1200 Cahuenga Project

Air Quality, Greenhouse Gas And Energy Study

City of Los Angeles, California

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1.0 Introduction

1.1 Purpose of Analyses and Study Objectives

These air quality, and greenhouse gas (GHG) and energy analyses were prepared to evaluate the potential air quality, GHG and energy impacts of the proposed 1200 Cahuenga development project (Project) pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code, Sections 21000, et seq.). The air quality, GHG, and energy assessments were conducted consistent with the methodologies and emission factors recommended by South Coast Air Quality Management District (SCAQMD), California Air Resource Board (CARB), and the United States Environmental Protection Agency (EPA).

1.2 Project Summary

1.2.1 Site Location

The 53,557 square-foot Project Site is located at 1200 – 1210 N. Cahuenga Boulevard, 6337 – 6357 W. Lexington Avenue, and 6332 – 6356 W. La Mirada Avenue in the City of Los Angeles, California, as shown in Exhibit A. The Site is bordered by North Cahuenga Boulevard and residential and commercial uses to the west, by La Mirada Avenue and single-family residences to the north, by multi-family units and commercial uses and ultimately Vine Street to the east, and by Lexington Avenue and multi-family residences and commercial uses to the south. The Project Site area is zoned as RD1.5-1XL and designated Low Medium II Residential in the Los Angeles Zone Information and Map Access System (ZIMAS)[1].

1.2.2 Project Description

The Project would replace an existing, vacant private school campus at the Project Site with an approximately 75,262 square-foot creative office campus with ground-floor retail uses. The Project would include three buildings, Buildings A, B and C, with an outdoor courtyard located between the buildings. Exhibit B demonstrates the Site plan for the Project. The Project would demolish the school's subterranean parking lot and access ramp, topped with a recreational field and basketball court, and two playgrounds. The Project would also demolish 8,941 square feet of the existing approximately 28,389 square-foot private school building, but would preserve and upgrade with a few exterior modifications the remaining approximately 19,448 square feet of the building and its subterranean parking garage to be a creative office building (Building B).

Building A would be new, 35,000 square-foot four-story building located along the northern border of the Project Site, that would be a maximum of 57' 1" in height. Building C would be new, 20,814 square-foot four-story building that would occupy the southwest corner of the Project Site, and would be a maximum of 60' 11" in height. Building B would consist of the remaining 19,448 square feet of the

[1] http://zimas.lacity.org/

existing two-story, 42' 6" tall school building. All three buildings would provide decks and balconies adjacent to the creative offices, and the buildings themselves would surround an outdoor courtyard for the use of the buildings' tenants.

The Project would provide 158 vehicular parking spaces and 22 bicycle spaces within the Project's one-level subterranean parking garage extending under Buildings A and B. The subterranean garage under Building A would contain automated parking stackers. Building A's subterranean parking level would connect to the existing subterranean parking level under Building B. Buildings A and C would include a screened at-grade surface parking area on their first floors.

Construction activities within the Project area will consist of demolition of 8,941 square feet of the existing two-story, approximately 28,389 square-foot, Stratford School Building, a recreational field and court topping a below-grade parking garage, and its access ramp and playground areas; grading, including export of up to an estimated 12,678 cubic yards of material, building construction, paving, and architectural coating. Table 1 summarizes the land use description for the proposed Project.

Table 1: Land Use Summary

Land Use	Unit Amount	Size Metric
General Office Building	55.31	TSF[1]
Strip Mall	0.5	TSF[1]
Parking Lot	156	Spaces
[1] TSF = Thousand Square Feet		

1.2.3 Sensitive Receptors

Sensitive receptors are considered land uses or other types of population groups that are more sensitive to air pollution than others. Sensitive population groups include children, the elderly, the acutely and chronically ill, and those with cardio-respiratory diseases. For CEQA purposes, a sensitive receptor would be a location where a sensitive individual could be situated, such as residencies, hospitals, and schools (etc).[2]

The closest existing sensitive receptors (to the Project Site) are the residential land uses located adjacent and 10 feet to the east of the Project Site, the residential uses across La Mirada Avenue approximately 36 feet to the north, the residential uses across Lexington Avenue approximately 40 feet south, and the residential uses across North Cahuenga Boulevard approximately 85 feet west.

1.3 Executive Summary of Findings

The following is a summary of the analysis results:

[2] CARB. Sensitive Receptor Assessment. https://ww2.arb.ca.gov/capp-resource-center/community-assessment/sensitive-receptor-assessment

Construction-Source Emissions

Project construction-source emissions would not exceed applicable regional thresholds of significance established by the SCAQMD with mitigation. For localized emissions, Project construction emissions would not exceed applicable Localized Significance Thresholds (LSTs) established by the SCAQMD. Construction of the project would also not be considered a significant source of toxic air contaminants (TAC) due to the limited construction schedule and number of construction equipment to be on-site per SCAQMD guidance.

Project construction-source emissions would not conflict with the Basin Air Quality Management Plan (AQMP). As discussed herein, the Project would comply with all applicable SCAQMD construction-source emission reduction rules and guidelines. Project construction source emissions would not cause or substantively contribute to violation of the California Ambient Air Quality Standards (CAAQS) or National Ambient Air Quality Standards (NAAQS).

Established requirements addressing construction equipment operations, and construction material use, storage, and disposal requirements act to minimize odor impacts that may result from construction activities. Moreover, construction-source odor emissions would be temporary, short-term, and intermittent in nature and would not result in persistent impacts that would adversely affect substantial numbers of people. Potential construction-source odor impacts are therefore considered less-than-significant.

Operational-Source Emissions

The Project operational-source emissions would not exceed applicable regional thresholds of significance established by the SCAQMD. Project operational-source emissions would not result in or cause a significant localized air quality impact as discussed in the Operations-Related Local Air Quality Impacts section of this report. Additionally, Project-related traffic will not cause or result in CO concentrations exceeding applicable state and/or federal standards (CO “hotspots”). The Project would not contain any uses or equipment that would emit a significant amount of TAC emissions. Project operational-source emissions would therefore not adversely affect sensitive receptors within the vicinity of the Project. The Project does not propose any such uses or activities that would result in potentially significant operational-source odor impacts. Potential operational-source odor impacts are therefore considered less-than significant.

Cumulative

The Project’s emissions would not be cumulatively considerable. Project construction and operational-source emissions would not conflict with the AQMP. The Project's emissions meet SCAQMD regional thresholds and will not result in a significant cumulative impact. The Project does not propose any such uses or activities that would result in potentially significant operational-source odor impacts, and therefore its effects on odor would not be cumulatively considerable. The Project’s emissions would not be cumulatively considerable and would result in a less than significant cumulative impact.

GHG

The Project would be consistent with **[list the plans assessed]** and, therefore, the Project's GHG emissions would be less than significant.

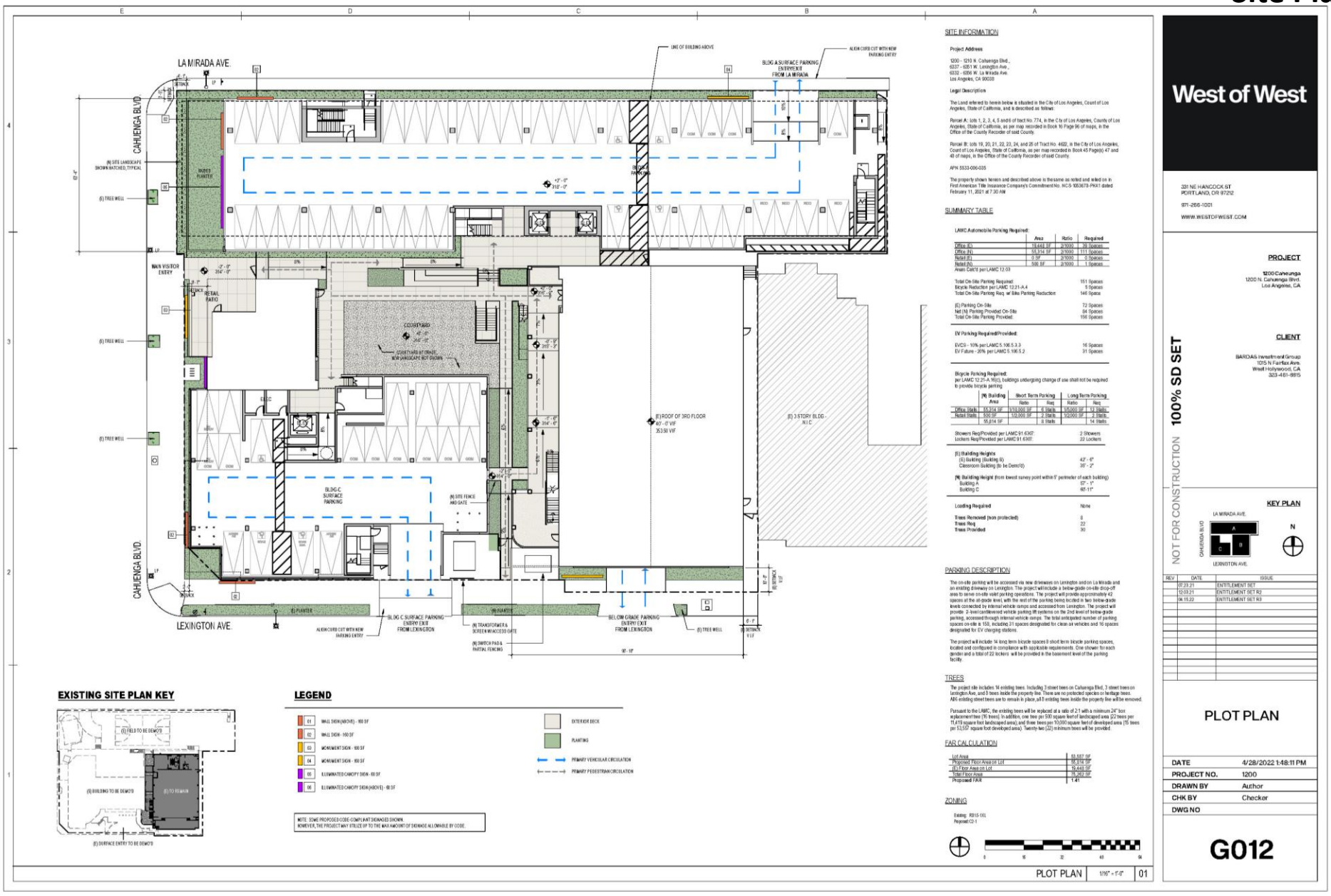
Energy

[We'll have to discuss the calculations – what context.] Further, there are sufficient electricity, natural gas and transportation fuels to supply the Project's demands, and the Project as designed would not result in wasteful, inefficient or unnecessary consumption of energy during either construction or operations.

Exhibit A

Location Map

Exhibit B
Site Plan



2.0 Regulatory Framework and Background

2.1 Air Quality Regulatory Setting

Air pollutants are regulated at the national, state, and air basin level; each agency has a different level of regulatory responsibility. The EPA regulates at the national level. The CARB regulates at the state level. The SCAQMD regulates at the air basin level.

2.1.1 National and State

The EPA is responsible for global, international, and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans, provides research and guidance for air pollution programs, and sets National Air Quality Standards, also known as federal standards. There are six common air pollutants, called criteria pollutants, which were identified from the provisions of the Clean Air Act of 1970.

- Ozone
- Nitrogen Dioxide
- Lead
- Particulate Matter (PM_{10} and $PM_{2.5}$)
- Carbon Monoxide
- Sulfur Dioxide

The federal standards were set to protect public health, including that of sensitive individuals; thus, the standards continue to change as more medical research is available regarding the health effects of the criteria pollutants. Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to project the public health.

A State Implementation Plan is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal standards. The State Implementation Plan for the State of California is administered by the CARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. California's State Implementation Plan incorporates individual federal attainment plans for regional air districts—air district prepares their federal attainment plan, which sent to CARB to be approved and incorporated into the California State Implementation Plan. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms. See http://www.arb.ca.gov/research/aaqs/aaqs.htm for additional information on criteria pollutants and air quality standards.

The federal and state ambient air quality standards are summarized in Table 2 and can also be found at http://www.arb.ca.gov/research/aaqs/aaqs2.pdf.

Table 2: Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		National Standards2		
		Concentrations[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)	1-Hour	0.09 ppm	Ultraviolet Photometry	- -	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.070 ppm		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM_{10})[8]	24-Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µ/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		- -		
Fine Particulate Matter ($PM_{2.5}$)[8]	24-Hour	- -	- -	35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12 µg/m³	15 µg/m³	
Carbon Monoxide (CO)	1-Hour	20 ppm (23 µg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 µg/m³)	- -	Non-Dispersive Infrared Photometry (NDIR)
	8-Hour	9.0 ppm (10 µg/m³)		9 ppm (10 µg/m³)	- -	
	8-Hour (Lake Tahoe)	6 ppm (7 µg/m³)		- -	- -	
Nitrogen Dioxide (NO_2)[9]	1-Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	- -	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (357 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[10]	1-Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	- -	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3-Hour	- -		- -	0.5 ppm (1300 mg/m³)	
	24-Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)[10]	- -	
	Annual Arithmetic Mean	- -		0.14 ppm (for certain areas)[10]	- -	
Lead[11,12]	30 Day Average	1.5 µg/m³	Atomic Absorption	- -		
	Calendar Qrtr	- -		1.5 µg/m³ (for certain areas)[12]	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Average	- -		0.15 µg/m³		
Visibility Reducing Particles[13]	8-Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24-Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[11]	24-Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

Notes:

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

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

4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

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

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

7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

8. On December 14, 2012, the national annual PM_e primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

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

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

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

11. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

12. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

13. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Several pollutants listed in Table 2 are not addressed in this analysis. Analysis of lead is not included in this report because the project is not anticipated to emit lead. Visibility-reducing particles are not explicitly addressed in this analysis because particulate matter is addressed. The project is not expected to generate or be exposed to vinyl chloride because proposed project uses do not utilize the chemical processes that create this pollutant and there are no such uses in the project vicinity. The proposed project is not expected to cause exposure to hydrogen sulfide because it would not generate hydrogen sulfide in any substantial quantity.

2.1.2 South Coast Air Quality Management District

The agency for air pollution control for the South Coast Air Basin (SoCAB or Basin) is the SCAQMD. The SCAQMD is responsible for controlling emissions primarily from stationary sources. The SCAQMD maintains air quality monitoring stations throughout the Basin. The SCAQMD, in coordination with the Southern California Association of Governments, is also responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for the Basin. An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as nonattainment of the federal and/or California ambient air quality standards.

On March 3, 2017, the SCAQMD adopted the 2016 AQMP. The 2016 AQMP addresses strategies and measures to attain the 2008 federal 8-hour ozone standard by 2032, the 2012 federal annual $PM_{2.5}$

standard by 2021 to 2025, and the 2006 federal 24-hour $PM_{2.5}$ standard by 2019. The 2016 AQMP also examined the regulatory requirements for attaining the 2015 federal 8-hour ozone standard. The 2016 AQMP also updates previous attainment plans for ozone and $PM_{2.5}$ that have not yet been met. In general, the AQMP is updated every 3 to 4 years. However, the air quality planning process for the AQMP is continuous and each iteration is an update of the previous plan. The 2016 AQMP is the current AQMP that is in place, however, the SCAQMD is currently in the process of developing the 2022 AQMP.

South Coast Air Quality Management District Rules

The AQMP for the Basin establishes a program of rules and regulations administered by SCAQMD to obtain attainment of the state and federal standards. Some of the rules and regulations that apply to this Project include, but are not limited to, the following:

SCAQMD Rule 402 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

SCAQMD Rule 403 governs emissions of fugitive dust during construction and operation activities. Compliance with this rule is achieved through application of standard Best Management Practices, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites.

Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable suppression techniques are indicated below and include but are not limited to the following:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas in active for 10 days or more).
- Water active sites at least three times daily.
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) section 23114.
- Pave construction access roads at least 100 feet onto the site from the main road.
- Reduce traffic speeds on all unpaved roads to 15 mph or less.
- Suspension of all grading activities when wind speeds (including instantaneous wind gusts) exceed 25 mph.
- Bumper strips or similar best management practices shall be provided where vehicles enter and exit the construction site onto paved roads or wash off trucks and any equipment leaving the site each trip.

- Replanting disturbed areas as soon as practical.
- During all construction activities, construction contractors shall sweep on-site and off-site streets if silt is carried to adjacent public thoroughfares, to reduce the amount of particulate matter on public streets.

SCAQMD Rule 481 applies to all spray painting and spray coating operations and equipment. This rule would apply to the application of architectural coatings to the exterior and interior or of the building walls.

SCAQMD Rule 1108 governs the sale, use, and manufacturing of asphalt and limits the volatile organic compound (VOC) content in asphalt used in the SoCAB. This rule would regulate the VOC content of asphalt used during construction. Therefore, all asphalt used during construction of the project must comply with SCAQMD Rule 1108.

SCAQMD Rule 1113 governs the sale, use, and manufacturing of architectural coating and limits the VOC content in paints and paint solvents. This rule regulates the VOC content of paints available during construction. Therefore, all paints and solvents used during construction and operation of project must comply with Rule 1113.

Idling Diesel Vehicle Trucks – Idling for more than 5 minutes is prohibited within California Borders.

Rule 2702. The SCAQMD adopted Rule 2702 on February 6, 2009, which establishes a voluntary air quality investment program from which SCAQMD can collect funds from parties that desire certified GHG emission reductions, pool those funds, and use them to purchase or fund GHG emission reduction projects within two years, unless extended by the Governing Board. Priority will be given to projects that result in co-benefit emission reductions of GHG emissions and criteria or toxic air pollutants within environmental justice areas. Further, this voluntary program may compete with the cap-and-trade program identified for implementation in CARB's Scoping Plan, or a federal cap and trade program.

2.2 Greenhouse Gas Regulatory Setting

Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases (GHG), play a critical role in the Earth's radiation amount by trapping infrared radiation emitted from the Earth's surface, which otherwise would have escaped to space. Prominent GHGs contributing to this process include carbon dioxide (CO_2), methane (CH_4), ozone, water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs). This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. Anthropogenic (caused or produced by humans) emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, agriculture, utilities, transportation, and residential land uses. Transportation is responsible for 41 percent of the State's greenhouse gas emissions, followed by electricity generation. Emissions of CO_2 and nitrous oxide (NO_X) are byproducts of fossil fuel combustion.

Methane, a potent greenhouse gas, results from off-gassing associated with agricultural practices and landfills. Sinks of CO_2, where CO_2 is stored outside of the atmosphere, include uptake by vegetation and dissolution into the ocean. Table 6 provides a description of each of the greenhouse gases and their global warming potential.

Additional information is available: https://www.arb.ca.gov/cc/inventory/data/data.htm

Table 3: Description of Greenhouse Gases

Greenhouse Gas	Description and Physical Properties	Sources
Nitrous oxide	Nitrous oxide (N_20),also known as laughing gas is a colorless gas. It has a lifetime of 114 years. Its global warming potential is 298.	Microbial processes in soil and water, fuel combustion, and industrial processes. In addition to agricultural sources, some industrial processes (nylon production, nitric acid production) also emit N_20.
Methane	Methane (CH_4) is a flammable gas and is the main component of natural gas. It has a lifetime of 12 years. Its global warming potential is 25.	A natural source of CH_4 is from the decay of organic matter. Methane is extracted from geological deposits (natural gas fields). Other sources are from the decay of organic material in landfills, fermentation of manure, and cattle farming.
Carbon dioxide	Carbon dioxide (CO_2) is an odorless, colorless, natural greenhouse gas. Carbon dioxide's global warming potential is 1. The concentration in 2005 was 379 parts per million (ppm), which is an increase of about 1.4 ppm per year since 1960.	Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood.
Chlorofluorocarbons	CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). They are gases formed synthetically by replacing all hydrogen atoms in methane or methane with chlorine and/or fluorine atoms. Global warming potentials range from 3,800 to 8,100.	Chlorofluorocarbons were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone, therefore their production was stopped as required by the Montreal Protocol.
Hydrofluorocarbons	Hydrofluorocarbons (HFCs) are a group of greenhouse gases containing carbon, chlorine, and at least one hydrogen atom. Global warming potentials range from 140 to 11,700.	Hydrofluorocarbons are synthetic manmade chemicals used as a substitute for chlorofluorocarbons in applications such as automobile air conditioners and refrigerants.
Perfluorocarbons	Perfluorocarbons (PFCs) have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above the Earth's surface. They have a lifetime 10,000 to 50,000 years. They have a global warming potential range of 6,200 to 9,500.	Two main sources of perfluorocarbons are primary aluminum production and semiconductor manufacturing.
Sulfur hexafluoride	Sulfur hexafluoride (SF_6) is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. It has a high global warming potential, 23,900.	This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Notes:
[1.] Sources: Intergovernmental Panel on Climate Change 2007a and Intergovernmental Panel on Climate Change 2007b.

2.2.1 International

Many countries around the globe have made an effort to reduce GHGs since climate change is a global issue.

Intergovernmental Panel on Climate Change. In 1988, the United Nations and the World Meteorological Organization established the Intergovernmental Panel on Climate Change (IPCC) to assess the scientific, technical, and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

United Nations. The United States participates in the United Nations Framework Convention on Climate Change (UNFCCC) (signed on March 21, 1994). Under the Convention, governments gather and share information on greenhouse gas emissions, national policies, and best practices; launch national strategies for addressing greenhouse gas emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

The 2014 UN Climate Change Conference in Lima Peru provided a unique opportunity to engage all countries to assess how developed countries are implementing actions to reduce emissions.

Kyoto Protocol. The Kyoto Protocol is a treaty made under the UNFCCC and was the first international agreement to regulate GHG emissions. It has been estimated that if the commitments outlined in the Kyoto Protocol are met, global GHG emissions could be reduced by an estimated 5 percent from 1990 levels during the first commitment period of 2008 – 2012 (UNFCCC 1997). On December 8, 2012, the Doha Amendment to the Kyoto Protocol was adopted. The amendment includes: New commitments for Annex I Parties to the Kyoto Protocol who agreed to take on commitments in a second commitment period from 2013 – 2020; a revised list of greenhouse gases (GHG) to be reported on by Parties in the second commitment period; and Amendments to several articles of the Kyoto Protocol which specifically referenced issues pertaining to the first commitment period and which needed to be updated for the second commitment period.

Paris Climate Change Agreement. Parties to the Convention reached a landmark agreement on December 12 in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a 4-year negotiating round, the new treaty ends the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. This includes, for the first time, requirements that all parties report regularly on their emissions and implementation efforts and undergo international review. The agreement and a

companion decision by parties were the key outcomes of the conference, known as the 21st Session of the Convention Conference of the Parties, or COP 21.[3]

On June 1, 2017, President Donald Trump announced the decision for the United States to withdraw from the Paris Climate Accord.[4] On January 20, 2021, President Joe Biden announced the decision for the United States to re-commit to the Paris Climate Accord.[5] California remains committed to combating climate change through programs aimed to reduce GHGs.[6]

2.2.2 National

Greenhouse Gas Endangerment. On December 2, 2009, the EPA announced that GHGs threaten the public health and welfare of the American people. The EPA also states that GHG emissions from on-road vehicles contribute to that threat. The decision was based on *Massachusetts v. EPA* (Supreme Court Case 05-1120) which argued that GHGs are air pollutants covered by the Clean Air Act and that the EPA has authority to regulate those emissions.

Clean Vehicles. Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the EPA and the Department of Transportation's National Highway Safety Administration announced a joint final rule establishing a national program that would reduce greenhouse gas emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program would apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of carbon dioxide per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this carbon dioxide level solely through fuel economy improvements. Together, these standards would cut carbon dioxide emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016). The EPA and the National Highway Safety Administration issued final rules on a second-phase joint rulemaking, establishing national standards for light-duty vehicles for

[3] Center for Climate and Energy Solutions (C2ES). 2015. Outcomes of the U.N. Climate Change Conference. Website: http://www.c2es.org/international/negotiations/cop21-paris/summary. Accessed April 27, 2021.
[4] The White House. Statement by President Trump on the Paris Climate Accord. Website: https://www.whitehouse.gov/the-press-office/2017/06/01/statement-president-trump-paris-climate-accord. Accessed April 27, 2021.
[5] The White House. Statement by President Biden: Paris Climate Agreement. Website: https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/paris-climate-agreement/. Accessed June 2021.
[6] California Air Resources Board (ARB). 2017. New Release: California and China Team Up to Push for Millions More Zero-emission Vehicles. Website: https://ww2.arb.ca.gov/news/california-and-china-team-push-millions-more-zero-emission-vehicles. Accessed June 2021.

model years 2017 through 2025 in August 2012.[7] The new standards for model years 2017 through 2025 apply to passenger cars, light-duty trucks, and medium duty passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of CO_2 in model year 2025, which is equivalent to 54.5 miles per gallon (mpg) if achieved exclusively through fuel economy improvements.

On October 25, 2010, the EPA and the U.S. Department of Transportation proposed the first national standards to reduce greenhouse gas emissions and improve fuel efficiency of heavy-duty trucks and buses on September 15, 2011, which became effective November 14, 2011. For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20 percent reduction in carbon dioxide emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10 percent reduction for gasoline vehicles and 15 percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the agencies are proposing engine and vehicle standards starting in the 2014 model year which would achieve up to a 10 percent reduction in fuel consumption and carbon dioxide emissions by 2018 model year.

Mandatory Reporting of Greenhouse Gases. On January 1, 2010, the EPA started requiring large emitters of heat-trapping emissions to begin collecting GHG data under a new reporting system. Under the rule, suppliers of fossil fuels or industrial greenhouse gases, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of greenhouse gas emissions are required to submit annual reports to the EPA.

2.2.3 California

California Code of Regulations (CCR) Title 24, Part 6. CCR Title 24, Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Although it was not originally intended to reduce GHG emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions.

[7] United States Environmental Protection Agency (EPA). 2012. EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks. August. Website: https://nepis.epa.gov/Exe/ZyNET.exe/P100EZ7C.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2011+Thru+2015&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C11thru15%5CTxt%5C00000005%5CP100EZ7C.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL . Accessed June 2021.

The newest version of Title 24 adopted by the CEC went into effect on January 1, 2020. One of the notable changes in the 2019 Title 24 Standards includes the solar photovoltaic systems requirement for new low-rise residential homes.

California Code of Regulations (CCR) Title 24, Part 11. All buildings for which an application for a building permit is submitted on or after January 1, 2020 must follow the 2019 standards. Local jurisdictions are permitted to adopt more stringent requirements, as State law provides methods for local enhancements. State building code provides the minimum standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions.

Executive Order S-3-05. California Governor issued Executive Order S-3-05, GHG Emission, in June 2005, which established the following targets:

- By 2010, California shall reduce greenhouse gas emissions to 2000 levels;
- By 2020, California shall reduce greenhouse gas emissions to 1990 levels.
- By 2050, California shall reduce greenhouse gas emissions to 80 percent below 1990 levels.

The executive order directed the secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. To comply with the Executive Order, the secretary of CalEPA created the California Climate Action Team (CAT), made up of members from various state agencies and commissions. The team released its first report in March 2006. The report proposed to achieve the targets by building on the voluntary actions of businesses, local governments, and communities and through State incentive and regulatory programs.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07. Executive Order S-1-07 was issued in 2007 and proclaims that the transportation sector is the main source of GHG emissions in the State, since it generates more than 40 percent of the State's GHG emissions. It established a goal to reduce the carbon intensity of transportation fuels sold in the State by at least ten percent by 2020. This Order also directs CARB to determine whether this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early-action measure as part of the effort to meet the mandates in AB 32.

On April 23, 2009 CARB approved the proposed regulation to implement the low carbon fuel standard.

The LCFS was subject to legal challenge in 2011. To address the Court ruling, CARB was required to bring a new LCFS regulation to the Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster

investments in the production of the low-carbon fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. The second public hearing for the new LCFS regulation was held on September 24, 2015, and September 25, 2015, where the LCFS Regulation was adopted. The Final Rulemaking Package adopting the regulation was filed with the Office of Administrative Law (OAL) on October 2, 2015. The OAL approved the regulation on November 16, 2015.

SB 97. Senate Bill 97 (SB 97) was adopted August 2007 and acknowledges that climate change is a prominent environmental issue that requires analysis under CEQA. SB 97 directed the Governor's Office of Planning and Research (OPR), which is part of the State Resource Agency, to prepare, develop, and transmit to CARB guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, by July 1, 2009. The Resources Agency was required to certify and adopt those guidelines by January 1, 2010.

Pursuant to the requirements of SB 97 as stated above, on December 30, 2009 the Natural Resources Agency adopted amendments to the state CEQA guidelines that address GHG emissions. The CEQA Guidelines Amendments changed 14 sections of the CEQA Guidelines and incorporate GHG language throughout the Guidelines. However, no GHG emissions thresholds of significance are provided and no specific mitigation measures are identified. The GHG emission reduction amendments went into effect on March 18, 2010 and are summarized below:

- Climate action plans and other greenhouse gas reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.
- Local governments are encouraged to quantify the greenhouse gas emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. The section also recommends consideration of several qualitative factors that may be used in the determination of significance, such as the extent to which the given project complies with state, regional, or local GHG reduction plans and policies. OPR does not set or dictate specific thresholds of significance. Consistent with existing CEQA Guidelines, OPR encourages local governments to develop and publish their own thresholds of significance for GHG impacts assessment.
- When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies or recommended by experts.
- New amendments include guidelines for determining methods to mitigate the effects of greenhouse gas emissions in Appendix F of the CEQA Guidelines.
- OPR is clear to state that "to qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project; general compliance with a plan, by itself, is not mitigation."
- OPR's emphasizes the advantages of analyzing GHG impacts on an institutional, programmatic level. OPR therefore approves tiering of environmental analyses and highlights some benefits of such an approach.

- Environmental impact reports (EIRs) must specifically consider a project's energy use and energy efficiency potential.

AB 32. The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that greenhouse gases emitted in California be reduced to 1990 levels by the year 2020. "Greenhouse gases" as defined under AB 32 include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. ARB is the state agency charged with monitoring and regulating sources of greenhouse gases. AB 32 states the following:
Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

The ARB Board approved the 1990 greenhouse gas emissions level of 427 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) on December 6, 2007 (California Air Resources Board 2007). Therefore, emissions generated in California in 2020 are required to be equal to or less than 427 $MMTCO_2e$. Emissions in 2020 in a "business as usual" scenario are estimated to be 596 $MMTCO_2e$.

Under AB 32, the ARB published its Final Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California. Discrete early action measures are currently underway or are enforceable by January 1, 2010. The ARB has 44 early action measures that apply to the transportation, commercial, forestry, agriculture, cement, oil and gas, fire suppression, fuels, education, energy efficiency, electricity, and waste sectors. Of these early action measures, nine are considered discrete early action measures, as they are regulatory and enforceable by January 1, 2010. The ARB estimates that the 44 recommendations are expected to result in reductions of at least 42 MMTCO2e by 2020, representing approximately 25 percent of the 2020 target.

The ARB's Climate Change Scoping Plan (Scoping Plan) contains measures designed to reduce the State's emissions to 1990 levels by the year 2020 (California Air Resources Board 2008). The Scoping Plan identifies recommended measures for multiple greenhouse gas emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 greenhouse gas target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewables energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;

- Establishing targets for transportation-related greenhouse gas emissions for regions throughout California and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, Including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

In addition, the Scoping Plan differentiates between "capped" and "uncapped" strategies. "Capped" strategies are subject to the proposed cap-and-trade program. The Scoping Plan states that the inclusion of these emissions within the cap-and trade program will help ensure that the year 2020 emission targets are met despite some degree of uncertainty in the emission reduction estimates for any individual measure. Implementation of the capped strategies is calculated to achieve a sufficient amount of reductions by 2020 to achieve the emission target contained in AB 32. "Uncapped" strategies that will not be subject to the cap-and-trade emissions caps and requirements are provided as a margin of safety by accounting for additional greenhouse gas emission reductions.[4]

SB 32. The Governor signed SB 32 in September 2016, giving the ARB the statutory responsibility to include the 2030 target previously contained in Executive Order B-30-15 in the 2017 Scoping Plan Update. SB 32 states that "In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by this division, the State [air resources] board shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030." The 2017 Climate Change Scoping Plan Update addressing the SB 32 targets was adopted on December 14, 2017. The major elements of the framework proposed to achieve the 2030 target are as follows:

- SB 350
    - Achieve 50 percent renewables portfolio standard (RPS) by 2030.
    - Doubling of energy efficiency savings by 2030.
- Low Carbon Fuel Standard
    - Increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020).
- Mobile Source Strategy (Cleaner Technology and Fuels Scenario)
    - Maintaining existing GHG standards for light- and heavy-duty vehicles.
    - Put 4.2 million ZEVs on the roads.
    - Increase ZEV buses, delivery and other trucks.
- Sustainable Freight Action Plan
    - Improve freight system efficiency.
    - Maximize use of near-zero emission vehicles and equipment powered by renewable energy.
    - Deploy over 100,000 zero-emission trucks and equipment by 2030.
- Short-Lived Climate Pollutant Reduction Strategy

  - Reduce emissions of methane and HFCs 40 percent below 2013 levels by 2030.
  - Reduce emissions of black carbon 50 percent below 2013 levels by 2030.
- SB 375 Sustainable Communities Strategies
  - Increased stringency of 2035 targets.
- Post-2020 Cap-and-Trade Program
  - Declining caps, continued linkage with Québec, and linkage to Ontario, Canada.
  - CARB will look for opportunities to strengthen the program to support more air quality co-benefits, including specific program design elements.
- 20 percent reduction in GHG emissions from the refinery sector.
- By 2018, develop Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.[8]

SB 375. Senate Bill 375 (SB 375) was adopted September 2008 and aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPO) to adopt a sustainable communities strategy (SCS) or alternate planning strategy (APS) that will prescribe land use allocation in that MPOs Regional Transportation Plan (RTP). CARB, in consultation with each MPO, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's sustainable communities strategy or alternate planning strategy for consistency with its assigned targets.

The proposed project is located within the Southern California Association of Governments (SCAG), which has authority to develop the SCS or APS. City and County land use policies, including General Plans, are not required to be consistent with the RTP and associated SCS or APS. However, new provisions of CEQA would incentivize, through streamlining and other provisions, qualified projects that are consistent with an approved SCS or APS and categorized as "transit priority projects."

To implement SB 375 and reduce GHG emissions by correlating land use and transportation planning, SCAG adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) on April 7, 2016.[9] The 2016 RTP/SCS reaffirms the land use policies that were incorporated into the prior 2012–2035 RTP/SCS. These foundational policies, which guided the development of the 2016 RTP/SCS's strategies for land use, include the following:

[8] California Air Resources Board (CARB). 2017. The 2017 Climate Change Scoping Plan Update, the Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target. January 17. Website: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf. Accessed June 2021.
[9] Southern California Association of Governments (SCAG). 2016. 2016-2040 RTP/SCS. Website: https://scag.ca.gov/sites/main/files/file-attachments/f2016rtpscs.pdf?1606005557. Accessed June 2021.

- Identify regional strategic areas for infill and investment;
- Structure the plan on a three-tiered system of centers development;
- Develop "Complete Communities";
- Develop nodes on a corridor;
- Plan for additional housing and jobs near transit;
- Plan for changing demand in types of housing;
- Continue to protect stable, existing single-family areas;
- Ensure adequate access to open space and preservation of habitat; and
- Incorporate local input and feedback on future growth.

The 2016 RTP/SCS recognizes that transportation investments and future land use patterns are inextricably linked, and continued recognition of this close relationship will help the region make choices that sustain existing resources and expand efficiency, mobility, and accessibility for people across the region."

Assembly Bill 939 and Senate Bill 1374. Assembly Bill 939 (AB 939) requires that each jurisdiction in California to divert at least 50 percent of its waste away from landfills, whether through waste reduction, recycling, or other means. Senate Bill 1374 (SB 1374) requires the California Integrated Waste Management Board to adopt a model ordinance by March 1, 2004 suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition of waste materials from landfills.

Executive Order B-30-15. Executive Order B-30-15, establishing a new interim statewide greenhouse gas emission reduction target to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030, was signed by Governor Brown in April 2015.

Executive Order B-29-15. Executive Order B-29-15, mandates a statewide 25% reduction in potable water usage and was signed into law on April 1, 2015.

Executive Order B-37-16. Executive Order B-37-16, continuing the State's adopted water reduction, was signed into law on May 9, 2016. The water reduction builds off the mandatory 25% reduction called for in EO B-29-15.

2.2.4 South Coast Air Quality Management District

The Project is within the South Coast Air Basin (SoCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD Regulation XXVII currently includes three rules:

- The purpose of Rule 2700 is to define terms and post global warming potentials.
- The purpose of Rule 2701, SoCal Climate Solutions Exchange, is to establish a voluntary program to encourage, quantify, and certify voluntary, high quality certified greenhouse gas emission reductions in the SCAQMD.

- Rule 2702, Greenhouse Gas Reduction Program, was adopted on February 6, 2009. The purpose of this rule is to create a Greenhouse Gas Reduction Program for greenhouse gas emission reductions in the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

2.2.5 City of Los Angeles

City of Los Angeles Green New Deal/Sustainable City pLAn

In 2015, Mayor Eric Garcetti issued the Sustainable City pLAn, a mayoral directive that includes both short-term and long-term aspirations through the year 2035 in various topic areas, including: water, solar power, energy-efficient buildings, carbon and climate leadership, waste and landfills, housing and development, mobility and transit, and air quality, among others.

In 2019, the first four-year update to the 2015 Sustainable City pLAn was released. This updated document, known as L.A.'s Green New Deal, expands upon the City's vision for a sustainable future and provides accelerated targets and new goals.[10] L.A.'s Green New Deal's specific targets, include ensuring 57 percent of new housing units are built within 1,500 feet of transit by 2025 and 75 percent by 2035; reducing VMT per capita by at least 13 percent by 2025, 39 percent by 2035, and 45 percent by 2050; increasing the percentage of all trips made by walking, biking, micro-mobility/matched rides or transit to at least 35 percent by 2025 and 50 percent by 2035; supplying 100 percent renewable energy by 2045; installing 10,000 publicly available EV chargers by 2022 and 28,000 by 2028; diverting 100 percent of waste by 2050; and recycling 100 percent of wastewater by 2035.[11]

The City of Los Angeles has not adopted a threshold for GHG emissions.

City of Los Angeles Transportation Assessment Guidelines

The City of Los Angeles Department of Transportation (LADOT) has developed the Transportation Assessment Guidelines (TAG) [July 2019, Updated July 2020] that establish criteria for project review objectives and requirements, and provide instructions and set standards for preparation of transportation assessments in the City of Los Angeles. The most recent TAG conforms to the requirements of SB 743, which directs lead agencies to revise transportation assessment guidelines to include a transportation performance metric that promotes the reduction of GHG emissions, the

[10] City of Los Angeles. 2019. L.A.'s Green New Deal, Sustainable City pLAn. Website: https://plan.lamayor.org/. Accessed June 28, 2021.
[11] City of Los Angeles. 2019. L.A.'s Green New Deal, Sustainable City pLAn — Targets. Website: https://plan.lamayor.org/targets/targets_plan.html. Accessed June 28, 2021.

development of multimodal networks, and access to diverse land uses. In particular, the TAG sets forth VMT thresholds that conform to the mandates and requirements of AB 32, SB 375, and SB743.

3.0 Setting

3.1 Existing Physical Setting

The Project Site is located within the City of Los Angeles, which is located within the South Coast Air Basin (SoCAB or Basin) that includes all of Orange County as well as the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The South Coast Air Basin is located on a coastal plain with connecting broad valleys and low hills to the east. Regionally, the South Coast Air Basin is bounded by the Pacific Ocean to the southwest and high mountains to the east forming the inland perimeter.

3.1.1 Local Climate and Meteorology

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution. The mountains surrounding the region form natural horizontal barriers to the dispersion of air contaminants. Air pollution created in the coastal areas and around the Los Angeles area is transported inland until it reaches the mountains where the combination of mountains and inversion layers generally prevent further dispersion.[12] This poor ventilation results in a gradual degradation of air quality from the coastal areas to inland areas. Air stagnation may occur during the early evening and early morning periods of transition between day and nighttime flows. The region also experiences periods of hot, dry winds from the desert, known as Santa Ana winds. If the Santa Ana winds are strong, they can surpass the sea breeze, which blows from the ocean to the land, and carry the suspended dust and pollutants out to the ocean. If the winds are weak, they are opposed by the sea breeze and cause stagnation, resulting in high pollution events.[13]

The annual average temperature varies little throughout much of the basin, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas where the Project Site is located. The majority of the annual rainfall in the basin occurs between November and April. Summer rainfall is minimal and is generally limited to scattered thunderstorms in the coastal regions and slightly heavier showers in the eastern portion of the basin along the coastal side of the mountains. Year-to-year patterns in rainfall are unpredictable because of fluctuations in the weather.[14]

Temperature inversions limit the vertical depth through which pollution can be mixed. Among the most common temperature inversions in the basin are radiation inversions, which form on clear winter nights when cold air off mountains sink to the valley floor while the air aloft over the valley remains warm. These inversions, in conjunction with calm winds, trap pollutants near the source. Other types of temperature inversions that affect the basin include marine, subsidence, and high-pressure inversions.

[12] South Coast Air Basin Attainment Plan for 2006 PM2.5 Standard. http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/draft-final-south-coast-air-basin-pm2-5-plan-110320.pdf?sfvrsn=6.
[13] Farmer's Almanac. "What Are The Santa Ana Winds?" November 7, 2022. https://www.farmersalmanac.com/what-are-the-santa-ana-winds-90667#:~:text=Southern%20California%20happens%20to%20be,States%E2%80%94the%20Santa%20Ana%20Winds.
[14] Western Regional Climate Center. http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5115.

Summers are often periods of hazy visibility and occasionally unhealthful air. Strong temperature inversions may occur that limit the vertical depth through which air pollution can be dispersed. Air pollutants concentrate because they cannot rise through the inversion layer and disperse. These inversions are more common and persistent during the summer months. Over time, sunlight produces photochemical reactions within this inversion layer that creates ozone, a particularly harmful air pollutant. Occasionally, strong thermal convections occur which allows the air pollutants to rise high enough to pass over the mountains and ultimately dilute the smog cloud trap pollutants such as automobile exhaust near their source. While these inversions may lead to air pollution "hot spots" in heavily developed coastal areas of the basin, there is not enough traffic in inland valleys to cause any winter air pollution problems. Despite light wind conditions, especially at night and in the early morning, winter is generally a period of good air quality in the Project vicinity.[12]

In the winter, light nocturnal winds result mainly from the drainage of cool air off of the mountains toward the valley floor while the air aloft over the valley remains warm. This forms a type of inversion known as a radiation inversion. Such winds are characterized by stagnation and poor local mixing and trap pollutants such as automobile exhaust near their source. While these inversions may lead to air pollution "hot spots" in heavily developed coastal areas of the basin, there is not enough traffic to cause any winter air pollution problems. Despite light wind conditions, especially at night and in the early morning, winter is generally a period of good air quality in the Project vicinity.[12]

The temperature and precipitation levels for the City of Los Angeles – North Main (Project area) in Table 3. Table 3 shows that August is typically the warmest month and December is typically the coolest month. Rainfall in the Project area varies considerably in both time and space. Almost all the annual rainfall comes from the fringes of mid-latitude storms from late November to early April, with summers being almost completely dry.

Table 4: Meteorological Summary

Month	Temperature (˚F)		Average Precipitation (inches)
	Average High	Average Low	
January	66.4	48.3	3.20
February	67.3	49.5	3.38
March	68.8	51.1	2.40
April	71.0	53.5	1.01
May	72.9	56.5	0.25
June	76.9	59.7	0.06
July	82.3	63.2	0.01
August	83.1	63.8	0.05
September	81.9	62.6	0.27
October	77.6	58.7	0.48
November	72.8	53.3	1.25
December	67.4	49.1	2.41
Annual Average	**74.0**	**55.8**	**14.8**

Notes:
[1] Source: http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5115

3.1.2 Local Air Quality

The SCAQMD has divided the South Coast Air Basin into 38 air-monitoring areas with a designated ambient air monitoring station representative of each area. The Project Site is located approximately 6 miles northwest of the LA Central (Los Angeles – North Main Street) air monitoring station, which is located near downtown Los Angeles and covers the Project Site. Table 4 presents the monitored pollutant levels within the vicinity of the Project Site. However, it should be noted that due to distance between the air monitoring station and the Project Site, recorded air pollution levels at the air monitoring station reflect with varying degrees of accuracy the local air quality conditions at the Project Site.

Table 5: Local Area Air Quality Levels from the Los Angeles Central Air Monitoring Station

Pollutant (Standard)[2]	Year		
	2019	2020	2021
Ozone:			
Maximum 1-Hour Concentration (ppm)	**0.093**	**0.185**	**0.099**
Days > CAAQS (0.09 ppm)	**0**	**14**	**1**
Maximum 8-Hour Concentration (ppm)	**0.08**	**0.118**	**0.085**
Days > NAAQS (0.080 ppm)	**2**	**22**	**2**
Days > CAAQS (0.070 ppm)	**2**	**22**	**2**
Carbon Monoxide:			
Maximum 1-Hour Concentration (ppm)	--[3]	--[3]	--[3]
Days > NAAQS (20 ppm)	--[3]	--[3]	--[3]
Maximum 8-Hour Concentration (ppm)	--[3]	--[3]	--[3]
Days > NAAQS (9 ppm)	--[3]	--[3]	--[3]
Nitrogen Dioxide:			
Maximum 1-Hour Concentration (ppm)	0.070	0.062	0.078
Days > NAAQS (0.25 ppm)	0	0	0
Sulfur Dioxide:			
Maximum 24-Hour Concentration (ppm)	--[3]	--[3]	--[3]
Days > CAAQS (0.04 ppm)	--[3]	--[3]	--[3]
Inhalable Particulates (PM_{10}):			
Maximum 24-Hour Concentration (ug/m^3)	**93.9**	**185.2**	**138.5**
Days > NAAQS (150 ug/m^3)	*	*	**0**
Days > CAAQS (50 ug/m^3)	*	**35.6**	**17.2**
Annual Arithmetic Mean (AAM) (ug/m^3)	**23**	**33.1**	**26**
Annual > NAAQS (50 ug/m^3)	No	No	No
Annual > CAAQS (20 ug/m^3)	**Yes**	**Yes**	**Yes**
Ultra-Fine Particulates ($PM_{2.5}$):			
Maximum 24-Hour Concentration (ug/m^3)	**43.5**	**175**	**61.0**
Days > NAAQS (35 ug/m^3)	**1**	**12.1**	**13**
Annual Arithmetic Mean (AAM) (ug/m^3)	**10.8**	**15.0**	**14.8**
Annual > NAAQS (15 ug/m3)	No	No	No
Annual > CAAQS (12 ug/m^3)	No	**Yes**	**Yes**

Notes:
Bold text indicates an exceedance in the applicable standard
* Indicates that there is insufficient data available to determine the value
[1] Source: https://www.arb.ca.gov/adam/
[2] CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million
[3] No data available.

The monitoring data presented in Table 4 shows that ozone and particulate matter (PM_{10} and $PM_{2.5}$) are the air pollutants of primary concern in the Project Site area, which pollutants are detailed below.

Ozone

During the 2019 to 2021 monitoring period, the State 1-hour concentration standard for ozone has been exceeded between 0 to 14 days each year. The State 8-hour ozone standard has been exceeded between 2 and 22 days each year over the past three years that data is available. The Federal 8-hour ozone standard was exceeded between 2 and 22 days each year over the past three years that data is available.

Ozone is a secondary pollutant, which means that it is not directly emitted. Ozone is created as the result of chemical reactions between other pollutants, most importantly hydrocarbons and NO_2, which reactions occur only in the presence of bright sunlight.[15] Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in the area. Many areas of the SoCAB contribute to the ozone levels experienced at the monitoring station, with the more significant areas being those directly upwind.[12]

Particulate Matter

During the 2019 to 2021 monitoring period, the State 24-hour concentration standard for PM_{10} has been exceeded between 17 and 36 days each year at the Los Angeles – North Main Street Area and the State annual concentration standard was also exceeded each year during this time period. Insufficient data was available for 2019 to 2021 to determine a value for these metrics. Over the same time period the Federal 24-hour and annual standards for PM_{10} have not been exceeded within the Los Angeles – North Street Main Area.

The Federal 24-hour standard for $PM_{2.5}$ was exceeded between 1 and 13 days each year during the 2019 to 2021 monitoring period within the Los Angeles – North Main Street Area. The annual average $PM_{2.5}$ concentrations exceeded both the state standards in 2020 and 2021, however was below in 2019. Over the same time period the Federal annual standard for $PM_{2.5}$ has not been exceeded within the Los Angeles – North Street Main Area.

According to the EPA, some people are much more sensitive than others to breathing fine particles (PM_{10} and $PM_{2.5}$). People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death due to breathing these fine particles. People with bronchitis can expect aggravated symptoms from breathing in fine particles. Children may experience

[15] USEPA. Ground Level Ozone Basics. https://www.epa.gov/ground-level-ozone-pollution/ground-level-ozone-basics.

decline in lung function due to breathing in PM_{10} and $PM_{2.5}$. Other groups considered sensitive are smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive because many breathe through their mouths during exercise.[16]

3.1.3 Attainment Status

The EPA and the ARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Each standard has a different definition, or 'form' of what constitutes attainment, based on specific air quality statistics. For example, the Federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual $PM_{2.5}$ standard is met if the three-year average of the annual average $PM_{2.5}$ concentration is less than or equal to the standard.[17] Table 5 lists the attainment status for pollutants that SoCAB is currently designated as nonattainment for California standards. The SoCAB is currently nonattainment for State ozone, PM_{10}, and $PM_{2.5}$, and federal ozone and $PM_{2.5}$.

Table 6: South Coast Air Basin Attainment Status

Pollutant	Standards1,2,3	Averaging Time	Designation
1-Hour Ozone	NAAQS	1-Hour Ozone	Nonattainment (Extreme)
	CAAQS	1-Hour Ozone	Nonattainment
8-Hour Ozone	NAAQS	8-Hour Ozone	Nonattainment (Extreme)
8-Hour Ozone	CAAQS	8-Hour Ozone	Nonattainment
PM_{10}	NAAQS	24-Hour	Attainment (Maintenance)
	CAAQS	24-Hour Annual	Nonattainment
$PM_{2.5}$	NAAQS	2006 24-Hour (35 µg/m^3)	Nonattainment (Serious)
		1997 Annual (15.0 µg/m^3)	Attainment
		2012 Annual (12.0 µg/m^3)	Nonattainment (Serious)
	CAAQS	Annual (12.0 µg/m^3)	Nonattainment

South Coast Air Quality Management District (SCAQMD). 2018. NAAQS and CAAQS Attainment Status for South Coast Air Basin. September. Website: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf?sfvrsn=14. Accessed June 2021.

[16] US EPA. Particulate Matter (PM) Basics. https://www.epa.gov/pm-pollution/particulate-matter-pm-basics.
[17] US EPA Nonattainment Areas and Designations. https://catalog.data.gov/dataset/us-epa-nonattainment-areas-and-designations#:~:text=A%20geographic%20area%20that%20meets,entirely%20within%20a%20single%20state.

4.0 Modeling Parameters and Assumptions

4.1 Construction

Typical emission rates from construction activities were obtained from CalEEMod Version 2020.4.0. CalEEMod is a computer model published by the SCAQMD for estimating air pollutant emissions. Using CalEEMod, the peak daily air pollutant emissions were calculated and presented below. These emissions represent the highest level of emissions for each of the construction phases in terms of air pollutant emissions.

The analysis assesses the emissions associated with the construction of 55,814 square feet of new buildings and associated hardscape and parking lot. Construction was estimated to begin approximately September 2022 and end approximately April 2024. The phases of the construction activities analyzed below are: 1) demolition of 8,941 square feet of buildings and facilities, 2) grading (12,678 CY of export of material), 3) paving, 4) building construction, and 5) architectural coating. The building phase was condensed from CalEEMod default length to accommodate the construction timing per the Project applicant. Default CalEEMod equipment counts and daily equipment usage hours were used for this analysis. For details on construction modeling, please see Appendix A. Table 7 shows the full list of construction equipment per CalEEMod.

Table 7: Construction Equipment

Phase	Offroad Equipment Type	Amount	Daily Usage Hours
Demolition	Concrete/Industrial Saws	1	8
	Rubber Tired Dozers	1	8
	Tractors/Loaders/Backhoes	3	8
Grading	Graders	1	8
	Rubber Tired Dozers	1	8
	Tractors/Loaders/Backhoes	2	7
Building Construction	Cranes	1	6
	Forklifts	1	6
	Generator Sets	1	8
	Tractors/Loaders/Backhoes	3	6
	Welders	1	8
Paving	Cement and Mortar Mixers	1	6
	Pavers	1	6
	Paving Equipment	1	8
	Rollers	1	7
	Tractors/Loaders/Backhoes	1	8
Architectural Coating	Air Compressors	1	6

4.2 Operations

Operational or long-term emissions occur over the life of the Project. Both mobile and area sources generate operational emissions. Area source emissions arise from consumer product usage, heaters that consume natural gas, gasoline-powered landscape equipment, and architectural coatings (painting). Mobile source emissions from motor vehicles are the largest single long-term source of air pollutants from the operation of the Project. Small amounts of emissions would also occur from area sources such as the consumption of natural gas for heating, from landscaping emissions, and consumer product usage. The operational emissions were estimated using the latest version of CalEEMod.

Mobile Sources
Mobile sources include emissions from the additional vehicle miles generated from the proposed Project. CalEEMod default values were used to estimate mobile-source emissions. Please see CalEEMod output comments sections in Appendix A and B for details.

Area Sources
Area sources include emissions from consumer products, landscape equipment and architectural coatings. Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers, as well as air compressors, generators, and pumps. As specifics were not known about the landscaping equipment fleet, CalEEMod defaults were used to estimate emissions from landscaping equipment.

Energy Usage
2020.4.0 CalEEMod defaults were utilized.

4.3 Localized Construction Analysis

The SCAQMD has published a "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds" (South Coast Air Quality Management District 2011b). CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily disturbance activity possible for each piece of equipment. In order to compare CalEEMod reported emissions against the localized significance threshold lookup tables, the CEQA document should disclose the following parameters:

1) The off-road equipment list (including type of equipment, horsepower, and hours of operation) assumed for the day of construction activity with maximum emissions.
2) The maximum number of acres disturbed on the peak day.
3) Any emission control devices added onto off-road equipment.
4) Specific dust suppression techniques used on the day of construction activity with maximum emissions.

As shown in Table 7, the maximum number of acres disturbed in a day would be up to 2 acres; therefore, the data for a 2-acre site was used.

The local air quality emissions from construction were analyzed using the SCAQMD's Mass Rate Localized Significant Threshold Look-up Tables and the methodology described in Localized Significance Threshold Methodology, prepared by SCAQMD, revised July 2008. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$ from the proposed Project could result in a significant impact to the local air quality. The emission thresholds were calculated based on the Central Los Angeles source receptor area (SRA 1) and a disturbance of 2 acres per day at a distance of 25 meters (82 feet). The distance to the nearest sensitive receptor is approximately 10 feet; however, according to LST methodology, any receptor closer than 25 meters should be based on the 25 meter threshold.

4.4 Localized Operational Analysis

For operational emissions, the screening tables for a disturbance area of 2 acre and a distance of 25 meters were used to determine significance. The tables were compared to the Project's operational emissions.

5.0 Thresholds of Significance

5.1 Air Quality Thresholds of Significance

5.1.1 CEQA Guidelines for Air Quality

The City has determined to adopt the checklist questions set forth in Appendix G of the CEQA Guidelines as thresholds for assessing the significance of a project's potential impacts related to air quality. A significant impact would occur if the project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- 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;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors adversely affecting a substantial number of people).

There are daily emission thresholds for construction and operation of a proposed project in the basin.

5.1.2 Regional Significance Thresholds for Construction Emissions

The following CEQA significance thresholds for construction emissions are established for the Basin:

- 75 pounds per day (lbs/day) of ROC
- 100 lbs/day of NO_x
- 550 lbs/day of CO
- 150 lbs/day of PM_{10}
- 55 lbs/day of $PM_{2.5}$
- 150 lbs/day of SO_2

Projects in the basin with construction-related emissions that exceed any of the emission thresholds are considered to be significant under SCAQMD guidelines.

5.1.3 Regional Significance Thresholds for Operational Emissions

The daily operational emissions significance thresholds for the basin are as follows:

- 55 pounds per day (lbs/day) of ROC
- 55 lbs/day of NO_X
- 550 lbs/day of CO
- 150 lbs/day of PM_{10}
- 55 lbs/day of $PM_{2.5}$
- 150 lbs/day of SO_2

Local Microscale Concentration Standards The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. If ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or federal standard, project emissions are considered significant if they increase

1-hour CO concentrations by 1.0 ppm or more or 8-hour CO concentrations by 0.45 ppm or more. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20.0 ppm
- California State 8-hour CO standard of 9.0 ppm

5.1.4 Thresholds for Localized Significance

The maximum number of acres disturbed in a day would be 2 acres as shown in Table 8. The nearest existing sensitive receptor are the residences adjacent to the east, approximately 10 feet. According to LST methodology any receptor located closer than 25 meters should be based on the 25-meter threshold. Therefore, the localized threshold for 2 acres of disturbance per day and a 25-meter distance in Central LA has been used for this analysis.

Table 8: Construction Equipment Assumptions[1]

Activity	Equipment	Number	Acres/8hr-day	Total Acres
Demolition	Rubber Tired Dozers	1	0.5	0.5
	Tractors/Loaders/Backhoes	3	0.5	1.5
Total Per Phase				*2.0*
Grading	Graders	1	0.5	0.5
	Rubber Tired Dozers	1	0.5	0.5
	Tractors/Loaders/Backhoes	2	0.5	1.0
Total Per Phase				*2.0*

Notes:
[1.] Source: Source: South Coast AQMD, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2

5.2 Greenhouse Gas Thresholds of Significance

5.2.1 CEQA Guidelines for Greenhouse Gas

The City has determined to adopt the checklist questions set forth in Appendix G of the CEQA Guidelines as thresholds for assessing the significance of a project's potential impacts related to GHG emissions. A significant impact would occur if the project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

However, despite this, currently neither the CEQA statutes, OPR guidelines, nor the CEQA Guidelines prescribe thresholds of significance or a particular methodology for performing an impact analysis; as

with most environmental topics, significance criteria are left to the judgment and discretion of the Lead Agency.

Although GHG emissions can be quantified, CARB, SCAQMD and the City of Los Angeles have yet to adopt project-level numeric significance thresholds for GHG emissions that would be applicable to the Project. The California Natural Resources Agency has also clarified that the effects of GHG emissions are cumulative impacts, and that they should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see Section 15064(h)(3)).[18] Further, the Governor's Office of Planning and Research's (OPR) technical advisory on CEQA and climate change, the Natural Resources Agency's Final Statement of Reasons, and CEQA Guidelines Section 15064.4 provide that a qualitative analysis of project-level impacts to determine whether a project's GHG impacts are significant can be based on a project's consistency with previously approved plans and mitigation programs, as long as such plans have adequately analyzed and mitigated GHG emissions to a less than significant level.[19] In the absence of any applicable adopted numeric threshold, the significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. This evaluation of consistency with such plans is the sole basis for determining the significance of the Project's GHG-related impacts on the environment.

[18] See generally California Natural Resources Agency, Final Statement of Reasons for Regulatory Action, December 2009, pp. 11–13, 14, 16; see also Letter from Cynthia Bryant, Director of the Office of Planning and Research to Mike Chrisman, Secretary for Natural Resources, April 13, 2009, www.opr.ca.gov/docs/Transmittal_Letter.pdf, accessed May 1, 2017.

[19] Governor's Office of Planning and Research, Technical Advisory—CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review, 2008; California Natural Resources Agency, Final Statement of Reasons for Regulatory Action, December 2009, p. 22–26.

6.0 Air Quality Emissions Impact

6.1 Construction Air Quality Emissions Impact

The latest version of CalEEMod was used to estimate the on-site and off-site construction emissions. The emissions estimates incorporate SCAQMD Rule 402 and 403. Measures incorporated into the Project to reflect compliance with Rules 402 and 403 (fugitive dust) are not considered mitigation measures as the Project is required to incorporate these rules during construction.

6.1.1 Regional Construction Emissions

The construction criteria pollutant emissions for the Project would not exceed the SCAQMD's daily emission thresholds at the regional level as reported in Table 9, and therefore would be considered less than significant. No mitigation is required.

Table 9: Regional Significance - Construction Emissions (pounds/day)

Activity	Pollutant Emissions (pounds/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Demolition						
On-Site[2]	1.69	16.62	13.93	0.02	1.35	0.86
Off-Site[3]	0.07	1.09	0.75	0.01	0.26	0.08
Total	**1.76**	**17.71**	**14.68**	**0.03**	**1.61**	**0.94**
Grading						
On-Site[2]	1.54	16.98	9.22	0.02	3.55	2.03
Off-Site[3]	1.09	39.60	9.38	0.14	4.36	1.39
Total	**2.63**	**56.58**	**18.61**	**0.16**	**7.91**	**3.41**
Building Construction						
On-Site[2]	1.65	12.50	12.73	0.02	0.59	0.57
Off-Site[3]	0.19	1.09	2.05	0.01	0.63	0.18
Total	**1.84**	**13.60**	**14.78**	**0.03**	**1.21**	**0.75**
Paving						
On-Site[2]	0.62	5.86	8.83	0.01	0.28	0.26
Off-Site[3]	0.04	0.03	0.44	0.00	0.15	0.04
Total	**0.66**	**5.89**	**9.26**	**0.01**	**0.43**	**0.30**
Architectural Coating						
On-Site	31.64	1.22	1.81	0.00	0.06	0.06
Off-Site	0.03	0.02	0.30	0.00	0.10	0.03
Total	**31.66**	**1.24**	**2.11**	**0.00**	**0.16**	**0.09**
Total Construction Duration						
Maximum Daily	**38.55**	**95.02**	**59.44**	**0.24**	**11.32**	**5.48**
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Thresholds	No	No	No	No	No	No

Notes:
[1] Source: CalEEMod Version 2020.4.0.
[2] On-site emissions from equipment operated on-site that is not operated on public roads.
[3] Off-site emissions from equipment and vehicles operated on public roads.

6.1.2 Localized Construction Emissions

The data provided in Table 10 shows that none of the analyzed criteria pollutants would exceed the local emissions thresholds at the nearest sensitive receptors. Therefore, a less than significant local air quality impact would result from construction of the proposed Project.

Table 10: Localized Significance - Construction

Phase	On-Site Pollutant Emissions (pounds/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Demolition	16.62	13.93	1.35	0.86
Grading	16.98	9.22	3.55	2.03
Paving	12.50	12.73	0.59	0.57
Building Construction	5.86	8.83	0.28	0.26
Architectural Coating	1.22	1.81	0.06	0.06
Total Construction Duration				
Maximum Daily	53.19	46.51	5.83	3.77
SCAQMD Construction Threshold for 25 meters (82 feet)[2]	**108**	**1,048**	**8**	**5**
Exceeds Threshold?	**No**	**No**	**No**	**No**

Notes:
[1] Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for 2-acre in Central LA.
[2] The estimated distance from the Project Site to the nearest existing multi-family building located 10 feet east of the Project Site, however according to LST methodology any receptor located closer than 25 meters should be based on the 25-meter threshold.

6.1.3 Odors

Potential sources that may emit odors during construction activities include the application of materials such as asphalt pavement. The objectionable odors that may be produced during the construction process are of short-term in nature and the odor emissions are expected cease upon the drying or hardening of the odor producing materials. Due to the short-term nature and limited amounts of odor producing materials being utilized, no significant impact related to odors would occur during construction of the proposed Project.

6.1.4 Construction-Related Toxic Air Contaminant Impact

The greatest potential for toxic air contaminant emissions would be related to diesel particulate emissions associated with heavy equipment operations during construction of the proposed Project. According to SCAQMD methodology, health effects from carcinogenic air toxics are described in terms of "individual cancer risk". "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of toxic air contaminants over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. Given the temporary and short-term construction schedule (approximately 18 months), the proposed Project would not result in a long-term (i.e., 70 years) substantial source of toxic air contaminant emissions and would not create a long-term (i.e., lifetime or 70-year) exposure to toxic air contaminant emissions and corresponding individual cancer risk. Therefore, no significant short-term toxic air contaminant impacts would occur during construction of the proposed Project.

6.2 Operational Air Quality Emissions Impact

6.2.1 Regional Operational Emissions

The operations-related criteria pollutant emission impacts created by the proposed Project have been analyzed using the CalEEMod model. The operating emissions were based on year 2024, which is the anticipated opening year for the Project. The summer and winter emissions created by the proposed Project's long-term operations were calculated and are summarized in Table 11 using the maximum value from either summer or winter. Based on trip generation factors, long-term operational emissions associated with the proposed Project, calculated with the CalEEMod model, are shown in Table 11.

Table 11: Regional Significance - Operational Emissions (lbs/Day)

Activity	Pollutant Emissions (pounds/day)					
	VOC	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area Sources[2]	1.28	0.00	0.02	0.00	0.00	0.00
Energy Usage[3]	0.02	0.15	0.13	0.00	0.01	0.01
Mobile Sources[4]	1.01	1.09	10.12	0.02	2.35	0.64
Total Emissions	**2.30**	**1.24**	**10.27**	**0.02**	**2.36**	**0.65**
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Threshold?	No	No	No	No	No	No

Notes:
[1] Source: CalEEMod Version 2020.4.0
[2] Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.
[3] Energy usage consists of emissions from generation of electricity and on-site natural gas usage.
[4] Mobile sources consist of emissions from vehicles and road dust.

Table 11 provides the Project's operational emissions. Table 11 shows that the Project's criteria pollutant emissions would not exceed the corresponding SCAQMD daily emission thresholds. The operational impacts would be less than significant.

6.2.2 Localized Operational Emissions

Table 12 shows the calculated localized emissions for the proposed operational activities compared with appropriate LSTs. The LST analysis only includes on-site sources; however, the CalEEMod software outputs do not separate on-site and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions shown in Table 12 include Project-related mobile sources that were estimated

at one tenth of the gross vehicular emissions and road dust. This trip length represents an estimate of the amount of Project-related new vehicle traffic that would occur on-site.[20]

Table 12: Localized Significance - Operational Emissions

LST Pollutants[1]	NO_X (lbs/day)	CO (lbs/day)	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)
Area Sources[2]	0.00	0.02	0.00	0.00
Energy Usage[3]	0.15	0.13	0.01	0.01
Vehicle Emissions[4]	0.11	1.01	0.23	0.06
Total Emissions	**0.26**	**1.16**	**0.25**	**0.08**
SCAQMD Operational Threshold for 25 meters (82 feet)	**108**	**1,048**	**2**	**2**
Exceeds Threshold?	**No**	**No**	**No**	**No**

Notes:
[1] Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for 2-acre in Central LA.
[2] Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.
[3] Energy usage consists of emissions from on-site natural gas usage.
[4] On-site vehicular emissions based on 1/10 of the gross vehicular emissions and road dust.
[5] The estimated distance from the Project Site to the nearest existing multi-family building located 10 feet east of the Project Site, however according to LST methodology any receptor located closer than 25 meters should be based on the 25-meter threshold.

Table 12 demonstrates that the operational emission rates would not exceed the LST thresholds for the nearest sensitive receptors at 25 meters or less**.** Therefore, the Project would not result in significant localized operational emissions.

Operation of the Project would not introduce any major new sources of air pollution within the Project Site. Project-related air pollutant emissions would occur from on-site sources such as architectural coatings, landscaping equipment, and on-site usage of natural gas, as well as the operation of vehicles on-site.

6.3 CO Hot Spot Emissions

With regard to off-site localized impacts, land use development projects may increase traffic in the nearby vicinity resulting in an increase in mobile source emissions. CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential local air quality impacts. Local air quality impacts can be assessed by comparing future without and with Project CO levels to the State and federal CO standards which were presented above.

[20] The Project Site is approximately 0.06 miles in length at its longest point; therefore the on-site mobile source emissions represent approximately 1/115th of the shortest CalEEMod default distance of 6.9 miles. Therefore, to be conservative, 1/10th the distance (dividing the mobile source emissions by 10) was used to represent the portion of the overall mobile source emissions that would occur on-site.

The SCAQMD recommends that a local CO hot spot analysis be conducted if the intersection meets one of the following criteria: 1) the intersection is at level of service (LOS) D or worse and where the project increases the volume to capacity ratio by 2 percent, or 2) the project decrease at an intersection from C to D.

Micro-scale air quality emissions have traditionally been analyzed in environmental documents where the air basin was a non-attainment area for CO. However, the SCAQMD has demonstrated in the CO attainment redesignation request to EPA that there are no "hot spots" anywhere in the Basin. If the worst-case intersections in the air basin have no "hot spot" potential, any local impacts will be below thresholds.

The analysis prepared for CO attainment in the Basin by the SCAQMD was used to assist in evaluating the potential for the Project to create CO exceedances in the Air Basin. CO attainment was thoroughly analyzed as part of the SCAQMD's 2003 Air Quality Management Plan (2003 AQMP) and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan). [21,22]

As discussed in the 1992 CO Plan, peak carbon monoxide concentrations in the Air Basin are due to unusual meteorological and topographical conditions, and not due to the impact of particular intersections. Considering the region's unique meteorological conditions and the increasingly stringent CO emissions standards, CO modeling was performed as part of the 1992 CO Plan and subsequent plan updates and air quality management plans.

In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included: Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and Century Boulevard (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which had a daily traffic volume of approximately 100,000 vehicles per day. As part of the 2003 AQMP CO Modeling Attainment Demonstration, an updated analysis was performed based on the 1992 CO Plan using more recent modeling techniques (dispersion modeling, emission factors).[23] The 2003 AQMP CO Modeling and Attainment Demonstration estimated that the 1-hour concentration for this intersection was 4.6 ppm, which indicates that the most stringent 1-hour CO standard (20.0 ppm) would likely not be exceeded until the daily traffic at the intersection exceeded more than 400,000 vehicles per day. As an initial screening step, if a project intersection does not exceed 400,000 vehicles per day, then the project does not need to prepare a detailed CO hot spot analysis.

[21] SCAQMD, Air Quality Management Plan, Appendix V, Modeling and Attainment Demonstrations, August 2003.
[22] SCAQMD, Federal Attainment Plan for Carbon Monoxide, 1992.
[23] SCAQMD, Air Quality Management Plan, Appendix V, Modeling and Attainment Demonstrations, August 2003.

According to the Project's Revised Transportation Assessment (Overland 2021), the volume of traffic at Project buildout with cumulative projects would be well below 100,000 vehicles, which is below the volume that would trigger even the preparation of a detailed CO hot spot analysis.

6.4 Operations Related Toxic Air Contaminants

When considering potential operational air quality impacts under CEQA, consideration is given to the location of sensitive receptors within close proximity of land uses that emit toxic air contaminants. The California Air Resources Board (CARB) has published and adopted the Air Quality and Land Use Handbook: A Community Health Perspective (2005), which provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities).[24] SCAQMD adopted similar recommendations in its Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning (2005).[25] Together, the CARB and SCAQMD guidelines recommend siting distances for both the development of sensitive land uses in proximity to TAC sources and the addition of new TAC sources in proximity to existing sensitive land uses.

The Project would not include any substantial sources of toxic air contaminant emissions such as generators, boilers or any other combustion sources. Cooking equipment (char broilers) may be installed as part of the Project. However, the CARB Air Quality and Land Use Handbook does not identify char broilers as a substantial source of toxic air contaminant emissions. Moreover, if the Project were to install stationary equipment with the potential to emit toxic air contaminants, this equipment would be subject to SCAQMD permitting requirements which will identify health risk to nearby sensitive receptors. As the Project would not contain substantial sources of toxic air contaminant emissions and is consistent with the CARB and SCAQMD guidelines, the Project would not result in the exposure of off-site sensitive receptors to carcinogenic or toxic air contaminants that exceed the maximum incremental cancer risk of 10 in one million or an acute or chronic hazard index of 1.0, and potential toxic air contaminant impacts would be less than significant.

The SCAQMD recommends Health Risk Assessments (HRAs) for substantial sources of diesel particulate matter such as warehouse distribution and cold storage facilities. No such uses are proposed by the Project. As such, a HRA was not required for the Project.

6.5 Cumulative Regional Air Quality Impacts

In accordance with the SCAQMD methodology, projects that do not exceed the SCAQMD criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative impact. The Project does not exceed any of the thresholds of significance and therefore is considered

[24] California Air Resources Board, Air Quality and Land Use Handbook: A Community Health Perspective, April 2005, ww3.arb.ca.gov/ch/handbook.pdf.
[25] SCAQMD, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, May 2005, www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.

less than significant. Additionally, as discussed in section 6.6 below, the project would be in compliance with the assumptions of the AQMP.

6.6 Air Quality Compliance

CEQA requires a discussion of any inconsistencies between a proposed project and applicable General Plans and Regional Plans (CEQA Guidelines Section 15125). The regional plan that applies to the proposed Project includes the applicable SCAQMD Air Quality Management Plan (AQMP). Therefore, this section discusses any potential inconsistencies of the proposed Project with the AQMP.

The assessment of the Project's consistency with the 2016 AQMP sets forth the issues regarding the Project's consistency with the assumptions and objectives of the 2016 AQMP and discusses whether the Project would interfere with the region's ability to comply with Federal and State air quality standards.

The SCAQMD CEQA Handbook states that "New or amended General Plan Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency:[26]

(1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

(2) Whether the project will exceed the assumptions in the AQMP or increments based on the year of project buildout and phase. According to Chapter 12 of the SCAQMD CEQA Air Quality Handbook, the purpose of the General Plan consistency findings is to determine whether a project is inconsistent with the growth assumptions incorporated into the air quality plan, and thus, whether it would interfere with the region's ability to comply with federal and California air quality standards.

Both of these indicators are evaluated below.

Increase in the Frequency or Severity of Violations?

Based on the air quality modeling analysis presented above, neither the Project's short-term construction activities, nor its long-term operations would result in significant impacts based on the SCAQMD regional and local thresholds of significance. As such, the Project would not result in an

[26] SCAQMD. CEQA Air Quality Handbook. November 1993. Print.

increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards.

Exceed the Assumptions in the AQMP and thus Interfere with the Region's Ability to Comply with Air Quality Standards?

As discussed in the Population and Housing analysis for the Project, the Project would be consistent with the regional growth projections for the Los Angeles Subregion. As noted above in the Project Description, as a creative office project, the Project would not introduce new homes at the Project Site and would therefore not result in direct population growth in the area. Based on employee generation rates promulgated by the City of Los Angeles VMT Calculator Documentation and also provided in the Project's Transportation Assessment, the Project would generate approximately 300 employees (Overland Traffic Consultants, 2021). According to SCAG's 2016–2040 RTP/SCS, there were approximately 1,848,339 employees within the City of Los Angeles in 2021 and approximately 1,917,721 employees are projected within the City for 2023, the Project's buildout year, which would be an increase of 69,382 employees. As such, the Project's estimated 300 employees would represent 0.02 percent of the total number of employees in 2023 and 0.43 percent of the growth between 2021 and 2023 within the City of Los Angeles. While some of the new employment positions could be filled by persons who would relocate to the vicinity of the Project Site, this potential increase in population would not be substantial since not all employees would move close to the Project Site. Specifically, some employment opportunities may be filled by persons already residing in the vicinity of the Project Site and other persons would commute to the Project Site from other communities in and outside of the City. Therefore, the increase in employees would be well within the existing employment projections for the community and region. Because the Project would result in a minimal increase in permanent employment, it would be consistent with the demographic projections set forth in SCAG's 2016–2040 RTP/SCS that were used in the 2016 AQMP. Thus, the Project would not conflict with or obstruct implementation of the 2016 AQMP.

Additionally, the Project would be consistent with the vehicle miles travelled (VMT) reduction policies included in SCAG's 2016–2040 RTP/SCS. Specifically, consistent with the 2016–2040 RTP/SCS alignment of transportation, land use, and housing strategies, the Project would provide employees and visitors with convenient access to public transit, which would facilitate a reduction in VMT. The Project's transportation demand management (TDM) plan and its less than significant VMT would be consistent with regional strategies and would be consistent with and support the goals and benefits of the SCAG RTP/SCS, which seeks improved "mobility and access by placing destinations closer together and decreasing the time and cost of traveling between them. Thus, consistent with 2016–2040 RTP/SCS, the Project would create less than significant VMT, and, consequently, the Project's mobile source emissions would be reduced.

Therefore, the Project would not exceed the assumptions in the 2016 AQMP and thus would not interfere with the region's ability to comply with air quality standards.

As such, the Project would not be inconsistent with the SCAQMD 2016 AQMP.

In addition, the Project would not conflict with or obstruct implementation of the City's General Plan Air Quality Element.[27] The City's General Plan Air Quality Element identifies policies and strategies for advancing the City's clean air goals. To achieve the goals of the Air Quality Element, performance-based standards have been adopted by the City of Los Angeles to provide flexibility in implementation of its policies and objectives. The goal, objectives, and policies provided in the City's Air Quality Element applicable to the Project include the following:

Goal 1: Good air quality and mobility in an environment of continued population growth and healthy economic structure.

Objective 1.1: It is the objective of the City of Los Angeles to reduce air pollutants consistent with the Regional Air Quality Management Plan (AQMP), increase traffic mobility, and sustain economic growth citywide.

Objective 1.3: It is the objective of the City of Los Angeles to reduce particulate air pollutants emanating from unpaved areas, parking lots, and construction sites.

Policy 1.3.2: Minimize particulate emissions from unpaved roads and parking lots which are associated with vehicular traffic.

Policy 4.2.3: Ensure that new development is compatible with pedestrians, bicycles, transit, and alternative fuel vehicles.

The Project's location within an existing developed urban area would reduce VMT and related vehicle emissions in comparison to a project located in a non-urban environment. The Project Site is also located in Hollywood, with its growth in mixed-use residential and commercial development. High population density would result in employees and visitors potentially living closer to the Project Site, reducing travel distances and overall VMT. In addition, the Project includes short- and long-term bicycle parking spaces, shower/changing facilities, pedestrian-friendly features and on-site EV and EV-ready parking, and the Project Site provides convenient access to public transit, all of which encourages multi-modal transportation and facilitates a reduced use of vehicular use and a reduction in VMT as discussed in the Transportation Assessment.

As shown in tables 9 through 12, Project implementation would not exceed the SCAQMD localized significance thresholds which were developed to ensure no exceedances of the California or federal ambient air quality standards or thresholds. As the Project would not increase the frequency or severity of an existing air quality violation or cause or contribute to new violations for air quality pollutants (including VOC, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$), the Project also would not delay timely attainment of air

[27] Department of City Planning Los Angeles, General Plan Air Quality Element, November 1992, https://planning.lacity.org/odocument/0ff9a9b0-0adf-49b4-8e07-0c16feea70bc/Air_Quality_Element.pdf.

quality standards or interim emission reductions specified in the 2016 AQMP. In addition, the Project would be consistent with the population and employment growth projections in the AQMP.

Based on the above, the Project would not conflict with or obstruct implementation of the SCAQMD's AQMP or the City's General Plan Air Quality Element. **Therefore, a less than significant impact would occur and no mitigation measures are required.**

7.0 Greenhouse Gas Impact Analysis

7.1 Construction Greenhouse Gas Emissions Impact

The GHG emissions from Project construction equipment and worker vehicles are shown in Table 13. The emissions result from all phases of construction. The total construction emissions amortized over a period of 30 years are estimated at 17.7 metric tons of CO_2e per year. Annual CalEEMod output calculations are provided in Appendix B.

Table 13: Construction Greenhouse Gas Emissions

Activity	Emissions ($MTCO_2e$)[1]		
	Onsite	Offsite	Total
Demolition	36.1	8.7	44.7
Grading	6.4	51.6	58.0
Paving	306.4	126.9	433.2
Building Construction	10.1	1.0	11.1
Architectural Coating	2.2	0.7	2.8
Total	**361.1**	188.8	549.9
Averaged over 30 years[2]	**12.0**	**6.3**	**18.3**

Notes:
[1.] $MTCO_2e$=metric tons of carbon dioxide equivalents (includes carbon dioxide, methane and nitrous oxide).
[2.] The emissions are averaged over 30 years because the average is added to the operational emissions, pursuant to SCAQMD.
* CalEEMod output (Appendix B)

7.2 Operational Greenhouse Gas Emissions Impact

As shown in Table 14, the Project's operational GHG emissions total 609.2 metric tons of CO_2e, and the Project's overall GHG emissions including 18.3 metric tons of CO_2e per year to account for amortized construction emissions total 627.5 metric tons of CO_2e per year as shown in Table 14.

Table 14: Project Greenhouse Gas Emissions During Operation (2024)

Emission Source	Emissions ($MTCO_2e$) with Regulation[1]
Area Source	0.0
Energy Source	159.0
Mobile Source	375.7
Waste	26.1
Water	48.3
Subtotal (Operation)	609.2
Subtotal Construction (averaged over 30 years)	18.3
Total Annual Emissions	**627.5**

Notes:
[1.] $MTCO_2e$ = metric tons of carbon dioxide equivalents

7.3 Greenhouse Gas Plan Consistency

In September 2006, Governor Arnold Schwarzenegger signed the California Global Warming Solutions Act of 2006, also known as AB 32, into law. AB 32 commits the State to the following:

- By 2010, reduce to 2000 emission levels;
- By 2020, reduce to 1990 levels; and
- By 2050, reduce to 80 percent below 1990 levels.

AB 32 requires that CARB determine what the statewide GHG emissions level was in 1990 and approve a statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. Executive Order (EO) B-30-15, which was issued in April 2015 by Governor Brown, requires statewide requires GHG emissions to be reduced 40 percent below 1990 levels by 2030. SB 32, signed into law in September 2016, codifies the 2030 GHG reduction target in EO B-30-15. Also, pursuant to AB 32, CARB must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.[28] To achieve these goals, AB 32 mandates that CARB establish a quantified emissions cap, institute a schedule to meet the cap, implement regulations to reduce statewide Greenhouse Gas (GHG) emissions from stationary sources, and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved.

CARB approved a Climate Change Scoping Plan (2008 Scoping Plan) required by AB 32 in 2008.[29] The 2008 Scoping Plan proposes a "comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health."[30] The First Update to the AB 32 Scoping Plan (First Update), released on May 22, 2014, found that California was on track to meet the 2020 emissions reduction mandate established by AB 32 and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80 percent below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.[31]

In December 2017, CARB adopted the *2017 Climate Change Scoping Plan Update: The Strategy for Achieving California's 2030 Greenhouse Gas Target* (2017 Update).[32] The 2017 Update builds upon the successful framework established by the 2008 Scoping Plan and the First Update while identifying new,

[28] California Air Resources Board. AB 32 Global Warming Solutions Act of 2006. ww2.arb.ca.gov/resources/fact-sheets/ab-32-global-warming-solutions-act-2006, accessed August 15, 2021.
[29] Climate Change Proposed Scoping Plan was approved by the California Air Resources Board on December 11, 2008.
[30] Climate Change Scoping Plan, CARB, December 2008, www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm, last reviewed April 3, 2013.
[31] CARB, First Update to the Climate Change Scoping Plan: Building on the Framework, May 2014, p. 34.
[32] CARB, California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target, November 2017, ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf?utm_medium=email&utm_source=govdelivery.

technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health. The 2017 Update includes policies to require direct GHG reductions at some of the state's largest stationary sources and mobile sources. These policies include the use of lower GHG fuels, efficiency regulations, and the Cap-and-Trade Program, which constraints and reduces emissions at covered sources.[33]

The California Attorney General's Office has taken an active role in addressing climate change in CEQA documents. The Attorney General's Office has created and routinely updates a Fact Sheet listing project design features to reduce greenhouse gas emissions.[34] The Attorney General's Office created the Fact Sheet primarily for the benefit of local agencies processing CEQA documents, noting that "local agencies will help to move the State away from 'business-as-usual' and toward a low-carbon future."[35] The Fact Sheet explains that the listed "measures can be included as design features of a project," but emphasizes that they "should not be considered in isolation, but as part of a larger set of measures that, working together, will reduce greenhouse gas emissions and the effects of global warming."[36]

The Governor's Office of Planning and Research (OPR) recommended Amendments to the CEQA Guidelines for GHGs which were adopted on December 30, 2009. CEQA Guidelines Section 15064.4 was adopted to assist lead agencies in determining the significance of the impacts of GHGs. Consistent with the developing practice, this section of the CEQA Guidelines urges lead agencies to quantify GHG emissions of projects where possible, but also indicates that a that a full "life-cycle" analysis is not required. In addition to quantification, CEQA Guidelines Section 15064.4 recommends consideration of several other qualitative factors that may be used in the determination of significance (i.e., the extent to which the project may increase or reduce GHG emissions compared to the existing environment; whether the project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to reduce or mitigate GHGs).

As discussed above, CEQA Guidelines Section 15064 provides that a determination that an impact is not cumulatively considerable may rest on compliance with previously adopted plans or regulations, including plans or regulations for the reduction of GHG emissions. As discussed above, no applicable numeric significance threshold for GHG emissions has been adopted by the State, SCAQMD, or the City of Los Angeles. Although state, regional, and local plans and policies have been adopted to help address climate change (see discussions above), no current law or regulation would regulate all aspects of the Project's GHG emissions. In the absence of any adopted numeric threshold, the significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by

[33] CARB, 2017 Climate Change Scoping Plan Update: The Strategy for Achieving California's 2030 Greenhouse Gas Target, November 2017, p. 6.
[34] California Attorney General's Office Fact Sheet, The CEQA—Addressing Global Warming Impacts at the Local Agency Level, revised January 6, 2010.
[35] California Attorney General's Office Fact Sheet, The CEQA—Addressing Global Warming Impacts at the Local Agency Level, revised January 6, 2010, http://understandtheplan.info/wp-content/uploads/2014/08/GW_mitigation_measures.pdf.
[36] California Attorney General's Office Fact Sheet, The CEQA—Addressing Global Warming Impacts at the Local Agency Level, revised January 6, 2010, http://understandtheplan.info/wp-content/uploads/2014/08/GW_mitigation_measures.pdf.

considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

As discussed above, a significant impact would occur if the Project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment by conflicting with applicable regulatory plans and policies to reduce GHG emissions as discussed within CARB's Scoping Plan and subsequent updates, SCAG's 2020–2045 RTP/SCS, and the City's Green New Deal. The analysis below describes the extent to which the Project complies with or exceeds the performance-based standards included in the regulations outlined in these plans. As shown herein, the Project would be consistent with the applicable GHG reduction plans and policies.

CARB's 2008 Climate Change Scoping Plan and Subsequent Updates

The Scoping Plan includes a range of GHG reduction actions that include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a Cap-and-Trade system, and an AB 32 implementation fee to fund the program. The following discussion demonstrates how the pertinent reduction actions relate to and reduce Project-related GHG emissions.

Regulatory Framework

The following applicable mandatory reduction actions/strategies would serve to indirectly reduce Project GHG emissions:

- **RPS Program and SB 2X:** The California RPS program (Updated under Senate Bill (SB) 2X) requires both public and investor-owned utilities in California to receive at least 33 percent of their electricity from renewable sources by the year 2020. SB 350 further requires 50 percent renewables by 2030. In 2020, LADWP indicated that 34 percent of its electricity came from renewable resources in Year 2019. The CalEEMod default carbon intensity for electricity generated by LADWP (pounds of CO_2e per MWh) is based on a year 2007 renewables portfolio of 8 percent and was therefore updated within CalEEMod to reflect the year 2026 renewables portfolio. Please note that under recently passed SB 100, LADWP is required to generate electricity that would increase renewable energy resources to 50 percent by 2026, 60 percent by 2030, and 100 percent by 2045. The Project complies with these percentage renewable requirements because the Project is served by LADWP. Electricity GHG emissions included in the total emissions in Table 14 conservatively do not account for the additional 50-percent reduction that would be achieved by LADWP in year 2045 (difference between the 50 percent renewables assumed for the buildout year of 2026 and 100 percent required under SB 2X in year 2045). Given LADWP's demonstrated progress towards meeting and exceeding the established targets, as well as potential penalties for non-compliance, it is reasonably assumed that LADWP will comply.

- **SB 350:** As required under SB 350, doubling of the energy efficiency savings from final end uses of retail customers by 2030 would primarily rely on the existing suite of building energy efficiency standards under CCR Title 24, Part 6 (discussed below) and utility-sponsored programs such as

rebates for high-efficiency appliances, HVAC systems, and insulation. The Project would further support this action/strategy because it includes energy-efficient light-emitting diode (LED) lighting as well as Energy Star–labeled appliances for the Project

- **Cap-and-Trade Program:** The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, this regulatory program applies to electric service providers and not directly to the Project. That being said, while not quantified in this analysis, the Project would benefit from this regulatory program in that the GHG emissions associated with the Project's electricity usage included in the total emissions in **Error! Reference source not found.**13 would indirectly be covered by the Cap-and-Trade Program.

- **Advanced Clean Cars Program:** CARB approved the Advanced Clean Cars Program in 2012 which establishes an emissions control program for model years 2017 through 2025 and increases the number of zero emission vehicles manufactured in the 2018 through 2025 model years.[37] Standards under the Advanced Clean Cars Program apply to all passenger vehicles and light duty trucks within California and indirectly used by employees and deliveries to the Project. Since the CalEEMod model default fleet mix for the SCAB does not yet account for this regulation, the Project's mobile source GHG emissions provided in Table 14 are conservative because they could not be adjusted to include this additional 34-percent reduction, even though the Project's emissions would be reduced as a result of this Program. The Project would support this regulation since the Project would comply with the City's EV charging requirements, which specify that 10 percent of new parking spaces would require EV charging equipment.[38] The Project would further support this regulation since the Applicant would provide at least 30 percent of the total parking spaces provided to be capable of supporting future EVSE as dictated.

- **Low Carbon Fuel Standard (LCFS)**: The current LCFS requires a reduction of at least 8.75 percent in the carbon intensity (CI) of California's transportation fuels by 2021.[39] CalEEMod includes implementation of LCFS into the calculation of GHG emissions from mobile sources. However, the LCFS was amended in September 2018 to target a 20-percent reduction in CI from a 2010 baseline by 2030. The CalEEMod model does not take into account the more recent updates to LCFS. The Project's emissions inventory conservatively does not take credit for additional GHG reductions due to the more recent LCFS requirements, but this additional 10-percent reduction in CI would indirectly reduce the Project's mobile source emissions.

- **California Integrated Waste Management Act of 1989:** The regulation requires each jurisdiction's source reduction and recycling element to include a diversion of 50 percent of all

[37] CARB, Advanced Clean Cars Program, ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about, accessed August 10, 2021.
[38] City of Los Angeles, Ordinance No. 186485, www.ladbs.org/docs/default-source/publications/misc-publications/ordinance-186485.pdf?sfvrsn=2.
[39] California Air Resources Board, Data Dashboard, ww3.arb.ca.gov/fuels/lcfs/dashboard/dashboard.htm, accessed August 9, 2021.

solid waste by 2000.[40] AB 341 (2011) amended the regulation to include a provision declaring that it is the policy goal of the state that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020, and annually thereafter.[41] The Project would comply with these percentage recycling requirements inasmuch as the Project is served by the City of Los Angeles, which currently achieves a diversion rate of 76 percent.[42] Project-related GHG emissions from solid waste generation provided in Table 14 are conservative as they do not include the 76-percent reduction in solid waste generation source emissions consistent with the minimum diversion rate required for the City of Los Angeles (CalEEMod default diversion rate is zero percent). The Applicant must also only contract for waste disposal services with a company that recycles solid waste in compliance with AB 341.[43] In addition, the Project would provide recycling bins at appropriate locations to promote recycling of paper, metal, glass and other recyclable material. Consistent with CalGreen requirements, the Project would recycle and/or salvage at least 65 percent of non-hazardous construction and demolition debris, and the Applicant would prepare a construction waste management plan that, at a minimum, identifies the materials to be diverted from disposal and whether the materials would be sorted on-site or comingled.[44]

Applicable Scoping Plan Measures

Further evaluation of project design features and specific applicable polices and measures in the Scoping Plan is provided below. As shown below, the Project would not conflict with the policies included in the Scoping Plan.

- **CCR, Title 24, Building Standards Code:** The 2019 Building Energy Efficiency Standards contained in Title 24, Part 6 (also known as the California Energy Code), requires the design of building shells and building components to conserve energy. The Project would not conflict with the regulatory requirements as the Project must comply with applicable provisions of the 2020 Los Angeles Green Code that, in turn, require compliance with mandatory standards included in the California Green Building Standards such as automatic lighting controls, electric vehicle charging requirements and reduced flow rate of plumbing fixtures to conserve water.[45,46] The Project would further support this regulation since the Project would incorporate energy-efficient LED

[40] California Legislative Information, State of California Public Resources Code Section 41780, https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=41780, accessed August 9, 2021.
[41] California Legislative Information, Assembly Bill No. 341, https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120AB341, accessed August 9, 2021.
[42] City of Los Angeles Zero Waste Progress Report, March 2013.
[43] CalRecycle, Mandatory Commercial Recycling, www.calrecycle.ca.gov/recycle/commercial, accessed August 9, 2021.
[44] CalRecycle, CALGreen Construction Waste Management Requirements, www.calrecycle.ca.gov/lgcentral/library/canddmodel/instruction/newstructures, accessed August 9, 2021.
[45] City of Los Angeles Municipal Code (LAMC), Chapter IX, Article 9.
[46] California Building Standards Commission, 2019 California Green Building Standards Code, California Code of Regulations, Title 24, Part 11, effective January 1, 2020.

lighting throughout the Project, reducing overall energy usage compared to baseline conditions. In addition, lighting and energy usage for new structures would comply with Title 24 standards.

Senate Bill (SB) 375: SB 375 requires integration of planning processes for transportation, land-use and housing. Under SB 375, each Metropolitan Planning Organization (MPO) would be required to adopt a Sustainable Community Strategy (SCS) to encourage compact development that reduces passenger vehicle miles traveled and trips so that the region will meet a target, created by CARB, for reducing GHG emissions. The Project represents an infill development within an existing urbanized area that would introduce new employment, within an HQTA, consistent with the overall growth pattern encouraged in the RTP/SCS.[47] The Project Site is also well served by public transportation and the Project provides the required short- and long-term bicycle parking spaces in compliance with the requirements of the LAMC. These and other measures would further promote a reduction in VMT and accompanying reduction in GHG emissions. Therefore, the Project would be consistent with SB 375 and the reduction in passenger vehicle GHG emissions provided in the 2016–2040 RTP/SCS. Furthermore, as shown in the Project's VMT analysis, the Project results in a less than significant VMT impact (Overland, 2021). The Project's less than significant VMT would support the goal of the 2020–2045 RTP/SCS to reduce GHG emissions from passenger vehicles.

- **Senate Bill X7-7:** The Water Conservation Act of 2009 set an overall goal of reducing per-capita urban water use by 20 percent by December 31, 2020. The state was required to make incremental progress toward this goal by reducing per-capita water use by at least 10 percent by December 31, 2015. This senate bill was an implementing measure of the Water Sector of the AB 32 Scoping Plan. Reduction in water consumption directly reduces the energy and the associated emissions necessary to convey, treat, and distribute the water; it also reduces emissions from wastewater treatment. The Project would comply with the City of Los Angeles Green Building Code, which requires a 20 percent reduction in water usage.[48]

SCAG 2020–2045 RTP/SCS

The purpose of SB 375 is to implement the State's GHG emissions reduction goals by integrating land use planning with the goal of reducing car and light-duty truck travel. Reflecting that purpose, the primary goal of the 2020–2045 RTP/SCS is to provide a framework for future growth that will decrease per capita GHG emissions from cars and light-duty trucks based on land use planning and transportation options.[49] To accomplish this goal, the 2020–2045 RTP/SCS identifies various strategies to reduce per capita VMT. The 2020–2045 RTP/SCS is expected to help SCAG reach its GHG reduction goals, as

[47] SCAG 2020–2045 RTP/SCS. Exhibit 2.8 Priority Growth Area—High Quality Transit Areas.
[48] City of Los Angeles Municipal Code (LAMC), Section 99.04.303.
[49] SCAG, Connect SoCal (2020–2045 RTP/SCS), adopted September 2020, https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176

identified by CARB, with reductions in per capita passenger vehicle GHG emissions for specified target years.[50]

In addition to demonstrating the region's ability to attain and exceed the GHG emission-reduction targets set forth by CARB, the 2020–2045 RTP/SCS outlines a series of actions and strategies for integrating the transportation network with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands.[51] Thus, successful implementation of the 2020–2045 RTP/SCS would result in more complete communities with a variety of transportation and housing choices, while reducing automobile use. With regard to individual developments, such as the Project, strategies and policies set forth in the 2020–2045 RTP/SCS can be grouped into the following three categories: (1) reduction of vehicle trips and VMT; (2) increased use of alternative fuel vehicles; and (3) improved energy efficiency.[52] These strategies and policies are addressed below. Also, as explained immediately below, the Project is consistent with applicable growth forecasts.

Consistency with Integrated Growth Forecast

The 2020–2045 RTP/SCS provides socioeconomic forecast projections of regional population growth. The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the specific area; these are used by SCAG in all phases of implementation and review.[53] As discussed in section 6.6, the Project is consistent with the regional growth projections for the Los Angeles Subregion.

Consistency with VMT Reduction Strategies and Policies

The Project is designed and would be constructed to incorporate features to support and promote environmental sustainability. The Project represents an infill development within an existing urbanized area that is well served by public transportation and located adjacent to several Metro bus stops. As discussed in section 6.6, the Project is estimated to generate less than significant VMT per employee for employees for the area. Additionally, the Project incorporates several TDM measures (e.g., provide required short- and long-term bicycle parking spaces in compliance with the requirements of the LAMC) to reduce the number of single occupancy vehicle trips to the Project Site. Trip generation and VMT were calculated using the LADOT VMT Calculator, which accounts for project features such as increased density and proximity to transit. As shown in the Project's VMT analysis, the Project would result in a less than significant employment VMT impact and resultant GHG emissions, which is consistent with the GHG reduction strategies provided in the 2020–2045 RTP/SCS (Overland, 2021). The Project would also

[50] SCAG, Connect SoCal (2020–2045 RTP/SCS), adopted September 2020, https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176
[51] SCAG, Connect SoCal (2020–2045 RTP/SCS), adopted September 2020, https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176
[52] SCAG, Draft Program EIR for the 2020–2045 RTP/SC, Section 3.8, Greenhouses, December 2019, p. 3.8-61.
[53] SCAG, Connect SoCal (2020–2045 RTP/SCS), adopted September 2020, https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176.

be consistent with the following key GHG reduction strategies in SCAG's 2020–2045 RTP/SCS, which are based on changing the region's land use and travel patterns:[54]

- New housing and job growth focused in High Quality Transit Areas (HQTAs);
- Limit total acreage of greenfield or otherwise rural land uses converted to urban use; and
- Reduce VMT per capita.

As discussed above, the Project represents an infill development within an existing urbanized area that would introduce new employment, within an HQTA which is well served by public transportation.[55] Furthermore, the Project VMT per capita would be less than the APC threshold designated for Project area. The Project would also provide required short- and long-term bicycle parking spaces in compliance with the requirements of the LAMC. These and other measures would further promote a reduction in VMT and subsequent reduction in GHG emissions, which would be consistent with the goals of SCAG's 2020–2045 RTP/SCS.

Increased Use of Alternative-Fueled Vehicles Policy Initiative

The second goal of the 2020–2045 RTP/SCS, with regard to individual development projects such as the Project, is to increase alternative-fueled vehicles to reduce per capita GHG emissions.[56] The 2020–2045 RTP/SCS policy initiative focuses on providing charge port infrastructure and accelerating fleet conversion to electric or other near zero-emission technologies.[57] The Project would provide at least 30 percent of the total LAMC-required parking spaces provided to be capable of supporting future EVSE and at least 10 percent of the total LAMC-required parking spaces with EV charging stations as dictated by City requirements.

Energy Efficiency Strategies and Policies

The third important goal within the 2020–2045 RTP/SCS for individual developments, such as the Project, involves improving energy efficiency (e.g., reducing energy consumption) to reduce GHG emissions.[58] The 2020–2045 RTP/SCS goal is to actively encourage and create incentives for energy efficiency, where possible.[59] As discussed above, the Project has been designed and would be constructed to incorporate environmentally sustainable building features and construction protocols required by the Los Angeles Green Building Code and CALGreen Code. [60,61] These standards would reduce energy and water usage

[54] SCAG 2020–2045 RTP/SCS, Table 5.1, Connect SoCal Performance Measures and Results.
[55] SCAG 2020–2045 RTP/SCS, Exhibit 2.8, Priority Growth Area—High Quality Transit Areas.
[56] SCAG, 2020–2045 RTP/SCS, https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176.
[57] SCAG, 2020–2045 RTP/SCS, https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176.
[58] SCAG, 2020–2045 RTP/SCS, https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176.
[59] SCAG, 2020–2045 RTP/SCS, https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176.
[60] City of Los Angeles Municipal Code (LAMC), Chapter IX, Article 9.
[61] California Building Standards Commission, 2019 California Green Building Standards Code, California Code of Regulations, Title 24, Part 11, effective January 1, 2020.

and waste and, thereby, reduce associated GHG emissions and help minimize the impact on natural resources and infrastructure. The sustainability features to be incorporated into the Project would include, but not limited to; high efficiency dual-flush toilets with a flush volume of 1.28/1.1 gallons per flush, or less, high efficiency hybrid urinals, showerheads with a flow rate of 1.5 gallons per minute or less, and drip irrigation systems to promote a reduction of indoor and outdoor water use; Energy Star–labeled appliances; 500 kW photovoltaic system; and water-efficient landscape design. Furthermore, the Project would provide domestic water heating systems located in close proximity to point(s) of use and individual metering and billing for water use. In addition, the Project would be subject to the 2019 Title 24 standards, which represent "challenging but achievable design and construction practices" that represent "a major step towards meeting the Zero Net Energy (ZNE) goal." Nonresidential buildings built with the 2019 Title 24 standards will use about 30 percent less energy due mainly to lighting upgrades.[62]

Land Use Assumptions

At the regional level, the 2020–2045 RTP/SCS is a plan adopted for the purpose of reducing GHGs.[63] In order to assess the Project's consistency with the 2020–2045 RTP/SCS, this MND also analyzes the Project's land use characteristics for consistency with those utilized by SCAG in its SCS. Generally, projects are considered consistent with the provisions and general policies of applicable City and regional land use plans and regulations, such as the 2020–2045 RTP/SCS, if they are compatible with the general intent of the plans and would not preclude the attainment of their primary goals. As discussed in section 6.6, the Project is consistent with the land use goals and principles set forth in the 2020–2045 RTP/SCS that pertain to GHG emissions.

In sum, the Project is the type of land use development that is encouraged by the 2020–2045 RTP/SCS to reduce VMT and expand multi-modal transportation options in order for the region to achieve the GHG reductions from the land use and transportation sectors required by SB 375, which, in turn, advances the State's long-term climate policies.[64] By furthering implementation of SB 375, the Project supports regional land use and transportation GHG reductions consistent with State regulatory requirements.

City of Los Angeles Green New Deal

L.A.'s Green New Deal, a mayoral initiative, includes both short-term and long-term aspirations through the year 2050 in various topic areas, including: water, renewable energy, energy-efficient buildings, carbon and climate leadership, waste and landfills, housing and development, mobility and transit, and air quality, among others. While not a plan adopted solely to reduce GHG emissions, within L.A.'s Green

[62] CEC, 2019 Building Energy Efficiency Standards, Fact Sheet.
[63] As part of the state's mandate to reduce per-capita GHG emissions from automobiles and light trucks, the 2020–2045 RTP/SCS presents strategies and tools that are consistent with local jurisdictions' land use policies and incorporates practices to achieve the state-mandated reductions in GHG emissions at the regional level through reduced per-capita vehicle miles traveled. SCAG 2020–2045 RTP/SCS, https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176.
[64] As discussed above, SB 375 legislation links regional planning for housing and transportation with the GHG reduction goals outlined in AB 32.

New Deal, climate change mitigation is one of eight explicit benefits that help define its strategies and goals.

Although L.A.'s Green New Deal mainly targets GHG emissions related to City-owned buildings and operations, certain reductions associated with the Project would promote its goals. Such goals include increasing renewable energy usage, reduction of per capita water usage, promotion of walking and biking to work, promotion of high-density housing close to major transportation stops, and various recycling and trash diversion goals. The Project would generally be consistent with these goals because it is an infill development within an existing urbanized area that would introduce employment within an HQTA which is well served by public transportation. Furthermore, the Project would comply with CALGreen Code, implement various project design features to reduce energy usage and would comply with the City of Los Angeles Solid Waste Management Policy Plan, the RENEW LA Plan, and the Exclusive Franchise System Ordinance (Ordinance No. 182,986) in furtherance of the targets included in L.A.'s Green New Deal with regard to energy-efficient buildings and waste and landfills. The Project would also provide secure short- and long-term bicycle storage areas, showers and changing areas for Project employees and visitors. The Project design would also provide pedestrian access that minimizes barriers and links the Project Site with existing or planned external streets to encourage people to walk instead of drive.

Conclusion

In conclusion, the Project would be consistent with the CARB's Scoping Plan, SCAG's 2020–2045 RTP/SCS and the City's Green New Deal and, therefore, would neither generate GHG emissions that may have a significant impact on the environment nor conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. Specifically, the Project would not conflict with the emission reduction measures discussed within CARB's Scoping Plan and subsequent updates, particularly their emphasis on the identification of emission reduction opportunities that promote economic growth while achieving greater energy efficiency and accelerating the transition to a low-carbon economy. In addition, as recommended by CARB's Scoping Plan and updates, the Project would use "green building" features consistent with the CalGreen Building Code. As discussed above, the Project would generate only a small number of new vehicle trips that would not result in any VMT impacts and would also not conflict with SCAG's 2020–2045 RTP/SCS. Furthermore, as detailed above, the Project would use LED lighting to minimize use of electricity; high efficiency dual-flush toilets with a flush volume of 1.28/1.1 gallons per flush, or less, high efficiency hybrid urinals, showerheads with a flow rate of 1.5 gallons per minute or less, and drip irrigation systems to promote a reduction of indoor and outdoor water use; Energy Star–labeled appliances; 500 kW photovoltaic system; use native and drought-tolerant plant species in the landscaping to minimize water use and would retain existing EV ready and EV-charging stations to assist in the reduction of GHG emissions from vehicles. In addition, the Project would provide domestic water heating systems located in close proximity to point(s) of use and individual metering and billing for water use. As such, the Project would comply with L.A.'s Green New Deal. In the absence of adopted standards and established significance thresholds, and given this consistency analysis, it is concluded that the Project's impacts related to GHG emissions would be less than significant, and no mitigation measures are required.

8.0 Energy Analysis

This analysis was done following the guidance set forth in Appendix F of the CEQA guidelines. Information from the CalEEMod 2020.4.0 Daily and Annual Outputs contained in the air quality and greenhouse gas analyses above was utilized for this analysis. The CalEEMod outputs detail project related construction equipment, transportation energy demands, and facility energy demands.

8.1 Construction Energy Demand

8.1.1 Construction Equipment Electricity Usage Estimates

Electrical service will be provided by Los Angeles Department of Water and Power (LADWP). Based on the 2017 National Construction Estimator, Richard Pray (2017)[65], the typical power cost per 1,000 square feet of building construction per month is estimated to be $2.32. The Project plans to develop the Project Site with 55,814 square feet of new office and retail uses over the course of approximately 19 months. Based on Table 15, the total power cost of the on-site electricity usage during the construction of the proposed Project is estimated to be approximately $2,460.10. As shown in Table 15, the total electricity usage from Project construction related activities is estimated to be approximately 44,729 kWh.[66]

Table 15: Project Construction Power Cost and Electricity Usage

Power Cost (per 1,000 square foot of building per month of construction)	Total Building Size (1,000 Square Foot)[1]	Construction Duration (months)	Total Project Construction Power Cost
$2.32	55.81	19	$2,460.10

Cost per kWh	Total Project Construction Electricity Usage (kWh)
$0.06	44,729

* Assumes the Project will be under the GS-1 General Service rate under SCE.

[65] Pray, Richard. 2017 National Construction Estimator. Carlsbad: Craftsman Book Company, 2017.
[66] LADWP's Small Commercial & Multi-Family Service (A-1) is approximately $0.06 per kWh of electricity Southern California Edison (SCE). Rates & Pricing Choices: General Service/Industrial Rates. https://library.sce.com/content/dam/sce-doclib/public/regulatory/historical/electric/2020/schedules/general-service-&-industrial-rates/ELECTRIC_SCHEDULES_GS-1_2020.pdf

8.1.2 Construction Equipment Fuel Estimates

Using the CalEEMod data input, the Project's construction phase would consume electricity and fossil fuels as a single energy demand, that is, once construction is completed their use would cease. CARB's 2017 Emissions Factors Tables show that on average aggregate fuel consumption (gasoline and diesel fuel) would be approximately 18.5 hp-hr-gal.[67] As presented in Table 16 below, Project construction activities would consume an estimated 38,983 gallons of diesel fuel.

Table 16: Construction Equipment Fuel Consumption Estimates

Phase	Number of Days	Offroad Equipment Type	Amount	Usage Hours	Horse-Power	Load Factor	HP hrs/day	Total Fuel Consumption (gal diesel fuel)[1]
Demolition	34	Concrete/Industrial Saws	1	8	81	0.73	473	869
	34	Rubber Tired Dozers	1	8	247	0.4	790	1453
	34	Tractors/Loaders/Backhoes	3	8	97	0.37	861	1,583
Grading	7	Graders	1	8	187	0.41	613	232
	7	Rubber Tired Dozers	1	8	247	0.4	790	299
	7	Tractors/Loaders/Backhoes	2	7	97	0.37	502	190
Building Construction	336	Cranes	1	6	231	0.29	402	7,300
	336	Forklifts	1	6	89	0.2	107	1,940
	336	Generator Sets	1	8	84	0.74	497	9,032
	336	Tractors/Loaders/Backhoes	3	6	97	0.37	646	11,733
	336	Welders	1	8	46	0.45	166	3,008
Paving	17	Cement and Mortar Mixers	1	6	9	0.56	30	28
	17	Pavers	1	6	130	0.42	328	301
	17	Paving Equipment	1	8	132	0.36	380	349
	17	Rollers	1	7	80	0.38	213	196
	17	Tractors/Loaders/Backhoes	1	8	97	0.37	287	264
Architectural Coating	17	Air Compressors	1	6	78	0.48	225	206

[67] Aggregate fuel consumption rate for all equipment was estimated at 18.5 hp-hr/day (from CARB's 2017 Emissions Factors Tables and fuel consumption rate factors as shown in Table D-21 of the Moyer Guidelines: (https://www.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_appendix_d.pdf).

CONSTRUCTION FUEL DEMAND (gallons of diesel fuel)	38,983

Notes:
[1]Using Carl Moyer Guidelines Table D-21 Fuel consumption rate factors (bhp-hr/gal) for engines less than 750 hp.
(Source: https://www.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_appendix_d.pdf)

8.1.3 Construction Worker Fuel Estimates

It is assumed that all construction worker trips are from light duty autos (LDA) along area roadways. With respect to estimated VMT, the construction worker trips would generate an estimated 230,349 VMT. Vehicle fuel efficiencies for construction workers were estimated in the air quality and greenhouse gas analysis using information generated using CARB's EMFAC model (see Appendix C for details). Table 17 shows that an estimated 7,443 gallons of fuel would be consumed for construction worker trips.

Table 17: Construction Worker Fuel Consumption Estimates

Phase	Number of Days	Worker Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Demolition	34	13	14.7	6497.4	30.95	210
Grading	7	10	14.7	1,029	30.95	33
Building Construction	336	44	14.7	217,325	30.95	7,022
Paving	17	13	14.7	3,249	30.95	105
Architectural Coating	17	9	14.7	2,249	30.95	73
Total Construction Worker Fuel Consumption						**7,443**

Notes:
[1]Assumptions for the worker trip length and vehicle miles traveled are consistent with CalEEMod 2020.4.0 defaults.

8.1.4 Construction Vendor/Hauling Fuel Estimates

Tables 18 and 19 show the estimated fuel consumption for vendor and hauling during building construction and architectural coating. With respect to estimated VMT, the vendor and hauling trips would generate an estimated 79,850 VMT. For the architectural coatings it is assumed that the contractors would be responsible for bringing coatings and equipment with them in their light duty vehicles.[68] Tables 18 and 19 show that an estimated 10,089 gallons of fuel would be consumed for vendor and hauling trips.

<Tables 18 and 19, next page>

[68] Vendors delivering construction material or hauling debris from the site during grading would use medium to heavy duty vehicles with an average fuel consumption of 9.22 mpg for medium heavy-duty trucks and 6.74 mpg for heavy heavy-duty trucks (see Appendix C for details).

Table 18: Construction Vendor Fuel Consumption Estimates (MHD Trucks)[1]

Phase	Number of Days	Vendor Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Demolition	34	0	6.9	0	9.22	0
Grading	7	0	6.9	0	9.22	0
Building Construction	336	19	6.9	44,050	9.22	4,778
Paving	17	0	6.9	0	9.22	0
Architectural Coating	17	0	6.9	0	9.22	0
Total Vendor Fuel Consumption						**4,778**

Notes:
[1] Assumptions for the vendor trip length and vehicle miles traveled are consistent with CalEEMod 2020.4.0 defaults.

Table 19: Construction Hauling Fuel Consumption Estimates (HHD Trucks)[1]

Phase	Number of Days	Hauling Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Demolition	34	6	20	4,100	6.74	608
Grading	7	226	20	31,700	6.74	4,703
Building Construction	336	0	20	0	6.74	0
Paving	17	0	20	0	6.74	0
Architectural Coating	17	0	20	0	6.74	0
Total Construction Hauling Fuel Consumption						**5,312**

Notes:
[1]Assumptions for the hauling trip length and vehicle miles traveled are consistent with CalEEMod 2020.40 defaults.

8.1.5 Construction Energy Efficiency/Conservation Measures

Construction equipment used over the approximately 19-month construction phase would comply with CARB regulations and California emissions standards and that compliance is evidence of related fuel efficiencies. In addition, the CARB Airborne Toxic Control Measure limits idling times of construction vehicles to no more than five minutes, thereby minimizing unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Furthermore, the Project has been designed in compliance with California's Energy Efficiency Standards and 2019 CALGreen Standards.

Construction of the proposed commercial development would require the typical use of energy resources. There are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the Project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

8.2 Operational Energy Demand

Energy consumption in support of or related to Project operations would include transportation energy demands (energy consumed by employee and patron vehicles accessing the Project Site) and facilities energy demands (energy consumed by building operations and site maintenance activities). The Project does not include any uses that create any unusual energy demands.

8.2.1 Transportation Fuel Consumption

The largest source of operational energy use would be vehicle operation of customers. The Project Site is located in an urbanized area just in close proximity to transit stops. Using the CalEEMod output, it is assumed that an average trip for autos were assumed to be 16.6 miles, light trucks were assumed to travel an average of 6.9 miles, and 3- 4-axle trucks were assumed to travel an average of 8.4 miles[69]. To show a worst-case analysis, as the proposed Project is a commercial Project, it was assumed that vehicles would operate 365 days per year. Table 20 shows the worst-case estimated annual fuel consumption for all classes of vehicles from autos to heavy-heavy trucks.[70] Table 20 shows that an estimated 55,519 gallons of fuel would be consumed per year for the operation of the proposed Project.

Table 20: Estimated Vehicle Operations Fuel Consumption

Vehicle Type	Vehicle Mix	Number of Vehicles	Average Trip (miles)[1]	Daily VMT	Average Fuel Economy (mpg)	Total Gallons per Day	Total Annual Fuel Consumption (gallons)
Light Auto	Automobile	192	16.6	3,195	31.82	100.40	36,646
Light Truck	Automobile	23	6.9	156	27.16	5.74	2,097
Light Truck	Automobile	67	6.9	461	25.6	18.00	6,570
Medium Truck	Automobile	45	6.9	311	20.81	14.93	5,449
Light Heavy Truck	2-Axle Truck	8	8.4	69	13.81	5.02	1,831
Light Heavy Truck 10,000 lbs +	2-Axle Truck	2	8.4	19	14.18	1.31	479
Medium Heavy Truck	3-Axle Truck	4	8.4	32	9.58	3.33	1,217
Heavy Heavy Truck	4-Axle Truck	3	8.4	24	7.14	3.37	1,231
Total		344	--	4,266	18.76	152.11	--

[69] CalEEMod default distance for H-W (home-work) or C-W (commercial-work) is 16.6 miles; 6.9 miles for H-S (home-shop) or C-C (commercial-customer); and 8.4 miles for H-O (home-other) or C-O (commercial-other).
[70] Average fuel economy based on aggregate mileage calculated in EMFAC 2017 for opening year (2024). See Appendix C for EMFAC output.

Total Annual Fuel Consumption	**55,519**

Notes:
[1] The trip generation assessment, the Project is to generate 344 total net new trips. Default CalEEMod vehicle fleet mix utilized.

Trip generation generated by the proposed Project are consistent with other similar commercial uses of similar scale and configuration as reflected in the Traffic Assessment (Overland, 2021). That is, the proposed Project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips, nor associated excess and wasteful vehicle energy consumption. Therefore, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

8.2.2 Facility Energy Demands (Electricity and Natural Gas)

The annual natural gas and electricity demands were provided per the CalEEMod output and are provided in Table 21.

Table 21: Project Unmitigated Annual Operational Energy Demand Summary[1]

Natural Gas Demand	kBTU/year
General Office Building	570,287
Strip Mall	812
Total	571,099
Electricity Demand	**kWh/year**
General Office Building	691,425
Strip Mall	21,840
Parking Lot	6,535
Total	719,800

Notes:
[1]Taken from the CalEEMod 2020.4.0 annual output.

As shown in Table 21, the estimated electricity demand for the proposed Project is approximately 719,800 kWh per year. In 2020, the non-residential sector of the County of Los Angeles consumed approximately 42,737 million kWh of electricity.[71] In addition, the estimated natural gas consumption for the proposed Project is approximately 571,099 kBTU per year. In 2020, the non-residential sector of the County of Los Angeles consumed approximately 1,699 million therms of gas.[72] Therefore, the increase in both electricity and natural gas demand from the proposed Project is insignificant compared to the County's 2020 demand.

[71] California Energy Commission, Electricity Consumption by County. https://ecdms.energy.ca.gov/elecbycounty.aspx
[72] California Energy Commission, Gas Consumption by County. http://ecdms.energy.ca.gov/gasbycounty.aspx

SoCal Gas and LADWP or Southern California Edison could serve the Project's energy needs. As Project energy needs would be insignificant compared to regional usage, there would be sufficient fuel in the region to accommodate the Project.

8.3 Renewable Energy and Energy Efficiency Plan Consistency

Regarding federal transportation regulations, the Project Site is located in an already developed area. Access to/from the Project Site is from existing roads. These roads are already in place so the Project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be proposed pursuant to the ISTEA because SCAG is not planning for intermodal facilities in the Project Site area.

Regarding the State's Energy Plan and compliance with Title 24 CCR energy efficiency standards, the applicant is required to comply with the California Green Building Standard Code requirements for energy efficient buildings and appliances as well as utility energy efficiency programs implemented by the SCE and Southern California Gas Company.

Regarding the State's Renewable Energy Portfolio Standards, the Project would be required to meet or exceed the energy standards established in the California Green Building Standards Code, Title 24, Part 11 (CALGreen). CalGreen Standards require that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials.

Sustainability Features

The Project would comply with the 2020 Los Angeles Green Building Code (LAGBC), which requires the use of numerous conservation measures, beyond those required by Title 24 of the California Administrative Code. LAGBC contains both mandatory and voluntary green building measures to conserve energy.

The Project would include enhanced energy-efficiency via high-performance glazing as well as enhanced roof and deck insulation values in buildings A & C. The air conditioning system would be comprised of highly efficient Variable Refrigerant Flow (VRF) systems allowing for minimal electrical consumption, particularly when the building is lightly occupied. The building systems would include enhanced filtration of outside air being delivered to the occupied areas, and operable windows and sliding glass walls that would enhance the natural ventilation whenever weather conditions permit.

Water usage would be minimized via the use of ultra-low flow plumbing fixtures throughout the Project. All roof, balcony and plaza deck drains would feed into a rainwater harvesting cistern, to be used entirely for irrigation of the on-site landscaping.

The irrigation system would be designed to meet or exceed the state Model Water Efficient Landscape Ordinance (MWELO). The system would utilize a dedicated landscape water meter and automatic weather-based controllers with electronically operated control valves and seasonal irrigation schedules. All areas would include high efficiency irrigation emitters, including micro spray and drip irrigation.

Bubblers may be used for trees or shrubs where drip irrigation is not feasible. Irrigation valves would be located in inconspicuous areas, and shall be parallel to adjacent structures and paving, with quick coupling valves spaces a minimum 100 feet on center.

The on-site drop-off areas in the surface parking lot would encourage ridesharing and carpooling, while the below-grade parking would include preferential parking electric parking and low-emitting vehicles with valet drop-off. The Project would also provide electric vehicle charging stations. The Project's infill location would promote the concentration of development in an urban location with extensive infrastructure and access to public transit facilities, which would reduce vehicle miles traveled for the office space. As discussed above, compliance with Title 24 of the California Administrative Code and the L.A. Green Building Code would reduce the Project's energy consumption.

On-site bicycle parking facilities would meet or exceed requirements required per LAMC 12.21 and encourage bicycle use.

8.4 Cumulative Regional Energy Use Impacts

Construction and operation of cumulative projects will further increase energy usage for the region. The greatest cumulative increase will be mainly from increased traffic from residential, commercial, and industrial development and the use of heavy equipment and trucks associated with the construction of these projects. However, as the Project will be in compliance with all state, regional, and local plans as shown in Section 8.3, the impact is considered less than significant.

9.0 References

The following references were used in the preparing this analysis.

California Air Pollution Control Officers Association
2009 Health Risk Assessments for Proposed Land Use Projects

California Air Resources Board
2008 Resolution 08-43

2008 Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act

2008 ARB Recommended Interim Risk Management Policy for Inhalation-Based Residential Cancer Risk – Frequently Asked Questions

2008 Climate Change Scoping Plan, a framework for change.

2011 Supplement to the AB 32 Scoping Plan Functional Equivalent Document

2013 Revised Emission Factors for Gasoline Marketing Operations at California Gasoline Dispensing Facilities

2014 First Update to the Climate Change Scoping Plan, Building on the Framework Pursuant to AB32, the California Global Warming Solutions Act of 2006. May.

2021 Historical Air Quality, Top 4 Summary

Governor's Office of Planning and Research
2008 CEQA and Climate: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review

2009 CEQA Guideline Sections to be Added or Amended

Office of Environmental Health Hazard Assessment
2015 Air Toxics Hot Spots Program Risk Assessment Guidelines

Overland Traffic Consultants, Inc.
2021 Traffic Assessment for 1200 Cahuenga. December.

South Coast Air Quality Management District
1993 CEQA Air Quality Handbook

2005 Rule 403 Fugitive Dust

2007 2007 Air Quality Management Plan

2008 Final Localized Significance Threshold Methodology, Revised

2011 Appendix A Calculation Details for CalEEMod

2012 Final 2012 Air Quality Management Plan

2016 Final 2016 Air Quality Management Plan

Appendix A:

CalEEMod Daily Emission Output

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

1200 Cahuenga Project

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	55.31	1000sqft	1.22	55,314.00	0
Parking Lot	156.00	Space	0.00	62,400.00	0
Strip Mall	0.50	1000sqft	0.01	500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project consists of a new 35,000 SF builing (A) and a new 20,000 SF building (C) including office and retail uses with 156 parking spaces built into building A.

Construction Phase - Construction schedule proportionally increased for 19 month schedule

Demolition -

Grading -

Vehicle Trips - Net generation of 344 daily trips per Traffic Assessment from Overland Traffic Consultants.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	17.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	200.00	336.00
tblConstructionPhase	NumDays	20.00	34.00
tblConstructionPhase	NumDays	4.00	7.00
tblConstructionPhase	NumDays	10.00	17.00
tblGrading	MaterialExported	0.00	12,678.00
tblLandUse	LandUseSquareFeet	55,310.00	55,314.00
tblLandUse	LotAcreage	1.27	1.22
tblLandUse	LotAcreage	1.40	0.00
tblVehicleTrips	ST_TR	2.21	6.22
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	0.70	6.22
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	9.74	6.22
tblVehicleTrips	WD_TR	44.32	0.00

2.0 Emissions Summary

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	2.6299	55.0373	18.4811	0.1623	11.3625	1.0255	12.3880	4.5720	0.9539	5.5259	0.0000	17,514.1997	17,514.1997	1.4669	2.4482	18,280.4497
2023	1.6860	12.5379	14.4880	0.0300	0.6135	0.5211	1.1346	0.1655	0.5031	0.6685	0.0000	2,827.8740	2,827.8740	0.3638	0.0649	2,856.2980
2024	31.6635	11.8823	14.2778	0.0298	0.6135	0.4571	1.0706	0.1655	0.4409	0.6064	0.0000	2,813.1083	2,813.1083	0.4144	0.0634	2,840.9042
Maximum	**31.6635**	**55.0373**	**18.4811**	**0.1623**	**11.3625**	**1.0255**	**12.3880**	**4.5720**	**0.9539**	**5.5259**	**0.0000**	**17,514.1997**	**17,514.1997**	**1.4669**	**2.4482**	**18,280.4497**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	2.6299	55.0373	18.4811	0.1623	6.9172	1.0255	7.9427	2.4640	0.9539	3.4179	0.0000	17,514.1997	17,514.1997	1.4669	2.4482	18,280.4497
2023	1.6860	12.5379	14.4880	0.0300	0.6135	0.5211	1.1346	0.1655	0.5031	0.6685	0.0000	2,827.8740	2,827.8740	0.3638	0.0649	2,856.2980
2024	31.6635	11.8823	14.2778	0.0298	0.6135	0.4571	1.0706	0.1655	0.4409	0.6064	0.0000	2,813.1083	2,813.1083	0.4144	0.0634	2,840.9042
Maximum	**31.6635**	**55.0373**	**18.4811**	**0.1623**	**6.9172**	**1.0255**	**7.9427**	**2.4640**	**0.9539**	**3.4179**	**0.0000**	**17,514.1997**	**17,514.1997**	**1.4669**	**2.4482**	**18,280.4497**

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	35.31	0.00	30.46	42.99	0.00	31.00	0.00	0.00	0.00	0.00	0.00	0.00

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2757	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0464	0.0464	1.2000e-004		0.0494
Energy	0.0169	0.1534	0.1289	9.2000e-004		0.0117	0.0117		0.0117	0.0117		184.0781	184.0781	3.5300e-003	3.3700e-003	185.1720
Mobile	1.0066	1.0061	10.1157	0.0224	2.3333	0.0160	2.3493	0.6215	0.0148	0.6363		2,317.8236	2,317.8236	0.1497	0.0920	2,348.9836
Total	**2.2992**	**1.1597**	**10.2662**	**0.0233**	**2.3333**	**0.0277**	**2.3610**	**0.6215**	**0.0266**	**0.6481**		**2,501.9481**	**2,501.9481**	**0.1534**	**0.0954**	**2,534.2050**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2757	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0464	0.0464	1.2000e-004		0.0494
Energy	0.0169	0.1534	0.1289	9.2000e-004		0.0117	0.0117		0.0117	0.0117		184.0781	184.0781	3.5300e-003	3.3700e-003	185.1720
Mobile	1.0066	1.0061	10.1157	0.0224	2.3333	0.0160	2.3493	0.6215	0.0148	0.6363		2,317.8236	2,317.8236	0.1497	0.0920	2,348.9836
Total	**2.2992**	**1.1597**	**10.2662**	**0.0233**	**2.3333**	**0.0277**	**2.3610**	**0.6215**	**0.0266**	**0.6481**		**2,501.9481**	**2,501.9481**	**0.1534**	**0.0954**	**2,534.2050**

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2022	10/18/2022	5	34	
2	Grading	Grading	10/19/2022	10/27/2022	5	7	
3	Building Construction	Building Construction	10/28/2022	2/9/2024	5	336	
4	Paving	Paving	2/10/2024	3/5/2024	5	17	
5	Architectural Coating	Architectural Coating	3/6/2024	3/28/2024	5	17	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 7

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 83,721; Non-Residential Outdoor: 27,907; Striped Parking Area: 3,744 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	205.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	1,585.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	44.00	19.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3028	0.0000	1.3028	0.1973	0.0000	0.1973			0.0000			0.0000
Off-Road	1.6889	16.6217	13.9605	0.0241		0.8379	0.8379		0.7829	0.7829		2,323.4168	2,323.4168	0.5921		2,338.2191
Total	**1.6889**	**16.6217**	**13.9605**	**0.0241**	**1.3028**	**0.8379**	**2.1407**	**0.1973**	**0.7829**	**0.9801**		**2,323.4168**	**2,323.4168**	**0.5921**		**2,338.2191**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0281	1.0126	0.2361	3.7500e-003	0.1055	7.5200e-003	0.1131	0.0289	7.2000e-003	0.0361		410.4676	410.4676	0.0218	0.0651	430.4202
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0450	0.0329	0.5124	1.3300e-003	0.1453	9.3000e-004	0.1462	0.0385	8.6000e-004	0.0394		135.2165	135.2165	3.6600e-003	3.2500e-003	136.2774
Total	**0.0731**	**1.0455**	**0.7485**	**5.0800e-003**	**0.2509**	**8.4500e-003**	**0.2593**	**0.0675**	**8.0600e-003**	**0.0755**		**545.6842**	**545.6842**	**0.0255**	**0.0684**	**566.6976**

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5081	0.0000	0.5081	0.0769	0.0000	0.0769			0.0000			0.0000
Off-Road	1.6889	16.6217	13.9605	0.0241		0.8379	0.8379		0.7829	0.7829	0.0000	2,323.4168	2,323.4168	0.5921		2,338.2191
Total	**1.6889**	**16.6217**	**13.9605**	**0.0241**	**0.5081**	**0.8379**	**1.3460**	**0.0769**	**0.7829**	**0.8598**	**0.0000**	**2,323.4168**	**2,323.4168**	**0.5921**		**2,338.2191**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0281	1.0126	0.2361	3.7500e-003	0.1055	7.5200e-003	0.1131	0.0289	7.2000e-003	0.0361		410.4676	410.4676	0.0218	0.0651	430.4202
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0450	0.0329	0.5124	1.3300e-003	0.1453	9.3000e-004	0.1462	0.0385	8.6000e-004	0.0394		135.2165	135.2165	3.6600e-003	3.2500e-003	136.2774
Total	**0.0731**	**1.0455**	**0.7485**	**5.0800e-003**	**0.2509**	**8.4500e-003**	**0.2593**	**0.0675**	**8.0600e-003**	**0.0755**		**545.6842**	**545.6842**	**0.0255**	**0.0684**	**566.6976**

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.2874	0.0000	7.2874	3.4558	0.0000	3.4558			0.0000			0.0000
Off-Road	1.5403	16.9836	9.2202	0.0206		0.7423	0.7423		0.6829	0.6829		1,995.4825	1,995.4825	0.6454		2,011.6169
Total	**1.5403**	**16.9836**	**9.2202**	**0.0206**	**7.2874**	**0.7423**	**8.0297**	**3.4558**	**0.6829**	**4.1387**		**1,995.4825**	**1,995.4825**	**0.6454**		**2,011.6169**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.0549	38.0284	8.8668	0.1407	3.9633	0.2825	4.2459	1.0866	0.2703	1.3569		15,414.7045	15,414.7045	0.8187	2.4457	16,164.0039
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0346	0.0253	0.3941	1.0200e-003	0.1118	7.2000e-004	0.1125	0.0296	6.6000e-004	0.0303		104.0127	104.0127	2.8200e-003	2.5000e-003	104.8288
Total	**1.0895**	**38.0537**	**9.2609**	**0.1417**	**4.0751**	**0.2833**	**4.3584**	**1.1163**	**0.2710**	**1.3872**		**15,518.7173**	**15,518.7173**	**0.8216**	**2.4482**	**16,268.8327**

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8421	0.0000	2.8421	1.3477	0.0000	1.3477			0.0000			0.0000
Off-Road	1.5403	16.9836	9.2202	0.0206		0.7423	0.7423		0.6829	0.6829	0.0000	1,995.4825	1,995.4825	0.6454		2,011.6169
Total	**1.5403**	**16.9836**	**9.2202**	**0.0206**	**2.8421**	**0.7423**	**3.5844**	**1.3477**	**0.6829**	**2.0306**	**0.0000**	**1,995.4825**	**1,995.4825**	**0.6454**		**2,011.6169**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.0549	38.0284	8.8668	0.1407	3.9633	0.2825	4.2459	1.0866	0.2703	1.3569		15,414.7045	15,414.7045	0.8187	2.4457	16,164.0039
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0346	0.0253	0.3941	1.0200e-003	0.1118	7.2000e-004	0.1125	0.0296	6.6000e-004	0.0303		104.0127	104.0127	2.8200e-003	2.5000e-003	104.8288
Total	**1.0895**	**38.0537**	**9.2609**	**0.1417**	**4.0751**	**0.2833**	**4.3584**	**1.1163**	**0.2710**	**1.3872**		**15,518.7173**	**15,518.7173**	**0.8216**	**2.4482**	**16,268.8327**

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689		2,001.5429	2,001.5429	0.3486		2,010.2581
Total	**1.6487**	**12.5031**	**12.7264**	**0.0221**		**0.5889**	**0.5889**		**0.5689**	**0.5689**		**2,001.5429**	**2,001.5429**	**0.3486**		**2,010.2581**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0374	0.9307	0.3191	3.7200e-003	0.1217	8.8700e-003	0.1306	0.0350	8.4800e-003	0.0435		399.8770	399.8770	0.0134	0.0576	417.3828
Worker	0.1523	0.1112	1.7342	4.5000e-003	0.4918	3.1500e-003	0.4950	0.1304	2.9000e-003	0.1333		457.6559	457.6559	0.0124	0.0110	461.2466
Total	**0.1897**	**1.0419**	**2.0533**	**8.2200e-003**	**0.6135**	**0.0120**	**0.6255**	**0.1655**	**0.0114**	**0.1769**		**857.5329**	**857.5329**	**0.0258**	**0.0686**	**878.6294**

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689	0.0000	2,001.5429	2,001.5429	0.3486		2,010.2581
Total	**1.6487**	**12.5031**	**12.7264**	**0.0221**		**0.5889**	**0.5889**		**0.5689**	**0.5689**	**0.0000**	**2,001.5429**	**2,001.5429**	**0.3486**		**2,010.2581**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0374	0.9307	0.3191	3.7200e-003	0.1217	8.8700e-003	0.1306	0.0350	8.4800e-003	0.0435		399.8770	399.8770	0.0134	0.0576	417.3828
Worker	0.1523	0.1112	1.7342	4.5000e-003	0.4918	3.1500e-003	0.4950	0.1304	2.9000e-003	0.1333		457.6559	457.6559	0.0124	0.0110	461.2466
Total	**0.1897**	**1.0419**	**2.0533**	**8.2200e-003**	**0.6135**	**0.0120**	**0.6255**	**0.1655**	**0.0114**	**0.1769**		**857.5329**	**857.5329**	**0.0258**	**0.0686**	**878.6294**

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**		**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0219	0.7293	0.2825	3.5400e-003	0.1217	3.6700e-003	0.1254	0.0350	3.5100e-003	0.0386		380.5367	380.5367	0.0128	0.0547	397.1591
Worker	0.1409	0.0982	1.5944	4.3500e-003	0.4918	2.9700e-003	0.4948	0.1304	2.7300e-003	0.1332		445.5496	445.5496	0.0111	0.0102	448.8532
Total	**0.1628**	**0.8275**	**1.8770**	**7.8900e-003**	**0.6135**	**6.6400e-003**	**0.6202**	**0.1655**	**6.2400e-003**	**0.1717**		**826.0863**	**826.0863**	**0.0239**	**0.0649**	**846.0123**

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**	**0.0000**	**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0219	0.7293	0.2825	3.5400e-003	0.1217	3.6700e-003	0.1254	0.0350	3.5100e-003	0.0386		380.5367	380.5367	0.0128	0.0547	397.1591
Worker	0.1409	0.0982	1.5944	4.3500e-003	0.4918	2.9700e-003	0.4948	0.1304	2.7300e-003	0.1332		445.5496	445.5496	0.0111	0.0102	448.8532
Total	**0.1628**	**0.8275**	**1.8770**	**7.8900e-003**	**0.6135**	**6.6400e-003**	**0.6202**	**0.1655**	**6.2400e-003**	**0.1717**		**826.0863**	**826.0863**	**0.0239**	**0.0649**	**846.0123**

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.9214	2,001.9214	0.3334		2,010.2563
Total	**1.4200**	**11.0639**	**12.5172**	**0.0221**		**0.4506**	**0.4506**		**0.4348**	**0.4348**		**2,001.9214**	**2,001.9214**	**0.3334**		**2,010.2563**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0212	0.7308	0.2765	3.4800e-003	0.1217	3.6900e-003	0.1254	0.0350	3.5300e-003	0.0386		374.8218	374.8218	0.0128	0.0540	391.2176
Worker	0.1313	0.0877	1.4841	4.2300e-003	0.4918	2.8500e-003	0.4947	0.1304	2.6200e-003	0.1331		436.3652	436.3652	0.0100	9.4400e-003	439.4304
Total	**0.1525**	**0.8185**	**1.7606**	**7.7100e-003**	**0.6135**	**6.5400e-003**	**0.6201**	**0.1655**	**6.1500e-003**	**0.1716**		**811.1869**	**811.1869**	**0.0228**	**0.0634**	**830.6480**

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.9214	2,001.9214	0.3334		2,010.2563
Total	**1.4200**	**11.0639**	**12.5172**	**0.0221**		**0.4506**	**0.4506**		**0.4348**	**0.4348**	**0.0000**	**2,001.9214**	**2,001.9214**	**0.3334**		**2,010.2563**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0212	0.7308	0.2765	3.4800e-003	0.1217	3.6900e-003	0.1254	0.0350	3.5300e-003	0.0386		374.8218	374.8218	0.0128	0.0540	391.2176
Worker	0.1313	0.0877	1.4841	4.2300e-003	0.4918	2.8500e-003	0.4947	0.1304	2.6200e-003	0.1331		436.3652	436.3652	0.0100	9.4400e-003	439.4304
Total	**0.1525**	**0.8185**	**1.7606**	**7.7100e-003**	**0.6135**	**6.5400e-003**	**0.6201**	**0.1655**	**6.1500e-003**	**0.1716**		**811.1869**	**811.1869**	**0.0228**	**0.0634**	**830.6480**

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.8688	1,297.8688	0.4114		1,308.1547
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6180**	**5.8607**	**8.8253**	**0.0136**		**0.2810**	**0.2810**		**0.2594**	**0.2594**		**1,297.8688**	**1,297.8688**	**0.4114**		**1,308.1547**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0388	0.0259	0.4385	1.2500e-003	0.1453	8.4000e-004	0.1462	0.0385	7.7000e-004	0.0393		128.9261	128.9261	2.9700e-003	2.7900e-003	129.8317
Total	**0.0388**	**0.0259**	**0.4385**	**1.2500e-003**	**0.1453**	**8.4000e-004**	**0.1462**	**0.0385**	**7.7000e-004**	**0.0393**		**128.9261**	**128.9261**	**2.9700e-003**	**2.7900e-003**	**129.8317**

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594	0.0000	1,297.8688	1,297.8688	0.4114		1,308.1547
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6180**	**5.8607**	**8.8253**	**0.0136**		**0.2810**	**0.2810**		**0.2594**	**0.2594**	**0.0000**	**1,297.8688**	**1,297.8688**	**0.4114**		**1,308.1547**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0388	0.0259	0.4385	1.2500e-003	0.1453	8.4000e-004	0.1462	0.0385	7.7000e-004	0.0393		128.9261	128.9261	2.9700e-003	2.7900e-003	129.8317
Total	**0.0388**	**0.0259**	**0.4385**	**1.2500e-003**	**0.1453**	**8.4000e-004**	**0.1462**	**0.0385**	**7.7000e-004**	**0.0393**		**128.9261**	**128.9261**	**2.9700e-003**	**2.7900e-003**	**129.8317**

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	31.4558					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**31.6366**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0269	0.0179	0.3036	8.7000e-004	0.1006	5.8000e-004	0.1012	0.0267	5.4000e-004	0.0272		89.2565	89.2565	2.0500e-003	1.9300e-003	89.8835
Total	**0.0269**	**0.0179**	**0.3036**	**8.7000e-004**	**0.1006**	**5.8000e-004**	**0.1012**	**0.0267**	**5.4000e-004**	**0.0272**		**89.2565**	**89.2565**	**2.0500e-003**	**1.9300e-003**	**89.8835**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	31.4558					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**31.6366**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0269	0.0179	0.3036	8.7000e-004	0.1006	5.8000e-004	0.1012	0.0267	5.4000e-004	0.0272		89.2565	89.2565	2.0500e-003	1.9300e-003	89.8835
Total	**0.0269**	**0.0179**	**0.3036**	**8.7000e-004**	**0.1006**	**5.8000e-004**	**0.1012**	**0.0267**	**5.4000e-004**	**0.0272**		**89.2565**	**89.2565**	**2.0500e-003**	**1.9300e-003**	**89.8835**

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0066	1.0061	10.1157	0.0224	2.3333	0.0160	2.3493	0.6215	0.0148	0.6363		2,317.8236	2,317.8236	0.1497	0.0920	2,348.9836
Unmitigated	1.0066	1.0061	10.1157	0.0224	2.3333	0.0160	2.3493	0.6215	0.0148	0.6363		2,317.8236	2,317.8236	0.1497	0.0920	2,348.9836

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	344.03	344.03	344.03	1,108,273	1,108,273
Parking Lot	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	344.03	344.03	344.03	1,108,273	1,108,273

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Parking Lot	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Strip Mall	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0169	0.1534	0.1289	9.2000e-004		0.0117	0.0117		0.0117	0.0117		184.0781	184.0781	3.5300e-003	3.3700e-003	185.1720
NaturalGas Unmitigated	0.0169	0.1534	0.1289	9.2000e-004		0.0117	0.0117		0.0117	0.0117		184.0781	184.0781	3.5300e-003	3.3700e-003	185.1720

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	1562.43	0.0169	0.1532	0.1287	9.2000e-004		0.0116	0.0116		0.0116	0.0116		183.8154	183.8154	3.5200e-003	3.3700e-003	184.9077
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	2.23288	2.0000e-005	2.2000e-004	1.8000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.2627	0.2627	1.0000e-005	0.0000	0.2643
Total		**0.0169**	**0.1534**	**0.1289**	**9.2000e-004**		**0.0117**	**0.0117**		**0.0117**	**0.0117**		**184.0781**	**184.0781**	**3.5300e-003**	**3.3700e-003**	**185.1720**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	1.56243	0.0169	0.1532	0.1287	9.2000e-004		0.0116	0.0116		0.0116	0.0116		183.8154	183.8154	3.5200e-003	3.3700e-003	184.9077
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.00223288	2.0000e-005	2.2000e-004	1.8000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.2627	0.2627	1.0000e-005	0.0000	0.2643
Total		**0.0169**	**0.1534**	**0.1289**	**9.2000e-004**		**0.0117**	**0.0117**		**0.0117**	**0.0117**		**184.0781**	**184.0781**	**3.5300e-003**	**3.3700e-003**	**185.1720**

6.0 Area Detail

6.1 Mitigation Measures Area

1200 Cahuenga Project - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2757	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0464	0.0464	1.2000e-004		0.0494
Unmitigated	1.2757	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0464	0.0464	1.2000e-004		0.0494

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1465					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.9900e-003	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0464	0.0464	1.2000e-004		0.0494
Total	**1.2757**	**2.0000e-004**	**0.0216**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0464**	**0.0464**	**1.2000e-004**		**0.0494**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1465					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.9900e-003	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0464	0.0464	1.2000e-004		0.0494
Total	**1.2757**	**2.0000e-004**	**0.0216**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0464**	**0.0464**	**1.2000e-004**		**0.0494**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

1200 Cahuenga Project

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	55.31	1000sqft	1.22	55,314.00	0
Parking Lot	156.00	Space	0.00	62,400.00	0
Strip Mall	0.50	1000sqft	0.01	500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project consists of a new 35,000 SF builing (A) and a new 20,000 SF building (C) including office and retail uses with 156 parking spaces built into building A.

Construction Phase - Construction schedule proportionally increased for 19 month schedule

Demolition -

Grading -

Vehicle Trips - Net generation of 344 daily trips per Traffic Assessment from Overland Traffic Consultants.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	17.00

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	200.00	336.00
tblConstructionPhase	NumDays	20.00	34.00
tblConstructionPhase	NumDays	4.00	7.00
tblConstructionPhase	NumDays	10.00	17.00
tblGrading	MaterialExported	0.00	12,678.00
tblLandUse	LandUseSquareFeet	55,310.00	55,314.00
tblLandUse	LotAcreage	1.27	1.22
tblLandUse	LotAcreage	1.40	0.00
tblVehicleTrips	ST_TR	2.21	6.22
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	0.70	6.22
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	9.74	6.22
tblVehicleTrips	WD_TR	44.32	0.00

2.0 Emissions Summary

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	2.6070	56.5832	18.6049	0.1623	11.3625	1.0261	12.3886	4.5720	0.9544	5.5264	0.0000	17,513.2191	17,513.2191	1.4656	2.4492	18,279.7248
2023	1.6958	12.5824	14.3680	0.0297	0.6135	0.5212	1.1347	0.1655	0.5031	0.6686	0.0000	2,805.0260	2,805.0260	0.3639	0.0657	2,833.7022
2024	31.6656	11.9258	14.1678	0.0296	0.6135	0.4571	1.0707	0.1655	0.4410	0.6064	0.0000	2,790.7862	2,790.7862	0.4145	0.0642	2,818.8174
Maximum	**31.6656**	**56.5832**	**18.6049**	**0.1623**	**11.3625**	**1.0261**	**12.3886**	**4.5720**	**0.9544**	**5.5264**	**0.0000**	**17,513.2191**	**17,513.2191**	**1.4656**	**2.4492**	**18,279.7248**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	2.6070	56.5832	18.6049	0.1623	6.9172	1.0261	7.9433	2.4640	0.9544	3.4184	0.0000	17,513.2191	17,513.2191	1.4656	2.4492	18,279.7248
2023	1.6958	12.5824	14.3680	0.0297	0.6135	0.5212	1.1347	0.1655	0.5031	0.6686	0.0000	2,805.0260	2,805.0260	0.3639	0.0657	2,833.7022
2024	31.6656	11.9258	14.1678	0.0296	0.6135	0.4571	1.0707	0.1655	0.4410	0.6064	0.0000	2,790.7862	2,790.7862	0.4145	0.0642	2,818.8174
Maximum	**31.6656**	**56.5832**	**18.6049**	**0.1623**	**6.9172**	**1.0261**	**7.9433**	**2.4640**	**0.9544**	**3.4184**	**0.0000**	**17,513.2191**	**17,513.2191**	**1.4656**	**2.4492**	**18,279.7248**

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	35.31	0.00	30.46	42.99	0.00	30.99	0.00	0.00	0.00	0.00	0.00	0.00

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2757	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0464	0.0464	1.2000e-004		0.0494
Energy	0.0169	0.1534	0.1289	9.2000e-004		0.0117	0.0117		0.0117	0.0117		184.0781	184.0781	3.5300e-003	3.3700e-003	185.1720
Mobile	0.9883	1.0865	9.9070	0.0214	2.3333	0.0160	2.3493	0.6215	0.0148	0.6363		2,219.4482	2,219.4482	0.1540	0.0961	2,251.9281
Total	**2.2809**	**1.2401**	**10.0574**	**0.0223**	**2.3333**	**0.0277**	**2.3610**	**0.6215**	**0.0266**	**0.6481**		**2,403.5726**	**2,403.5726**	**0.1577**	**0.0994**	**2,437.1495**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2757	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0464	0.0464	1.2000e-004		0.0494
Energy	0.0169	0.1534	0.1289	9.2000e-004		0.0117	0.0117		0.0117	0.0117		184.0781	184.0781	3.5300e-003	3.3700e-003	185.1720
Mobile	0.9883	1.0865	9.9070	0.0214	2.3333	0.0160	2.3493	0.6215	0.0148	0.6363		2,219.4482	2,219.4482	0.1540	0.0961	2,251.9281
Total	**2.2809**	**1.2401**	**10.0574**	**0.0223**	**2.3333**	**0.0277**	**2.3610**	**0.6215**	**0.0266**	**0.6481**		**2,403.5726**	**2,403.5726**	**0.1577**	**0.0994**	**2,437.1495**

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2022	10/18/2022	5	34	
2	Grading	Grading	10/19/2022	10/27/2022	5	7	
3	Building Construction	Building Construction	10/28/2022	2/9/2024	5	336	
4	Paving	Paving	2/10/2024	3/5/2024	5	17	
5	Architectural Coating	Architectural Coating	3/6/2024	3/28/2024	5	17	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 7

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 83,721; Non-Residential Outdoor: 27,907; Striped Parking Area: 3,744 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	205.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	1,585.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	44.00	19.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3028	0.0000	1.3028	0.1973	0.0000	0.1973			0.0000			0.0000
Off-Road	1.6889	16.6217	13.9605	0.0241		0.8379	0.8379		0.7829	0.7829		2,323.4168	2,323.4168	0.5921		2,338.2191
Total	**1.6889**	**16.6217**	**13.9605**	**0.0241**	**1.3028**	**0.8379**	**2.1407**	**0.1973**	**0.7829**	**0.9801**		**2,323.4168**	**2,323.4168**	**0.5921**		**2,338.2191**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0274	1.0537	0.2403	3.7500e-003	0.1055	7.5400e-003	0.1131	0.0289	7.2100e-003	0.0362		410.5880	410.5880	0.0218	0.0652	430.5460
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0482	0.0363	0.4704	1.2600e-003	0.1453	9.3000e-004	0.1462	0.0385	8.6000e-004	0.0394		128.0673	128.0673	3.7000e-003	3.4800e-003	129.1958
Total	**0.0756**	**1.0900**	**0.7107**	**5.0100e-003**	**0.2509**	**8.4700e-003**	**0.2593**	**0.0675**	**8.0700e-003**	**0.0755**		**538.6553**	**538.6553**	**0.0255**	**0.0686**	**559.7417**

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5081	0.0000	0.5081	0.0769	0.0000	0.0769			0.0000			0.0000
Off-Road	1.6889	16.6217	13.9605	0.0241		0.8379	0.8379		0.7829	0.7829	0.0000	2,323.4168	2,323.4168	0.5921		2,338.2191
Total	**1.6889**	**16.6217**	**13.9605**	**0.0241**	**0.5081**	**0.8379**	**1.3460**	**0.0769**	**0.7829**	**0.8598**	**0.0000**	**2,323.4168**	**2,323.4168**	**0.5921**		**2,338.2191**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0274	1.0537	0.2403	3.7500e-003	0.1055	7.5400e-003	0.1131	0.0289	7.2100e-003	0.0362		410.5880	410.5880	0.0218	0.0652	430.5460
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0482	0.0363	0.4704	1.2600e-003	0.1453	9.3000e-004	0.1462	0.0385	8.6000e-004	0.0394		128.0673	128.0673	3.7000e-003	3.4800e-003	129.1958
Total	**0.0756**	**1.0900**	**0.7107**	**5.0100e-003**	**0.2509**	**8.4700e-003**	**0.2593**	**0.0675**	**8.0700e-003**	**0.0755**		**538.6553**	**538.6553**	**0.0255**	**0.0686**	**559.7417**

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.2874	0.0000	7.2874	3.4558	0.0000	3.4558			0.0000			0.0000
Off-Road	1.5403	16.9836	9.2202	0.0206		0.7423	0.7423		0.6829	0.6829		1,995.4825	1,995.4825	0.6454		2,011.6169
Total	**1.5403**	**16.9836**	**9.2202**	**0.0206**	**7.2874**	**0.7423**	**8.0297**	**3.4558**	**0.6829**	**4.1387**		**1,995.4825**	**1,995.4825**	**0.6454**		**2,011.6169**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.0296	39.5717	9.0229	0.1408	3.9633	0.2831	4.2465	1.0866	0.2709	1.3575		15,419.2234	15,419.2234	0.8174	2.4465	16,168.7265
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0371	0.0279	0.3619	9.7000e-004	0.1118	7.2000e-004	0.1125	0.0296	6.6000e-004	0.0303		98.5133	98.5133	2.8500e-003	2.6700e-003	99.3813
Total	**1.0666**	**39.5996**	**9.3848**	**0.1417**	**4.0751**	**0.2838**	**4.3589**	**1.1163**	**0.2715**	**1.3878**		**15,517.7367**	**15,517.7367**	**0.8202**	**2.4492**	**16,268.1079**

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8421	0.0000	2.8421	1.3477	0.0000	1.3477			0.0000			0.0000
Off-Road	1.5403	16.9836	9.2202	0.0206		0.7423	0.7423		0.6829	0.6829	0.0000	1,995.4825	1,995.4825	0.6454		2,011.6169
Total	**1.5403**	**16.9836**	**9.2202**	**0.0206**	**2.8421**	**0.7423**	**3.5844**	**1.3477**	**0.6829**	**2.0306**	**0.0000**	**1,995.4825**	**1,995.4825**	**0.6454**		**2,011.6169**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.0296	39.5717	9.0229	0.1408	3.9633	0.2831	4.2465	1.0866	0.2709	1.3575		15,419.2234	15,419.2234	0.8174	2.4465	16,168.7265
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0371	0.0279	0.3619	9.7000e-004	0.1118	7.2000e-004	0.1125	0.0296	6.6000e-004	0.0303		98.5133	98.5133	2.8500e-003	2.6700e-003	99.3813
Total	**1.0666**	**39.5996**	**9.3848**	**0.1417**	**4.0751**	**0.2838**	**4.3589**	**1.1163**	**0.2715**	**1.3878**		**15,517.7367**	**15,517.7367**	**0.8202**	**2.4492**	**16,268.1079**

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689		2,001.5429	2,001.5429	0.3486		2,010.2581
Total	**1.6487**	**12.5031**	**12.7264**	**0.0221**		**0.5889**	**0.5889**		**0.5689**	**0.5689**		**2,001.5429**	**2,001.5429**	**0.3486**		**2,010.2581**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0369	0.9691	0.3301	3.7200e-003	0.1217	8.9000e-003	0.1306	0.0350	8.5100e-003	0.0436		400.0273	400.0273	0.0133	0.0577	417.5541
Worker	0.1630	0.1229	1.5922	4.2600e-003	0.4918	3.1500e-003	0.4950	0.1304	2.9000e-003	0.1333		433.4586	433.4586	0.0125	0.0118	437.2779
Total	**0.2000**	**1.0919**	**1.9224**	**7.9800e-003**	**0.6135**	**0.0121**	**0.6256**	**0.1655**	**0.0114**	**0.1769**		**833.4859**	**833.4859**	**0.0259**	**0.0695**	**854.8320**

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689	0.0000	2,001.5429	2,001.5429	0.3486		2,010.2581
Total	**1.6487**	**12.5031**	**12.7264**	**0.0221**		**0.5889**	**0.5889**		**0.5689**	**0.5689**	**0.0000**	**2,001.5429**	**2,001.5429**	**0.3486**		**2,010.2581**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0369	0.9691	0.3301	3.7200e-003	0.1217	8.9000e-003	0.1306	0.0350	8.5100e-003	0.0436		400.0273	400.0273	0.0133	0.0577	417.5541
Worker	0.1630	0.1229	1.5922	4.2600e-003	0.4918	3.1500e-003	0.4950	0.1304	2.9000e-003	0.1333		433.4586	433.4586	0.0125	0.0118	437.2779
Total	**0.2000**	**1.0919**	**1.9224**	**7.9800e-003**	**0.6135**	**0.0121**	**0.6256**	**0.1655**	**0.0114**	**0.1769**		**833.4859**	**833.4859**	**0.0259**	**0.0695**	**854.8320**

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**		**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0211	0.7636	0.2914	3.5400e-003	0.1217	3.6900e-003	0.1254	0.0350	3.5300e-003	0.0386		381.1786	381.1786	0.0127	0.0549	397.8431
Worker	0.1514	0.1085	1.4656	4.1200e-003	0.4918	2.9700e-003	0.4948	0.1304	2.7300e-003	0.1332		422.0598	422.0598	0.0113	0.0109	425.5733
Total	**0.1725**	**0.8721**	**1.7570**	**7.6600e-003**	**0.6135**	**6.6600e-003**	**0.6202**	**0.1655**	**6.2600e-003**	**0.1717**		**803.2383**	**803.2383**	**0.0240**	**0.0657**	**823.4164**

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**	**0.0000**	**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0211	0.7636	0.2914	3.5400e-003	0.1217	3.6900e-003	0.1254	0.0350	3.5300e-003	0.0386		381.1786	381.1786	0.0127	0.0549	397.8431
Worker	0.1514	0.1085	1.4656	4.1200e-003	0.4918	2.9700e-003	0.4948	0.1304	2.7300e-003	0.1332		422.0598	422.0598	0.0113	0.0109	425.5733
Total	**0.1725**	**0.8721**	**1.7570**	**7.6600e-003**	**0.6135**	**6.6600e-003**	**0.6202**	**0.1655**	**6.2600e-003**	**0.1717**		**803.2383**	**803.2383**	**0.0240**	**0.0657**	**823.4164**

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.9214	2,001.9214	0.3334		2,010.2563
Total	**1.4200**	**11.0639**	**12.5172**	**0.0221**		**0.4506**	**0.4506**		**0.4348**	**0.4348**		**2,001.9214**	**2,001.9214**	**0.3334**		**2,010.2563**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0204	0.7651	0.2853	3.4900e-003	0.1217	3.7100e-003	0.1254	0.0350	3.5500e-003	0.0386		375.4672	375.4672	0.0127	0.0541	391.9039
Worker	0.1416	0.0969	1.3654	4.0100e-003	0.4918	2.8500e-003	0.4947	0.1304	2.6200e-003	0.1331		413.3975	413.3975	0.0102	0.0101	416.6572
Total	**0.1620**	**0.8620**	**1.6506**	**7.5000e-003**	**0.6135**	**6.5600e-003**	**0.6201**	**0.1655**	**6.1700e-003**	**0.1716**		**788.8648**	**788.8648**	**0.0229**	**0.0642**	**808.5611**

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.9214	2,001.9214	0.3334		2,010.2563
Total	**1.4200**	**11.0639**	**12.5172**	**0.0221**		**0.4506**	**0.4506**		**0.4348**	**0.4348**	**0.0000**	**2,001.9214**	**2,001.9214**	**0.3334**		**2,010.2563**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0204	0.7651	0.2853	3.4900e-003	0.1217	3.7100e-003	0.1254	0.0350	3.5500e-003	0.0386		375.4672	375.4672	0.0127	0.0541	391.9039
Worker	0.1416	0.0969	1.3654	4.0100e-003	0.4918	2.8500e-003	0.4947	0.1304	2.6200e-003	0.1331		413.3975	413.3975	0.0102	0.0101	416.6572
Total	**0.1620**	**0.8620**	**1.6506**	**7.5000e-003**	**0.6135**	**6.5600e-003**	**0.6201**	**0.1655**	**6.1700e-003**	**0.1716**		**788.8648**	**788.8648**	**0.0229**	**0.0642**	**808.5611**

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.8688	1,297.8688	0.4114		1,308.1547
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6180**	**5.8607**	**8.8253**	**0.0136**		**0.2810**	**0.2810**		**0.2594**	**0.2594**		**1,297.8688**	**1,297.8688**	**0.4114**		**1,308.1547**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0418	0.0286	0.4034	1.1800e-003	0.1453	8.4000e-004	0.1462	0.0385	7.7000e-004	0.0393		122.1402	122.1402	3.0100e-003	2.9800e-003	123.1033
Total	**0.0418**	**0.0286**	**0.4034**	**1.1800e-003**	**0.1453**	**8.4000e-004**	**0.1462**	**0.0385**	**7.7000e-004**	**0.0393**		**122.1402**	**122.1402**	**3.0100e-003**	**2.9800e-003**	**123.1033**

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594	0.0000	1,297.8688	1,297.8688	0.4114		1,308.1547
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6180**	**5.8607**	**8.8253**	**0.0136**		**0.2810**	**0.2810**		**0.2594**	**0.2594**	**0.0000**	**1,297.8688**	**1,297.8688**	**0.4114**		**1,308.1547**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0418	0.0286	0.4034	1.1800e-003	0.1453	8.4000e-004	0.1462	0.0385	7.7000e-004	0.0393		122.1402	122.1402	3.0100e-003	2.9800e-003	123.1033
Total	**0.0418**	**0.0286**	**0.4034**	**1.1800e-003**	**0.1453**	**8.4000e-004**	**0.1462**	**0.0385**	**7.7000e-004**	**0.0393**		**122.1402**	**122.1402**	**3.0100e-003**	**2.9800e-003**	**123.1033**

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	31.4558					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**31.6366**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0290	0.0198	0.2793	8.2000e-004	0.1006	5.8000e-004	0.1012	0.0267	5.4000e-004	0.0272		84.5586	84.5586	2.0800e-003	2.0600e-003	85.2253
Total	**0.0290**	**0.0198**	**0.2793**	**8.2000e-004**	**0.1006**	**5.8000e-004**	**0.1012**	**0.0267**	**5.4000e-004**	**0.0272**		**84.5586**	**84.5586**	**2.0800e-003**	**2.0600e-003**	**85.2253**

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	31.4558					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**31.6366**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0290	0.0198	0.2793	8.2000e-004	0.1006	5.8000e-004	0.1012	0.0267	5.4000e-004	0.0272		84.5586	84.5586	2.0800e-003	2.0600e-003	85.2253
Total	**0.0290**	**0.0198**	**0.2793**	**8.2000e-004**	**0.1006**	**5.8000e-004**	**0.1012**	**0.0267**	**5.4000e-004**	**0.0272**		**84.5586**	**84.5586**	**2.0800e-003**	**2.0600e-003**	**85.2253**

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9883	1.0865	9.9070	0.0214	2.3333	0.0160	2.3493	0.6215	0.0148	0.6363		2,219.4482	2,219.4482	0.1540	0.0961	2,251.9281
Unmitigated	0.9883	1.0865	9.9070	0.0214	2.3333	0.0160	2.3493	0.6215	0.0148	0.6363		2,219.4482	2,219.4482	0.1540	0.0961	2,251.9281

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	344.03	344.03	344.03	1,108,273	1,108,273
Parking Lot	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	344.03	344.03	344.03	1,108,273	1,108,273

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Parking Lot	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Strip Mall	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0169	0.1534	0.1289	9.2000e-004		0.0117	0.0117		0.0117	0.0117		184.0781	184.0781	3.5300e-003	3.3700e-003	185.1720
NaturalGas Unmitigated	0.0169	0.1534	0.1289	9.2000e-004		0.0117	0.0117		0.0117	0.0117		184.0781	184.0781	3.5300e-003	3.3700e-003	185.1720

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	1562.43	0.0169	0.1532	0.1287	9.2000e-004		0.0116	0.0116		0.0116	0.0116		183.8154	183.8154	3.5200e-003	3.3700e-003	184.9077
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	2.23288	2.0000e-005	2.2000e-004	1.8000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.2627	0.2627	1.0000e-005	0.0000	0.2643
Total		**0.0169**	**0.1534**	**0.1289**	**9.2000e-004**		**0.0117**	**0.0117**		**0.0117**	**0.0117**		**184.0781**	**184.0781**	**3.5300e-003**	**3.3700e-003**	**185.1720**

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	1.56243	0.0169	0.1532	0.1287	9.2000e-004		0.0116	0.0116		0.0116	0.0116		183.8154	183.8154	3.5200e-003	3.3700e-003	184.9077
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.00223288	2.0000e-005	2.2000e-004	1.8000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.2627	0.2627	1.0000e-005	0.0000	0.2643
Total		**0.0169**	**0.1534**	**0.1289**	**9.2000e-004**		**0.0117**	**0.0117**		**0.0117**	**0.0117**		**184.0781**	**184.0781**	**3.5300e-003**	**3.3700e-003**	**185.1720**

6.0 Area Detail

6.1 Mitigation Measures Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2757	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0464	0.0464	1.2000e-004		0.0494
Unmitigated	1.2757	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0464	0.0464	1.2000e-004		0.0494

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1465					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.9900e-003	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0464	0.0464	1.2000e-004		0.0494
Total	**1.2757**	**2.0000e-004**	**0.0216**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0464**	**0.0464**	**1.2000e-004**		**0.0494**

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1465					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.9900e-003	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0464	0.0464	1.2000e-004		0.0494
Total	**1.2757**	**2.0000e-004**	**0.0216**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0464**	**0.0464**	**1.2000e-004**		**0.0494**

7.0 Water Detail

7.1 Mitigation Measures Water

1200 Cahuenga Project - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix B:

CalEEMod 2024 Annual Emission Output

1200 Cahuenga Project - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

1200 Cahuenga Project

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	55.31	1000sqft	1.22	55,314.00	0
Parking Lot	156.00	Space	0.00	62,400.00	0
Strip Mall	0.50	1000sqft	0.01	500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project consists of a new 35,000 SF builing (A) and a new 20,000 SF building (C) including office and retail uses with 156 parking spaces built into building A.

Construction Phase - Construction schedule proportionally increased for 19 month schedule

Demolition -

Grading -

Vehicle Trips - Net generation of 344 daily trips per Traffic Assessment from Overland Traffic Consultants.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	17.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	200.00	336.00
tblConstructionPhase	NumDays	20.00	34.00
tblConstructionPhase	NumDays	4.00	7.00
tblConstructionPhase	NumDays	10.00	17.00
tblGrading	MaterialExported	0.00	12,678.00
tblLandUse	LandUseSquareFeet	55,310.00	55,314.00
tblLandUse	LotAcreage	1.27	1.22
tblLandUse	LotAcreage	1.40	0.00
tblVehicleTrips	ST_TR	2.21	6.22
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	0.70	6.22
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	9.74	6.22
tblVehicleTrips	WD_TR	44.32	0.00

2.0 Emissions Summary

1200 Cahuenga Project - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2022	0.0814	0.8140	0.6521	1.7600e-003	0.0797	0.0318	0.1115	0.0242	0.0301	0.0543	0.0000	159.0582	159.0582	0.0220	0.0103	162.6738
2023	0.2190	1.6363	1.8721	3.8700e-003	0.0783	0.0678	0.1460	0.0211	0.0654	0.0865	0.0000	331.5067	331.5067	0.0429	7.7600e-003	334.8926
2024	0.2983	0.2396	0.3093	6.0000e-004	0.0111	9.7800e-003	0.0209	2.9800e-003	9.3500e-003	0.0123	0.0000	51.8509	51.8509	8.1800e-003	9.1000e-004	52.3279
Maximum	**0.2983**	**1.6363**	**1.8721**	**3.8700e-003**	**0.0797**	**0.0678**	**0.1460**	**0.0242**	**0.0654**	**0.0865**	**0.0000**	**331.5067**	**331.5067**	**0.0429**	**0.0103**	**334.8926**

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					
2022	0.0814	0.8140	0.6521	1.7600e-003	0.0506	0.0318	0.0824	0.0147	0.0301	0.0449	0.0000	159.0581	159.0581	0.0220	0.0103	162.6737
2023	0.2190	1.6363	1.8721	3.8700e-003	0.0783	0.0678	0.1460	0.0211	0.0654	0.0865	0.0000	331.5064	331.5064	0.0429	7.7600e-003	334.8923
2024	0.2983	0.2396	0.3093	6.0000e-004	0.0111	9.7800e-003	0.0209	2.9800e-003	9.3500e-003	0.0123	0.0000	51.8509	51.8509	8.1800e-003	9.1000e-004	52.3278
Maximum	**0.2983**	**1.6363**	**1.8721**	**3.8700e-003**	**0.0783**	**0.0678**	**0.1460**	**0.0211**	**0.0654**	**0.0865**	**0.0000**	**331.5064**	**331.5064**	**0.0429**	**0.0103**	**334.8923**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**17.20**	**0.00**	**10.44**	**19.51**	**0.00**	**6.15**	**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	**9-1-2022**	**11-30-2022**	0.7112	0.7112
2	**12-1-2022**	**2-28-2023**	0.4718	0.4718
3	**3-1-2023**	**5-31-2023**	0.4680	0.4680
4	**6-1-2023**	**8-31-2023**	0.4674	0.4674
5	**9-1-2023**	**11-30-2023**	0.4635	0.4635
6	**12-1-2023**	**2-29-2024**	0.3978	0.3978
7	**3-1-2024**	**5-31-2024**	0.2820	0.2820
		Highest	0.7112	0.7112

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2327	2.0000e-005	2.7000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.2600e-003	5.2600e-003	1.0000e-005	0.0000	5.6000e-003
Energy	3.0800e-003	0.0280	0.0235	1.7000e-004		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003	0.0000	158.1295	158.1295	0.0114	1.8600e-003	158.9692
Mobile	0.1768	0.2005	1.8188	3.9400e-003	0.4164	2.9000e-003	0.4193	0.1111	2.6900e-003	0.1138	0.0000	370.3590	370.3590	0.0253	0.0160	375.7463
Waste						0.0000	0.0000		0.0000	0.0000	10.5494	0.0000	10.5494	0.6235	0.0000	26.1358
Water						0.0000	0.0000		0.0000	0.0000	3.1305	34.7022	37.8327	0.3245	7.9500e-003	48.3125
Total	**0.4126**	**0.2285**	**1.8450**	**4.1100e-003**	**0.4164**	**5.0400e-003**	**0.4214**	**0.1111**	**4.8300e-003**	**0.1159**	**13.6799**	**563.1960**	**576.8759**	**0.9846**	**0.0258**	**609.1693**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2327	2.0000e-005	2.7000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.2600e-003	5.2600e-003	1.0000e-005	0.0000	5.6000e-003
Energy	3.0800e-003	0.0280	0.0235	1.7000e-004		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003	0.0000	158.1295	158.1295	0.0114	1.8600e-003	158.9692
Mobile	0.1768	0.2005	1.8188	3.9400e-003	0.4164	2.9000e-003	0.4193	0.1111	2.6900e-003	0.1138	0.0000	370.3590	370.3590	0.0253	0.0160	375.7463
Waste						0.0000	0.0000		0.0000	0.0000	10.5494	0.0000	10.5494	0.6235	0.0000	26.1358
Water						0.0000	0.0000		0.0000	0.0000	3.1305	34.7022	37.8327	0.3245	7.9500e-003	48.3125
Total	**0.4126**	**0.2285**	**1.8450**	**4.1100e-003**	**0.4164**	**5.0400e-003**	**0.4214**	**0.1111**	**4.8300e-003**	**0.1159**	**13.6799**	**563.1960**	**576.8759**	**0.9846**	**0.0258**	**609.1693**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2022	10/18/2022	5	34	
2	Grading	Grading	10/19/2022	10/27/2022	5	7	
3	Building Construction	Building Construction	10/28/2022	2/9/2024	5	336	

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4	Paving	Paving	2/10/2024	3/5/2024	5	17	
5	Architectural Coating	Architectural Coating	3/6/2024	3/28/2024	5	17	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 7

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 83,721; Non-Residential Outdoor: 27,907; Striped Parking Area: 3,744 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	205.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	1,585.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	44.00	19.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0222	0.0000	0.0222	3.3500e-003	0.0000	3.3500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0287	0.2826	0.2373	4.1000e-004		0.0142	0.0142		0.0133	0.0133	0.0000	35.8321	35.8321	9.1300e-003	0.0000	36.0603
Total	**0.0287**	**0.2826**	**0.2373**	**4.1000e-004**	**0.0222**	**0.0142**	**0.0364**	**3.3500e-003**	**0.0133**	**0.0167**	**0.0000**	**35.8321**	**35.8321**	**9.1300e-003**	**0.0000**	**36.0603**

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3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.7000e-004	0.0181	4.0400e-003	6.0000e-005	1.7600e-003	1.3000e-004	1.8900e-003	4.8000e-004	1.2000e-004	6.1000e-004	0.0000	6.3311	6.3311	3.4000e-004	1.0000e-003	6.6388
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	6.3000e-004	8.2000e-003	2.0000e-005	2.4200e-003	2.0000e-005	2.4400e-003	6.4000e-004	1.0000e-005	6.6000e-004	0.0000	2.0046	2.0046	6.0000e-005	5.0000e-005	2.0223
Total	**1.2300e-003**	**0.0188**	**0.0122**	**8.0000e-005**	**4.1800e-003**	**1.5000e-004**	**4.3300e-003**	**1.1200e-003**	**1.3000e-004**	**1.2700e-003**	**0.0000**	**8.3357**	**8.3357**	**4.0000e-004**	**1.0500e-003**	**8.6611**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.6400e-003	0.0000	8.6400e-003	1.3100e-003	0.0000	1.3100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0287	0.2826	0.2373	4.1000e-004		0.0142	0.0142		0.0133	0.0133	0.0000	35.8320	35.8320	9.1300e-003	0.0000	36.0603
Total	**0.0287**	**0.2826**	**0.2373**	**4.1000e-004**	**8.6400e-003**	**0.0142**	**0.0229**	**1.3100e-003**	**0.0133**	**0.0146**	**0.0000**	**35.8320**	**35.8320**	**9.1300e-003**	**0.0000**	**36.0603**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.7000e-004	0.0181	4.0400e-003	6.0000e-005	1.7600e-003	1.3000e-004	1.8900e-003	4.8000e-004	1.2000e-004	6.1000e-004	0.0000	6.3311	6.3311	3.4000e-004	1.0000e-003	6.6388
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	6.3000e-004	8.2000e-003	2.0000e-005	2.4200e-003	2.0000e-005	2.4400e-003	6.4000e-004	1.0000e-005	6.6000e-004	0.0000	2.0046	2.0046	6.0000e-005	5.0000e-005	2.0223
Total	**1.2300e-003**	**0.0188**	**0.0122**	**8.0000e-005**	**4.1800e-003**	**1.5000e-004**	**4.3300e-003**	**1.1200e-003**	**1.3000e-004**	**1.2700e-003**	**0.0000**	**8.3357**	**8.3357**	**4.0000e-004**	**1.0500e-003**	**8.6611**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0255	0.0000	0.0255	0.0121	0.0000	0.0121	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3900e-003	0.0594	0.0323	7.0000e-005		2.6000e-003	2.6000e-003		2.3900e-003	2.3900e-003	0.0000	6.3360	6.3360	2.0500e-003	0.0000	6.3872
Total	**5.3900e-003**	**0.0594**	**0.0323**	**7.0000e-005**	**0.0255**	**2.6000e-003**	**0.0281**	**0.0121**	**2.3900e-003**	**0.0145**	**0.0000**	**6.3360**	**6.3360**	**2.0500e-003**	**0.0000**	**6.3872**

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3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.6500e-003	0.1402	0.0313	4.9000e-004	0.0136	9.9000e-004	0.0146	3.7500e-003	9.5000e-004	4.6900e-003	0.0000	48.9500	48.9500	2.6000e-003	7.7700e-003	51.3294
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	1.0000e-004	1.3000e-003	0.0000	3.8000e-004	0.0000	3.9000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3175	0.3175	1.0000e-005	1.0000e-005	0.3203
Total	**3.7700e-003**	**0.1403**	**0.0326**	**4.9000e-004**	**0.0140**	**9.9000e-004**	**0.0150**	**3.8500e-003**	**9.5000e-004**	**4.7900e-003**	**0.0000**	**49.2674**	**49.2674**	**2.6100e-003**	**7.7800e-003**	**51.6497**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.9500e-003	0.0000	9.9500e-003	4.7200e-003	0.0000	4.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3900e-003	0.0594	0.0323	7.0000e-005		2.6000e-003	2.6000e-003		2.3900e-003	2.3900e-003	0.0000	6.3359	6.3359	2.0500e-003	0.0000	6.3872
Total	**5.3900e-003**	**0.0594**	**0.0323**	**7.0000e-005**	**9.9500e-003**	**2.6000e-003**	**0.0126**	**4.7200e-003**	**2.3900e-003**	**7.1100e-003**	**0.0000**	**6.3359**	**6.3359**	**2.0500e-003**	**0.0000**	**6.3872**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.6500e-003	0.1402	0.0313	4.9000e-004	0.0136	9.9000e-004	0.0146	3.7500e-003	9.5000e-004	4.6900e-003	0.0000	48.9500	48.9500	2.6000e-003	7.7700e-003	51.3294
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	1.0000e-004	1.3000e-003	0.0000	3.8000e-004	0.0000	3.9000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3175	0.3175	1.0000e-005	1.0000e-005	0.3203
Total	**3.7700e-003**	**0.1403**	**0.0326**	**4.9000e-004**	**0.0140**	**9.9000e-004**	**0.0150**	**3.8500e-003**	**9.5000e-004**	**4.7900e-003**	**0.0000**	**49.2674**	**49.2674**	**2.6100e-003**	**7.7800e-003**	**51.6497**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0379	0.2876	0.2927	5.1000e-004		0.0135	0.0135		0.0131	0.0131	0.0000	41.7627	41.7627	7.2700e-003	0.0000	41.9445
Total	**0.0379**	**0.2876**	**0.2927**	**5.1000e-004**		**0.0135**	**0.0135**		**0.0131**	**0.0131**	**0.0000**	**41.7627**	**41.7627**	**7.2700e-003**	**0.0000**	**41.9445**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.5000e-004	0.0225	7.4500e-003	9.0000e-005	2.7500e-003	2.0000e-004	2.9600e-003	7.9000e-004	2.0000e-004	9.9000e-004	0.0000	8.3449	8.3449	2.8000e-004	1.2000e-003	8.7105
Worker	3.4700e-003	2.8900e-003	0.0376	1.0000e-004	0.0111	7.0000e-005	0.0112	2.9500e-003	7.0000e-005	3.0100e-003	0.0000	9.1796	9.1796	2.6000e-004	2.5000e-004	9.2604
Total	**4.3200e-003**	**0.0254**	**0.0450**	**1.9000e-004**	**0.0138**	**2.7000e-004**	**0.0141**	**3.7400e-003**	**2.7000e-004**	**4.0000e-003**	**0.0000**	**17.5244**	**17.5244**	**5.4000e-004**	**1.4500e-003**	**17.9709**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0379	0.2876	0.2927	5.1000e-004		0.0135	0.0135		0.0131	0.0131	0.0000	41.7626	41.7626	7.2700e-003	0.0000	41.9445
Total	**0.0379**	**0.2876**	**0.2927**	**5.1000e-004**		**0.0135**	**0.0135**		**0.0131**	**0.0131**	**0.0000**	**41.7626**	**41.7626**	**7.2700e-003**	**0.0000**	**41.9445**

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3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.5000e-004	0.0225	7.4500e-003	9.0000e-005	2.7500e-003	2.0000e-004	2.9600e-003	7.9000e-004	2.0000e-004	9.9000e-004	0.0000	8.3449	8.3449	2.8000e-004	1.2000e-003	8.7105
Worker	3.4700e-003	2.8900e-003	0.0376	1.0000e-004	0.0111	7.0000e-005	0.0112	2.9500e-003	7.0000e-005	3.0100e-003	0.0000	9.1796	9.1796	2.6000e-004	2.5000e-004	9.2604
Total	**4.3200e-003**	**0.0254**	**0.0450**	**1.9000e-004**	**0.0138**	**2.7000e-004**	**0.0141**	**3.7400e-003**	**2.7000e-004**	**4.0000e-003**	**0.0000**	**17.5244**	**17.5244**	**5.4000e-004**	**1.4500e-003**	**17.9709**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1980	1.5224	1.6394	2.8700e-003		0.0669	0.0669		0.0646	0.0646	0.0000	236.0789	236.0789	0.0401	0.0000	237.0811
Total	**0.1980**	**1.5224**	**1.6394**	**2.8700e-003**		**0.0669**	**0.0669**		**0.0646**	**0.0646**	**0.0000**	**236.0789**	**236.0789**	**0.0401**	**0.0000**	**237.0811**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.7900e-003	0.0995	0.0373	4.6000e-004	0.0156	4.8000e-004	0.0160	4.4900e-003	4.6000e-004	4.9500e-003	0.0000	44.9101	44.9101	1.5000e-003	6.4600e-003	46.8737
Worker	0.0182	0.0144	0.1954	5.4000e-004	0.0627	3.9000e-004	0.0631	0.0167	3.6000e-004	0.0170	0.0000	50.5177	50.5177	1.3300e-003	1.3000e-003	50.9379
Total	**0.0210**	**0.1140**	**0.2327**	**1.0000e-003**	**0.0783**	**8.7000e-004**	**0.0791**	**0.0211**	**8.2000e-004**	**0.0220**	**0.0000**	**95.4278**	**95.4278**	**2.8300e-003**	**7.7600e-003**	**97.8115**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1980	1.5224	1.6394	2.8700e-003		0.0669	0.0669		0.0646	0.0646	0.0000	236.0786	236.0786	0.0401	0.0000	237.0808
Total	**0.1980**	**1.5224**	**1.6394**	**2.8700e-003**		**0.0669**	**0.0669**		**0.0646**	**0.0646**	**0.0000**	**236.0786**	**236.0786**	**0.0401**	**0.0000**	**237.0808**

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3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.7900e-003	0.0995	0.0373	4.6000e-004	0.0156	4.8000e-004	0.0160	4.4900e-003	4.6000e-004	4.9500e-003	0.0000	44.9101	44.9101	1.5000e-003	6.4600e-003	46.8737
Worker	0.0182	0.0144	0.1954	5.4000e-004	0.0627	3.9000e-004	0.0631	0.0167	3.6000e-004	0.0170	0.0000	50.5177	50.5177	1.3300e-003	1.3000e-003	50.9379
Total	**0.0210**	**0.1140**	**0.2327**	**1.0000e-003**	**0.0783**	**8.7000e-004**	**0.0791**	**0.0211**	**8.2000e-004**	**0.0220**	**0.0000**	**95.4278**	**95.4278**	**2.8300e-003**	**7.7600e-003**	**97.8115**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0213	0.1660	0.1878	3.3000e-004		6.7600e-003	6.7600e-003		6.5200e-003	6.5200e-003	0.0000	27.2417	27.2417	4.5400e-003	0.0000	27.3551
Total	**0.0213**	**0.1660**	**0.1878**	**3.3000e-004**		**6.7600e-003**	**6.7600e-003**		**6.5200e-003**	**6.5200e-003**	**0.0000**	**27.2417**	**27.2417**	**4.5400e-003**	**0.0000**	**27.3551**

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3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1000e-004	0.0115	4.2100e-003	5.0000e-005	1.8000e-003	6.0000e-005	1.8500e-003	5.2000e-004	5.0000e-005	5.7000e-004	0.0000	5.1042	5.1042	1.7000e-004	7.4000e-004	5.3277
Worker	1.9600e-003	1.4900e-003	0.0210	6.0000e-005	7.2300e-003	4.0000e-005	7.2700e-003	1.9200e-003	4.0000e-005	1.9600e-003	0.0000	5.7092	5.7092	1.4000e-004	1.4000e-004	5.7542
Total	**2.2700e-003**	**0.0130**	**0.0252**	**1.1000e-004**	**9.0300e-003**	**1.0000e-004**	**9.1200e-003**	**2.4400e-003**	**9.0000e-005**	**2.5300e-003**	**0.0000**	**10.8134**	**10.8134**	**3.1000e-004**	**8.8000e-004**	**11.0818**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0213	0.1660	0.1878	3.3000e-004		6.7600e-003	6.7600e-003		6.5200e-003	6.5200e-003	0.0000	27.2417	27.2417	4.5400e-003	0.0000	27.3551
Total	**0.0213**	**0.1660**	**0.1878**	**3.3000e-004**		**6.7600e-003**	**6.7600e-003**		**6.5200e-003**	**6.5200e-003**	**0.0000**	**27.2417**	**27.2417**	**4.5400e-003**	**0.0000**	**27.3551**

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3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1000e-004	0.0115	4.2100e-003	5.0000e-005	1.8000e-003	6.0000e-005	1.8500e-003	5.2000e-004	5.0000e-005	5.7000e-004	0.0000	5.1042	5.1042	1.7000e-004	7.4000e-004	5.3277
Worker	1.9600e-003	1.4900e-003	0.0210	6.0000e-005	7.2300e-003	4.0000e-005	7.2700e-003	1.9200e-003	4.0000e-005	1.9600e-003	0.0000	5.7092	5.7092	1.4000e-004	1.4000e-004	5.7542
Total	**2.2700e-003**	**0.0130**	**0.0252**	**1.1000e-004**	**9.0300e-003**	**1.0000e-004**	**9.1200e-003**	**2.4400e-003**	**9.0000e-005**	**2.5300e-003**	**0.0000**	**10.8134**	**10.8134**	**3.1000e-004**	**8.8000e-004**	**11.0818**

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.2500e-003	0.0498	0.0750	1.2000e-004		2.3900e-003	2.3900e-003		2.2100e-003	2.2100e-003	0.0000	10.0080	10.0080	3.1700e-003	0.0000	10.0873
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.2500e-003**	**0.0498**	**0.0750**	**1.2000e-004**		**2.3900e-003**	**2.3900e-003**		**2.2100e-003**	**2.2100e-003**	**0.0000**	**10.0080**	**10.0080**	**3.1700e-003**	**0.0000**	**10.0873**

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3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.5000e-004	3.5200e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9559	0.9559	2.0000e-005	2.0000e-005	0.9634
Total	**3.3000e-004**	**2.5000e-004**	**3.5200e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**0.9559**	**0.9559**	**2.0000e-005**	**2.0000e-005**	**0.9634**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.2500e-003	0.0498	0.0750	1.2000e-004		2.3900e-003	2.3900e-003		2.2100e-003	2.2100e-003	0.0000	10.0080	10.0080	3.1700e-003	0.0000	10.0873
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.2500e-003**	**0.0498**	**0.0750**	**1.2000e-004**		**2.3900e-003**	**2.3900e-003**		**2.2100e-003**	**2.2100e-003**	**0.0000**	**10.0080**	**10.0080**	**3.1700e-003**	**0.0000**	**10.0873**

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3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.5000e-004	3.5200e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9559	0.9559	2.0000e-005	2.0000e-005	0.9634
Total	**3.3000e-004**	**2.5000e-004**	**3.5200e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**0.9559**	**0.9559**	**2.0000e-005**	**2.0000e-005**	**0.9634**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2674					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0104	0.0154	3.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	2.1703	2.1703	1.2000e-004	0.0000	2.1733
Total	**0.2689**	**0.0104**	**0.0154**	**3.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**2.1703**	**2.1703**	**1.2000e-004**	**0.0000**	**2.1733**

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3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.7000e-004	2.4300e-003	1.0000e-005	8.4000e-004	0.0000	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.6618	0.6618	2.0000e-005	2.0000e-005	0.6670
Total	**2.3000e-004**	**1.7000e-004**	**2.4300e-003**	**1.0000e-005**	**8.4000e-004**	**0.0000**	**8.4000e-004**	**2.2000e-004**	**0.0000**	**2.3000e-004**	**0.0000**	**0.6618**	**0.6618**	**2.0000e-005**	**2.0000e-005**	**0.6670**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2674					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0104	0.0154	3.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	2.1703	2.1703	1.2000e-004	0.0000	2.1733
Total	**0.2689**	**0.0104**	**0.0154**	**3.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**2.1703**	**2.1703**	**1.2000e-004**	**0.0000**	**2.1733**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.7000e-004	2.4300e-003	1.0000e-005	8.4000e-004	0.0000	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.6618	0.6618	2.0000e-005	2.0000e-005	0.6670
Total	**2.3000e-004**	**1.7000e-004**	**2.4300e-003**	**1.0000e-005**	**8.4000e-004**	**0.0000**	**8.4000e-004**	**2.2000e-004**	**0.0000**	**2.3000e-004**	**0.0000**	**0.6618**	**0.6618**	**2.0000e-005**	**2.0000e-005**	**0.6670**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1768	0.2005	1.8188	3.9400e-003	0.4164	2.9000e-003	0.4193	0.1111	2.6900e-003	0.1138	0.0000	370.3590	370.3590	0.0253	0.0160	375.7463
Unmitigated	0.1768	0.2005	1.8188	3.9400e-003	0.4164	2.9000e-003	0.4193	0.1111	2.6900e-003	0.1138	0.0000	370.3590	370.3590	0.0253	0.0160	375.7463

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	344.03	344.03	344.03	1,108,273	1,108,273
Parking Lot	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	344.03	344.03	344.03	1,108,273	1,108,273

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	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
General Office Building	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Parking Lot	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Strip Mall	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	127.6533	127.6533	0.0108	1.3100e-003	128.3119
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	127.6533	127.6533	0.0108	1.3100e-003	128.3119
NaturalGas Mitigated	3.0800e-003	0.0280	0.0235	1.7000e-004		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003	0.0000	30.4762	30.4762	5.8000e-004	5.6000e-004	30.6573
NaturalGas Unmitigated	3.0800e-003	0.0280	0.0235	1.7000e-004		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003	0.0000	30.4762	30.4762	5.8000e-004	5.6000e-004	30.6573

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	570287	3.0800e-003	0.0280	0.0235	1.7000e-004		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	30.4327	30.4327	5.8000e-004	5.6000e-004	30.6136
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	815	0.0000	4.0000e-005	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0435	0.0435	0.0000	0.0000	0.0438
Total		**3.0800e-003**	**0.0280**	**0.0235**	**1.7000e-004**		**2.1200e-003**	**2.1200e-003**		**2.1200e-003**	**2.1200e-003**	**0.0000**	**30.4762**	**30.4762**	**5.8000e-004**	**5.6000e-004**	**30.6573**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	570287	3.0800e-003	0.0280	0.0235	1.7000e-004		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	30.4327	30.4327	5.8000e-004	5.6000e-004	30.6136
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	815	0.0000	4.0000e-005	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0435	0.0435	0.0000	0.0000	0.0438
Total		**3.0800e-003**	**0.0280**	**0.0235**	**1.7000e-004**		**2.1200e-003**	**2.1200e-003**		**2.1200e-003**	**2.1200e-003**	**0.0000**	**30.4762**	**30.4762**	**5.8000e-004**	**5.6000e-004**	**30.6573**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	691425	122.6211	0.0104	1.2500e-003	123.2537
Parking Lot	21840	3.8732	3.3000e-004	4.0000e-005	3.8932
Strip Mall	6535	1.1590	1.0000e-004	1.0000e-005	1.1649
Total		**127.6533**	**0.0108**	**1.3000e-003**	**128.3119**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	691425	122.6211	0.0104	1.2500e-003	123.2537
Parking Lot	21840	3.8732	3.3000e-004	4.0000e-005	3.8932
Strip Mall	6535	1.1590	1.0000e-004	1.0000e-005	1.1649
Total		**127.6533**	**0.0108**	**1.3000e-003**	**128.3119**

6.0 Area Detail

6.1 Mitigation Measures Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2327	2.0000e-005	2.7000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.2600e-003	5.2600e-003	1.0000e-005	0.0000	5.6000e-003
Unmitigated	0.2327	2.0000e-005	2.7000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.2600e-003	5.2600e-003	1.0000e-005	0.0000	5.6000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0267					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2057					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5000e-004	2.0000e-005	2.7000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.2600e-003	5.2600e-003	1.0000e-005	0.0000	5.6000e-003
Total	**0.2327**	**2.0000e-005**	**2.7000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.2600e-003**	**5.2600e-003**	**1.0000e-005**	**0.0000**	**5.6000e-003**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0267					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2057					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5000e-004	2.0000e-005	2.7000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.2600e-003	5.2600e-003	1.0000e-005	0.0000	5.6000e-003
Total	**0.2327**	**2.0000e-005**	**2.7000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.2600e-003**	**5.2600e-003**	**1.0000e-005**	**0.0000**	**5.6000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	37.8327	0.3245	7.9500e-003	48.3125
Unmitigated	37.8327	0.3245	7.9500e-003	48.3125

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	9.83045 / 6.02512	37.6907	0.3232	7.9200e-003	48.1312
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.0370363 / 0.0226996	0.1420	1.2200e-003	3.0000e-005	0.1813
Total		**37.8327**	**0.3245**	**7.9500e-003**	**48.3125**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	9.83045 / 6.02512	37.6907	0.3232	7.9200e-003	48.1312
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.0370363 / 0.0226996	0.1420	1.2200e-003	3.0000e-005	0.1813
Total		**37.8327**	**0.3245**	**7.9500e-003**	**48.3125**

8.0 Waste Detail

8.1 Mitigation Measures Waste

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	10.5494	0.6235	0.0000	26.1358
Unmitigated	10.5494	0.6235	0.0000	26.1358

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	51.44	10.4419	0.6171	0.0000	25.8693
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.53	0.1076	6.3600e-003	0.0000	0.2665
Total		**10.5495**	**0.6235**	**0.0000**	**26.1358**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	51.44	10.4419	0.6171	0.0000	25.8693
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.53	0.1076	6.3600e-003	0.0000	0.2665
Total		**10.5495**	**0.6235**	**0.0000**	**26.1358**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

11.0 Vegetation

Appendix C:

EMFAC 2017 Output

Calendar Year: 2022
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Ca	Model Year	Speed	Fuel	Population	Trips	Fuel Consumption	Fuel Consumption	Total Fuel Consumption	VMT	Total VMT	Miles Per Gallon	Vehicle Class
South Coast AQMD	2022	HHDT	Aggregate	Aggregate	Gasoline	77.82251	1557.073	1.914672095	1914.672095	1984478.157	7970.981	13381402.09	**6.74**	HHD
South Coast AQMD	2022	HHDT	Aggregate	Aggregate	Diesel	108362	1118617	1982.563485	1982563.485		13373431			
South Coast AQMD	2022	LDA	Aggregate	Aggregate	Gasoline	6542832	30915701	8178.144259	8178144.259	8226568.36	2.52E+08	254602375.4	**30.95**	LDA
South Coast AQMD	2022	LDA	Aggregate	Aggregate	Diesel	58937.5	279973.4	48.42410045	48424.10045		2358230			
South Coast AQMD	2022	LDA	Aggregate	Aggregate	Electricity	127532.6	637025.4	0	0		5177709			
South Coast AQMD	2022	LDT1	Aggregate	Aggregate	Gasoline	736905.6	3399512	1031.447408	1031447.408	1031847.287	27300896	27309932.68	**26.47**	LDT1
South Coast AQMD	2022	LDT1	Aggregate	Aggregate	Diesel	387.1571	1348.408	0.39987912	399.8791198		9037.122			
South Coast AQMD	2022	LDT1	Aggregate	Aggregate	Electricity	5339.042	26794.47	0	0		221507.4			
South Coast AQMD	2022	LDT2	Aggregate	Aggregate	Gasoline	2246303	10535910	3436.155557	3436155.557	3453207.618	84740129	85348125.78	**24.72**	LDT2
South Coast AQMD	2022	LDT2	Aggregate	Aggregate	Diesel	14234.59	70193.22	17.05206088	17052.06088		607996.5			
South Coast AQMD	2022	LDT2	Aggregate	Aggregate	Electricity	22589.96	114302.6	0	0		734756.1			
South Coast AQMD	2022	LHDT1	Aggregate	Aggregate	Gasoline	175903.1	2620694	598.0685493	598068.5493	821513.5103	6298251	11115258.37	**13.53**	LHDT1
South Coast AQMD	2022	LHDT1	Aggregate	Aggregate	Diesel	119380.7	1501659	223.444961	223444.961		4817007			
South Coast AQMD	2022	LHDT2	Aggregate	Aggregate	Gasoline	30009.92	447103.1	113.5150695	113515.0695	209067.0531	1040649	2902289.397	**13.88**	LHDT2
South Coast AQMD	2022	LHDT2	Aggregate	Aggregate	Diesel	47335.63	595422.7	95.55198358	95551.98358		1861640			
South Coast AQMD	2022	MCY	Aggregate	Aggregate	Gasoline	295960.1	591920.2	56.92214589	56922.14589	56922.14589	2072370	2072370.126	**36.41**	MCY
South Coast AQMD	2022	MDV	Aggregate	Aggregate	Gasoline	1579640	7302407	2793.799561	2793799.561	2842944.316	55888916	57233722.8	**20.13**	MDV
South Coast AQMD	2022	MDV	Aggregate	Aggregate	Diesel	33348.92	163526.3	49.14475473	49144.75473		1344806			
South Coast AQMD	2022	MDV	Aggregate	Aggregate	Electricity	11658.48	59625.3	0	0		391944.3			
South Coast AQMD	2022	MH	Aggregate	Aggregate	Gasoline	35097.75	3511.179	64.70410395	64704.10395	76270.38211	333282.4	455641.5746	**5.97**	MH
South Coast AQMD	2022	MH	Aggregate	Aggregate	Diesel	12758.81	1275.881	11.56627815	11566.27815		122359.2			
South Coast AQMD	2022	MHDT	Aggregate	Aggregate	Gasoline	25445.41	509111.8	269.2842176	269284.2176	1009568.488	1367743	9307083.084	**9.22**	MHDT
South Coast AQMD	2022	MHDT	Aggregate	Aggregate	Diesel	123310	1231988	740.28427	740284.27		7939340			
South Coast AQMD	2022	OBUS	Aggregate	Aggregate	Gasoline	5959.443	119236.5	49.67589796	49675.89796	88138.04214	250653.5	576603.5972	**6.54**	OBUS
South Coast AQMD	2022	OBUS	Aggregate	Aggregate	Diesel	4274.499	41607.39	38.46214418	38462.14418		325950.1			
South Coast AQMD	2022	SBUS	Aggregate	Aggregate	Gasoline	2630.829	10523.32	11.7605267	11760.5267	39328.1885	107369.8	316915.9173	**8.06**	SBUS
South Coast AQMD	2022	SBUS	Aggregate	Aggregate	Diesel	6631.313	76524.43	27.5676618	27567.6618		209546.1			
South Coast AQMD	2022	UBUS	Aggregate	Aggregate	Gasoline	952.146	3808.584	18.40085629	18400.85629	18647.65249	89256	90734.08386	**4.87**	UBUS
South Coast AQMD	2022	UBUS	Aggregate	Aggregate	Diesel	14.14142	56.56567	0.246796198	246.7961984		1478.086			
South Coast AQMD	2022	UBUS	Aggregate	Aggregate	Electricity	17.11694	68.46776	0			1343.185			

Source: EMFAC2017 (v1.0.3) Emissions Inventory
Region Type: Air District
Region: South Coast AQMD
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Year	Speed	Fuel	Population	VMT	Trips	Fuel Consumption	Fuel Consumption	Total Fuel Consumption	VMT	Total VMT	Miles Per Gallon	Vehicle Class
South Coas	2023	HHDT	Aggregate	Aggregate	Gasoline	75.10442936	8265.097	1502.689	1.936286145	1936.286145	1913466.474	8265.097	13656273.03	7.14	**HHD**
South Coas	2023	HHDT	Aggregate	Aggregate	Diesel	109818.6753	13648008	1133618	1911.530188	1911530.188		13648008			
South Coas	2023	LDA	Aggregate	Aggregate	Gasoline	6635002.295	2.53E+08	31352477	7971.24403	7971244.03	8020635.698	2.53E+08	255180358.3	31.82	**LDA**
South Coas	2023	LDA	Aggregate	Aggregate	Diesel	62492.97958	2469816	297086.6	49.3916685	49391.6685		2469816			
South Coas	2023	LDA	Aggregate	Aggregate	Electricity	150700.3971	6237106	751566	0	0		6237106			
South Coas	2023	LDT1	Aggregate	Aggregate	Gasoline	758467.6481	27812996	3504563	1023.913006	1023913.006	1024279.466	27812996	27821405.09	27.16	**LDT1**
South Coas	2023	LDT1	Aggregate	Aggregate	Diesel	360.7799144	8408.618	1256.88	0.366459477	366.4594769		8408.618			
South Coas	2023	LDT1	Aggregate	Aggregate	Electricity	7122.93373	303507.5	35798.19	0	0		303507.5			
South Coas	2023	LDT2	Aggregate	Aggregate	Gasoline	2285150.139	85272416	10723315	3338.798312	3338798.312	3356536.438	85272416	85922778.34	25.60	**LDT2**
South Coas	2023	LDT2	Aggregate	Aggregate	Diesel	15594.68309	650362.8	76635.83	17.73812611	17738.12611		650362.8			
South Coas	2023	LDT2	Aggregate	Aggregate	Electricity	28809.63735	917592.8	145405.4	0	0		917592.8			
South Coas	2023	LHDT1	Aggregate	Aggregate	Gasoline	174910.3847	6216643	2605904	583.3851736	583385.1736	811563.1022	6216643	11211395.79	13.81	**LHDT1**
South Coas	2023	LHDT1	Aggregate	Aggregate	Diesel	125545.0822	4994753	1579199	228.1779285	228177.9285		4994753			
South Coas	2023	LHDT2	Aggregate	Aggregate	Gasoline	30102.75324	1034569	448486.2	111.5753864	111575.3864	209423.5025	1034569	2969599.008	14.18	**LHDT2**
South Coas	2023	LHDT2	Aggregate	Aggregate	Diesel	50003.13116	1935030	628976.5	97.84811618	97848.11618		1935030			
South Coas	2023	MCY	Aggregate	Aggregate	Gasoline	305044.5141	2104624	610089	57.849018	57849.018	57849.018	2104624	2104623.657	36.38	**MCY**
South Coas	2023	MDV	Aggregate	Aggregate	Gasoline	1589862.703	55684188	7354860	2693.883526	2693883.526	2744536.341	55684188	57109879.73	20.81	**MDV**
South Coas	2023	MDV	Aggregate	Aggregate	Diesel	36128.1019	1425691	176566.9	50.65281491	50652.81491		1425691			
South Coas	2023	MDV	Aggregate	Aggregate	Electricity	16376.67653	537591.7	83475.95	0	0		537591.7			
South Coas	2023	MH	Aggregate	Aggregate	Gasoline	34679.50542	330042.9	3469.338	63.26295123	63262.95123	74893.26955	330042.9	454344.9436	6.07	**MH**
South Coas	2023	MH	Aggregate	Aggregate	Diesel	13122.69387	124302	1312.269	11.63031832	11630.31832		124302			
South Coas	2023	MHDT	Aggregate	Aggregate	Gasoline	25624.3151	1363694	512691.3	265.2060557	265206.0557	989975.6425	1363694	9484317.768	9.58	**MHDT**
South Coas	2023	MHDT	Aggregate	Aggregate	Diesel	122124.488	8120623	1221858	724.7695868	724769.5868		8120623			
South Coas	2023	OBUS	Aggregate	Aggregate	Gasoline	5955.291639	245774	119153.5	48.07750689	48077.50689	86265.88761	245774	579743.8353	6.72	**OBUS**
South Coas	2023	OBUS	Aggregate	Aggregate	Diesel	4286.940093	333969.8	41558.29	38.18838072	38188.38072		333969.8			
South Coas	2023	SBUS	Aggregate	Aggregate	Gasoline	2783.643068	112189.6	11134.57	12.19474692	12194.74692	39638.85935	112189.6	323043.5203	8.15	**SBUS**
South Coas	2023	SBUS	Aggregate	Aggregate	Diesel	6671.825716	210853.9	76991.94	27.44411242	27444.11242		210853.9			
South Coas	2023	UBUS	Aggregate	Aggregate	Gasoline	957.7686184	89782.63	3831.074	17.62416327	17624.16327	17863.66378	89782.63	91199.2533	5.11	**UBUS**
South Coas	2023	UBUS	Aggregate	Aggregate	Diesel	13.00046095	1416.622	52.00184	0.239500509	239.5005093		1416.622			
South Coas	2023	UBUS	Aggregate	Aggregate	Electricity	16.11693886	1320.163	64.46776	0			1320.163			