Operational Roadways - Annual.EF
CT-EMFAC2017 Version: 1.0.2.27401
Run Date: 12/17/2019 4:01:46 PM
Area: Santa Clara (SF)
Analysis Year: 2026
Season: Annual

=====

Vehicle Category	VMT Fraction Across Category	Diesel VMT Fraction Within Category	Gas VMT Fraction Within Category
Truck 1	0.026	0.508	0.492
Truck 2	0.036	0.935	0.049
Non-Truck	0.938	0.015	0.949

=====

Road Type: Major/Collector
Silt Loading Factor: CARB 0.032 g/m²
Precipitation Correction: CARB P = 64 days N = 365 days

Fleet Average Running Exhaust Emission Factors (grams/veh-mile)

Pollutant Name	<= 5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph	40 mph
PM2.5	0.008319	0.005459	0.003737	0.002697	0.002070	0.001697	0.001490	0.001401
TOG	0.169566	0.111920	0.074569	0.052316	0.039565	0.031606	0.026484	0.023265
Diesel PM	0.001108	0.000920	0.000722	0.000585	0.000510	0.000483	0.000494	0.000540

Fleet Average Fuel Consumption (gallons/veh-mile)

Fuel Type	<= 5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph	40 mph
Gasoline	0.068437	0.055347	0.045288	0.037674	0.032206	0.028586	0.026476	0.025616
Diesel	0.012226	0.010184	0.007889	0.006772	0.005924	0.005232	0.004750	0.004397

Fleet Average Running Loss Emission Factors (grams/veh-hour)

Pollutant Name	Emission Factor
TOG	1.219975

Fleet Average Tire Wear Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.002190

Fleet Average Brake Wear Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.017337

Fleet Average Road Dust Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.016794

=====END=====

City View Plaza - San Jose

Project Operation - Park Avenue

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PARK_DPM	Park Avenue	SW-NE	4	538	0.33	20.63	67.7	3.4	20	1,540
	SR-87 to S. Market									

Emission Factors

Speed Category	1	2	3	4
	Travel Speed (mph)	20		
Emissions per Vehicle (g/VMT)	0.00059			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - PARK_DPM

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.98%	61	3.33E-06	9	6.44%	99	5.38E-06	17	5.53%	85	4.62E-06
2	2.67%	41	2.23E-06	10	7.40%	114	6.18E-06	18	3.14%	48	2.63E-06
3	2.84%	44	2.38E-06	11	6.32%	97	5.28E-06	19	2.35%	36	1.96E-06
4	3.30%	51	2.76E-06	12	6.88%	106	5.76E-06	20	0.86%	13	7.20E-07
5	2.16%	33	1.81E-06	13	6.27%	97	5.24E-06	21	3.08%	47	2.57E-06
6	3.30%	51	2.76E-06	14	6.21%	96	5.19E-06	22	4.21%	65	3.52E-06
7	6.03%	93	5.04E-06	15	5.13%	79	4.29E-06	23	2.62%	40	2.19E-06
8	4.56%	70	3.82E-06	16	3.88%	60	3.25E-06	24	0.85%	13	7.13E-07
Total										1,540	

City View Plaza - San Jose

Project Operation - Park Avenue

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PARK_PM25	Park Avenue	SW-NE	4	538	0.33	20.63	68	1.3	20	1,540
	SR-87 to S. Market									

Emission Factors - PM2.5

Speed Category	1	2	3	4
	Travel Speed (mph)	20	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - PARK_PM25

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	18	4.43E-06	9	7.11%	110	2.74E-05	17	7.38%	114	2.85E-05
2	0.42%	6	1.62E-06	10	4.39%	68	1.69E-05	18	8.18%	126	3.15E-05
3	0.41%	6	1.56E-06	11	4.66%	72	1.80E-05	19	5.70%	88	2.20E-05
4	0.26%	4	1.01E-06	12	5.89%	91	2.27E-05	20	4.27%	66	1.65E-05
5	0.50%	8	1.92E-06	13	6.15%	95	2.37E-05	21	3.26%	50	1.26E-05
6	0.90%	14	3.49E-06	14	6.04%	93	2.33E-05	22	3.30%	51	1.27E-05
7	3.79%	58	1.46E-05	15	7.01%	108	2.70E-05	23	2.46%	38	9.49E-06
8	7.76%	120	2.99E-05	16	7.14%	110	2.75E-05	24	1.87%	29	7.20E-06
									Total	1,540	

City View Plaza - San Jose

Project Operation - Park Avenue

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year =

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - PARK_TEXH

City View Plaza - San Jose

Project Operation - Park Avenue

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PARK_TEVAP	Park Avenue	SW-NE	4	538	0.33	20.63	68	1.3	20	1,540
	SR-87 to S. Market									

Emission Factors - PM2.5 - Evaporative TOG

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200			
Emissions per Vehicle per Mile (g/VMT)	0.0610			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - PARK_TEVAP

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	18	1.00E-04	9	7.11%	110	6.20E-04	17	7.38%	114	6.44E-04
2	0.42%	6	3.67E-05	10	4.39%	68	3.82E-04	18	8.18%	126	7.13E-04
3	0.41%	6	3.53E-05	11	4.66%	72	4.07E-04	19	5.70%	88	4.97E-04
4	0.26%	4	2.27E-05	12	5.89%	91	5.13E-04	20	4.27%	66	3.72E-04
5	0.50%	8	4.35E-05	13	6.15%	95	5.36E-04	21	3.26%	50	2.84E-04
6	0.90%	14	7.88E-05	14	6.04%	93	5.26E-04	22	3.30%	51	2.88E-04
7	3.79%	58	3.30E-04	15	7.01%	108	6.11E-04	23	2.46%	38	2.15E-04
8	7.76%	120	6.77E-04	16	7.14%	110	6.22E-04	24	1.87%	29	1.63E-04
Total										1,540	

City View Plaza - San Jose

Project Operation - Park Avenue

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PARK_FUG	Park Avenue	SW-NE	4	538	0.33	20.63	68	1.3	20	1,540
	SR-87 to S. Market									

Emission Factors - Fugitive PM2.5

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Tire Wear - Emissions per Vehicle (g/VMT)	0.00219			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01734			
Road Dust - Emissions per Vehicle (g/VMT)	0.01679			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM_{2.5} Emissions - PARK_FUG

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	18	5.97E-05	9	7.11%	110	3.69E-04	17	7.38%	114	3.83E-04
2	0.42%	6	2.18E-05	10	4.39%	68	2.28E-04	18	8.18%	126	4.24E-04
3	0.41%	6	2.10E-05	11	4.66%	72	2.42E-04	19	5.70%	88	2.96E-04
4	0.26%	4	1.35E-05	12	5.89%	91	3.06E-04	20	4.27%	66	2.22E-04
5	0.50%	8	2.59E-05	13	6.15%	95	3.19E-04	21	3.26%	50	1.69E-04
6	0.90%	14	4.69E-05	14	6.04%	93	3.13E-04	22	3.30%	51	1.71E-04
7	3.79%	58	1.97E-04	15	7.01%	108	3.64E-04	23	2.46%	38	1.28E-04
8	7.76%	120	4.03E-04	16	7.14%	110	3.71E-04	24	1.87%	29	9.69E-05
Total											1,540

City View Plaza - San Jose

Project Operation - South Almaden Avenue

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALMAV_DPM	South Almaden Avenue	NW-SE	2	232	0.14	13.32	43.7	3.4	20	2,335
	W Santa Clara to San Fernando									

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	20			
Emissions per Vehicle (g/VMT)	0.00059			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - SALMAV_DPM

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.98%	93	2.18E-06	9	6.44%	150	3.52E-06	17	5.53%	129	3.02E-06
2	2.67%	62	1.46E-06	10	7.40%	173	4.04E-06	18	3.14%	73	1.72E-06
3	2.84%	66	1.55E-06	11	6.32%	147	3.45E-06	19	2.35%	55	1.28E-06
4	3.30%	77	1.80E-06	12	6.88%	161	3.76E-06	20	0.86%	20	4.71E-07
5	2.16%	50	1.18E-06	13	6.27%	146	3.43E-06	21	3.08%	72	1.68E-06
6	3.30%	77	1.80E-06	14	6.21%	145	3.40E-06	22	4.21%	98	2.30E-06
7	6.03%	141	3.30E-06	15	5.13%	120	2.81E-06	23	2.62%	61	1.43E-06
8	4.56%	107	2.50E-06	16	3.88%	91	2.12E-06	24	0.85%	20	4.66E-07
Total											2,335

City View Plaza - San Jose

Project Operation - South Almaden Avenue

PM_{2.5} Modeling - Roadway Links, Traffic Volumes, and PM_{2.5} Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALMAV_PM25	South Almaden Avenue	NW-SE	2	232	0.14	13.32	44	1.3	20	2,335
	W Santa Clara to San Fernando									

Emission Factors - PM_{2.5}

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - SALMAV_PM25

City View Plaza - San Jose

Project Operation - South Almaden Avenue

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year =

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - SALMAV_TEXH

City View Plaza - San Jose

Project Operation - South Almaden Avenue

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALMAV_TEVAP	South Almaden Avenue	NW-SE	2	232	0.14	13.32	44	1.3	20	2,335
	W Santa Clara to San Fernando									

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200			
Emissions per Vehicle per Mile (g/VMT)	0.0610			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - SALMAV_TEVAP

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	27	6.56E-05	9	7.11%	166	4.06E-04	17	7.38%	172	4.21E-04
2	0.42%	10	2.40E-05	10	4.39%	102	2.50E-04	18	8.18%	191	4.66E-04
3	0.41%	9	2.31E-05	11	4.66%	109	2.66E-04	19	5.70%	133	3.25E-04
4	0.26%	6	1.49E-05	12	5.89%	137	3.36E-04	20	4.27%	100	2.44E-04
5	0.50%	12	2.84E-05	13	6.15%	144	3.51E-04	21	3.26%	76	1.86E-04
6	0.90%	21	5.16E-05	14	6.04%	141	3.44E-04	22	3.30%	77	1.88E-04
7	3.79%	88	2.16E-04	15	7.01%	164	4.00E-04	23	2.46%	58	1.40E-04
8	7.76%	181	4.43E-04	16	7.14%	167	4.07E-04	24	1.87%	44	1.06E-04
Total											2,335

City View Plaza - San Jose

Project Operation - South Almaden Avenue

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALMAV_FUG	South Almaden Avenue	NW-SE	2	232	0.14	13.32	44	1.3	20	2,335
	W Santa Clara to San Fernando									

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Tire Wear - Emissions per Vehicle (g/VMT)	0.00219			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01734			
Road Dust - Emissions per Vehicle (g/VMT)	0.01679			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM_{2.5} Emissions - SALMAV_FUG

City View Plaza - San Jose

Project Operation - South Almaden Blvd #1

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	20			
Emissions per Vehicle (g/VMT)	0.00059			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - SALM1_DPM

City View Plaza - San Jose

Project Operation - South Almaden Blvd #1

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2026

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - SALM1 PM25

2020 Hourly Traffic Volumes and PM2.5 Emissions - STANFORD											
Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	27	3.25E-06	9	7.11%	169	2.01E-05	17	7.38%	175	2.09E-05
2	0.42%	10	1.19E-06	10	4.39%	104	1.24E-05	18	8.18%	194	2.31E-05
3	0.41%	10	1.15E-06	11	4.66%	111	1.32E-05	19	5.70%	135	1.61E-05
4	0.26%	6	7.37E-07	12	5.89%	140	1.66E-05	20	4.27%	101	1.21E-05
5	0.50%	12	1.41E-06	13	6.15%	146	1.74E-05	21	3.26%	77	9.21E-06
6	0.90%	21	2.56E-06	14	6.04%	143	1.71E-05	22	3.30%	78	9.33E-06
7	3.79%	90	1.07E-05	15	7.01%	166	1.98E-05	23	2.46%	58	6.96E-06
8	7.76%	184	2.19E-05	16	7.14%	169	2.02E-05	24	1.87%	44	5.28E-06
Total										2,370	

City View Plaza - San Jose

Project Operation - South Almaden Blvd #1

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Emission Factors - TOG Exhaust

	Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0	
Emissions per Vehicle (g/VMT)	0.05232				

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - SALM1 TEXH

2020 Hourly Traffic Volumes and TOG Exhaust Emissions - GALTMT - YEAR											
Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	27	6.30E-05	9	7.11%	169	3.90E-04	17	7.38%	175	4.05E-04
2	0.42%	10	2.31E-05	10	4.39%	104	2.41E-04	18	8.18%	194	4.48E-04
3	0.41%	10	2.22E-05	11	4.66%	111	2.56E-04	19	5.70%	135	3.12E-04
4	0.26%	6	1.43E-05	12	5.89%	140	3.23E-04	20	4.27%	101	2.34E-04
5	0.50%	12	2.73E-05	13	6.15%	146	3.37E-04	21	3.26%	77	1.79E-04
6	0.90%	21	4.96E-05	14	6.04%	143	3.31E-04	22	3.30%	78	1.81E-04
7	3.79%	90	2.08E-04	15	7.01%	166	3.85E-04	23	2.46%	58	1.35E-04
8	7.76%	184	4.26E-04	16	7.14%	169	3.91E-04	24	1.87%	44	1.02E-04
Total										2,370	

City View Plaza - San Jose

Project Operation - South Almaden Blvd #1

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALM1_TEVAP	South Almaden Blvd	NW-SE	2	256	0.16	13.32	44	1.3	20	2,370
	Santa Clara to San Fernando									

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4	
	Travel Speed (mph)	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200				
Emissions per Vehicle per Mile (g/VMT)	0.0610				

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - SALM1_TEVAP

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	27	7.35E-05	9	7.11%	169	4.55E-04	17	7.38%	175	4.72E-04
2	0.42%	10	2.69E-05	10	4.39%	104	2.80E-04	18	8.18%	194	5.23E-04
3	0.41%	10	2.59E-05	11	4.66%	111	2.98E-04	19	5.70%	135	3.64E-04
4	0.26%	6	1.67E-05	12	5.89%	140	3.77E-04	20	4.27%	101	2.73E-04
5	0.50%	12	3.19E-05	13	6.15%	146	3.93E-04	21	3.26%	77	2.08E-04
6	0.90%	21	5.78E-05	14	6.04%	143	3.86E-04	22	3.30%	78	2.11E-04
7	3.79%	90	2.42E-04	15	7.01%	166	4.48E-04	23	2.46%	58	1.57E-04
8	7.76%	184	4.96E-04	16	7.14%	169	4.56E-04	24	1.87%	44	1.19E-04
Total										2,370	

City View Plaza - San Jose

Project Operation - South Almaden Blvd #1

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALM1_FUG	South Almaden Blvd	NW-SE	2	256	0.16	13.32	44	1.3	20	2,370
	Santa Clara to San Fernando									

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4	
	Travel Speed (mph)	20	0	0	0
Tire Wear - Emissions per Vehicle (g/VMT)	0.00219				
Brake Wear - Emissions per Vehicle (g/VMT)	0.01734				
Road Dust - Emissions per Vehicle (g/VMT)	0.01679				
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03632				

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM_{2.5} Emissions - SALM1_FUG

City View Plaza - San Jose

Project Operation - South Almaden Blvd #2

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Emission Factors

	Speed Category	1	2	3	4
Travel Speed (mph)	20				
	Emissions per Vehicle (g/VMT)	0.00059			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - SALM2_DPM

City View Plaza - San Jose

Project Operation - South Almaden Blvd #2

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2026

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM_{2.5} Emissions - SALM2 PM25

City View Plaza - San Jose

Project Operation - South Almaden Blvd #2

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Emission Factors - TOG Exhaust

Emission Factors - T-60 Exhaust		Speed Category	1	2	3	4
		Travel Speed (mph)	20	0	0	0
		Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - SALM2 TEXH

City View Plaza - San Jose

Project Operation - South Almaden Blvd #2

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALM2_TEVAP	South Almaden Blvd	NW-SE	2	193	0.12	13.32	44	1.3	20	8,575
	San Fernando to Park Ave									

Emission Factors - PM2.5 - Evaporative TOG

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200			
Emissions per Vehicle per Mile (g/VMT)	0.0610			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - SALM2_TEVAP

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	99	2.01E-04	9	7.11%	610	1.24E-03	17	7.38%	633	1.29E-03
2	0.42%	36	7.34E-05	10	4.39%	376	7.66E-04	18	8.18%	701	1.43E-03
3	0.41%	35	7.08E-05	11	4.66%	400	8.14E-04	19	5.70%	489	9.95E-04
4	0.26%	22	4.55E-05	12	5.89%	505	1.03E-03	20	4.27%	366	7.45E-04
5	0.50%	43	8.70E-05	13	6.15%	528	1.07E-03	21	3.26%	279	5.69E-04
6	0.90%	78	1.58E-04	14	6.04%	518	1.05E-03	22	3.30%	283	5.76E-04
7	3.79%	325	6.61E-04	15	7.01%	601	1.22E-03	23	2.46%	211	4.30E-04
8	7.76%	666	1.35E-03	16	7.14%	612	1.25E-03	24	1.87%	160	3.26E-04
Total											8,575

City View Plaza - San Jose

Project Operation - South Almaden Blvd #2

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALM2_FUG	South Almaden Blvd	NW-SE	2	193	0.12	13.32	44	1.3	20	8,575
	San Fernando to Park Ave									

Emission Factors - Fugitive PM2.5

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Tire Wear - Emissions per Vehicle (g/VMT)	0.00219			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01734			
Road Dust - Emissions per Vehicle (g/VMT)	0.01679			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM_{2.5} Emissions - SALM2_FUG

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	99	1.19E-04	9	7.11%	610	7.39E-04	17	7.38%	633	7.67E-04
2	0.42%	36	4.37E-05	10	4.39%	376	4.56E-04	18	8.18%	701	8.50E-04
3	0.41%	35	4.21E-05	11	4.66%	400	4.85E-04	19	5.70%	489	5.92E-04
4	0.26%	22	2.71E-05	12	5.89%	505	6.12E-04	20	4.27%	366	4.44E-04
5	0.50%	43	5.18E-05	13	6.15%	528	6.39E-04	21	3.26%	279	3.39E-04
6	0.90%	78	9.39E-05	14	6.04%	518	6.27E-04	22	3.30%	283	3.43E-04
7	3.79%	325	3.94E-04	15	7.01%	601	7.29E-04	23	2.46%	211	2.56E-04
8	7.76%	666	8.07E-04	16	7.14%	612	7.42E-04	24	1.87%	160	1.94E-04
Total										8,575	

City View Plaza - San Jose

Project Operation - South Almaden Blvd #3

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Emission Factors

	Speed Category	1	2	3	4
Travel Speed (mph)	20				
	Emissions per Vehicle (g/VMT)	0.00059			

Emission Factors from CT-EMEAC2017

2026 Hourly Traffic Volumes and DPM Emissions - SALM3_DPM

City View Plaza - San Jose

Project Operation - South Almaden Blvd #3

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2026

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - SALM3 PM25

City View Plaza - San Jose

Project Operation - South Almaden Blvd #3

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Emission Factors - TOG Exhaust

Emission Factors - T-60 Exhaust		Speed Category	1	2	3	4
		Travel Speed (mph)	20	0	0	0
		Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - SALM3 TEXH

City View Plaza - San Jose

Project Operation - South Almaden Blvd #3

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = **2026**

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALM3_TEVAP	South Almaden Blvd	NW-SE	2	162	0.10	13.32	44	1.3	20	5,810
	Park Ave to W San Carlos									

Emission Factors - PM2.5 - Evaporative TOG

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200			
Emissions per Vehicle per Mile (g/VMT)	0.0610			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - SALM3_TEVAP

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	67	1.14E-04	9	7.11%	413	7.06E-04	17	7.38%	429	7.33E-04
2	0.42%	24	4.18E-05	10	4.39%	255	4.36E-04	18	8.18%	475	8.12E-04
3	0.41%	24	4.03E-05	11	4.66%	271	4.63E-04	19	5.70%	331	5.66E-04
4	0.26%	15	2.59E-05	12	5.89%	342	5.85E-04	20	4.27%	248	4.24E-04
5	0.50%	29	4.95E-05	13	6.15%	357	6.11E-04	21	3.26%	189	3.24E-04
6	0.90%	53	8.98E-05	14	6.04%	351	6.00E-04	22	3.30%	192	3.28E-04
7	3.79%	220	3.76E-04	15	7.01%	407	6.97E-04	23	2.46%	143	2.45E-04
8	7.76%	451	7.71E-04	16	7.14%	415	7.09E-04	24	1.87%	108	1.85E-04
Total											5,810

City View Plaza - San Jose

Project Operation - South Almaden Blvd #3

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = **2026**

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALM3_FUG	South Almaden Blvd	NW-SE	2	162	0.10	13.32	44	1.3	20	5,810
	Park Ave to W San Carlos									

Emission Factors - Fugitive PM2.5

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Tire Wear - Emissions per Vehicle (g/VMT)	0.00219			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01734			
Road Dust - Emissions per Vehicle (g/VMT)	0.01679			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM_{2.5} Emissions - SALM3_FUG

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	67	6.80E-05	9	7.11%	413	4.21E-04	17	7.38%	429	4.37E-04
2	0.42%	24	2.49E-05	10	4.39%	255	2.59E-04	18	8.18%	475	4.84E-04
3	0.41%	24	2.40E-05	11	4.66%	271	2.76E-04	19	5.70%	331	3.37E-04
4	0.26%	15	1.54E-05	12	5.89%	342	3.48E-04	20	4.27%	248	2.53E-04
5	0.50%	29	2.95E-05	13	6.15%	357	3.64E-04	21	3.26%	189	1.93E-04
6	0.90%	53	5.35E-05	14	6.04%	351	3.57E-04	22	3.30%	192	1.95E-04
7	3.79%	220	2.24E-04	15	7.01%	407	4.15E-04	23	2.46%	143	1.46E-04
8	7.76%	451	4.59E-04	16	7.14%	415	4.22E-04	24	1.87%	108	1.10E-04
Total										5,810	

City View Plaza - San Jose

Project Operation - South San Pedro Street

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PEDRO_DPM	South San Pedro Street	NW-SE	2	229	0.14	13.32	43.7	3.4	20	2,335
	W Santa Clara to San Fernando									

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	20			
Emissions per Vehicle (g/VMT)	0.00059			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - PEDRO_DPM

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.98%	93	2.14E-06	9	6.44%	150	3.47E-06	17	5.53%	129	2.98E-06
2	2.67%	62	1.44E-06	10	7.40%	173	3.99E-06	18	3.14%	73	1.69E-06
3	2.84%	66	1.53E-06	11	6.32%	147	3.40E-06	19	2.35%	55	1.27E-06
4	3.30%	77	1.78E-06	12	6.88%	161	3.71E-06	20	0.86%	20	4.64E-07
5	2.16%	50	1.16E-06	13	6.27%	146	3.38E-06	21	3.08%	72	1.66E-06
6	3.30%	77	1.78E-06	14	6.21%	145	3.35E-06	22	4.21%	98	2.27E-06
7	6.03%	141	3.25E-06	15	5.13%	120	2.77E-06	23	2.62%	61	1.41E-06
8	4.56%	107	2.46E-06	16	3.88%	91	2.09E-06	24	0.85%	20	4.59E-07
Total										2,335	

City View Plaza - San Jose

Project Operation - South San Pedro Street

PM_{2.5} Modeling - Roadway Links, Traffic Volumes, and PM_{2.5} Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PEDRO_PM25	South San Pedro Street	NW-SE	2	229	0.14	13.32	44	1.3	20	2,335
	W Santa Clara to San Fernando									

Emission Factors - PM_{2.5}

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - PEDRO_PM25

City View Plaza - San Jose

Project Operation - South San Pedro Street

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - PEDRO TEXH

2020 Hourly Traffic Volumes and TOG Exhaust Emissions - PEDRO - Year											
Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	27	5.54E-05	9	7.11%	166	3.43E-04	17	7.38%	172	3.56E-04
2	0.42%	10	2.03E-05	10	4.39%	102	2.11E-04	18	8.18%	191	3.94E-04
3	0.41%	9	1.95E-05	11	4.66%	109	2.25E-04	19	5.70%	133	2.75E-04
4	0.26%	6	1.26E-05	12	5.89%	137	2.84E-04	20	4.27%	100	2.06E-04
5	0.50%	12	2.40E-05	13	6.15%	144	2.97E-04	21	3.26%	76	1.57E-04
6	0.90%	21	4.36E-05	14	6.04%	141	2.91E-04	22	3.30%	77	1.59E-04
7	3.79%	88	1.83E-04	15	7.01%	164	3.38E-04	23	2.46%	58	1.19E-04
8	7.76%	181	3.74E-04	16	7.14%	167	3.44E-04	24	1.87%	44	9.00E-05
Total										2,335	

City View Plaza - San Jose

Project Operation - South San Pedro Street

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PEDRO_TEVAP	South San Pedro Street	NW-SE	2	229	0.14	13.32	44	1.3	20	2,335
	W Santa Clara to San Fernando									

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200			
Emissions per Vehicle per Mile (g/VMT)	0.0610			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - PEDRO_TEVAP

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	27	6.46E-05	9	7.11%	166	4.00E-04	17	7.38%	172	4.15E-04
2	0.42%	10	2.36E-05	10	4.39%	102	2.47E-04	18	8.18%	191	4.60E-04
3	0.41%	9	2.28E-05	11	4.66%	109	2.62E-04	19	5.70%	133	3.20E-04
4	0.26%	6	1.47E-05	12	5.89%	137	3.31E-04	20	4.27%	100	2.40E-04
5	0.50%	12	2.80E-05	13	6.15%	144	3.46E-04	21	3.26%	76	1.83E-04
6	0.90%	21	5.08E-05	14	6.04%	141	3.39E-04	22	3.30%	77	1.85E-04
7	3.79%	88	2.13E-04	15	7.01%	164	3.94E-04	23	2.46%	58	1.38E-04
8	7.76%	181	4.36E-04	16	7.14%	167	4.01E-04	24	1.87%	44	1.05E-04
Total											2,335

City View Plaza - San Jose

Project Operation - South San Pedro Street

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PEDRO_FUG	South San Pedro Street	NW-SE	2	229	0.14	13.32	44	1.3	20	2,335
	W Santa Clara to San Fernando									

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Tire Wear - Emissions per Vehicle (g/VMT)	0.00219			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01734			
Road Dust - Emissions per Vehicle (g/VMT)	0.01679			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM_{2.5} Emissions - PEDRO_FUG

City View Plaza - San Jose

Project Operation - West San Fernando

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Emission Factors

	Speed Category	1	2	3	4
Travel Speed (mph)	20				
	Emissions per Vehicle (g/VMT)	0.00059			

Emission Factors from CT-EMEAC2017

2026 Hourly Traffic Volumes and DPM Emissions - WSF_DPM

**City View Plaza - San Jose
Project Operation - West San Fernando
PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2026**

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - WFS PM25

City View Plaza - San Jose

Project Operation - West San Fernando

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Emission Factors - TOG Exhaust

Emission Factors - TCG Exhaust		Speed Category	1	2	3	4
		Travel Speed (mph)	20	0	0	0
		Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMEAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - WFS TEXH

2020 Hourly Traffic Volumes and TCO Exhaust Emissions - VTPS_Year											
	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	71	5.04E-04	9	7.11%	437	3.12E-03	17	7.38%	454	3.24E-03
2	0.42%	26	1.85E-04	10	4.39%	270	1.92E-03	18	8.18%	502	3.59E-03
3	0.41%	25	1.78E-04	11	4.66%	287	2.05E-03	19	5.70%	350	2.50E-03
4	0.26%	16	1.14E-04	12	5.89%	362	2.58E-03	20	4.27%	262	1.87E-03
5	0.50%	31	2.19E-04	13	6.15%	378	2.70E-03	21	3.26%	200	1.43E-03
6	0.90%	56	3.97E-04	14	6.04%	371	2.65E-03	22	3.30%	203	1.45E-03
7	3.79%	233	1.66E-03	15	7.01%	431	3.08E-03	23	2.46%	151	1.08E-03
8	7.76%	477	3.41E-03	16	7.14%	439	3.13E-03	24	1.87%	115	8.19E-04
Total									6,145		

City View Plaza - San Jose

Project Operation - West San Fernando

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WFS_TEVAP	West San Fernando Street	SW-NE	4	791	0.49	20.63	68	1.3	20	6,145
	SR-87 to S. First St.									

Emission Factors - PM2.5 - Evaporative TOG

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200			
Emissions per Vehicle per Mile (g/VMT)	0.0610			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - WFS_TEVAP

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	71	5.88E-04	9	7.11%	437	3.64E-03	17	7.38%	454	3.78E-03
2	0.42%	26	2.15E-04	10	4.39%	270	2.24E-03	18	8.18%	502	4.18E-03
3	0.41%	25	2.07E-04	11	4.66%	287	2.39E-03	19	5.70%	350	2.91E-03
4	0.26%	16	1.33E-04	12	5.89%	362	3.01E-03	20	4.27%	262	2.18E-03
5	0.50%	31	2.55E-04	13	6.15%	378	3.15E-03	21	3.26%	200	1.67E-03
6	0.90%	56	4.62E-04	14	6.04%	371	3.09E-03	22	3.30%	203	1.69E-03
7	3.79%	233	1.94E-03	15	7.01%	431	3.59E-03	23	2.46%	151	1.26E-03
8	7.76%	477	3.97E-03	16	7.14%	439	3.65E-03	24	1.87%	115	9.55E-04
Total											6,145

City View Plaza - San Jose

Project Operation - West San Fernando

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WFS_FUG	West San Fernando Street	SW-NE	4	791	0.49	20.63	68	1.3	20	6,145
	SR-87 to S. First St.									

Emission Factors - Fugitive PM2.5

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Tire Wear - Emissions per Vehicle (g/VMT)	0.00219			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01734			
Road Dust - Emissions per Vehicle (g/VMT)	0.01679			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM_{2.5} Emissions - WFS_FUG

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	71	3.50E-04	9	7.11%	437	2.17E-03	17	7.38%	454	2.25E-03
2	0.42%	26	1.28E-04	10	4.39%	270	1.34E-03	18	8.18%	502	2.49E-03
3	0.41%	25	1.23E-04	11	4.66%	287	1.42E-03	19	5.70%	350	1.74E-03
4	0.26%	16	7.94E-05	12	5.89%	362	1.79E-03	20	4.27%	262	1.30E-03
5	0.50%	31	1.52E-04	13	6.15%	378	1.87E-03	21	3.26%	200	9.92E-04
6	0.90%	56	2.75E-04	14	6.04%	371	1.84E-03	22	3.30%	203	1.01E-03
7	3.79%	233	1.15E-03	15	7.01%	431	2.14E-03	23	2.46%	151	7.50E-04
8	7.76%	477	2.36E-03	16	7.14%	439	2.17E-03	24	1.87%	115	5.69E-04
Total											6,145

City View Plaza - San Jose

Project Operation - West Santa Clara Street #1

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC1_DPM	West Santa Clara - 1	SW-NE	4	130.2	0.08	20.63	67.7	3.4	20	7,005
	SR-87 to N. Almaden									

Emission Factors

Speed Category Travel Speed (mph)	1	2	3	4
Emissions per Vehicle (g/VMT)	20			
	0.00059			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - WSC1_DPM

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.98%	279	3.66E-06	9	6.44%	451	5.93E-06	17	5.53%	387	5.09E-06
2	2.67%	187	2.46E-06	10	7.40%	518	6.81E-06	18	3.14%	220	2.89E-06
3	2.84%	199	2.62E-06	11	6.32%	442	5.82E-06	19	2.35%	164	2.16E-06
4	3.30%	231	3.04E-06	12	6.88%	482	6.34E-06	20	0.86%	60	7.93E-07
5	2.16%	151	1.99E-06	13	6.27%	439	5.77E-06	21	3.08%	216	2.83E-06
6	3.30%	231	3.04E-06	14	6.21%	435	5.72E-06	22	4.21%	295	3.88E-06
7	6.03%	423	5.56E-06	15	5.13%	359	4.73E-06	23	2.62%	184	2.42E-06
8	4.56%	320	4.20E-06	16	3.88%	272	3.57E-06	24	0.85%	60	7.85E-07
Total											7,005

City View Plaza - San Jose

Project Operation - West Santa Clara Street #1

PM_{2.5} Modeling - Roadway Links, Traffic Volumes, and PM_{2.5} Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC1_PM25	West Santa Clara - 1	SW-NE	4	130	0.08	20.63	68	1.3	20	7,005
	SR-87 to N. Almaden									

Emission Factors - PM_{2.5}

Speed Category Travel Speed (mph)	1	2	3	4
Emissions per Vehicle (g/VMT)	20	0	0	0
	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - WSC1_PM25

City View Plaza - San Jose

Project Operation - West Santa Clara Street #1

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - WSC1_TEXH

City View Plaza - San Jose

Project Operation - West Santa Clara Street #1

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC1_TEVAP	West Santa Clara - 1	SW-NE	4	130	0.08	20.63	68	1.3	20	7,005
	SR-87 to N. Almaden									

Emission Factors - PM2.5 - Evaporative TOG

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200			
Emissions per Vehicle per Mile (g/VMT)	0.0610			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - WSC1_TEVAP

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	81	1.10E-04	9	7.11%	498	6.83E-04	17	7.38%	517	7.09E-04
2	0.42%	29	4.04E-05	10	4.39%	307	4.21E-04	18	8.18%	573	7.85E-04
3	0.41%	28	3.89E-05	11	4.66%	327	4.48E-04	19	5.70%	399	5.47E-04
4	0.26%	18	2.50E-05	12	5.89%	412	5.66E-04	20	4.27%	299	4.10E-04
5	0.50%	35	4.79E-05	13	6.15%	431	5.91E-04	21	3.26%	228	3.13E-04
6	0.90%	63	8.68E-05	14	6.04%	423	5.80E-04	22	3.30%	231	3.17E-04
7	3.79%	265	3.64E-04	15	7.01%	491	6.74E-04	23	2.46%	173	2.37E-04
8	7.76%	544	7.46E-04	16	7.14%	500	6.86E-04	24	1.87%	131	1.79E-04
Total										7,005	

City View Plaza - San Jose

Project Operation - West Santa Clara Street #1

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC1_FUG	West Santa Clara - 1	SW-NE	4	130	0.08	20.63	68	1.3	20	7,005
	SR-87 to N. Almaden									

Emission Factors - Fugitive PM2.5

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Tire Wear - Emissions per Vehicle (g/VMT)	0.00219			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01734			
Road Dust - Emissions per Vehicle (g/VMT)	0.01679			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM_{2.5} Emissions - WSC1_FUG

City View Plaza - San Jose

Project Operation - West Santa Clara Street #2

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	20			
Emissions per Vehicle (g/VMT)	0.00059			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - WSC2_DPM

City View Plaza - San Jose

Project Operation - West Santa Clara Street #2

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2026

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - WSC2 PM25

City View Plaza - San Jose

Project Operation - West Santa Clara Street #2

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Emission Factors - TOG Exhaust

	Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0	
Emissions per Vehicle (g/VMT)	0.05232				

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - WSC2 TEXH

City View Plaza - San Jose

Project Operation - West Santa Clara Street #2

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = **2026**

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC2_TEVAP	West Santa Clara - 2	NW-SE	4	428.398	0.27	20.63	68	1.3	20	4,630
	N. Almaden to S. First St.									

Emission Factors - PM2.5 - Evaporative TOG

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200			
Emissions per Vehicle per Mile (g/VMT)	0.0610			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - WSC2_TEVAP

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	53	2.40E-04	9	7.11%	329	1.49E-03	17	7.38%	342	1.54E-03
2	0.42%	19	8.78E-05	10	4.39%	203	9.16E-04	18	8.18%	379	1.71E-03
3	0.41%	19	8.47E-05	11	4.66%	216	9.74E-04	19	5.70%	264	1.19E-03
4	0.26%	12	5.45E-05	12	5.89%	273	1.23E-03	20	4.27%	198	8.92E-04
5	0.50%	23	1.04E-04	13	6.15%	285	1.28E-03	21	3.26%	151	6.80E-04
6	0.90%	42	1.89E-04	14	6.04%	280	1.26E-03	22	3.30%	153	6.89E-04
7	3.79%	175	7.91E-04	15	7.01%	325	1.46E-03	23	2.46%	114	5.14E-04
8	7.76%	359	1.62E-03	16	7.14%	331	1.49E-03	24	1.87%	86	3.90E-04
Total											4,630

City View Plaza - San Jose

Project Operation - West Santa Clara Street #2

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = **2026**

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC2_FUG	West Santa Clara - 2	NW-SE	4	428.398	0.27	20.63	68	1.3	20	4,630
	N. Almaden to S. First St.									

Emission Factors - Fugitive PM2.5

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Tire Wear - Emissions per Vehicle (g/VMT)	0.00219			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01734			
Road Dust - Emissions per Vehicle (g/VMT)	0.01679			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM_{2.5} Emissions - WSC2_FUG

City View Plaza - San Jose

Project Operation - West San Carlos

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	20			
Emissions per Vehicle (g/VMT)	0.00059			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - WSC_DPM

**City View Plaza - San Jose
Project Operation - West San Carlos
PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2026**

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - WSC PM25

City View Plaza - San Jose

Project Operation - West San Carlos

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - WSC TEXH

2020 Hourly Traffic Volumes and TCOG Exhaust Emissions - WSC - Year											
Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	21	9.91E-05	9	7.11%	133	6.13E-04	17	7.38%	138	6.37E-04
2	0.42%	8	3.63E-05	10	4.39%	82	3.78E-04	18	8.18%	153	7.05E-04
3	0.41%	8	3.50E-05	11	4.66%	87	4.02E-04	19	5.70%	107	4.91E-04
4	0.26%	5	2.25E-05	12	5.89%	110	5.08E-04	20	4.27%	80	3.68E-04
5	0.50%	9	4.30E-05	13	6.15%	115	5.30E-04	21	3.26%	61	2.81E-04
6	0.90%	17	7.79E-05	14	6.04%	113	5.20E-04	22	3.30%	62	2.85E-04
7	3.79%	71	3.27E-04	15	7.01%	131	6.05E-04	23	2.46%	46	2.12E-04
8	7.76%	145	6.69E-04	16	7.14%	133	6.15E-04	24	1.87%	35	1.61E-04
Total									1,870		

City View Plaza - San Jose

Project Operation - West San Carlos

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC_TEVAP	West San Carlos	SW-NE	4	511	0.32	20.63	68	1.3	20	1,870
	SR-87 to S. Market									

Emission Factors - PM2.5 - Evaporative TOG

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200			
Emissions per Vehicle per Mile (g/VMT)	0.0610			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - WSC_TEVAP

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	21	1.16E-04	9	7.11%	133	7.15E-04	17	7.38%	138	7.42E-04
2	0.42%	8	4.23E-05	10	4.39%	82	4.41E-04	18	8.18%	153	8.22E-04
3	0.41%	8	4.08E-05	11	4.66%	87	4.69E-04	19	5.70%	107	5.73E-04
4	0.26%	5	2.62E-05	12	5.89%	110	5.92E-04	20	4.27%	80	4.29E-04
5	0.50%	9	5.01E-05	13	6.15%	115	6.19E-04	21	3.26%	61	3.28E-04
6	0.90%	17	9.09E-05	14	6.04%	113	6.07E-04	22	3.30%	62	3.32E-04
7	3.79%	71	3.81E-04	15	7.01%	131	7.05E-04	23	2.46%	46	2.48E-04
8	7.76%	145	7.80E-04	16	7.14%	133	7.18E-04	24	1.87%	35	1.88E-04
Total											1,870

City View Plaza - San Jose

Project Operation - West San Carlos

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC_FUG	West San Carlos	SW-NE	4	511	0.32	20.63	68	1.3	20	1,870
	SR-87 to S. Market									

Emission Factors - Fugitive PM2.5

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Tire Wear - Emissions per Vehicle (g/VMT)	0.00219			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01734			
Road Dust - Emissions per Vehicle (g/VMT)	0.01679			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM_{2.5} Emissions - WSC_FUG

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	21	6.88E-05	9	7.11%	133	4.26E-04	17	7.38%	138	4.42E-04
2	0.42%	8	2.52E-05	10	4.39%	82	2.63E-04	18	8.18%	153	4.89E-04
3	0.41%	8	2.43E-05	11	4.66%	87	2.79E-04	19	5.70%	107	3.41E-04
4	0.26%	5	1.56E-05	12	5.89%	110	3.52E-04	20	4.27%	80	2.56E-04
5	0.50%	9	2.98E-05	13	6.15%	115	3.68E-04	21	3.26%	61	1.95E-04
6	0.90%	17	5.41E-05	14	6.04%	113	3.61E-04	22	3.30%	62	1.98E-04
7	3.79%	71	2.27E-04	15	7.01%	131	4.20E-04	23	2.46%	46	1.47E-04
8	7.76%	145	4.65E-04	16	7.14%	133	4.27E-04	24	1.87%	35	1.12E-04
Total										1,870	

City View Plaza - San Jose

Project Operation - South Market Street

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SMRKT_DPM	South Market Street	NW-SE	4	611	0.38	20.63	67.7	3.4	20	3,300
	W Santa Clara to W San Carlos									

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	20			
Emissions per Vehicle (g/VMT)	0.00059			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - SMRKT_DPM

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.98%	131	8.10E-06	9	6.44%	212	1.31E-05	17	5.53%	182	1.13E-05
2	2.67%	88	5.44E-06	10	7.40%	244	1.51E-05	18	3.14%	104	6.40E-06
3	2.84%	94	5.78E-06	11	6.32%	208	1.29E-05	19	2.35%	77	4.78E-06
4	3.30%	109	6.71E-06	12	6.88%	227	1.40E-05	20	0.86%	28	1.75E-06
5	2.16%	71	4.40E-06	13	6.27%	207	1.28E-05	21	3.08%	102	6.27E-06
6	3.30%	109	6.71E-06	14	6.21%	205	1.26E-05	22	4.21%	139	8.58E-06
7	6.03%	199	1.23E-05	15	5.13%	169	1.04E-05	23	2.62%	87	5.34E-06
8	4.56%	151	9.29E-06	16	3.88%	128	7.90E-06	24	0.85%	28	1.74E-06
Total										3,300	

City View Plaza - San Jose

Project Operation - South Market Street

PM_{2.5} Modeling - Roadway Links, Traffic Volumes, and PM_{2.5} Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SMRKT_PM25	South Market Street	NW-SE	4	611	0.38	20.63	68	1.3	20	3,300
	W Santa Clara to W San Carlos									

Emission Factors - PM_{2.5}

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - SMRKT_PM25

City View Plaza - San Jose

Project Operation - South Market Street

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - SMRKT_TEXH

City View Plaza - San Jose

Project Operation - South Market Street

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SMRKT_TEVAP	South Market Street	NW-SE	4	611	0.38	20.63	68	1.3	20	3,300
	W Santa Clara to W San Carlos									

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200			
Emissions per Vehicle per Mile (g/VMT)	0.0610			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - SMRKT_TEVAP

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	38	2.44E-04	9	7.11%	235	1.51E-03	17	7.38%	244	1.57E-03
2	0.42%	14	8.93E-05	10	4.39%	145	9.31E-04	18	8.18%	270	1.74E-03
3	0.41%	13	8.61E-05	11	4.66%	154	9.90E-04	19	5.70%	188	1.21E-03
4	0.26%	9	5.54E-05	12	5.89%	194	1.25E-03	20	4.27%	141	9.07E-04
5	0.50%	16	1.06E-04	13	6.15%	203	1.31E-03	21	3.26%	108	6.92E-04
6	0.90%	30	1.92E-04	14	6.04%	199	1.28E-03	22	3.30%	109	7.01E-04
7	3.79%	125	8.04E-04	15	7.01%	231	1.49E-03	23	2.46%	81	5.23E-04
8	7.76%	256	1.65E-03	16	7.14%	236	1.52E-03	24	1.87%	62	3.96E-04
Total											3,300

City View Plaza - San Jose

Project Operation - South Market Street

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SMRKT_FUG	South Market Street	NW-SE	4	611	0.38	20.63	68	1.3	20	3,300
	W Santa Clara to W San Carlos									

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Tire Wear - Emissions per Vehicle (g/VMT)	0.00219			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01734			
Road Dust - Emissions per Vehicle (g/VMT)	0.01679			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM_{2.5} Emissions - SMRKT_FUG

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	38	1.45E-04	9	7.11%	235	8.99E-04	17	7.38%	244	9.34E-04
2	0.42%	14	5.32E-05	10	4.39%	145	5.55E-04	18	8.18%	270	1.03E-03
3	0.41%	13	5.13E-05	11	4.66%	154	5.90E-04	19	5.70%	188	7.20E-04
4	0.26%	9	3.30E-05	12	5.89%	194	7.44E-04	20	4.27%	141	5.40E-04
5	0.50%	16	6.30E-05	13	6.15%	203	7.78E-04	21	3.26%	108	4.12E-04
6	0.90%	30	1.14E-04	14	6.04%	199	7.63E-04	22	3.30%	109	4.17E-04
7	3.79%	125	4.79E-04	15	7.01%	231	8.87E-04	23	2.46%	81	3.11E-04
8	7.76%	256	9.81E-04	16	7.14%	236	9.03E-04	24	1.87%	62	2.36E-04
Total										3,300	

Existing + Project + Background Traffic Emissions

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - Park Avenue
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PARK_DPM	Park Avenue	SW-NE	4	538	0.33	20.63	67.7	3.4	20	6,185
	SR-87 to S. Market									

Emission Factors

Speed Category Travel Speed (mph)	1	2	3	4
Emissions per Vehicle (g/VMT)	20	0.00059		

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - PARK_DPM

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.98%	246	1.34E-05	9	6.44%	398	2.16E-05	17	5.53%	342	1.86E-05
2	2.67%	165	8.97E-06	10	7.40%	457	2.48E-05	18	3.14%	194	1.06E-05
3	2.84%	176	9.54E-06	11	6.32%	391	2.12E-05	19	2.35%	145	7.88E-06
4	3.30%	204	1.11E-05	12	6.88%	426	2.31E-05	20	0.86%	53	2.89E-06
5	2.16%	134	7.25E-06	13	6.27%	388	2.10E-05	21	3.08%	190	1.03E-05
6	3.30%	204	1.11E-05	14	6.21%	384	2.09E-05	22	4.21%	261	1.41E-05
7	6.03%	373	2.03E-05	15	5.13%	317	1.72E-05	23	2.62%	162	8.81E-06
8	4.56%	282	1.53E-05	16	3.88%	240	1.30E-05	24	0.85%	53	2.86E-06
Total											6,185

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - Park Avenue
PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PARK_PM25	Park Avenue	SW-NE	4	538	0.33	20.63	68	1.3	20	6,185
	SR-87 to S. Market									

Emission Factors - PM2.5

Speed Category Travel Speed (mph)	1	2	3	4
Emissions per Vehicle (g/VMT)	20	0	0	0

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - PARK_PM25

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	71	1.78E-05	9	7.11%	440	1.10E-04	17	7.38%	457	1.14E-04
2	0.42%	26	6.51E-06	10	4.39%	271	6.79E-05	18	8.18%	506	1.27E-04
3	0.41%	25	6.28E-06	11	4.66%	288	7.22E-05	19	5.70%	352	8.82E-05
4	0.26%	16	4.04E-06	12	5.89%	364	9.12E-05	20	4.27%	264	6.61E-05
5	0.50%	31	7.72E-06	13	6.15%	381	9.53E-05	21	3.26%	202	5.04E-05
6	0.90%	56	1.40E-05	14	6.04%	373	9.35E-05	22	3.30%	204	5.11E-05
7	3.79%	234	5.86E-05	15	7.01%	434	1.09E-04	23	2.46%	152	3.81E-05
8	7.76%	480	1.20E-04	16	7.14%	442	1.11E-04	24	1.87%	115	2.89E-05
Total										6,185	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - Park Avenue

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - PARK TEXH

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - Park Avenue

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PARK_TEVAP	Park Avenue	SW-NE	4	538	0.33	20.63	68	1.3	20	6,185
	SR-87 to S. Market									

Emission Factors - PM2.5 - Evaporative TOG

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200			
Emissions per Vehicle per Mile (g/VMT)	0.0610			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - PARK_TEVAP

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	71	4.03E-04	9	7.11%	440	2.49E-03	17	7.38%	457	2.59E-03
2	0.42%	26	1.47E-04	10	4.39%	271	1.54E-03	18	8.18%	506	2.86E-03
3	0.41%	25	1.42E-04	11	4.66%	288	1.63E-03	19	5.70%	352	2.00E-03
4	0.26%	16	9.13E-05	12	5.89%	364	2.06E-03	20	4.27%	264	1.50E-03
5	0.50%	31	1.75E-04	13	6.15%	381	2.15E-03	21	3.26%	202	1.14E-03
6	0.90%	56	3.17E-04	14	6.04%	373	2.11E-03	22	3.30%	204	1.16E-03
7	3.79%	234	1.33E-03	15	7.01%	434	2.46E-03	23	2.46%	152	8.62E-04
8	7.76%	480	2.72E-03	16	7.14%	442	2.50E-03	24	1.87%	115	6.54E-04
Total										6,185	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - Park Avenue

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PARK_FUG	Park Avenue	SW-NE	4	538	0.33	20.63	68	1.3	20	6,185
	SR-87 to S. Market									

Emission Factors - Fugitive PM2.5

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Tire Wear - Emissions per Vehicle (g/VMT)	0.00219			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01734			
Road Dust - Emissions per Vehicle (g/VMT)	0.01679			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM_{2.5} Emissions - PARK_FUG

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	71	2.40E-04	9	7.11%	440	1.48E-03	17	7.38%	457	1.54E-03
2	0.42%	26	8.77E-05	10	4.39%	271	9.15E-04	18	8.18%	506	1.70E-03
3	0.41%	25	8.45E-05	11	4.66%	288	9.72E-04	19	5.70%	352	1.19E-03
4	0.26%	16	5.44E-05	12	5.89%	364	1.23E-03	20	4.27%	264	8.90E-04
5	0.50%	31	1.04E-04	13	6.15%	381	1.28E-03	21	3.26%	202	6.79E-04
6	0.90%	56	1.88E-04	14	6.04%	373	1.26E-03	22	3.30%	204	6.88E-04
7	3.79%	234	7.90E-04	15	7.01%	434	1.46E-03	23	2.46%	152	5.14E-04
8	7.76%	480	1.62E-03	16	7.14%	442	1.49E-03	24	1.87%	115	3.89E-04
Total											6,185

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Avenue

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALMAV_DPM	South Almaden Avenue	NW-SE	2	232	0.14	13.32	43.7	3.4	20	9,325
	W Santa Clara to San Fernando									

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	20			
Emissions per Vehicle (g/VMT)	0.00059			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - SALMAV_DPM

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.98%	371	8.69E-06	9	6.44%	600	1.41E-05	17	5.53%	516	1.21E-05
2	2.67%	249	5.83E-06	10	7.40%	690	1.62E-05	18	3.14%	293	6.86E-06
3	2.84%	265	6.20E-06	11	6.32%	589	1.38E-05	19	2.35%	219	5.13E-06
4	3.30%	307	7.20E-06	12	6.88%	642	1.50E-05	20	0.86%	80	1.88E-06
5	2.16%	201	4.72E-06	13	6.27%	584	1.37E-05	21	3.08%	287	6.72E-06
6	3.30%	307	7.20E-06	14	6.21%	579	1.36E-05	22	4.21%	393	9.20E-06
7	6.03%	562	1.32E-05	15	5.13%	478	1.12E-05	23	2.62%	245	5.73E-06
8	4.56%	425	9.97E-06	16	3.88%	362	8.48E-06	24	0.85%	79	1.86E-06
Total											9,325

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Avenue

PM_{2.5} Modeling - Roadway Links, Traffic Volumes, and PM_{2.5} Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALMAV_PM25	South Almaden Avenue	NW-SE	2	232	0.14	13.32	44	1.3	20	9,325
	W Santa Clara to San Fernando									

Emission Factors - PM_{2.5}

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - SALMAV_PM25

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Avenue

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - SALMAV_TEXH

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Avenue

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALMAV_TEVAP	South Almaden Avenue	NW-SE	2	232	0.14	13.32	44	1.3	20	9,325
	W Santa Clara to San Fernando									

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200			
Emissions per Vehicle per Mile (g/VMT)	0.0610			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - SALMAV_TEVAP

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	107	2.62E-04	9	7.11%	663	1.62E-03	17	7.38%	689	1.68E-03
2	0.42%	39	9.58E-05	10	4.39%	409	9.99E-04	18	8.18%	762	1.86E-03
3	0.41%	38	9.23E-05	11	4.66%	435	1.06E-03	19	5.70%	531	1.30E-03
4	0.26%	24	5.94E-05	12	5.89%	549	1.34E-03	20	4.27%	398	9.73E-04
5	0.50%	46	1.14E-04	13	6.15%	574	1.40E-03	21	3.26%	304	7.42E-04
6	0.90%	84	2.06E-04	14	6.04%	563	1.37E-03	22	3.30%	308	7.52E-04
7	3.79%	353	8.63E-04	15	7.01%	654	1.60E-03	23	2.46%	230	5.61E-04
8	7.76%	724	1.77E-03	16	7.14%	666	1.63E-03	24	1.87%	174	4.25E-04
Total										9,325	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Avenue

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALMAV_FUG	South Almaden Avenue	NW-SE	2	232	0.14	13.32	44	1.3	20	9,325
	W Santa Clara to San Fernando									

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Tire Wear - Emissions per Vehicle (g/VMT)	0.00219			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01734			
Road Dust - Emissions per Vehicle (g/VMT)	0.01679			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM_{2.5} Emissions - SALMAV_FUG

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Blvd #1

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	20			
Emissions per Vehicle (g/VMT)	0.00059			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - SALM1_DPM

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Blvd #1

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)
SALM1_PM25	South Almaden Blvd	NW-SE	2	256	0.16	13.32	44	1.3	20
	Santa Clara to San Fernando								

Emission Factors - PM2.5

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - SALM1_PM25

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	93	1.10E-05	9	7.11%	573	6.83E-05	17	7.38%	595	7.10E-05
2	0.42%	34	4.04E-06	10	4.39%	353	4.21E-05	18	8.18%	659	7.86E-05
3	0.41%	33	3.89E-06	11	4.66%	376	4.48E-05	19	5.70%	459	5.47E-05
4	0.26%	21	2.51E-06	12	5.89%	474	5.66E-05	20	4.27%	344	4.10E-05
5	0.50%	40	4.79E-06	13	6.15%	496	5.91E-05	21	3.26%	262	3.13E-05
6	0.90%	73	8.69E-06	14	6.04%	486	5.80E-05	22	3.30%	266	3.17E-05
7	3.79%	305	3.64E-05	15	7.01%	565	6.74E-05	23	2.46%	198	2.37E-05
8	7.76%	625	7.46E-05	16	7.14%	575	6.86E-05	24	1.87%	150	1.79E-05
						Total		8,055			

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Blvd #1

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALM1_TEXH	South Almaden Blvd	NW-SE	2	256	0.16	13.32	44	1.3	20	8,055
	Santa Clara to San Fernando									

Emission Factors - TOG Exhaust

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - SALM1_TEXH

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Blvd #1

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200			
Emissions per Vehicle per Mile (g/VMT)	0.0610			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - SALM1_TEVAP

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	93	2.50E-04	9	7.11%	573	1.55E-03	17	7.38%	595	1.60E-03
2	0.42%	34	9.14E-05	10	4.39%	353	9.53E-04	18	8.18%	659	1.78E-03
3	0.41%	33	8.81E-05	11	4.66%	376	1.01E-03	19	5.70%	459	1.24E-03
4	0.26%	21	5.67E-05	12	5.89%	474	1.28E-03	20	4.27%	344	9.28E-04
5	0.50%	40	1.08E-04	13	6.15%	496	1.34E-03	21	3.26%	262	7.08E-04
6	0.90%	73	1.96E-04	14	6.04%	486	1.31E-03	22	3.30%	266	7.17E-04
7	3.79%	305	8.23E-04	15	7.01%	565	1.52E-03	23	2.46%	198	5.35E-04
8	7.76%	625	1.69E-03	16	7.14%	575	1.55E-03	24	1.87%	150	4.06E-04
Total										8,055	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Blvd #1

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALM1_FUG	South Almaden Blvd	NW-SE	2	256	0.16	13.32	44	1.3	20	8,055
	Santa Clara to San Fernando									

Emission Factors - Fugitive PM2.5

Speed Category Travel Speed (mph)	1	2	3	4
Tire Wear - Emissions per Vehicle (g/VMT)	20	0	0	0
Brake Wear - Emissions per Vehicle (g/VMT)	0.00219			
Road Dust - Emissions per Vehicle (g/VMT)	0.01734			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.01679			
	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - SALM1_FUG

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	93	1.49E-04	9	7.11%	573	9.20E-04	17	7.38%	595	9.56E-04
2	0.42%	34	5.44E-05	10	4.39%	353	5.68E-04	18	8.18%	659	1.06E-03
3	0.41%	33	5.25E-05	11	4.66%	376	6.03E-04	19	5.70%	459	7.37E-04
4	0.26%	21	3.37E-05	12	5.89%	474	7.62E-04	20	4.27%	344	5.53E-04
5	0.50%	40	6.45E-05	13	6.15%	496	7.96E-04	21	3.26%	262	4.22E-04
6	0.90%	73	1.17E-04	14	6.04%	486	7.81E-04	22	3.30%	266	4.27E-04
7	3.79%	305	4.90E-04	15	7.01%	565	9.07E-04	23	2.46%	198	3.19E-04
8	7.76%	625	1.00E-03	16	7.14%	575	9.24E-04	24	1.87%	150	2.42E-04
Total										8,055	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Blvd #2

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALM2_DPM	South Almaden Blvd	NW-SE	2	193	0.12	13.32	43.7	3.4	20	22,395
	San Fernando to Park Ave									

Emission Factors

Speed Category Travel Speed (mph)	1	2	3	4
Emissions per Vehicle (g/VMT)	20			
	0.00059			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - SALM2_DPM

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.98%	891	1.74E-05	9	6.44%	1442	2.81E-05	17	5.53%	1238	2.42E-05
2	2.67%	598	1.17E-05	10	7.40%	1656	3.23E-05	18	3.14%	704	1.37E-05
3	2.84%	636	1.24E-05	11	6.32%	1414	2.76E-05	19	2.35%	526	1.03E-05
4	3.30%	738	1.44E-05	12	6.88%	1542	3.01E-05	20	0.86%	193	3.76E-06
5	2.16%	484	9.44E-06	13	6.27%	1404	2.74E-05	21	3.08%	689	1.35E-05
6	3.30%	738	1.44E-05	14	6.21%	1391	2.71E-05	22	4.21%	944	1.84E-05
7	6.03%	1351	2.64E-05	15	5.13%	1149	2.24E-05	23	2.62%	587	1.15E-05
8	4.56%	1022	1.99E-05	16	3.88%	869	1.70E-05	24	0.85%	191	3.73E-06
Total											22,395

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Blvd #2

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALM2_PM25	South Almaden Blvd	NW-SE	2	193	0.12	13.32	44	1.3	20	22,395
	San Fernando to Park Ave									

Emission Factors - PM2.5

Speed Category	1	2	3	4
	Travel Speed (mph)	20	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - SALM2_PM25

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	257	2.32E-05	9	7.11%	1593	1.43E-04	17	7.38%	1654	1.49E-04
2	0.42%	94	8.48E-06	10	4.39%	982	8.84E-05	18	8.18%	1831	1.65E-04
3	0.41%	91	8.17E-06	11	4.66%	1044	9.40E-05	19	5.70%	1276	1.15E-04
4	0.26%	58	5.25E-06	12	5.89%	1319	1.19E-04	20	4.27%	956	8.61E-05
5	0.50%	112	1.00E-05	13	6.15%	1378	1.24E-04	21	3.26%	730	6.57E-05
6	0.90%	202	1.82E-05	14	6.04%	1352	1.22E-04	22	3.30%	739	6.65E-05
7	3.79%	848	7.63E-05	15	7.01%	1571	1.41E-04	23	2.46%	552	4.96E-05
8	7.76%	1739	1.56E-04	16	7.14%	1599	1.44E-04	24	1.87%	418	3.76E-05
Total											22,395

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Blvd #2

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALM2_TEXH	South Almaden Blvd	NW-SE	2	193.315	0.12	13.32	44	1.3	20	22,395
	San Fernando to Park Ave									

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
	Travel Speed (mph)	20	0	0
Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - SALM2_TEXH

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	257	4.49E-04	9	7.11%	1593	2.78E-03	17	7.38%	1654	2.89E-03
2	0.42%	94	1.64E-04	10	4.39%	982	1.71E-03	18	8.18%	1831	3.20E-03
3	0.41%	91	1.58E-04	11	4.66%	1044	1.82E-03	19	5.70%	1276	2.23E-03
4	0.26%	58	1.02E-04	12	5.89%	1319	2.30E-03	20	4.27%	956	1.67E-03
5	0.50%	112	1.95E-04	13	6.15%	1378	2.41E-03	21	3.26%	730	1.27E-03
6	0.90%	202	3.53E-04	14	6.04%	1352	2.36E-03	22	3.30%	739	1.29E-03
7	3.79%	848	1.48E-03	15	7.01%	1571	2.74E-03	23	2.46%	552	9.63E-04
8	7.76%	1739	3.03E-03	16	7.14%	1599	2.79E-03	24	1.87%	418	7.30E-04
Total										22,395	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Blvd #2

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALM2_TEVAP	South Almaden Blvd	NW-SE	2	193	0.12	13.32	44	1.3	20	22,395
	San Fernando to Park Ave									

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4	
	Travel Speed (mph)	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200				
Emissions per Vehicle per Mile (g/VMT)	0.0610				

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - SALM2_TEVAP

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	257	5.24E-04	9	7.11%	1593	3.24E-03	17	7.38%	1654	3.37E-03
2	0.42%	94	1.92E-04	10	4.39%	982	2.00E-03	18	8.18%	1831	3.73E-03
3	0.41%	91	1.85E-04	11	4.66%	1044	2.13E-03	19	5.70%	1276	2.60E-03
4	0.26%	58	1.19E-04	12	5.89%	1319	2.68E-03	20	4.27%	956	1.95E-03
5	0.50%	112	2.27E-04	13	6.15%	1378	2.80E-03	21	3.26%	730	1.49E-03
6	0.90%	202	4.12E-04	14	6.04%	1352	2.75E-03	22	3.30%	739	1.50E-03
7	3.79%	848	1.73E-03	15	7.01%	1571	3.20E-03	23	2.46%	552	1.12E-03
8	7.76%	1739	3.54E-03	16	7.14%	1599	3.25E-03	24	1.87%	418	8.51E-04
Total										22,395	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Blvd #2

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALM2_FUG	South Almaden Blvd	NW-SE	2	193	0.12	13.32	44	1.3	20	22,395
	San Fernando to Park Ave									

Emission Factors - Fugitive PM2.5

Speed Category Travel Speed (mph)	1	2	3	4
Tire Wear - Emissions per Vehicle (g/VMT)	20	0	0	0
Brake Wear - Emissions per Vehicle (g/VMT)	0.00219			
Road Dust - Emissions per Vehicle (g/VMT)	0.01734			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.01679			
	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - SALM2_FUG

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	257	3.12E-04	9	7.11%	1593	1.93E-03	17	7.38%	1654	2.00E-03
2	0.42%	94	1.14E-04	10	4.39%	982	1.19E-03	18	8.18%	1831	2.22E-03
3	0.41%	91	1.10E-04	11	4.66%	1044	1.27E-03	19	5.70%	1276	1.55E-03
4	0.26%	58	7.08E-05	12	5.89%	1319	1.60E-03	20	4.27%	956	1.16E-03
5	0.50%	112	1.35E-04	13	6.15%	1378	1.67E-03	21	3.26%	730	8.84E-04
6	0.90%	202	2.45E-04	14	6.04%	1352	1.64E-03	22	3.30%	739	8.96E-04
7	3.79%	848	1.03E-03	15	7.01%	1571	1.90E-03	23	2.46%	552	6.68E-04
8	7.76%	1739	2.11E-03	16	7.14%	1599	1.94E-03	24	1.87%	418	5.07E-04
Total										22,395	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Blvd #3

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALM3_DPM	South Almaden Blvd	NW-SE	2	162	0.10	13.32	43.7	3.4	20	22,215
	Park Ave to W San Carlos									

Emission Factors

Speed Category Travel Speed (mph)	1	2	3	4
Emissions per Vehicle (g/VMT)	20			
	0.00059			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - SALM3_DPM

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.98%	884	1.45E-05	9	6.44%	1430	2.34E-05	17	5.53%	1228	2.01E-05
2	2.67%	593	9.73E-06	10	7.40%	1643	2.69E-05	18	3.14%	698	1.14E-05
3	2.84%	631	1.03E-05	11	6.32%	1403	2.30E-05	19	2.35%	521	8.55E-06
4	3.30%	732	1.20E-05	12	6.88%	1529	2.51E-05	20	0.86%	191	3.14E-06
5	2.16%	480	7.86E-06	13	6.27%	1392	2.28E-05	21	3.08%	684	1.12E-05
6	3.30%	732	1.20E-05	14	6.21%	1380	2.26E-05	22	4.21%	936	1.53E-05
7	6.03%	1340	2.20E-05	15	5.13%	1140	1.87E-05	23	2.62%	583	9.55E-06
8	4.56%	1014	1.66E-05	16	3.88%	862	1.41E-05	24	0.85%	189	3.10E-06
Total											22,215

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Blvd #3

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALM3_PM25	South Almaden Blvd	NW-SE	2	162	0.10	13.32	44	1.3	20	22,215
	Park Ave to W San Carlos									

Emission Factors - PM2.5

Speed Category	1	2	3	4
	Travel Speed (mph)	20	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - SALM3_PM25

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	255	1.93E-05	9	7.11%	1580	1.19E-04	17	7.38%	1640	1.24E-04
2	0.42%	93	7.06E-06	10	4.39%	975	7.37E-05	18	8.18%	1816	1.37E-04
3	0.41%	90	6.81E-06	11	4.66%	1036	7.83E-05	19	5.70%	1266	9.57E-05
4	0.26%	58	4.38E-06	12	5.89%	1308	9.89E-05	20	4.27%	949	7.17E-05
5	0.50%	111	8.37E-06	13	6.15%	1367	1.03E-04	21	3.26%	724	5.47E-05
6	0.90%	201	1.52E-05	14	6.04%	1341	1.01E-04	22	3.30%	733	5.54E-05
7	3.79%	841	6.36E-05	15	7.01%	1558	1.18E-04	23	2.46%	547	4.14E-05
8	7.76%	1725	1.30E-04	16	7.14%	1586	1.20E-04	24	1.87%	415	3.14E-05
Total											22,215

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Blvd #3

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALM3_TEXH	South Almaden Blvd	NW-SE	2	162	0.10	13.32	44	1.3	20	22,215
	Park Ave to W San Carlos									

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
	Travel Speed (mph)	20	0	0
Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - SALM3_TEXH

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	255	3.74E-04	9	7.11%	1580	2.32E-03	17	7.38%	1640	2.41E-03
2	0.42%	93	1.37E-04	10	4.39%	975	1.43E-03	18	8.18%	1816	2.66E-03
3	0.41%	90	1.32E-04	11	4.66%	1036	1.52E-03	19	5.70%	1266	1.86E-03
4	0.26%	58	8.49E-05	12	5.89%	1308	1.92E-03	20	4.27%	949	1.39E-03
5	0.50%	111	1.62E-04	13	6.15%	1367	2.00E-03	21	3.26%	724	1.06E-03
6	0.90%	201	2.94E-04	14	6.04%	1341	1.97E-03	22	3.30%	733	1.07E-03
7	3.79%	841	1.23E-03	15	7.01%	1558	2.28E-03	23	2.46%	547	8.02E-04
8	7.76%	1725	2.53E-03	16	7.14%	1586	2.33E-03	24	1.87%	415	6.08E-04
Total										22,215	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Blvd #3

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200			
Emissions per Vehicle per Mile (g/VMT)	0.0610			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - SALM3_TEVAP

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	255	4.37E-04	9	7.11%	1580	2.70E-03	17	7.38%	1640	2.80E-03
2	0.42%	93	1.60E-04	10	4.39%	975	1.67E-03	18	8.18%	1816	3.11E-03
3	0.41%	90	1.54E-04	11	4.66%	1036	1.77E-03	19	5.70%	1266	2.16E-03
4	0.26%	58	9.90E-05	12	5.89%	1308	2.24E-03	20	4.27%	949	1.62E-03
5	0.50%	111	1.89E-04	13	6.15%	1367	2.34E-03	21	3.26%	724	1.24E-03
6	0.90%	201	3.43E-04	14	6.04%	1341	2.29E-03	22	3.30%	733	1.25E-03
7	3.79%	841	1.44E-03	15	7.01%	1558	2.66E-03	23	2.46%	547	9.35E-04
8	7.76%	1725	2.95E-03	16	7.14%	1586	2.71E-03	24	1.87%	415	7.09E-04
Total										22,215	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Almaden Blvd #3

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SALM3_FUG	South Almaden Blvd	NW-SE	2	162	0.10	13.32	44	1.3	20	22,215
	Park Ave to W San Carlos									

Emission Factors - Fugitive PM2.5

Speed Category Travel Speed (mph)	1	2	3	4
Tire Wear - Emissions per Vehicle (g/VMT)	20	0	0	0
Brake Wear - Emissions per Vehicle (g/VMT)	0.00219			
Road Dust - Emissions per Vehicle (g/VMT)	0.01734			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.01679			
	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - SALM3_FUG

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	255	2.60E-04	9	7.11%	1580	1.61E-03	17	7.38%	1640	1.67E-03
2	0.42%	93	9.51E-05	10	4.39%	975	9.92E-04	18	8.18%	1816	1.85E-03
3	0.41%	90	9.17E-05	11	4.66%	1036	1.05E-03	19	5.70%	1266	1.29E-03
4	0.26%	58	5.90E-05	12	5.89%	1308	1.33E-03	20	4.27%	949	9.66E-04
5	0.50%	111	1.13E-04	13	6.15%	1367	1.39E-03	21	3.26%	724	7.37E-04
6	0.90%	201	2.04E-04	14	6.04%	1341	1.37E-03	22	3.30%	733	7.46E-04
7	3.79%	841	8.56E-04	15	7.01%	1558	1.59E-03	23	2.46%	547	5.57E-04
8	7.76%	1725	1.76E-03	16	7.14%	1586	1.61E-03	24	1.87%	415	4.22E-04
Total										22,215	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South San Pedro Street

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PEDRO_DPM	South San Pedro Street	NW-SE	2	229	0.14	13.32	43.7	3.4	20	3,680
	W Santa Clara to San Fernando									

Emission Factors

Speed Category Travel Speed (mph)	1	2	3	4
Emissions per Vehicle (g/VMT)	20			
	0.00059			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - PEDRO_DPM

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.98%	146	3.38E-06	9	6.44%	237	5.47E-06	17	5.53%	203	4.70E-06
2	2.67%	98	2.27E-06	10	7.40%	272	6.28E-06	18	3.14%	116	2.67E-06
3	2.84%	105	2.41E-06	11	6.32%	232	5.37E-06	19	2.35%	86	1.99E-06
4	3.30%	121	2.80E-06	12	6.88%	253	5.85E-06	20	0.86%	32	7.31E-07
5	2.16%	79	1.83E-06	13	6.27%	231	5.32E-06	21	3.08%	113	2.61E-06
6	3.30%	121	2.80E-06	14	6.21%	229	5.28E-06	22	4.21%	155	3.58E-06
7	6.03%	222	5.12E-06	15	5.13%	189	4.36E-06	23	2.62%	97	2.23E-06
8	4.56%	168	3.88E-06	16	3.88%	143	3.30E-06	24	0.85%	31	7.24E-07
Total											3,680

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South San Pedro Street

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PEDRO_PM25	South San Pedro Street	NW-SE	2	229	0.14	13.32	44	1.3	20	3,680
	W Santa Clara to San Fernando									

Emission Factors - PM2.5

Speed Category	1	2	3	4
	Travel Speed (mph)	20	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - PEDRO_PM25

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	42	4.50E-06	9	7.11%	262	2.79E-05	17	7.38%	272	2.89E-05
2	0.42%	15	1.65E-06	10	4.39%	161	1.72E-05	18	8.18%	301	3.20E-05
3	0.41%	15	1.59E-06	11	4.66%	172	1.83E-05	19	5.70%	210	2.23E-05
4	0.26%	10	1.02E-06	12	5.89%	217	2.31E-05	20	4.27%	157	1.67E-05
5	0.50%	18	1.95E-06	13	6.15%	226	2.41E-05	21	3.26%	120	1.28E-05
6	0.90%	33	3.54E-06	14	6.04%	222	2.36E-05	22	3.30%	121	1.29E-05
7	3.79%	139	1.48E-05	15	7.01%	258	2.75E-05	23	2.46%	91	9.65E-06
8	7.76%	286	3.04E-05	16	7.14%	263	2.80E-05	24	1.87%	69	7.31E-06
Total											3,680

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South San Pedro Street

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PEDRO_TEXH	South San Pedro Street	NW-SE	2	229	0.14	13.32	44	1.3	20	3,680
	W Santa Clara to San Fernando									

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
	Travel Speed (mph)	20	0	0
Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - PEDRO_TEXH

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South San Pedro Street

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200			
Emissions per Vehicle per Mile (g/VMT)	0.0610			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - PEDRO_TEVAP

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South San Pedro Street

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PEDRO_FUG	South San Pedro Street	NW-SE	2	229	0.14	13.32	44	1.3	20	3,680
	W Santa Clara to San Fernando									

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Tire Wear - Emissions per Vehicle (g/VMT)	0.00219			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01734			
Road Dust - Emissions per Vehicle (g/VMT)	0.01679			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - PEDRO_FUG

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	42	6.06E-05	9	7.11%	262	3.75E-04	17	7.38%	272	3.89E-04
2	0.42%	15	2.22E-05	10	4.39%	161	2.31E-04	18	8.18%	301	4.31E-04
3	0.41%	15	2.14E-05	11	4.66%	172	2.46E-04	19	5.70%	210	3.01E-04
4	0.26%	10	1.38E-05	12	5.89%	217	3.11E-04	20	4.27%	157	2.25E-04
5	0.50%	18	2.63E-05	13	6.15%	226	3.25E-04	21	3.26%	120	1.72E-04
6	0.90%	33	4.77E-05	14	6.04%	222	3.18E-04	22	3.30%	121	1.74E-04
7	3.79%	139	2.00E-04	15	7.01%	258	3.70E-04	23	2.46%	91	1.30E-04
8	7.76%	286	4.09E-04	16	7.14%	263	3.77E-04	24	1.87%	69	9.85E-05
		Total		3,680							

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West San Fernando

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSF_DPM	West San Fernando Street	SW-NE	4	791	0.49	20.63	67.7	3.4	20	10,340
	SR-87 to S. First St.									

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	20			
Emissions per Vehicle (g/VMT)	0.00059			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - WSF_DPM

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.98%	411	3.28E-05	9	6.44%	666	5.31E-05	17	5.53%	572	4.56E-05
2	2.67%	276	2.20E-05	10	7.40%	765	6.10E-05	18	3.14%	325	2.59E-05
3	2.84%	294	2.35E-05	11	6.32%	653	5.21E-05	19	2.35%	243	1.94E-05
4	3.30%	341	2.72E-05	12	6.88%	712	5.68E-05	20	0.86%	89	7.11E-06
5	2.16%	223	1.78E-05	13	6.27%	648	5.17E-05	21	3.08%	318	2.54E-05
6	3.30%	341	2.72E-05	14	6.21%	642	5.13E-05	22	4.21%	436	3.48E-05
7	6.03%	624	4.98E-05	15	5.13%	531	4.24E-05	23	2.62%	271	2.16E-05
8	4.56%	472	3.77E-05	16	3.88%	401	3.20E-05	24	0.85%	88	7.04E-06
Total											10,340

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West San Fernando

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WFS_PM25	West San Fernando Street	SW-NE	4	791	0.49	20.63	68	1.3	20	10,340
	SR-87 to S. First St.									

Emission Factors - PM2.5

Speed Category	1	2	3	4
	Travel Speed (mph)	20	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - WFS_PM25

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	119	4.37E-05	9	7.11%	735	2.71E-04	17	7.38%	764	2.81E-04
2	0.42%	43	1.60E-05	10	4.39%	454	1.67E-04	18	8.18%	845	3.11E-04
3	0.41%	42	1.54E-05	11	4.66%	482	1.77E-04	19	5.70%	589	2.17E-04
4	0.26%	27	9.92E-06	12	5.89%	609	2.24E-04	20	4.27%	442	1.63E-04
5	0.50%	52	1.90E-05	13	6.15%	636	2.34E-04	21	3.26%	337	1.24E-04
6	0.90%	93	3.44E-05	14	6.04%	624	2.30E-04	22	3.30%	341	1.26E-04
7	3.79%	392	1.44E-04	15	7.01%	725	2.67E-04	23	2.46%	255	9.37E-05
8	7.76%	803	2.95E-04	16	7.14%	738	2.72E-04	24	1.87%	193	7.11E-05
Total											10,340

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West San Fernando

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WFS_TEXH	West San Fernando Street	SW-NE	4	791	0.49	20.63	68	1.3	20	10,340
	SR-87 to S. First St.									

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
	Travel Speed (mph)	20	0	0
Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - WFS_TEXH

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West San Fernando

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200			
Emissions per Vehicle per Mile (g/VMT)	0.0610			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - WFS_TEVAP

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West San Fernando

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WFS_FUG	West San Fernando Street	SW-NE	4	791	0.49	20.63	68	1.3	20	10,340
	SR-87 to S. First St.									

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Tire Wear - Emissions per Vehicle (g/VMT)	0.00219			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01734			
Road Dust - Emissions per Vehicle (g/VMT)	0.01679			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - WFS_FUG

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	119	5.89E-04	9	7.11%	735	3.65E-03	17	7.38%	764	3.78E-03
2	0.42%	43	2.16E-04	10	4.39%	454	2.25E-03	18	8.18%	845	4.19E-03
3	0.41%	42	2.08E-04	11	4.66%	482	2.39E-03	19	5.70%	589	2.92E-03
4	0.26%	27	1.34E-04	12	5.89%	609	3.02E-03	20	4.27%	442	2.19E-03
5	0.50%	52	2.56E-04	13	6.15%	636	3.15E-03	21	3.26%	337	1.67E-03
6	0.90%	93	4.63E-04	14	6.04%	624	3.09E-03	22	3.30%	341	1.69E-03
7	3.79%	392	1.94E-03	15	7.01%	725	3.59E-03	23	2.46%	255	1.26E-03
8	7.76%	803	3.98E-03	16	7.14%	738	3.66E-03	24	1.87%	193	9.57E-04
Total										10,340	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West Santa Clara Street #1

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC1_DPM	West Santa Clara - 1	SW-NE	4	130.2	0.08	20.63	67.7	3.4	20	29,265
	SR-87 to N. Almaden									

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	20			
Emissions per Vehicle (g/VMT)	0.00059			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - WSC1_DPM

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.98%	1164	1.53E-05	9	6.44%	1884	2.48E-05	17	5.53%	1618	2.13E-05
2	2.67%	782	1.03E-05	10	7.40%	2164	2.85E-05	18	3.14%	920	1.21E-05
3	2.84%	831	1.09E-05	11	6.32%	1848	2.43E-05	19	2.35%	687	9.03E-06
4	3.30%	964	1.27E-05	12	6.88%	2015	2.65E-05	20	0.86%	252	3.31E-06
5	2.16%	632	8.31E-06	13	6.27%	1834	2.41E-05	21	3.08%	900	1.18E-05
6	3.30%	964	1.27E-05	14	6.21%	1818	2.39E-05	22	4.21%	1233	1.62E-05
7	6.03%	1765	2.32E-05	15	5.13%	1502	1.97E-05	23	2.62%	767	1.01E-05
8	4.56%	1335	1.76E-05	16	3.88%	1136	1.49E-05	24	0.85%	249	3.28E-06
Total											29,265

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West Santa Clara Street #1

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC1_PM25	West Santa Clara - 1	SW-NE	4	130	0.08	20.63	68	1.3	20	29,265
	SR-87 to N. Almaden									

Emission Factors - PM2.5

Speed Category	1	2	3	4
	Travel Speed (mph)	20	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - WSC1_PM25

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	336	2.04E-05	9	7.11%	2081	1.26E-04	17	7.38%	2161	1.31E-04
2	0.42%	123	7.46E-06	10	4.39%	1284	7.78E-05	18	8.18%	2393	1.45E-04
3	0.41%	119	7.19E-06	11	4.66%	1365	8.27E-05	19	5.70%	1668	1.01E-04
4	0.26%	76	4.63E-06	12	5.89%	1723	1.04E-04	20	4.27%	1250	7.58E-05
5	0.50%	146	8.85E-06	13	6.15%	1801	1.09E-04	21	3.26%	954	5.78E-05
6	0.90%	265	1.60E-05	14	6.04%	1767	1.07E-04	22	3.30%	966	5.85E-05
7	3.79%	1108	6.72E-05	15	7.01%	2052	1.24E-04	23	2.46%	721	4.37E-05
8	7.76%	2272	1.38E-04	16	7.14%	2089	1.27E-04	24	1.87%	546	3.31E-05
Total											29,265

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West Santa Clara Street #1

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC1_TEXH	West Santa Clara - 1	SW-NE	4	130	0.08	20.63	68	1.3	20	29,265
	SR-87 to N. Almaden									

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
	Travel Speed (mph)	20	0	0
Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - WSC1_TEXH

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	336	3.96E-04	9	7.11%	2081	2.45E-03	17	7.38%	2161	2.54E-03
2	0.42%	123	1.45E-04	10	4.39%	1284	1.51E-03	18	8.18%	2393	2.81E-03
3	0.41%	119	1.39E-04	11	4.66%	1365	1.60E-03	19	5.70%	1668	1.96E-03
4	0.26%	76	8.97E-05	12	5.89%	1723	2.03E-03	20	4.27%	1250	1.47E-03
5	0.50%	146	1.72E-04	13	6.15%	1801	2.12E-03	21	3.26%	954	1.12E-03
6	0.90%	265	3.11E-04	14	6.04%	1767	2.08E-03	22	3.30%	966	1.14E-03
7	3.79%	1108	1.30E-03	15	7.01%	2052	2.41E-03	23	2.46%	721	8.47E-04
8	7.76%	2272	2.67E-03	16	7.14%	2089	2.46E-03	24	1.87%	546	6.42E-04
Total										29,265	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West Santa Clara Street #1

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Emission Factors - PM2.5 - Evaporative TOG

	Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0	
Emissions per Vehicle per Hour (g/V-hour)	1.2200				
Emissions per Vehicle per Mile (g/VMT)	0.0610				

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - WSC1_TEVAP

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	336	4.61E-04	9	7.11%	2081	2.85E-03	17	7.38%	2161	2.96E-03
2	0.42%	123	1.69E-04	10	4.39%	1284	1.76E-03	18	8.18%	2393	3.28E-03
3	0.41%	119	1.63E-04	11	4.66%	1365	1.87E-03	19	5.70%	1668	2.29E-03
4	0.26%	76	1.05E-04	12	5.89%	1723	2.36E-03	20	4.27%	1250	1.71E-03
5	0.50%	146	2.00E-04	13	6.15%	1801	2.47E-03	21	3.26%	954	1.31E-03
6	0.90%	265	3.63E-04	14	6.04%	1767	2.42E-03	22	3.30%	966	1.32E-03
7	3.79%	1108	1.52E-03	15	7.01%	2052	2.81E-03	23	2.46%	721	9.88E-04
8	7.76%	2272	3.11E-03	16	7.14%	2089	2.86E-03	24	1.87%	546	7.49E-04
Total										29,265	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West Santa Clara Street #1

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC1_FUG	West Santa Clara - 1	SW-NE	4	130	0.08	20.63	68	1.3	20	29,265
	SR-87 to N. Almaden									

Emission Factors - Fugitive PM2.5

Speed Category Travel Speed (mph)	1	2	3	4
Tire Wear - Emissions per Vehicle (g/VMT)	20	0	0	0
Brake Wear - Emissions per Vehicle (g/VMT)	0.00219			
Road Dust - Emissions per Vehicle (g/VMT)	0.01734			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.01679			
	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - WSC1_FUG

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	336	2.75E-04	9	7.11%	2081	1.70E-03	17	7.38%	2161	1.76E-03
2	0.42%	123	1.00E-04	10	4.39%	1284	1.05E-03	18	8.18%	2393	1.95E-03
3	0.41%	119	9.68E-05	11	4.66%	1365	1.11E-03	19	5.70%	1668	1.36E-03
4	0.26%	76	6.23E-05	12	5.89%	1723	1.41E-03	20	4.27%	1250	1.02E-03
5	0.50%	146	1.19E-04	13	6.15%	1801	1.47E-03	21	3.26%	954	7.78E-04
6	0.90%	265	2.16E-04	14	6.04%	1767	1.44E-03	22	3.30%	966	7.88E-04
7	3.79%	1108	9.05E-04	15	7.01%	2052	1.68E-03	23	2.46%	721	5.88E-04
8	7.76%	2272	1.85E-03	16	7.14%	2089	1.71E-03	24	1.87%	546	4.46E-04
Total										29,265	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West Santa Clara Street #2

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC2_DPM	West Santa Clara - 2	NW-SE	4	428	0.27	20.63	67.7	3.4	20	22,775
	N. Almaden to S. First St.									

Emission Factors

Speed Category Travel Speed (mph)	1	2	3	4
Emissions per Vehicle (g/VMT)	20			
	0.00059			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - WSC2_DPM

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.98%	906	3.92E-05	9	6.44%	1466	6.34E-05	17	5.53%	1259	5.45E-05
2	2.67%	608	2.63E-05	10	7.40%	1684	7.29E-05	18	3.14%	716	3.10E-05
3	2.84%	647	2.80E-05	11	6.32%	1438	6.22E-05	19	2.35%	535	2.31E-05
4	3.30%	751	3.25E-05	12	6.88%	1568	6.78E-05	20	0.86%	196	8.48E-06
5	2.16%	492	2.13E-05	13	6.27%	1427	6.17E-05	21	3.08%	701	3.03E-05
6	3.30%	751	3.25E-05	14	6.21%	1414	6.12E-05	22	4.21%	960	4.15E-05
7	6.03%	1374	5.94E-05	15	5.13%	1169	5.06E-05	23	2.62%	597	2.58E-05
8	4.56%	1039	4.50E-05	16	3.88%	884	3.82E-05	24	0.85%	194	8.40E-06
Total											22,775

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West Santa Clara Street #2

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC2_PM25	West Santa Clara - 2	NW-SE	4	428.3979	0.27	20.63	68	1.3	20	22,775
	N. Almaden to S. First St.									

Emission Factors - PM2.5

Speed Category	1	2	3	4
	Travel Speed (mph)	20	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - WSC2_PM25

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	262	5.22E-05	9	7.11%	1620	3.23E-04	17	7.38%	1682	3.35E-04
2	0.42%	96	1.91E-05	10	4.39%	999	1.99E-04	18	8.18%	1862	3.71E-04
3	0.41%	92	1.84E-05	11	4.66%	1062	2.12E-04	19	5.70%	1298	2.59E-04
4	0.26%	59	1.18E-05	12	5.89%	1341	2.67E-04	20	4.27%	973	1.94E-04
5	0.50%	114	2.26E-05	13	6.15%	1401	2.79E-04	21	3.26%	742	1.48E-04
6	0.90%	206	4.11E-05	14	6.04%	1375	2.74E-04	22	3.30%	752	1.50E-04
7	3.79%	863	1.72E-04	15	7.01%	1597	3.19E-04	23	2.46%	561	1.12E-04
8	7.76%	1768	3.53E-04	16	7.14%	1626	3.24E-04	24	1.87%	425	8.48E-05
Total											22,775

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West Santa Clara Street #2

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC2_TEXH	West Santa Clara - 2	NW-SE	4	428.398	0.27	20.63	68	1.3	20	22,775
	N. Almaden to S. First St.									

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
	Travel Speed (mph)	20	0	0
Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - WSC2_TEXH

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West Santa Clara Street #2

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200			
Emissions per Vehicle per Mile (g/VMT)	0.0610			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - WSC2_TEVAP

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	262	1.18E-03	9	7.11%	1620	7.31E-03	17	7.38%	1682	7.59E-03
2	0.42%	96	4.32E-04	10	4.39%	999	4.51E-03	18	8.18%	1862	8.40E-03
3	0.41%	92	4.16E-04	11	4.66%	1062	4.79E-03	19	5.70%	1298	5.85E-03
4	0.26%	59	2.68E-04	12	5.89%	1341	6.05E-03	20	4.27%	973	4.39E-03
5	0.50%	114	5.12E-04	13	6.15%	1401	6.32E-03	21	3.26%	742	3.35E-03
6	0.90%	206	9.29E-04	14	6.04%	1375	6.20E-03	22	3.30%	752	3.39E-03
7	3.79%	863	3.89E-03	15	7.01%	1597	7.20E-03	23	2.46%	561	2.53E-03
8	7.76%	1768	7.97E-03	16	7.14%	1626	7.33E-03	24	1.87%	425	1.92E-03
Total										22,775	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West Santa Clara Street #2

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC2_FUG	West Santa Clara - 2 N. Almaden to S. First St.	NW-SE	4	428.398	0.27	20.63	68	1.3	20	22,775

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4	
	Travel Speed (mph)	20	0	0	0
Tire Wear - Emissions per Vehicle (g/VMT)	0.00219				
Brake Wear - Emissions per Vehicle (g/VMT)	0.01734				
Road Dust - Emissions per Vehicle (g/VMT)	0.01679				
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03632				

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - WSC2_FUG

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	262	7.03E-04	9	7.11%	1620	4.35E-03	17	7.38%	1682	4.52E-03
2	0.42%	96	2.57E-04	10	4.39%	999	2.68E-03	18	8.18%	1862	5.00E-03
3	0.41%	92	2.48E-04	11	4.66%	1062	2.85E-03	19	5.70%	1298	3.49E-03
4	0.26%	59	1.59E-04	12	5.89%	1341	3.60E-03	20	4.27%	973	2.61E-03
5	0.50%	114	3.05E-04	13	6.15%	1401	3.76E-03	21	3.26%	742	1.99E-03
6	0.90%	206	5.53E-04	14	6.04%	1375	3.69E-03	22	3.30%	752	2.02E-03
7	3.79%	863	2.32E-03	15	7.01%	1597	4.29E-03	23	2.46%	561	1.51E-03
8	7.76%	1768	4.75E-03	16	7.14%	1626	4.37E-03	24	1.87%	425	1.14E-03
Total										22,775	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West San Carlos

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC_DPM	West San Carlos	SW-NE	4	511	0.32	20.63	67.7	3.4	20	14,365
	SR-87 to S. Market									

Emission Factors

Speed Category	1	2	3	4	
	Travel Speed (mph)	20			
Emissions per Vehicle (g/VMT)	0.00059				

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - WSC_DPM

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.98%	571	2.95E-05	9	6.44%	925	4.77E-05	17	5.53%	794	4.09E-05
2	2.67%	384	1.98E-05	10	7.40%	1062	5.48E-05	18	3.14%	451	2.33E-05
3	2.84%	408	2.10E-05	11	6.32%	907	4.68E-05	19	2.35%	337	1.74E-05
4	3.30%	473	2.44E-05	12	6.88%	989	5.10E-05	20	0.86%	124	6.38E-06
5	2.16%	310	1.60E-05	13	6.27%	900	4.64E-05	21	3.08%	442	2.28E-05
6	3.30%	473	2.44E-05	14	6.21%	892	4.60E-05	22	4.21%	605	3.12E-05
7	6.03%	866	4.47E-05	15	5.13%	737	3.80E-05	23	2.62%	377	1.94E-05
8	4.56%	655	3.38E-05	16	3.88%	558	2.87E-05	24	0.85%	122	6.31E-06
Total											14,365

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West San Carlos

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC_PM25	West San Carlos	SW-NE	4	511	0.32	20.63	68	1.3	20	14,365
	SR-87 to S. Market									

Emission Factors - PM2.5

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - WSC_PM25

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	165	3.92E-05	9	7.11%	1022	2.43E-04	17	7.38%	1061	2.52E-04
2	0.42%	60	1.44E-05	10	4.39%	630	1.50E-04	18	8.18%	1175	2.79E-04
3	0.41%	58	1.38E-05	11	4.66%	670	1.59E-04	19	5.70%	819	1.95E-04
4	0.26%	37	8.90E-06	12	5.89%	846	2.01E-04	20	4.27%	613	1.46E-04
5	0.50%	72	1.70E-05	13	6.15%	884	2.10E-04	21	3.26%	468	1.11E-04
6	0.90%	130	3.09E-05	14	6.04%	867	2.06E-04	22	3.30%	474	1.13E-04
7	3.79%	544	1.29E-04	15	7.01%	1007	2.39E-04	23	2.46%	354	8.41E-05
8	7.76%	1115	2.65E-04	16	7.14%	1026	2.44E-04	24	1.87%	268	6.37E-05
Total											14,365

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West San Carlos

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC_TEXH	West San Carlos	SW-NE	4	511	0.32	20.63	68	1.3	20	14,365
	SR-87 to S. Market									

Emission Factors - TOG Exhaust

Speed Category Travel Speed (mph)	1	2	3	4
	20	0	0	0
Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - WSC_TEXH

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West San Carlos

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Emission Factors - PM2.5 - Evaporative TOG

	Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0	
Emissions per Vehicle per Hour (g/V-hour)	1.2200				
Emissions per Vehicle per Mile (g/VMT)	0.0610				

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - WSC_TEVAP

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	165	8.88E-04	9	7.11%	1022	5.49E-03	17	7.38%	1061	5.70E-03
2	0.42%	60	3.25E-04	10	4.39%	630	3.39E-03	18	8.18%	1175	6.31E-03
3	0.41%	58	3.13E-04	11	4.66%	670	3.60E-03	19	5.70%	819	4.40E-03
4	0.26%	37	2.01E-04	12	5.89%	846	4.55E-03	20	4.27%	613	3.30E-03
5	0.50%	72	3.85E-04	13	6.15%	884	4.75E-03	21	3.26%	468	2.52E-03
6	0.90%	130	6.98E-04	14	6.04%	867	4.66E-03	22	3.30%	474	2.55E-03
7	3.79%	544	2.92E-03	15	7.01%	1007	5.42E-03	23	2.46%	354	1.90E-03
8	7.76%	1115	5.99E-03	16	7.14%	1026	5.51E-03	24	1.87%	268	1.44E-03
Total										14,365	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - West San Carlos

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
WSC_FUG	West San Carlos	SW-NE	4	511	0.32	20.63	68	1.3	20	14,365
	SR-87 to S. Market									

Emission Factors - Fugitive PM2.5

Speed Category Travel Speed (mph)	1	2	3	4
Tire Wear - Emissions per Vehicle (g/VMT)	20	0	0	0
Brake Wear - Emissions per Vehicle (g/VMT)	0.00219			
Road Dust - Emissions per Vehicle (g/VMT)	0.01734			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.01679			
	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - WSC_FUG

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	165	5.29E-04	9	7.11%	1022	3.27E-03	17	7.38%	1061	3.40E-03
2	0.42%	60	1.93E-04	10	4.39%	630	2.02E-03	18	8.18%	1175	3.76E-03
3	0.41%	58	1.86E-04	11	4.66%	670	2.14E-03	19	5.70%	819	2.62E-03
4	0.26%	37	1.20E-04	12	5.89%	846	2.71E-03	20	4.27%	613	1.96E-03
5	0.50%	72	2.29E-04	13	6.15%	884	2.83E-03	21	3.26%	468	1.50E-03
6	0.90%	130	4.16E-04	14	6.04%	867	2.78E-03	22	3.30%	474	1.52E-03
7	3.79%	544	1.74E-03	15	7.01%	1007	3.22E-03	23	2.46%	354	1.13E-03
8	7.76%	1115	3.57E-03	16	7.14%	1026	3.28E-03	24	1.87%	268	8.58E-04
Total										14,365	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Market Street

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SMRKT_DPM	South Market Street	NW-SE	4	611	0.38	20.63	67.7	3.4	20	16,950
	W Santa Clara to W San Carlos									

Emission Factors

Speed Category Travel Speed (mph)	1	2	3	4
Emissions per Vehicle (g/VMT)	20			
	0.00059			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - SMRKT_DPM

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.98%	674	4.16E-05	9	6.44%	1091	6.73E-05	17	5.53%	937	5.78E-05
2	2.67%	453	2.79E-05	10	7.40%	1253	7.73E-05	18	3.14%	533	3.29E-05
3	2.84%	482	2.97E-05	11	6.32%	1070	6.61E-05	19	2.35%	398	2.45E-05
4	3.30%	559	3.45E-05	12	6.88%	1167	7.20E-05	20	0.86%	146	9.01E-06
5	2.16%	366	2.26E-05	13	6.27%	1062	6.56E-05	21	3.08%	522	3.22E-05
6	3.30%	559	3.45E-05	14	6.21%	1053	6.50E-05	22	4.21%	714	4.41E-05
7	6.03%	1022	6.31E-05	15	5.13%	870	5.37E-05	23	2.62%	444	2.74E-05
8	4.56%	773	4.77E-05	16	3.88%	658	4.06E-05	24	0.85%	144	8.91E-06
Total										16,950	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Market Street

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SMRKT_PM25	South Market Street	NW-SE	4	611	0.38	20.63	68	1.3	20	16,950
	W Santa Clara to W San Carlos									

Emission Factors - PM2.5

Speed Category	1	2	3	4
	Travel Speed (mph)	20	0	0
Emissions per Vehicle (g/VMT)	0.002697			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - SMRKT_PM25

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	195	5.54E-05	9	7.11%	1206	3.43E-04	17	7.38%	1252	3.56E-04
2	0.42%	71	2.03E-05	10	4.39%	744	2.12E-04	18	8.18%	1386	3.94E-04
3	0.41%	69	1.95E-05	11	4.66%	790	2.25E-04	19	5.70%	966	2.75E-04
4	0.26%	44	1.26E-05	12	5.89%	998	2.84E-04	20	4.27%	724	2.06E-04
5	0.50%	85	2.40E-05	13	6.15%	1043	2.97E-04	21	3.26%	552	1.57E-04
6	0.90%	153	4.36E-05	14	6.04%	1023	2.91E-04	22	3.30%	559	1.59E-04
7	3.79%	642	1.83E-04	15	7.01%	1189	3.38E-04	23	2.46%	417	1.19E-04
8	7.76%	1316	3.74E-04	16	7.14%	1210	3.44E-04	24	1.87%	316	9.00E-05
Total										16,950	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Market Street

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2026

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
SMRKT_TEXH	South Market Street	NW-SE	4	611	0.38	20.63	68	1.3	20	16,950
	W Santa Clara to W San Carlos									

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
	Travel Speed (mph)	20	0	0
Emissions per Vehicle (g/VMT)	0.05232			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - SMRKT_TEXH

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	195	1.08E-03	9	7.11%	1206	6.65E-03	17	7.38%	1252	6.91E-03
2	0.42%	71	3.93E-04	10	4.39%	744	4.10E-03	18	8.18%	1386	7.65E-03
3	0.41%	69	3.79E-04	11	4.66%	790	4.36E-03	19	5.70%	966	5.33E-03
4	0.26%	44	2.44E-04	12	5.89%	998	5.51E-03	20	4.27%	724	3.99E-03
5	0.50%	85	4.66E-04	13	6.15%	1043	5.76E-03	21	3.26%	552	3.05E-03
6	0.90%	153	8.46E-04	14	6.04%	1023	5.65E-03	22	3.30%	559	3.09E-03
7	3.79%	642	3.54E-03	15	7.01%	1189	6.56E-03	23	2.46%	417	2.30E-03
8	7.76%	1316	7.26E-03	16	7.14%	1210	6.68E-03	24	1.87%	316	1.75E-03
Total									16,950		

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Market Street

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2026

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Emissions per Vehicle per Hour (g/V-hour)	1.2200			
Emissions per Vehicle per Mile (g/VMT)	0.0610			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - SMRKT_TEVAP

2020 Hourly Traffic Volumes and TOG Evaporative Emissions - SMARTR-TEVAR											
Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	195	1.25E-03	9	7.11%	1206	7.76E-03	17	7.38%	1252	8.05E-03
2	0.42%	71	4.59E-04	10	4.39%	744	4.78E-03	18	8.18%	1386	8.92E-03
3	0.41%	69	4.42E-04	11	4.66%	790	5.09E-03	19	5.70%	966	6.21E-03
4	0.26%	44	2.84E-04	12	5.89%	998	6.42E-03	20	4.27%	724	4.66E-03
5	0.50%	85	5.44E-04	13	6.15%	1043	6.71E-03	21	3.26%	552	3.55E-03
6	0.90%	153	9.86E-04	14	6.04%	1023	6.58E-03	22	3.30%	559	3.60E-03
7	3.79%	642	4.13E-03	15	7.01%	1189	7.65E-03	23	2.46%	417	2.69E-03
8	7.76%	1316	8.47E-03	16	7.14%	1210	7.79E-03	24	1.87%	316	2.04E-03
Total										16,950	

City View Plaza - San Jose

Operation - Existing + Project + Background Traffic - South Market Street

Fugitive Road PM_{2.5} Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM_{2.5} Emissions

Year = 2026

Emission Factors - Fugitive PM_{2.5}

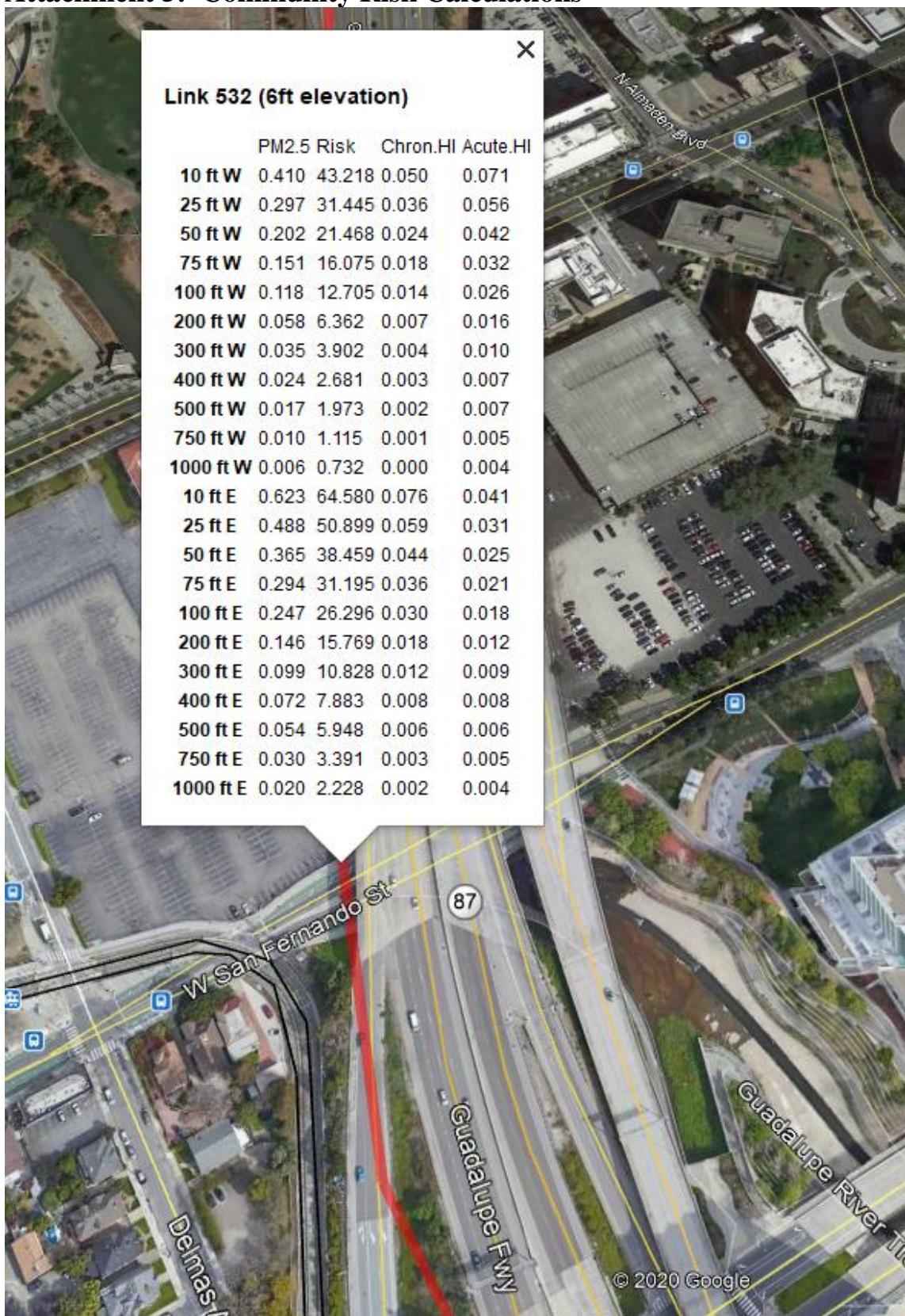
Speed Category	1	2	3	4
Travel Speed (mph)	20	0	0	0
Tire Wear - Emissions per Vehicle (g/VMT)	0.00219			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01734			
Road Dust - Emissions per Vehicle (g/VMT)	0.01679			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03632			

Emission Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM_{2.5} Emissions - SMRKT_FUG

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	195	7.46E-04	9	7.11%	1206	4.62E-03	17	7.38%	1252	4.80E-03
2	0.42%	71	2.73E-04	10	4.39%	744	2.85E-03	18	8.18%	1386	5.31E-03
3	0.41%	69	2.63E-04	11	4.66%	790	3.03E-03	19	5.70%	966	3.70E-03
4	0.26%	44	1.69E-04	12	5.89%	998	3.82E-03	20	4.27%	724	2.77E-03
5	0.50%	85	3.24E-04	13	6.15%	1043	4.00E-03	21	3.26%	552	2.12E-03
6	0.90%	153	5.87E-04	14	6.04%	1023	3.92E-03	22	3.30%	559	2.14E-03
7	3.79%	642	2.46E-03	15	7.01%	1189	4.55E-03	23	2.46%	417	1.60E-03
8	7.76%	1316	5.04E-03	16	7.14%	1210	4.64E-03	24	1.87%	316	1.21E-03
Total										16,950	

Attachment 5: Community Risk Calculations



BAAQMD Response to SSIF Request



**BAY AREA AIR QUALITY
MANAGEMENT DISTRICT**

Risk & Hazard Stationary Source Inquiry Form

This form is required when users request stationary source data from BAAQMD

This form is to be used with the BAAQMD's Google Earth stationary source screening tables.

[Click here for guidance on conducting risk & hazard screening, including roadways & freeways, refer to the District's Risk & Hazard Analysis flow chart.](#)

[Click here for District's Recommended Methods for Screening and Modeling Local Risks and Hazards document.](#)

Table A: Requester Contact Information

Date of Request	
Contact Name	Mimi McNamara
Affiliation	Illinoiworth & Rodkin
Phone	207-794-0400 x111
Email	mimicnamara@illinoiworth.com pdkin.com
Project Name	Cityview Plaza
Address	Boulevard and Park
City	San Jose
County	Santa Clara
Type (residential, commercial, mixed use, industrial, etc.)	Office
Project Size (# of units or building square feet)	3.3 million sqft

For Air District assistance, the following steps must be completed:

1. Complete all the contact and project information requested in [Table A](#). Incomplete forms will not be processed. Please include a project site map.
2. Download and install the free program Google Earth, <http://www.google.com/earth/download/ge/>, and then download the county specific Google Earth stationary source application files from the District's website, <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx>. The small points on the map represent stationary sources permitted by the District (Map A on right). These permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc. Click on a point to view the source's information Table, including the name, location, and preliminary estimated cancer risk, hazard index, and PM2.5 concentration.
3. Find the project site in Google Earth by inputting the site's address in the Google Earth search box.
4. Identify stationary sources within at least a 1000ft radius of project site. Verify that the location of the source on the map matches with the source's address in the Information Table, by using the Google Earth address search box to confirm the source's address location. Please report any mapping errors to the District.
5. List the stationary source information in [Table B](#) blue section only.
6. Note that a small percentage of the stationary sources have Health Risk Screening Assessment (HRSA) data INSTEAD of screening level data. These sources will be noted by an asterisk next to the Plant Name (Map B on right). If HRSA values are presented, these values have already been modeled and cannot be adjusted further.
7. Email this completed form to District staff. District staff will provide the most recent risk, hazard, and PM2.5 data that are available for the source(s). If this information or data are not available, source emissions data will be provided. Staff will respond to inquiries within three weeks.

Note that a public records request received for the same stationary source information will cancel the processing of your SSIF request.

Submit forms, maps, and questions to Areana Flores at 415-749-4616, or aflores@baaqmd.gov

Table B: Google Earth data

Distance from Receptor (feet) or MEI ¹	FACID (Plant No.)	FNAME	FSSTREET	Cancer Risk ²	Hazard Risk ²	PM _{2.5} ³	Source No. ⁴	Type of Source ⁵	Fuel Code ⁶	Status/Comments	IR Comments
TBD	1269	Verizon Business	55 So Market Street					Generator	98		
TBD	19758	60 South Market Investors LLC	60 So Market					Generator, Fire Pump (2)	98		
TBD	20903	CoreSite	55 So Market Street					Generator (5)	98		
TBD	8556	Fairmont Hotel, San Jose	170 So Market Street					Multiple			
TBD	16778	Owl Energy Resources Inc	170 So Market Street					Generator (2)	189		
TBD	19296	188 Master Association	150 So 1st Street					Generator (6)	98		
TBD	18768	88 Master Association	88 E San Fernando St					Generator	98		
		US General Services						Generator, Boiler	98		
TBD	15031	Administration	280 So 1st Street					Boiler	98		
TBD	15125	San Jose Marriott Hotel	301 So Market Street					Multiple			
		360 Residences c/o Gateway									
TBD	22400	Nathaniel, Inc	360 So Market Street					Generator	98		
		Dept of Convention & Cultural									
TBD	2060	Affairs-San Jose	408 Almaden Avenue					Multiple			
TBD	13431	San Jose Hilton & Towers	300 Almaden Boulevard					Generator	98		
TBD	22565	303 Almaden Fee Owner, LLC	303 Almaden Boulevard					Ownership Change, New FACID			
								24131, CPT 303 Almaden LLC			
TBD	17642	Legacy Partners I Riverpark I, LLC	333 W San Carlos St					FACID is 24130			
		Riverpark Tower II, LLC, a						Facility ID 24127, Riverpark			
TBD	22372	Delaware LLC	300 Park Avenue					BAAQMD ArcGIS			
								FACID is 24127			
TBD	15169	Adobe Systems, Inc	151 Almaden Boulevard					Generator (3),			
TBD	14985	Wells Fargo Bank	121 Park Center Plaza					Fire Pump (3)	98		
								Generator	98		
TBD	14177	Pacific Gas and Electric	111 Almaden Boulevard					Generator, Generator NG			
								(2)	98, 189 (2)		
TBD	13528	Pacific Bell	95 So Almaden Avenue					Generator (2),	98		
		CenturyLink Communications,						Fire Pump			
TBD	14687	LLC	55 Almaden Boulevard					Generator	98		
TBD	16647	Equity Office Properties	Ten Almaden					New FACID 23291, KBS 111 Ten Almaden LLC			
TBD	14713	Verizon Business	55 So Almaden					98			
								New FACID 23395, KBS III			
TBD	21548	ECI Three Embarcadero LLC	1Almaden Boulevard					98 Almaden Financial Plaza, LLC			
TBD	15556	Jeppesen	225 W Santa Clara St					Shutdown			
TBD	23706	AXIS HOA	38 N Almaden Blvd					Generator	98		
TBD		San Jose Evergreen Community									
		22514 College District	40 So Market Street								
TBD	22398	Harvest Properties	225 W Santa Clara St								

Confirm this source and address -
BAAQMD ArcGIS
has different
FNAME and
FACID but same
address

New FACID 23291, KBS 111 Ten Almaden LLC

New FACID 23395, KBS III

98 Almaden Financial Plaza, LLC

Shutdown

Not in SSIF
Rollup
Spreadsheet or
Permitted

Source Risk XML

Not in SSIF
Rollup
Spreadsheet or
Permitted

Source Risk XML

Not in SSIF
Rollup
Spreadsheet or
Permitted

Source Risk XML

		Project		
Unmitigated		247.35	2.57	0.14
Mitigated		15.01	0.44	0.01
Cumulative Sources				
Roadways	SR 87, Link 202 (6ft elevation) at 400 feet east	2.2	0.02	0.01
	Local Roadways	3.79	0.19	0.01
Stationary Sources	Verizon Business (Plant #12969) at 75m	7.07	0.01	0.01
	60 South Market Investors LLC (Plant #19758) at 160m	0.63	0.01	0.01
	CoreSite (Plant #20903) at 75m	10.85	0.01	0.02
	Fairmont Hotel, San José (Plant #8556) at 235m	2.02	0.1	0.01
	Owl Energy Resources Inc (Plant #16778) at 235m	0.87	0.17	0.01
	DataPipe Inc (Plant #19298) at >300m	2.5	0.01	0.01
	88 Master Association (Plant #18768) at >300m	0.11	0.01	0.01
	US General Services Administration (Plant #15031) at >300m	0.03	0.01	0.01
	San José Marriott Hotel (Plant #15125) at >300m	0.17	0.02	0.01
	360 Residences c/o Gateway Nathaniel, Inc (Plant #22400) at >300m	0.01 -	-	-
	Dept of Convention & Cultural Affairs-San José (Plant #2060) at >300m	1.32	0.07	0.01
	San José Hilton & Towers (Plant #13431) at >300m	0.33	0.01	0.01
	303 Almaden Fee Owner, LLC (Plant #24131) at >300m	0.15	0.01	0.01
	Riverpark I, LLC (Plant #24127) at >300m	0.22	0.01	0.01
	Riverpark Tower II, LLC, a Delaware LLC (Plant #22372) at >300m	0.16	0.01	0.01
	Adobe Systems, Inc (Plant #15169) at 215m	10.22	0.01	0.01
	Pacific Gas and Electric (Plant #14177) at 220m	0.06	0.01	0.01
	Pacific Bell (Plant #13528) at 65m	24.24	0.03	0.04
	CenturyLink Communications, LLC (Plant #14687) at 210m	0.12	0.01	0.01
	KBS 111 Ten Almaden (Plant #23391) at 125m	0.57	0.01	0.01
	Verizon Business (Plant #14713) at 210m	0.11	0.01	0.01
	KBS 111 Almaden Financial Plaza (Plant #23395) at 230m	0.32	0.01	0.01
	AXIS HOA (Plant #23706) at >300m	0.09	0.01	0.01
	San José Evergreen Community College District (Plant #22514) at 180m*	-	-	-
	225 West Santa Clara LLC c/o Harvest Properties (Plant #22398) at 225m	0.26	0.01	0.01
Nearby Developments	Nearby Construction Development - Mitigated Emissions	25	0.75	2.5
	Cumulative Risk Total			
Unmitigated		340.77	4.10	2.930
Mitigated		108.43	1.97	2.800