



Eilar Associates, Inc.
Acoustical and Environmental Consulting Services

Air Quality/Greenhouse Gas Analysis for Chick-fil-A and Starbucks – Huntington and 210

Prepared for:

Chick-fil-A

Attention: Jennifer Daw
15635 Alton Parkway, # 350
Irvine, California 92618
Phone: 404-305-4834

Prepared by:

Eilar Associates, Inc.
210 South Juniper Street, Suite 100
Escondido, California 92025
Phone: 760-738-5570
info@eilarassociates.com

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AIR QUALITY AND GREENHOUSE GAS ANALYSIS
for the
CHICK-FIL-A AND STARBUCKS MONROVIA PROJECT

Submitted to:

Eilar Associates
210 S. Juniper St., Suite 100
Escondido, CA 92025

Completed by:

BlueScape Environmental
16870 West Bernardo Drive, Suite 400
San Diego, CA 92127



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1.0 INTRODUCTION

This report presents an assessment of potential air quality and greenhouse gas (GHG) impacts associated with the proposed Chick-fil-A and Starbucks Monrovia Project (the "Project"). The Project is planned at a 2-acre site at 820 Huntington Drive in Monrovia, California. The site is currently occupied by a 12,216 square foot Claim Jumper restaurant, which will be demolished and removed. Proposed use of the site is a 4,562 square foot Chick-fil-A fast-food restaurant and a 2,200 square foot Starbucks coffee shop, both with drive-through windows. In addition, approximately 8,600 square feet of the southeast corner of the Project site will be dedicated to a City park known as a "Pocket Park."

Proposed hours of operation and deliveries for the two restaurants are as follows:

- Chick-fil-A:
 - Open to the public between 6:30 am – 10:00 pm, with extended hours of 5 am – 11 pm for employee opening/closing;
 - Deliveries can occur anytime within the hours of operation, but likely set for opening hours of 5:00 am – 6:30 am.
- Starbucks:
 - Open to the public 24 hours/day;
 - Deliveries can occur between 7:00 am – 9:00 am daily; shipments from Starbucks headquarters (HQ) will occur 2 times per week between midnight and 4:00 am.

Air quality and GHG impacts will be due to the demolition of the existing building, construction of the two new buildings, parking lot, and park; and operation of the new restaurant and coffee shop. This report presents an evaluation of the existing conditions at the Project site, the California Environmental Quality Act (CEQA) air quality and GHG impact significance thresholds applicable to the Project, and the potential air quality and GHG impacts associated with construction and operation of the Project.

2.0 EXISTING CONDITIONS

2.1 Current Site Conditions

The Project site, located at 820 Huntington Drive in Monrovia, California, is currently occupied by a 12,216 square foot Claim Jumper restaurant and parking lot. The building will be demolished prior to construction of the Chick-fil-A and Starbucks buildings and Pocket Park. The existing Claim Jumper restaurant is currently a source of operational air emissions, including air emissions primarily from customer and worker mobile source vehicle trips. Figure 2-1 includes a Google Earth map showing the current site land usage including the Claim Jumper.



FIGURE 2-1: EXISTING PROJECT SITE

2.2 Air Quality Regulatory Setting

This section provides information on the air quality regulatory setting of the proposed Project. Information on existing air quality conditions, relevant pollutant standards, and regulatory issues of concern are included in this section.

2.2.1 Climate, Topography and Meteorology

Los Angeles County and the broader Los Angeles Basin are defined by a semi-arid, Mediterranean climate with mild winters and warm summers. The San Gabriel, San Bernardino, and San Jacinto Mountains bound the Basin to the north and east. The mountains trap ambient air and pollutants within the Los Angeles and Inland Empire valleys below.

The City's climate, and that of Southern California in general, is controlled by the strength and position of the subtropical high-pressure cell over the Pacific Ocean. It maintains moderate temperatures and comfortable humidity, and limits precipitation to a few storms during the winter rainy season. Temperatures are normally mild, excepting the summer months, which can bring temperatures well above 100 degrees Fahrenheit (°F). The annual average temperature in the Basin is approximately 62 °F. Near the City of Monrovia, winds are driven by the dominant land/sea breeze circulation system. Regional wind patterns are dominated by daytime onshore sea breezes while at night the wind generally slows and reverses direction traveling towards the sea. The frequency of calm winds (less than 2 miles per hour) is less than 10 percent, meaning there is little stagnation near the City, especially during busy daytime traffic hours; however, the Basin experiences temperature inversions which inhibit the dispersion of pollutants. Inversions may be either ground based or elevated. Ground-based inversions, sometimes referred to as radiation inversions, are most severe during clear, cold, early winter mornings. Under conditions of a ground-based inversion, very little mixing or turbulence occurs, and high concentrations of primary pollutants may occur local to major roadways. Elevated inversions can be generated by a variety of meteorological phenomena. Elevated inversions act as a lid or upper boundary and restrict vertical mixing. Below the elevated inversion, dispersion is not restricted.

City of Monrovia elevations range from approximately 440 feet above mean seal level (AMSL) in the southern portion of the City to approximately 1,240 feet AMSL in the northern portion of the City. Portions of the City's sphere of influence include step hillsides and rugged terrain that can reach 1,800 feet AMSL. The proposed Project site is generally located at an approximate elevation of about 455 feet AMSL.

2.2.2 Regulated Air Pollutants

2.2.2.1 Criteria Pollutants

Air quality is defined by ambient air concentrations of specific pollutants identified by the United States Environmental Protection Agency (EPA) to be of concern with respect to health and welfare of the general public. The EPA is responsible for

enforcing the federal Clean Air Act (CAA) of 1970 and its 1977 and 1990 Amendments. The CAA required the EPA to establish the National Ambient Air Quality Standards (NAAQS), which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. In response, the EPA established both primary and secondary standards for seven pollutants (called "criteria" pollutants). The CAA requires that the NAAQS be reassessed by EPA at least every five years. States with areas that exceed the NAAQS must prepare a state Implementation Plan (SIP) to demonstrate how these areas will attain the standard within mandated time frames.

The U.S. EPA has established NAAQS for six common air pollutants: ozone (O₃), particulate matter (PM), which consists of "inhalable coarse" PM (particles with an aerodynamic diameter between 2.5 and 10 microns in diameter, or PM₁₀) and "fine" PM (particles with an aerodynamic diameter smaller than 2.5 microns, or PM_{2.5}), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead (Pb). The EPA refers to these six common pollutants as "criteria" pollutants because the agency regulates the pollutants on the basis of human health and/or environmentally based criteria. Ozone is formed in the atmosphere from emissions of the precursor compounds nitrogen oxides (NO_x) and volatile organic compounds (VOC), also called reactive organic gases (ROG).

The California Air Resources Board (CARB) has established the California Ambient Air Quality Standards (CAAQS) for the six common air pollutants regulated by the federal Clean Air Act (the CAAQS are generally the same or more stringent than the NAAQS) plus the following additional air pollutants: hydrogen sulfide (H₂S), sulfates (SO_x), vinyl chloride, and visibility reducing particles. The NAAQS and CAAQS are shown in Table 2-1.

**TABLE 2-1
NATIONAL AND STATE AMBIENT AIR QUALITY STANDARDS**

Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
Respirable Particulate Matter (PM10) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		—		
Fine Particulate Matter (PM2.5) ⁹	24 Hour	—	—	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³	15 µg/m ³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—	—	
Nitrogen Dioxide (NO ₂) ¹⁰	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)	Same as Primary Standard	
Sulfur Dioxide (SO ₂) ¹¹	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m ³)	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹¹	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ¹¹	—	
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas) ¹²	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m ³		
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

See footnotes on next page ...

See footnotes on next page ...

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM₁₀, 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 PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For 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 October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM_{2.5} 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 PM₁₀ standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated non-attainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated non-attainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

The Project site is located within the City of Monrovia, which is part of the South Coast Air Basin (the Basin). The Basin includes all of Orange County and portions of Los Angeles, Riverside, and San Bernardino Counties. Air quality within the Basin is under the jurisdiction of the SCAQMD. The SCAQMD is the agency responsible for achieving compliance with the NAAQS and CAAQS, including criteria pollutants and their precursors. To that effect, the SCAQMD and the Southern California Association of Governments (SCAG) adopted the *2016 Air Quality Management Plan* (AQMP) in March 2017 (SCAQMD 2017a). The AQMP addresses SCAQMD's planning and progress for regional maintenance or attainment of the NAAQS and the CAAQS. The AQMP forms the basis for the most recent SIP update, as it contains documentation on emission inventories and trends, the SCAQMD's emission control strategy, and an attainment demonstration to show that the Basin will come into attainment with the NAAQS and CAAQS.

Table 2-2 summarizes specific health effects associated with each of the criteria pollutants.

TABLE 2-2 SUMMARY OF SOURCES AND HEALTH EFFECTS ASSOCIATED WITH CRITERIA AIR POLLUTANTS		
Pollutant	Sources	Effects on Health
Ozone (O ₃)	• Photochemical oxidant (not emitted directly); instead, chemically formed when volatile organic compounds (VOCs) and oxides of nitrogen (NO_x) react in the presence of ultraviolet light; • Many VOCs are released as fugitive sources; and • VOCs and NO_x are combustion by-products.	• Respiratory symptoms • Worsening of lung disease leading to premature death • Damage to lung tissue
PM _{2.5} (particulate matter [PM] less than 2.5 microns in aerodynamic diameter)	• Fugitive dust PM primarily composed of PM₁₀ with a small fraction consisting of PM_{2.5}; • PM from combustion sources primarily composed of PM_{2.5} with a small fraction consisting of particles larger than PM_{2.5} and smaller than PM₁₀.	• Premature death • Hospitalization for worsening of cardiovascular disease • Hospitalization for respiratory disease • Asthma-related emergency room visits • Increased symptoms, increased inhaler usage
PM ₁₀ (particulate matter less than 10 microns in aerodynamic diameter)	See PM _{2.5} .	• Premature death & hospitalization, primarily for worsening of respiratory disease

**TABLE 2-2
SUMMARY OF SOURCES AND HEALTH EFFECTS ASSOCIATED
WITH CRITERIA AIR POLLUTANTS**

Pollutant	Sources	Effects on Health
Nitrogen Oxides (NO _x)	• All combustion sources; especially a by-product of higher temperature combustion.	• Lung irritation • Enhanced allergic responses
Carbon Monoxide (CO)	• All combustion sources; especially a by-product of incomplete combustion.	• Chest pain in patients with heart disease • Headache • Light-headedness • Reduced mental alertness
Sulfur Oxides (SO _x)	• Coal- or oil-burning power plants and industries; • Refineries; and • Diesel-/gasoline-fired engines.	• Worsening of asthma: increased symptoms, increased medication usage, and emergency room visits
Lead (Pb)	• Metal smelters; • Resource recovery; • Leaded fuels (esp. aircraft, racing); and • Deterioration of lead-based paint.	• Impaired mental functioning in children • Learning disabilities in children • Brain and kidney damage
Hydrogen Sulfide (H ₂ S)	• Landfills and sewer gas; • Geothermal power plants; and • Petroleum production and refining.	• At high concentrations: headache & breathing difficulties
Sulfates	• Fully-oxidized, ionic form of sulfur; • See SO_x. • SO_x converted to sulfate compounds in the atmosphere.	• Same as PM_{2.5}; particularly worsening of asthma and other lung diseases
Vinyl Chloride	• Primarily results from microbial breakdown of chlorinated solvents, especially in: ◦ Landfills; ◦ Sewage plants; and ◦ Hazardous waste sites.	• Central nervous system effects, such as dizziness, drowsiness & headaches • Long-term exposure: liver damage and liver cancer

Table 2-3 presents the current criteria pollutant attainment status for the Basin.

TABLE 2-3 SUMMARY OF SOUTH COAST AIR BASIN (SCAB) FEDERAL AND STATE ATTAINMENT STATUS		
Criteria Pollutant	Federal Designation	State Designation
Ozone (8-Hour)	Non-attainment	Non-attainment
Ozone (1-Hour)	Non-Attainment	Non-attainment
Carbon Monoxide	Attainment	Attainment
PM ₁₀	Attainment	Non-attainment
PM _{2.5}	Non-attainment	Non-attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Partial Non-Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Attainment
Visibility	No Federal Standard	Unclassified

Source: SCAQMD 2018

Background Air Quality

The SCAQMD monitors air quality conditions at 38 locations throughout the Basin. The Azusa Monitoring Station at 803 N. Loren Ave. in Azusa, California (Station No. 060, East San Gabriel 1) is the closest air quality monitor to the site. Table 2-4 shows maximum pollutant levels and the number of exceedances above state standards recorded at the Azusa Monitoring Station from 2017 to 2019 (SCAQMD 2020).

**TABLE 2-4
AMBIENT AIR QUALITY MONITORING DATA, AZUSA MONITORING STATION**

Pollutant	Averaging Period	2017		2018		2019	
		Max Conc.	Days above standard	Max Conc.	Days above standard	Max Conc.	Days above standard
Ozone	1-hour	0.152 ppm	38	0.139 ppm	24	0.123 ppm	34
	8-hour	0.114 ppm	62	0.099 ppm	42	0.094 ppm	39
Carbon Monoxide	1-hour	1.8 ppm	0	1.4 ppm	0	1.6 ppm	0
	8-hour	0.9 ppm	0	1.0 ppm	0	1.1 ppm	0
Nitrogen Dioxide	1-hour	0.066 ppm	0	0.071 ppm	0	0.060 ppm	0
	Annual	0.016 ppm	N/A	0.015 ppm	N/A	0.014 ppm	N/A
PM ₁₀	24-hour	83 µg/m ³	6	78 µg/m ³	10	82 µg/m ³	4
	Annual	31.4 µg/m ³	N/A	32.2 µg/m ³	N/A	28.1 µg/m ³	N/A
PM _{2.5}	24-hour	24.9 µg/m ³	0	30.2 µg/m ³	0	28.3 µg/m ³	0
	Annual	10.4 µg/m ³	N/A	10.4 µg/m ³	N/A	9.18 µg/m ³	N/A
Sulfur Dioxide*	1-hour	0.0057 ppm	0	0.0179 ppm	0	0.010 ppm	0

Note:

ppm = parts per million (by volume); **µg/m³** = micrograms per cubic meter; **N/A** = not applicable

* There is no data for SO₂ at the Azusa station. The closest representative station with SO₂ data is the Central LA station (Station No. 87), values from which are reported in this table.

Local SCAQMD Rules

In order to control air pollution in the Basin, the SCAQMD adopts rules that establish permissible air pollutant emissions and govern a variety of businesses, processes, operations, and products, to implement the AQMP and the various federal and state air quality requirements. SCAQMD does not adopt rules for mobile sources; those are established by CARB or the U.S. EPA. In general, the SCAQMD rules that may be applicable to the development of the proposed Project include:

Rule 222 (Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II) requires registration for specific equipment including food ovens with a maximum heat input capacity of 2,000,000 Btu per hour or less, fired exclusively on natural gas, and where process VOC emissions are less than one pound per day, and exempt from a written permit under Rule 219(b)(2). If Chick-fil-A or Starbucks installs natural gas-fired food ovens, this rule will likely apply.

Rule 401 (Visible Emissions) prohibits discharge into the atmosphere from any single source of emission for any contaminant for a period or periods aggregating more than three minutes in any one hour that is as dark or darker in shade than that

designated as No. 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines.

Rule 402 (Nuisance) prohibits discharges of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Rule 402 includes regulation of odors that may become a public nuisance.

Rule 403 (Fugitive Dust) prohibits emissions of fugitive dust from any grading activity, storage pile, or other disturbed surface area if it crosses the project property line or if emissions caused by vehicle movement cause substantial impairment of visibility (defined as exceeding 20 percent capacity in the air). Rule 403 requires the implementation of Best Available Control Measures and includes additional provisions for projects disturbing more than five acres and those disturbing more than fifty acres.

Rule 481 (Spray Coating Operations) imposes equipment and operational restrictions during construction for all spray painting and spray coating operations.

Rule 1108 (Cutback Asphalt) prohibits the sale or use of any cutback asphalt containing more than 0.5 percent by volume organic compounds which evaporate at 260°C (500°F) or lower.

Rule 1113 (Architectural Coatings) establishes maximum concentrations of VOCs in paints and other applications and establishes the thresholds for low-VOC coatings.

Rule 1113 (Control of Emissions from Restaurant Operations) sets the requirements to equip and operate catalytic oxidizer control devices on chain-driven charbroilers. If chain-driven charbroilers are installed and operated by Chick-Fil-A or Starbucks, then this rule will apply.

Rule 1143 (Consumer Paint Thinners and Multi-Purpose Solvents) prohibits the supply, sale, manufacture, blend, package or repackage of any consumer paint thinner or multipurpose solvent for use in the SCAQMD unless consumer paint thinners or other multi-purpose solvents comply with applicable VOC content limits.

Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities) specifies work practice requirements to limit asbestos emissions from building demolitions and renovation activities, including the removal and associated disturbance of asbestos containing materials. The requirements for demolition and renovation activities include asbestos surveying, notification, asbestos containing materials removal procedures and time schedules, asbestos containing materials handling and clean-up procedures, and storage, disposal, and land filling requirements for asbestos containing waste materials. This rule will apply only if asbestos is observed prior to demolition of the existing Claim Jumper.

2.2.2.2 Toxic Air Contaminants

Toxic air contaminants (TACs) are controlled under a different regulatory process than criteria pollutants. Because no safe level of emissions can be established for TACs region-wide, the regulation of TACs is based on the levels of cancer risk and other health risks posed to persons who may be exposed. Joint federal, state and local regulations aimed at lessening public exposure to TACs are constantly revisited and updated.

Under federal law, 188 substances are listed as Hazardous Air Pollutants (HAPs) that are TACs. Major sources of specific HAPs are subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) program. The federal EPA establishes regulatory schemes for specific source categories and requires implementation of Maximum Achievable Control Technologies (MACTs) for major sources of HAPs in each source category.

State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program, and is aimed at HAPs that are a problem in California. The state has formally identified more than 200 substances as TACs and has adopted appropriate control measures for each. Once adopted at the state level, each air district is required to adopt a measure that is equally or more stringent. In addition, the California Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) enacted in 1987 requires certain applicable facilities in the Basin to quantify the emissions of TACs, and in some cases, conduct a health risk assessment (HRA), and to notify the public, while developing risk reduction strategies. In the Basin, SCAQMD Rule 1402 implements the public notification and risk reduction requirements of AB 2588 and requires facilities to reduce risks to acceptable levels within 5 years. In addition, SCAQMD Rule 1401 establishes acceptable risk levels and emission control requirements for new or modified and facilities that may emit TACs.

As an example of TAC emissions from the proposed Project, development projects can generate diesel particulate matter (DPM) emissions from construction vehicles during the construction and operational phases. DPM is mainly composed of particulate matter and gases, which contain potential cancer-causing substances in addition to some noncancer hazards. Emissions from diesel engines currently include over 40 substances that are listed by EPA as HAPs and by CARB as TACs. On August 27, 1998, CARB and the Office of Environmental Health Hazard Assessment (OEHHA) identified DPM as a TAC, based on data linking diesel particulate emissions to increased risks of lung cancer and respiratory disease (CARB 1998).

The SCAQMD recommends preparation of a Health Risk Assessment (HRA) for large commercial or industrial projects to determine the specific health risks posed by long-term emissions of TACs from a project (SCAQMD 2017b). Following California's Office of Environmental Health Hazard Assessment's (OEHHA) guidelines and SCAQMD guidance (SCAQMD 2017b), health risks from TAC emissions are estimated based on "Individual Cancer Risk," which is the likelihood that a person exposed to TACs over

their exposure lifetime will get cancer or suffer some other “non-cancer” effect (measured by what is called as a “hazard index”). Numerous weighting factors (e.g., age sensitivity factors, breathing rates, etc.) are applied during health risk calculations to account for those members of the public who may be more sensitive to pollution than others (e.g., sensitive receptors).

The SCAQMD identifies sensitive receptors as populations more susceptible to the effects of air pollution than the general population (SCAQMD 2017b). Some people are more affected by air pollution than others. Sensitive air quality receptors include specific subsets of the general population that are susceptible to poor air quality and the potential adverse health effects associated with poor air quality. Both CARB and the SCAQMD consider residences, schools, parks and playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes to be sensitive air quality land uses and receptors (SCAQMD 2017b; CARB 2005). The potential sensitive air quality receptors in close proximity to the Project site (i.e., within 1,000 feet) include:

- The residential area beginning about 60 feet to the east of the southern area of the Project site, along Encino Avenue, Alta Street, Bonita Street and Los Robles Avenue; and
- The residential area more than 950 feet to the north of the Project site across the I-210 Freeway.

The existing sensitive air quality receptors located adjacent or in close proximity to the Project area, as well as the existing and proposed residents within the Project area, are exposed to air pollution associated with motor vehicles travelling on the I-210 Freeway, which lies just to the north of the Project area.

According to the SCAQMD’s MATES IV Carcinogenic Risk Map, the existing, background carcinogenic risk on the south side of the I-210 Freeway in the vicinity of the Project is about 1,450 in one million (i.e., there is a probability of 1,450 cases of cancer out of a population of one million) (SCAQMD 2018b). These cancer risks are orders of magnitude higher than the SCAQMD’s significance threshold of 10 cases in one million for cancer risk. These estimates, however, are based upon regional modeling efforts that largely do not account for site specific emission rates and dispersion characteristics that typically result in refined and substantially lower health risk estimates with distance away from the I-210 freeway.

The air quality analysis for the Project evaluates whether the proposed Project would create or exacerbate adverse public health risk conditions at sensitive receptor locations due to criteria pollutant or TACs, as identified in the SCAQMD’s CEQA significance criteria.

2.2.2.3 City of Monrovia Local Air Quality Requirements

The City of Monrovia's existing General Plan does not establish specific goals, policies, or standards related to air quality; however, the City's Monrovia General Plan Proposed Land Use and Circulation Elements EIR (City of Monrovia 2008a) included the following mitigation measures related to air quality:

- **AIR-A:** The City shall require applicants to analyze the air quality impacts of construction for each project.
- **AIR-B:** If project-level analysis demonstrates that NO_x emissions would be significant, the project shall provide a plan, for approval by the City, demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, shall utilize all feasible measures to reduce the emissions to a less than significant level. Acceptable options for reducing emissions may include use of late model low-emission diesel engines, alternative fuels, engine retrofit technology, and/or other options as they become available. The SCAQMD web site provides specific information on mitigation options for off-road and on-road construction equipment.
- **AIR-C:** The following measure shall be incorporated into all project specifications to reduce diesel engine emissions of O₃ precursors including ROG and NO_x, PM₁₀, PM_{2.5}, and diesel PM: Idling Restrictions. Idling of diesel-powered vehicles and equipment shall not be permitted during periods of non-active vehicle use. Diesel-powered engines shall not be allowed to idle for more than 5 consecutive minutes in a 60-minute period when the equipment is not in use, occupied by an operator, or otherwise in motion, except as follows: 1) When equipment is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control; 2) When it is necessary to operate auxiliary systems installed on the equipment, only when such system operation is necessary to accomplish the intended use of the equipment; 3) To bring the equipment to the manufacturer's recommended operating temperature; 4) When the ambient temperature is below 40 degrees F or above 85 degrees F; or 5) When equipment is being repaired.
- **AIR-D:** The City shall require that all new residential fireplaces to be fueled by natural gas. Wood stoves and wood burning fireplaces shall be prohibited.
- **AIR-E:** The City shall require applicants to analyze the potential for creating a local CO hotspot due to traffic congestion that could result from implementation of projects anticipated in the proposed General Plan amendments to the Land Use and Circulation Element.

- **AIR-F:** The City shall require applicants to complete a Health Risk Assessment (HRA) to determine the cancer risk to sensitive receptors for all residential projects located within 500 feet of Interstate 210 (I-210).
- **AIR-G:** The City shall require applicants to assess the potential impacts to children's respiratory health for all residential projects located within 500 feet of I-210.

The City air quality review requirements will be satisfied by the review in this technical study, and mitigation measures adopted during Project. AIR-B will not apply to the Project because NO_x emissions are not considered to be significant. AIR-D, AIR-F, and AIR-G do not apply because the Project will not include installation of wood stoves or construction of residential units.

2.3 Greenhouse Gas Regulatory Setting

This section presents the existing conditions relevant to GHG emissions from the proposed Project site, including the existing site setting, and further discussion on global climate change impacts and GHG pollutants, with discussion on the federal, state and local regulations and standards applicable to GHG emissions.

2.3.1 Defining Global Climate Change

Global climate change (GCC) refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns, precipitation and storms. Global temperatures are moderated by naturally occurring atmospheric gases, including water vapor, carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O), which are known as GHGs. These gases allow solar radiation (sunlight) into the Earth's atmosphere, but prevent radiative heat from escaping, thus warming the Earth's atmosphere. Because these gases trap heat in the atmosphere, similar to a greenhouse, that are often called greenhouse gases. The accumulation of GHGs in the atmosphere regulates the Earth's temperature. Without these natural GHGs, the Earth's temperature would be cooler. GHG emissions from human activities, such as combustion associated with electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere.

GCC may result from natural factors, natural processes, and/or human activities that change the composition of the atmosphere and alter the surface and features of land. The natural factors and processes result in biogenic GHG emissions which do not result from human activity. Although the conceptual existence of GCC is generally accepted, the extent to which global climate change attributable to anthropogenic, or non-biogenic (human), emissions of GHGs (mainly CO₂, CH₄ and N₂O) is currently one of the most important and widely debated scientific, economic and political issues in the United States. There is consensus among scientific experts that GCC is attributable to human impacts on the earth's environment. Historical records indicate that global climate changes have occurred in the past due to natural phenomena (such as during previous ice ages). Some data indicate that the current global conditions differ from past climate changes in rate and magnitude. The State of

California has been at the forefront of developing solutions to address potential anthropogenic impacts to GCC.

The United Nations Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. The IPCC concluded that a stabilization of GHGs at 400 to 450 parts per million (ppm) CO₂ equivalent concentration is required to keep global mean warming below 3.6° Fahrenheit (2° Celsius), which is assumed to be necessary to avoid dangerous climate change.

2.3.2 Greenhouse Gases

California law defines GHGs as any of the following compounds: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF₆) (California Health and Safety Code Section 38505(g)). CO₂, followed by CH₄ and N₂O, are the most common GHGs that result from human activity.

Sources and Global Warming Potentials of GHG

As discussed further below, the emission sources, global warming potential (GWP), and atmospheric lifetime of GHGs are all important variables to be considered in the process of calculating CO₂e for discretionary land use projects that require a climate change analysis.

The California Air Resources Board (CARB) compiled a statewide inventory of anthropogenic GHG emissions and sinks that includes estimates for CO₂, CH₄, N₂O, SF₆, HFCs, and PFCs (CARB 2019a). The current inventory covers the years 2000 to 2017 and is summarized in Table 2-5. Data sources used to calculate this GHG inventory include California and Federal agencies, international organizations, and industry associations. The calculation methodologies are consistent with guidance from the IPCC (IPCC 2014). The inventory is divided into seven broad categories in the inventory. These categories include: Agriculture; Commercial and Residential; Electricity Generation; Industrial; High GWP; Recycling and Waste; and Transportation.

**TABLE 2-5
2017 TOTAL CALIFORNIA GHG EMISSIONS BY CATEGORY**

Category	Total 2017 Emissions (MMTCO₂e)	Percent of Total 2017 Emissions
Agriculture	32.42	7.64%
Commercial and Residential	41.14	9.70%
Electricity Generation	62.39	14.71%
Industrial	89.40	21.08%
High GWP	19.99	4.71%
Recycling and Waste	8.89	2.10%
Transportation	169.86	40.05%
Total	424.1 MMTCO₂e	

When accounting for GHGs, all types of GHG emissions are expressed in terms of CO₂ equivalents (CO₂e) and are typically quantified in metric tons (MT) or millions of metric tons (MMT).

GHGs have varying global warming potential (GWP). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere; it is the “cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas” (USEPA 2020). The reference gas for GWP is CO₂; therefore, CO₂ has a GWP of 1. The other main greenhouse gases that have been attributed to human activity include CH₄, which has a GWP of 25, and N₂O, which has a GWP of 298 (USEPA 2020). Table 2-6 presents the GWP and atmospheric lifetimes of the GHGs that are regulated by the State of California.

**TABLE 2-6
GLOBAL WARMING POTENTIALS AND ATMOSPHERIC LIFETIMES OF GHGS**

GHG	Formula	100-Year Global Warming Potential	Atmospheric Lifetime (Years)
Carbon Dioxide	CO ₂	1	Variable
Methane	CH ₄	25	12
Nitrous Oxide	N ₂ O	298	114
Sulfur Hexafluoride	SF ₆	22,800	3,200
Hydrofluorocarbons	HFCs	124 to 14,800	1 to 270
Perfluorocarbons	PFCs	7,390 to 12,200	2,600 to 50,000
Nitrogen Trifluoride	NF ₃	17,200	740

Human-caused sources of GHGs include combustion of fossil fuels (coal, oil, natural gas, gasoline and wood). Data from ice cores indicate that CO₂ concentrations remained steady prior to the current period for approximately 10,000 years. Concentrations of CO₂ have increased in the atmosphere since the industrial revolution.

CH₄ is the main component of natural gas and also arises naturally from anaerobic decay of organic matter. Human-caused, or non-biogenic, sources of natural gas include landfills, fermentation of manure and cattle farming. Non-biogenic sources of N₂O include combustion of fossil fuels and industrial processes such as nylon production and production of nitric acid. Other GHGs are present in trace amounts in the atmosphere and are generated from various industrial or other uses.

2.3.3 Climate Change Adverse Effects

The Climate Scenarios Report (CCCC 2006a) uses a range of emissions scenarios developed by the IPCC to project a series of potential warming ranges (i.e., temperature increases) that may occur in California during the 21st century. Three warming ranges were identified: Lower warming range (3.0 to 5.5 degrees Fahrenheit (°F)); medium warming range (5.5 to 8.0 °F); and higher warming range (8.0 to 10.5°F). The Climate Scenarios Report then presents an analysis of the future projected climate changes in California under each warming range scenario.

According to the report, substantial temperature increases would result in a variety of impacts to the people, economy, and environment of California. These impacts would result from a projected increase in extreme conditions, with the severity of the impacts depending upon actual future emissions of GHGs and associated warming. These impacts are described below.

Public Health. Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone (O₃) formation are projected to increase by 25 to 35 percent under the lower warming range and 75 to 85 percent under the medium warming range. In addition, if global background O₃ levels increase as is predicted in some scenarios, it may become impossible to meet local air quality standards. An increase in wildfires could also occur, and the corresponding increase in the release of pollutants including fine particulates (PM_{2.5}) could further compromise air quality. The Climate Scenarios Report indicates that large wildfires could become up to 55 percent more frequent if GHG emissions are not significantly reduced (CCCC 2006a).

Potential health effects from global climate change may arise from temperature increases, climate-sensitive diseases, extreme events, and air quality. There may be direct temperature effects through increases in average temperature leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems (e.g., heat rash and heat stroke). In addition, climate sensitive diseases (such as malaria, dengue fever,

yellow fever, and encephalitis) may increase, such as those spread by mosquitoes and other disease-carrying insects.

Potential public health impacts from climate change would be global in nature rather than site-specific. That being said, because the project site is not located in an area that is subject to climate sensitive diseases (such as the tropics), it is unlikely that risks associated with these diseases would increase substantially. It is too speculative to estimate the potential frequency of heat waves at the project site that would be associated with global climate change.

Water Resources. A vast network of reservoirs and aqueducts capture and transport water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada mountain snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages. In addition, if temperatures continue to rise more precipitation would fall as rain instead of snow, further reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. The state's water resources are also at risk from rising sea levels. An influx of seawater would degrade California's estuaries, wetlands, and groundwater aquifers.

Impacts to water resources could affect the project site through decreased availability of water in southern California overall. Decreased availability could lead to higher prices and water rationing. However, due to the scientific and factual uncertainties regarding the effects of climate change at a regional level, it is too speculative to quantify the effect of this impact.

Agriculture. Increased GHG and associated increases in temperature are expected to cause widespread changes to the agricultural industry, reducing the quantity and quality of agricultural products statewide. Significant reductions in available water supply to support agriculture would also impact production. Crop growth and development will change as will the intensity and frequency of pests and diseases.

This potential effect of climate change would not impact the proposed project because the project does not involve agricultural uses.

Ecosystems/Habitats. Continued global warming will likely shift the ranges of existing invasive plants and weeds, thus alternating competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Continued global warming is also likely to increase the populations of and types of pests. Continued global warming would also affect natural ecosystems and biological habitats throughout the state.

Due to the scientific and factual uncertainties regarding the effects of climate change at a regional and site-specific level, particularly as to sensitive biological resources, it is too speculative to assess the effect of this impact on the Project site.

Wildland Fires. Global warming is expected to increase the risk of wildfire and alter the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55 percent, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state.

Sea Level Rising and Coastal Flooding. Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the state's coastal regions. Under the high warming scenario, sea level is anticipated to rise 22 to 35 inches by 2100. A sea level risk of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten levees and inland water systems, and disrupt wetlands and natural habitats.

Because the site is not located in a coastal area, it is unlikely to be affected by rising sea levels.

2.3.4 Existing Site GHG Emissions

As explained in Section 2.1, the proposed Project area consists of a Claim Jumper restaurant and parking lot with light industrial uses that generate emissions, including GHG emissions, which contribute to existing environmental conditions. The existing land uses generate emissions from the following sources specific to GHG emissions:

- **Small "area" sources:** Existing land uses in the Project area generate emission from small area source including landscaping equipment and the use of consumer products such as paints, cleaners and fertilizers that result in the evaporation of chemicals into the atmosphere during product use.
- **Energy use and consumption:** Emissions generated from purchased electricity and natural gas.
- **Mobile Sources:** Existing land uses in the Project area generate emissions from vehicles travelling to and from the plan area.
- **Solid waste disposal:** Emissions generated from the transport and disposal of waste generated by land uses.
- **Water/wastewater:** Emissions from electricity used to supply water to land uses, and treat the resulting wastewater generated.

The Project area's existing GHG emissions are evaluated and presented in Section 5.0, Table 5-2.

2.3.5 Federal, State, and Local Climate Change Regulations

This section includes a discussion of federal, state and local GHG regulations applicable to the proposed Project.

2.3.5.1 National and International Efforts

GHG is being addressed at both the international and federal levels. In 1988, the United Nations and the World Meteorological Organization established the IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis for human-induced climate change, its potential impacts, and options for adaptation and mitigation. The most recent reports of the IPCC have emphasized the scientific consensus that real and measurable changes to the climate are occurring, that they are caused by human activity, and that significant adverse impacts on the environment, the economy, and human health and welfare are unavoidable.

On March 21, 1994, the United States joined a number of countries around the world in signing the United Nations Framework Convention on Climate Change (UNFCCC). Under the Convention, governments agreed to gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG 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 GCC. Recently, the United States Supreme Court declared in the 2007 court case of *Massachusetts et al. vs. the Environmental Protection Agency et al.*, 549 C.S. 497 that the EPA does have the ability to regulate GHG emissions. In addition to the national and international efforts described above, many local jurisdictions have adopted climate change policies and programs.

Massachusetts v. EPA Endangerment Finding. On April 2, 2007, in *Massachusetts v. EPA*, the Supreme Court directed the EPA Administrator to determine if GHG emissions from new motor vehicles threaten public health and welfare. On December 7, 2009, the EPA Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases - CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆ - in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

The endangerment findings do not themselves impose any requirements on industry or other entities. However, this action was a prerequisite to finalizing the EPA's greenhouse gas emission standards for light-duty vehicles, which were jointly

proposed by EPA and the Department of Transportation's National Highway Safety Administration on September 15, 2009.

Mandatory GHG Reporting Rule. On March 10, 2009, in response to the FY2008 Consolidated Appropriations Act (H.R. 2764; Public Law 110-161), the EPA proposed a rule that requires mandatory reporting of GHG from large sources in the United States. On September 22, 2009, the Final Mandatory Reporting of Greenhouse Gases Rule was signed and was published in the Federal Register on October 30, 2009. The rule became effective on December 29, 2009. The rule requires submittal to EPA of accurate and comprehensive emissions data to inform future policy decisions.

EPA requires facilities that emit 25,000 metric tons or more per year of GHG emissions to submit annual reports. The gases covered by the proposed rule are CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, and other fluorinated gases including nitrogen trifluoride (NF₃) and hydrofluorinated ethers (HFE).

Federal Vehicle Standards. In 2007 the Bush Administration issued Executive Order 13432 entitled "Strengthening Federal Environmental, Energy and Transportation Management." The order directed the EPA, the Department of Transportation (DOT), and the Department of Energy (DOE) to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the National Highway Traffic Safety Administration (NHTSA) issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011; and, in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012– 2016.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO₂ emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23 percent over the 2010 baselines.

As discussed above, the Corporate Average Fuel Economy (CAFE) standards are standards that have been adopted by the U.S. Department of Transportation and the EPA. These standards are therefore federal standards and apply to vehicles throughout the United States.

The final phase two program promotes a new generation of cleaner, more fuel-efficient trucks by encouraging the development and deployment of new and advanced cost-effective technologies. New vehicle and engine performance standards would cover model years 2018-2027. The federal law is expected to lower CO₂ emissions by approximately 1.1 billion metric tons over the lifetime of vehicles sold under the program.

2.3.5.2 State Climate Change Regulations

State Climate Change Targets

Executive Order S-3-05. Executive Order S-3-05, signed by Governor Schwarzenegger on June 1, 2005, calls for a reduction in GHG emissions to 1990 levels by 2020 and for an 80 percent reduction in GHG emissions by 2050. Executive Order S-3-05 also calls for the California EPA (CalEPA) to prepare biennial science reports on the potential impact of continued GCC on certain sectors of the California economy. The first of these reports, "Our Changing Climate: Assessing Risks to California," and its supporting document "Scenarios of Climate Change in California: An Overview" were published by the California Climate Change Center in 2006 (CCCC 2006a and CCCC 2006b).

Assembly Bill 32, the California Global Warming Solutions Act of 2006. In September 2006, Governor Schwarzenegger signed California AB 32, the global warming bill, into law. AB 32 directed the CARB to do the following:

- Make publicly available a list of discrete early action GHG emission reduction measures that can be implemented prior to the adoption of the statewide GHG limit and the measures required to achieve compliance with the statewide limit.
- Make publicly available a GHG inventory for the year 1990 and determine target levels for 2020.
- On or before January 1, 2010, adopt regulations to implement the early action GHG emission reduction measures.
- On or before January 1, 2011, adopt quantifiable, verifiable, and enforceable emission reduction measures by regulation that will achieve the statewide GHG emissions limit by 2020, to become operative on January 1, 2012, at the latest. The emission reduction measures may include direct emission reduction measures, alternative compliance mechanisms, and potential monetary and non-monetary incentives that reduce GHG emissions from any sources or categories of sources that CARB finds necessary to achieve the statewide GHG emissions limit.
- Monitor compliance with and enforce any emission reduction measure adopted pursuant to AB 32.

AB 32 required that, by January 1, 2008, 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. CARB adopted its Scoping Plan in December 2008, which provided estimates of the 1990 GHG emissions level and identified sectors for the reduction of GHG emissions (CARB 2008). CARB estimated that the 1990 GHG emissions level was 427 MMT net CO₂e, and the projection for "business as usual" emissions for 2020 was 596 MMT net CO₂e. CARB therefore estimated that a reduction of 169 MMT net CO₂e emissions below "business as usual"

levels would be required by 2020 to meet the 1990 level. This amounted to roughly a 28.35 percent reduction from projected business-as-usual levels in 2020. In 2011, CARB developed a supplement to the AB 32 Scoping Plan (CARB 2011a). The Supplement updated the emissions inventory based on current projections for “business as usual” emissions for 2020 to 506.8 metric tons of CO₂e. The updated projection included adopted measures (Pavley fuel efficiency standards, 20 percent Renewable Portfolio Standard requirement), and estimated that an additional 16 percent reduction below the estimated “business as usual” levels would be necessary to return to 1990 levels by 2020.

In 2014, CARB published its First Update to the Climate Change Scoping Plan (CARB 2014). The First Update indicated that the state is on target to meet the goal of reducing GHG emissions to 1990 level by 2020. The First Update tracks progress in achieving the goals of AB 32 and lays out a new set of actions that will move the state further along the path to achieving the 2050 goal of reducing emissions to 80 percent below 1990 levels. While the Update discusses setting a mid-term target, the plan does not yet set a quantifiable target toward meeting the 2050 goal.

A second update was published for comment in January 2017 and finalized in November 2017 (CARB 2017). This Second Update establishes a proposed framework of action for California to meet the most aggressive climate change target in North America: a 40 percent reduction in greenhouse gases by 2030 compared to 1990 levels (see SB 32 below). This goal builds on California’s success in establishing effective policies that are reducing emission of GHG while delivering substantial economic and environmental benefits. When discussing project-level GHG emissions reduction actions and thresholds, the second update document state “achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development.” CARB also recognized that achievement of such an objecting “may not be feasible or appropriate for every project” and “the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA.”

Senate Bill 97. Senate Bill 97, enacted in 2007, amends the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. It directs OPR to develop draft CEQA guidelines “for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions” by July 1, 2009 and directs the Resources Agency to certify and adopt the CEQA guidelines by January 1, 2010.

The Governor’s Office of Planning and Research (OPR) published a technical advisory on CEQA and Climate Change on June 19, 2008. The guidance did not include a suggested threshold. The OPR does recommend that CEQA analyses include the following components:

- Identify greenhouse gas emissions.

- Determine Significance.
- Mitigate Impacts.

In April 2009, the OPR published its proposed revisions to CEQA to address GHG emissions. The amendments to CEQA indicate the following:

- 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.

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.

On July 3, 2009, the California Natural Resources Agency published proposed amendment of regulations based on OPR’s proposed revisions to CEQA to address GHG emissions. On that date, the Natural Resources Agency commenced the Administrative Procedure Act rulemaking process for certifying and adopting these amendments pursuant to Public Resources Code Section 21083.05. Having reviewed and considered all comments received, on December 30, 2009, the Natural Resources Agency adopted the proposed amendments to the state CEQA guidelines in the California Code of Regulations. The amendments were formally adopted on March 18, 2010.

On December 28th, 2018, The California Office of Administrative Law completed the rulemaking process and approved amendments and additions to the CEQA Guidelines

that are contained in Title 14 of the CCR, beginning with Section 15000. With regard to GHG emissions, Section 15064.1 was updated to clarify that agencies shall make a significance determination regarding a projects GHG emissions. Specific guidance has yet to be provided.

Executive Order B-30-15. Executive Order B-30-15 was enacted by the Governor on April 29, 2015. Executive Order B-30-15 establishes an interim GHG emission reduction goal for the state of California to reduce GHG emissions to 40 percent below 1990 levels by the year 2030. This Executive Order directs all state agencies with jurisdiction over GHG-emitting sources to implement measures designed to achieve the new interim 2030 goal, as well as the pre-existing, long-term 2050 goal identified in Executive Order S-3-05 to reduce GHG emissions to 80 percent below 1990 levels by the year 2050. The Executive Order directs CARB to update its Scoping Plan to address the 2030 goal. It is anticipated that CARB will develop statewide inventory projection data for 2030 and commence efforts to identify reduction strategies capable of securing emission reductions that allow for achievement of the new interim goal for 2030.

Senate Bill 32 and Assembly Bill 197. Senate Bill 32 (SB 32) was enacted by the California Legislature on September 8, 2016 to require CARB to approve a statewide GHG emissions limit to reduce GHG emissions to 40% below 1990 levels by 2030. The bill codified the target identified in Executive Order B-30-15 and authorizes CARB to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions and 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 companion bill AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide oversight of the implementation of the state's climate policies. AB 197 requires CARB to make emissions data for GHGs, criteria pollutants, and TACs from reporting facilities available on its website at least annually and maintain the updating of the data. Also, AB 197 requires CARB to identify specific information for GHG emissions reduction measures when updating the Climate Change Scoping Plan.

2.3.5.3 Renewable Energy and Energy Procurement

Executive Order S-21-09. Executive Order S-21-09 was enacted by the Governor on September 15, 2009. Executive Order S-21-09 requires that CARB, under its AB 32 authority, adopt a regulation by July 31, 2010 that sets a 33 percent renewable energy target as established in Executive Order S-14-08. Under Executive Order S-21-09, CARB will work with the Public Utilities Commission (PUC) and California Energy Commission (CEC) to encourage the creation and use of renewable energy sources and will regulate all California utilities. CARB will also consult with the Independent System Operator (ISO) and other load balancing authorities on the impacts on reliability, renewable integration requirements, and interactions with wholesale power markets in carrying out the provisions of the Executive Order. The

order requires CARB to establish highest priority for those resources that provide the greatest environmental benefits with the least environmental costs and impacts on public health.

SB 100 – The 100 Percent Clean Energy Act of 2018. SB 100 was passed in late 2018 and calls for the 100 percent of total retail sales of electricity in California to originate from eligible renewable energy resources and zero-carbon resources by December 31, 2045. The intention was to extend and expand policies of the California Renewables Portfolio Standard Program (Article 16 (commencing with Section 399.11) of Chapter 2.3 of Part 1 of Division 1 of the Public Utilities Code), and to codify the policies established pursuant to Section 454.53 of the Public Utilities Code, and that both be included in long-term planning. A benefit seen by the legislator of this Act includes meeting the state's climate change goals by reducing emissions of GHGs associated with electrical generation.

Executive Order B-55-18 This order signed by the Governor on September 10, 2018, calls for a new statewide goal to achieve carbon neutrality as soon as possible, and no later than 2045, and to maintain net negative emissions thereafter. This goal is in addition to the existing statewide targets of reducing GHG emissions.

2.3.5.4 Building Energy

California Code of Regulations Title 24. Although not originally intended to reduce GHG emissions, California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings 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. The current Title 24 standards are the 2019 Building Energy Efficiency Standards, effective January 1, 2020 (CEC 2019). The 2019 and previous standards require higher efficiency windows, insulation, lighting, ventilation systems and other features that further reduce energy consumption in commercial and industrial buildings. Therefore, increased energy efficiency results in decreased GHG emissions. The 2022 Building Energy Efficiency Standards, that will become effective January 1, 2023 and will apply to the Project, are currently under development.

2.3.5.5 Mobile Sources

State Standards Addressing Vehicular Emissions. California Assembly Bill 1493 (Pavley) enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Regulations adopted by CARB would apply to 2009 and later model year vehicles. CARB estimated that the regulation would reduce climate change emissions from light duty passenger vehicle fleet by an estimated 18% in 2020 and by 27% in 2030 (AEP 2007). Once implemented, emissions from new light-duty vehicles are expected to be reduced in San Diego County by 21 percent by 2020. CARB has adopted amendments to the "Pavley" regulations that reduce GHG emissions in new passenger vehicles from 2009 through 2016. The amendments, approved by the Board on September 24, 2009, are

part of California's commitment toward a nation-wide program to reduce new passenger vehicle GHGs from 2012 through 2016. CARB's September 2009 amendments cemented California's enforcement of the Pavley rule starting in 2009, while providing vehicle manufacturers with new compliance flexibility.

Implementation of the Pavley II standards commenced in 2017 and cover vehicles manufactured from 2017 through 2025. Based on information from the CARB (CARB 2011b), the Pavley II program (now referred to as the "Advanced Clean Cars" program) will reduce GHG emissions from the fleet by 3% by 2020, and by 12% by 2025, with continuing reductions in emissions of 27% by 2035 and 33% by 2050.

Executive Order S-01-07. Executive Order S-01-07 was enacted by the Governor on January 18, 2007. Essentially, the order mandates the following: 1) that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020; and 2) that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California. It is assumed that the effects of the LCFS would be a 10% reduction in GHG emissions from fuel use by 2020. On April 23, 2009, CARB adopted regulations to implement the LCFS.

Senate Bill 375. Senate Bill 375 requires that regions within the state which have a metropolitan planning organization must adopt a sustainable communities strategy as part of their regional transportation plans. The strategy must be designed to achieve certain goals for the reduction of GHG emissions. The bill finds that GHG from autos and light trucks can be substantially reduced by new vehicle technology, but even so "it will be necessary to achieve significant additional greenhouse gas reductions from changed land use patterns and improved transportation. Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 provides that new CEQA provisions be enacted to "encourage developers to submit applications and local governments to make land use decisions that will help the state achieve its goals under AB 32," and that "current planning models and analytical techniques used for making transportation infrastructure decisions and for air quality planning should be able to assess the effects of policy choices, such as residential development patterns, expanded transit service and accessibility, the walkability of communities, and the use of economic incentives and disincentives."

The Sustainable Communities and Climate Protection Act of 2008 (SB 375) coordinates land use planning, regional transportation plans, and funding priorities to reduce GHG emissions from passenger vehicles through better-integrated regional transportation, land use, and housing planning that provides easier access to jobs, services, public transit, and active transportation options. SB 375 specifically requires the Metropolitan Planning Organization (MPO) relevant to the Project area (here, the Southern California Association of Governments [SCAG]) to include a Sustainable Communities Strategy in its Regional Transportation Plan that will achieve GHG emission reduction targets set by the CARB by reducing vehicle miles traveled from light-duty vehicles through the development of more compact, complete, and efficient communities.

California Air Resources Board Phase 2 – GHG Standards. California Air Resources Board (CARB) staff worked jointly with the U.S. Environmental Protection Agency (U.S. EPA) and the National Highway Traffic Safety Administration (NHTSA) on the next phase of federal greenhouse gas (GHG) emission standards for medium- and heavy-duty vehicles. These federal Phase 2 standards were built on the improvements in engine and vehicle efficiency required by the Phase 1 emission standards and represent a significant opportunity to achieve further GHG reductions for 2018 and later model year heavy-duty vehicles, including trailers. In the California Phase 2 standards, California is aligning with the federal Phase 2 standards in structure, timing, and stringency, but with some minor California differences.

2.3.5.6 Solid Waste

AB 75. AB 75 was passed in 1999 and mandates state agencies to develop and implement integrated waste management plans to reduce GHG emissions related to solid waste disposal and diversion (recycling). Since 2004, the bill required diversion of at least 50 percent of the solid waste from landfills and submission to the California Integrated Waste management Board of an annual report describing achieved diversion rates.

SB 1016. In 2007, AB 1016 changed the diversion reporting from a percentage calculation to a target of daily pounds per capita disposal based on each jurisdiction's average waste generation from 2003 through 2006. A comparison between the reported annual per capita disposal rate to the 50 percent per capita disposal target will be useful for indicating progress.

AB 939 and AB 341. AB 341 increased previous California recycling requirements (AB 939) from 50% diversion to 75% diversion of solid waste from landfills by January 2020. Most businesses and multifamily residential dwelling of five units or more must arrange for recycling services.

Each jurisdiction is required to implement a commercial solid waste recycling program that consists of education, outreach and monitoring of businesses.

AB 1826 Chesbro Mandatory Organics Recycling. This law, enacted in 2014, requires businesses to recycle their organic wastes. Organic wastes include, primarily greenwaste and foodwaste. This amount of wastes to be recycled will increase over time. If CalRecycle determines that the statewide disposal of organic waste in 2020 has not been reduced by 50% of the level of disposal during 2014, the organic recycling requirements on businesses will expand to cover businesses that generate 2 cubic yards or more of commercial solid waste per week. Additionally, certain exemptions may no longer be available if this target is not met.

SB 1383. This bill was signed into law in September 2016. It establishes methane emissions reduction targets in a statewide effort to reduce emissions of short-lived climate pollutants (SLCPs). SB 1383 established a target to achieve a 50 percent reduction in the level of statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. In early 2019, CalRecycle began the rule

making process for the Proposed Organic Waste Reduction Regulations to implement SB 1383.

AB 1933. Approved in September 2018, this bill designates that additional moneys from the Greenhouse Gas Reduction Fund may be appropriated to finance programs that reduce emissions of GHGs by promoting the in-state development of infrastructure, food waste prevention programs, or other projects to reduce organic waste or to process organic and other recyclable materials into new value-added products. The bill additionally specifies the eligibility of infrastructure projects to include the expansion of facilities for the processing of recyclable materials and projects that improve the quality of recycled materials.

AB 1981. Approved in September 2018, his bill revises and recasts existing law regarding the developing and implementing of policies to aid in the diverting of organic wastes from landfills by promoting the composting of specified organic wastes and by promoting the appropriate use of compost through the state. Specifically, it calls for the California EPA to work with the Department of Forestry and Fire Protection and Forest Management Task Force to achieve the goal of reducing at least 5 million metric tons of greenhouse gas emissions per year through the development and application of compost on working lands. This provision will be in place until January 1, 2026.

2.3.5.7 California Climate Adaptation Strategy

In 2009, California adopted a statewide Climate Adaptation Strategy (CAS) that summarizes climate change impacts and recommends adaptation strategies across seven sectors: Public Health, Biodiversity and Habitat, Oceans and Coastal Resources, Water, Agriculture, Forestry, and Transportation and Energy (CNRA 2009). The 2009 CAS was the first of its kind in the usage of downscaled climate models to more accurately assess statewide climate impacts as a basis for providing guidance for establishing actions that prepare, prevent, and respond to the effects of climate change.

The California Natural Resources Agency prepared its California Climate Adaptation Strategy (CNRA 2009) to summarize the best-known science on climate change impacts in California, with the goal of assessing vulnerability to climate change impacts. According to CARB, some of the potential California-specific impacts of global warming may include loss in snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. To protect the state's public health and safety, resources, and economy, the California Natural Resources Agency—in coordination with other state agencies—has updated the *2009 California Climate Adaptation Strategy* that is titled, *Safeguarding California Plan: 2018 Update – California's Climate Adaptation Strategy* (CNRA 2018). The plan includes 33 examples of adaptation projects and pasty strategies dating back to 2009. Further, the plan provides policy guidance for state decision makers relative to climate risks in nine sectors: agriculture; biodiversity and habitat; emergency management; energy; forestry; ocean and coastal ecosystems and resources; public

health; transportation; and water. It also identifies policies for reducing GHG emissions and accelerating the transition to a clean-energy economy through reductions in emissions, readiness, and continued research.

The California Climate Adaptation Strategy takes into account the long-term, complex, and uncertain nature of climate change and establishes a proactive foundation for an ongoing adaptation process.

2.3.5.8 Local Regulations and Standards

City of Monrovia General Plan: The City of Monrovia currently does not have a Climate Action Plan. The county has adopted its General Plan and updates (City of Monrovia 2008b), which provides smart growth and land use planning principles designed to reduce vehicle miles traveled (VMT) and result in a reduction in GHG emissions. Climate change and GHG reduction policies are addressed in plans and programs in multiple elements of the General Plan.

City of Monrovia Energy Action Plan: The City of Monrovia has an *Energy Action Plan* (City of Monrovia 2008c) that seeks to decrease energy use and dependence. The plan suggests the need for citizen involvement and focuses heavily on actionable items related to managing City facilities and vehicles. Additionally, the City requires consistency with energy saving strategies (such as Title 24 which requires energy efficient practices).

SCAQMD Air Quality Management Plan: SCAQMD has worked closely with CARB and EPA in creating the AQMP. In addition to the primary focus of regional attainment of the NAAQS and CAAQS, the AQMP also details the strategies employed in the Basin to address climate change and support the state goals to meet the GHG emissions reduction targets of AB32 and SB32, while planning for responsible growth.

3.0 AIR QUALITY AND GREENHOUSE GAS IMPACT ANALYSIS SIGNIFICANCE THRESHOLDS

In accordance with Appendix G, Sections III and VIII of the State of California Environmental Quality Act (CEQA) Guidelines (OPR 2020), the proposed Project could result in potentially significant impacts related to air quality and greenhouse gases (GHG) if:

III. Air Quality

- (a) The Project conflicts with or obstructs implementation of the applicable air quality plan;
- (b) The Project results 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;

- (c) The Project exposes sensitive receptors to substantial pollutant concentrations; or
- (d) The Project results in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

VIII. Greenhouse Gas Emissions

- (a) The Project generates greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- (b) The Project conflicts with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

For the purposes of addressing Air Quality Criteria “(A)” and GHG Emissions Criteria “(A)”, SCAQMD has developed methodologies for quantifying project impacts to determine whether or not the project may have a significant impact, as discussed in the following sections on regional or local air quality.

3.1 Air Quality Significance Thresholds

3.1.1 Regional Air Quality Impacts from Criteria Pollutants

According to the SCAQMD *CEQA Air Quality Analysis Handbook* and supplemental information provided at SCAQMD’s website (SCAQMD 1993), there are two main indicators of a project’s consistency with the applicable AQMP: (1) whether the project would increase 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 2016 AQMP; and (2) whether the project would exceed the 2016 AQMP’s assumptions for 2030 or yearly increments based on the year of project buildout and phasing.

To evaluate whether the proposed Project’s emissions may conflict with or obstruct implementation of the applicable air quality plan (Air Quality Criteria A), or result in a cumulatively considerable net increase in a non-attainment pollutant (Air Quality Criteria B), this analysis relies primarily on the SCAQMD regional significance thresholds for construction and operational emissions, shown in Table 3-1.

TABLE 3-1 SCAQMD REGIONAL SIGNIFICANT EMISSIONS THRESHOLDS		
Pollutant	Construction Emissions (lbs/day)	Operational Emissions (lbs/day)
Volatile Organic Compounds or Reactive Organic Compounds (VOC or ROG)	75	55
Nitrogen Oxides (NO _x)	100	55
Carbon Monoxide (CO)	550	550
Sulfur Oxides (SO _x)	150	150
Respirable Particulate Matter (PM ₁₀)	150	150
Fine Particulate Matter (PM _{2.5})	55	55

Note:

lbs/day = pounds per day

Source: SCAQMD Air Quality Significance Thresholds, April 2019

www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook

For the proposed Project to be consistent with the AQMP, the pollutants emitted from the Project should not exceed the SCAQMD daily thresholds or cause a significant impact on air quality. Additionally, if feasible mitigation measures are implemented and are shown to reduce the impact level from significant to less than significant, a project may be deemed consistent with the AQMP. A project may be considered significant under CEQA, on a regional basis, if it exceeds SCAQMD thresholds for VOC, NO_x, CO, SO_x, PM₁₀, or PM_{2.5}.

This technical report also reviews consistency of the Project development with specific requirements in the applicable air quality rules and standards. If the Project will be developed consistent with SCAQMD rules and regulations, and meet requirements of the City General Plan, including mitigation requirements, then the Project would not be considered significant under CEQA.

3.1.2 Localized Impacts on Sensitive Receptors

This section discusses the CEQA air quality significance thresholds related to sensitive receptors (Air Quality Criteria C), including localized impacts from Project criteria pollutant emissions, CO hotspots, and impacts from TAC emissions.

Local Significance Thresholds for Criteria Pollutants

In addition to the regional daily significance thresholds for air pollutants, SCAQMD has also developed Localized Significance Thresholds (LSTs) that represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards, which could result in significant adverse localized air quality effects. The LST methodology takes into account a number of factors, including 1) existing ambient air quality in each Source Receptor Area (SRA); 2) how many acres the project would disturb in a day; and 3) how far project construction and operational activities would take place from the nearest sensitive receptor. LSTs are only applicable to on-site emissions of NO_x, CO, PM₁₀, and PM_{2.5}. SCAQMD's LST methodology provides screening tables for one through five-acre project scenarios for each SRA and sensitive receptor proximity ranging from 25 m to 500 m away from the project site (SCAQMD 2003a). LSTs are the allowable emissions in pounds per day (lbs/day) that will not result in significant localized air quality impacts on the nearest sensitive receptor.

The Project is on an approximately 2-acre parcel and is located in Source Receptor Area 9 (East San Gabriel Valley). The nearest sensitive receptor, a resident, is located approximately 20 m east of the southern portion of the Project site parking area. Per SCAQMD guidance, for receptor distances less than 25 m, a receptor distance of 25 m is used to determine thresholds for localized impacts. The SCAQMD localized construction and operational emission thresholds for the Project are summarized in Table 3-2.

TABLE 3-2 SCAQMD LOCALIZED SIGNIFICANT EMISSIONS THRESHOLDS		
Pollutant	Construction Emissions (lbs/day)	Operational Emissions (lbs/day)
Nitrogen Oxides (NO _x)	128	128
Carbon Monoxide (CO)	953	953
Respirable Particulate Matter (PM ₁₀)	7	2
Fine Particulate Matter (PM _{2.5})	5	2

Source: SCAQMD Localized Significance Thresholds, October 2009

www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook for 2-acre project site in Source Receptor Area 9 (East San Gabriel Valley) at receptor distance of 25 m.

Carbon Monoxide Hotspots

Historically, to determine whether a project poses the potential for a CO hotspot, the quantitative CO screening procedures provided in the *Transportation Project-Level Carbon Monoxide Protocol* (the Protocol) were used (UCD 1997). The Protocol

determines whether a project may worsen air quality by increasing the percentage of vehicles in cold start modes by two percent or more; significantly increasing traffic volumes by five percent or more; or worsening traffic flow at signalized intersections (by increasing average delay at intersections operating at level of service (LOS) E or for causing an intersection that would operate at LOS D or better without the project, to operate at LOS E or F). With new vehicles and improvements in fuels resulting in fewer emissions, the retirement of older polluting vehicles, and new controls and programs, CO concentrations have declined dramatically in California. As a result of emissions controls on new vehicles, the number of vehicles that can idle, and the length of time that vehicles can idle before emissions would trigger a CO impact, has increased. Therefore, the use of LOS as an indicator is no longer applicable for determining CO impacts.

The Bay Area Air Quality Management District (BAAQMD) developed a screening-level analysis for CO hotspots in 2010 which finds that projects that are consistent with the applicable congestion management program, and that do not cause traffic volumes at affected intersections to increase to more than 44,000 vehicles per hour, would not result in a CO hotspot that could exceed state or federal air quality standards (BAAQMD 2017). CO modeling was conducted for the SCAQMD's 2003 AQMP at four busy intersections during morning and evening peak hour periods as well. The busiest intersection studied in this analysis, Wilshire Boulevard and Veteran Avenue, had 8,062 vehicles per hour during morning peak hours, 7,719 vehicles per hour during evening peak hours, and approximately 100,000 vehicles per day. The 2003 AQMP estimated that the 1-hour CO concentration for this intersection was 4.6 ppm, which is less than a fourth of the 1-hour CAAQS CO standard (20 ppm) (SCAQMD 2003b). The BAAQMD screening threshold is generally consistent with the results of the CO modeling conducted for the SCAQMD's 2003 AQMP.

Therefore, for purposes of this Report, the Project would pose the potential for a CO hotspot if it would exceed the BAAQMD's screening traffic level for peak hour intersection traffic volumes (44,000 vehicles per hour) (thereby having the potential to result in CO concentrations that exceed 1-hour state [20 ppm], 1-hour federal [35 ppm], and/or state and federal 8-hour [9 ppm] ambient air quality standards for CO).

Toxic Air Contaminant Thresholds

Project impacts may include emissions of pollutants identified by the federal and state government and SCAQMD as toxic air contaminants (TACs) of Hazardous Air Pollutants (HAPs). The SCAQMD sets significance thresholds of Maximum Incremental Cancer Risk ≥ 10 in 1 million, Cancer Burden > 0.5 excess cancer cases, and Chronic or Acute Hazard Index ≥ 1.0 .

3.1.3 Other Emissions Including Odors

Other emissions that may affect a substantial number of persons including odors (Air Criteria D) is addressed in this technical study. Section 4.0 includes a discussion of

potential odors from restaurant cooking operations, and the control of those odors. SCAQMD Rule 402 addresses emissions and odors that may cause a public nuisance.

3.2 Greenhouse Gas Significance Threshold

The CEQA statutes and Guidelines do not currently prescribe specific quantitative thresholds of significance to address AB32 and SB32, or a particular methodology for conducting an impact analysis related to GHG effects on global climate. Rather, as with most environmental topics, significance criteria are left to the judgement and discretion of the Lead Agency.

Currently, there is no statewide GHG emissions threshold that has been used to determine the potential GHG emissions impacts of a project. A threshold methodology and thresholds are still being developed and revised by lead agencies and air districts in the state. The City of Monrovia has not adopted GHG significance thresholds or developed a climate action plan to date. Therefore, this environmental issue remains unsettled and must be evaluated on a case-by-case basis until the City of Monrovia or SCAQMD adopts significance thresholds and a GHG impact methodology. In the absence of a climate action plan, SCAQMD GHG significance thresholds, when adopted, would apply to future development in the City.

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD convened a GHG CEQA Significance Threshold Working Group (Working Group) (SCAQMD 2008). This Working Group proposed a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency. In the absence of any further guidance from SCAQMD since this proposal in 2008, these draft interim proposed GHG emission thresholds are used in this analysis. The applicable tier for this Project is Tier 3; if GHG emissions are less than 3,000 metric tons of carbon dioxide equivalent per year (MT CO₂e/yr) project level and cumulative GHG emissions are less than significant. Individual GHGs have varying global warming potentials and atmospheric lifetimes. Because it is not possible to tie specific GHG emissions to actual changes in climate, this evaluation focuses on the Project's emissions of GHGs. CO₂e is a consistent methodology for comparing GHG emissions because it normalizes various GHGs to the same metric. GHG emissions are typically measured in terms of metric tons of CO₂e. Therefore, for the purpose of this technical analysis, the concept of CO₂e is used to describe how much global climate change a given type and amount of GHG may cause, using the functionally equivalent amount or concentration of CO₂ as the reference.

4.0 AIR QUALITY IMPACT ANALYSIS

The following sections address the criteria set forth in the Air Quality section in Appendix G of the state CEQA Guidelines (criteria listed in Section III). The air quality modeling and analysis spreadsheets and output that are cited throughout these sections are included in Attachment A.

a) Would the Project conflict with or obstruct implementation of the applicable air quality plan?

The applicable air quality plan is the *2016 Air Quality Management Plan* (SCAQMD 2017a) adopted by SCAQMD and SCAG in March 2017. Consistency with the 2016 AQMP for the Basin would be achieved if a project is consistent with the goals, objectives, and assumptions in the respective plan to achieve the federal and state air quality standards.

The Project site is designated as Regional/Subregional Commercial in the City of Monrovia's General Plan Land Use Map. This Commercial General Plan designation allows for large-scale retail, entertainment, hotels and office facilities serving both the local and sub-regional markets. The Commercial zoning designation allows for certain uses such as food and drug stores, clothing stores, professional and business offices, restaurants, retail and commercial services, as well as several conditionally permitted uses. As the proposed Project would involve construction and operation of two drive-through, fast-food restaurants, the proposed Project would not conflict with the 2016 AQMP.

The proposed Project would generate both short-term construction emissions and long-term operational emissions. The Project's potential emissions were estimated using the California Emissions Estimator Model (CalEEMod) V. 2016.3.2. CalEEMod is a land use air emissions model developed in collaboration with SCAQMD for use in planning analyses. Default parameters assumed by CalEEMod may be updated with project specific data for refinement. CalEEMod quantifies direct on-site emissions from construction, as well as off-site emissions from vehicle use and other indirect emissions. As described in more detail below, with standard conditions and mitigation measures incorporated, the proposed Project would not generate short-term or long-term emissions that exceed SCAQMD recommended pollutant CEQA thresholds for regional impacts.

Construction Emissions

Construction activities would include demolition, site preparation, grading, construction, paving, and architectural coating work. The proposed Project's potential construction emissions were modeled using CalEEMod (see Attachment A). Construction phase and duration and type and amount of equipment used during construction was generated using CalEEMod default assumptions and modified as necessary to reflect additional-Project-specific construction activities, including demolition of approximately 12,216 square feet of existing building space and associated debris hauling activities. No export or import of soil for cut and fill were assumed for site preparation and grading of the site, because all of the soil will be balanced on-site.

For the purpose of this analysis, it was assumed that the Chick-fil-A and Starbucks buildings will be constructed in parallel, using the following schedule:

- Phase 1: Demolition, 2 weeks, 5 days/week;
- Phase 2: Site Prep, 2 weeks, 5 days/week;
- Phase 3: Grading, 3 weeks, 5 days/week;
- Phase 4: Building Construction, 22.5 weeks, 5 days/week;
- Phase 5: Paving, 3.5 week, 5 days/week; and
- Phase 6: Architectural Coating, 2 weeks, 5 days/week.

Note that construction includes watering exposed areas 2 times per day.

Construction is estimated to begin in April 2022, and the phases are assumed not to overlap. As a conservative assumption, it is assumed that both the Chick Fil-A and Starbucks portions of the Project will be constructed at the same time. The CalEEMod report in Attachment A summarizes project assumptions and resulting maximum daily emissions for Summer and Winter seasons. Both Chick Fil-A and Starbucks were modeled using a readily available Land Use designation of "Fast Food Restaurant with Drive Thru" found in the current version of CalEEMod; however, Starbucks was identified in a traffic study (LLG 2021) using a "Land Use 937: Donut-Coffee Shop with Drive-Through Window" designation found in newer Institute of Transportation Engineers (ITE) documentation. The "High-Turnover (Sit Down) Restaurant" designation was used in both the traffic study and CalEEMod. The construction emission estimates for the Project are summarized in Table 4-1 and compared with SCAQMD regional construction significance thresholds.

TABLE 4-1 ESTIMATED PROJECT CONSTRUCTION EMISSIONS						
Season	Total Maximum Unmitigated Emissions (lbs/day)					
	ROG/ VOC	NO_x	CO	SO_x	PM₁₀	PM_{2.5}
Summer 2022	7.92	18.2	14.7	0.030	6.36	3.59
Winter 2022	7.93	18.2	14.7	0.030	6.36	3.59
SCAQMD Threshold	75	100	550	150	150	55
Significant Impact?	No	No	No	No	No	No

Source: CalEEMod v. 2016.3.2, output attached in Attachment A.

Daily construction emissions for VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} would be well below the SCAQMD significance thresholds for regional impacts. Therefore, the proposed Project would result in a less-than-significant impact related to regional construction emissions.

Operational Emissions

As discussed in Section 1.0, the Project site is currently occupied by a Claim Jumper restaurant and parking lot. As it exists, the restaurant building is a source of air emissions from vehicles and building operations. Emissions from the existing building were calculated with CalEEMod version 2016.3.2 and presented in Table 4-2, along with operational impacts from the Project, and compared to SCAQMD regional operational significance thresholds. The CalEEMod reports for the existing land use as well as for the proposed Project land use are in Attachment A.

Non-default Operational assumptions in CalEEMod:

- Use Low VOC paint (non-residential interior and exterior), per Rule 1113; and
- Use Low VOC cleaning supplies.

Mobile Source emissions are conservatively estimated based upon default trip generation data for a "Fast Food Restaurant with Drive Thru" and "City Park" contained in CalEEMod; whereas the traffic study (LLG 2021) presents much lower empirically derived weekday trip generation rates based upon traffic at existing Chick-fil-A restaurants and adjusted for pass-by trips. For example, the average daily trip rate for the Chick-fil-A in CalEEMod using defaults ranged from 2,263 on weekdays (3,355 total, including Starbucks) to 3,294 on Saturdays (4,882 total, including Starbucks); compared to the trip generation rates of 1,115 (2,018 total, including Starbucks) on weekdays as presented in the traffic study. For this reason, the mobile source emissions presented herein are conservative and have not been corrected to reflect the lesser rates of the LLG study. Moreover, the CalEEMod analysis emissions are conservative given that the CalEEMod cannot be corrected to reflect the fact that Chick-fil-A stores are not open on Sundays.

Although, the twice weekly deliveries from HQ to the Starbucks coffee shop may occur during nighttime hours, CalEEMod does not distinguish between daytime and nighttime hours when calculating operational emissions, so this issue is not consequential to the conclusions of this study.

Mobile source emissions associated with the "Pocket Park" are expected to be minimal, compared to emissions from mobile sources for traffic to/from the two restaurants. CalEEMod default trip generation data for a "City Park" land use is conservatively estimated at 4.55 trips on a Saturday, 3.35 trips on a Sunday, and 0.38 trips on weekdays. Although the LLG traffic study predicts daily trip rates of 30 vehicles per day for the Pocket Park, which is considerably higher than the default number of trips assumed in CalEEMod, this difference is negligible compared to the highly conservative CalEEMod trip generation rates assumed for Chick-fil-A and Starbucks.

The net operational emissions estimates for the Project are summarized in Table 4-2, and compared with SCAQMD regional construction significance thresholds.

TABLE 4-2 ESTIMATED INCREASE OF REGIONAL OPERATIONAL EMISSIONS					
Pollutant	Emission Source	Existing Building Emissions	Project Emissions	Project Increase / Decrease in Emissions	SCAQMD Threshold/ Significant Impact?
ROG/VOC (lb/day)	Area Source	0.312	0.174	-0.138	55 No
	Energy Consumption	0.0833	0.0461	-0.0372	
	Mobile Source	2.91	5.53	2.62	
	Total ROG/VOC Emissions	3.31	5.75	2.44	
NO_x (lb/day)	Area Source	0.00010	0.00005	-0.00005	55 No
	Energy Consumption	0.757	0.419	-0.338	
	Mobile Source	12.7	22.4	9.64	
	Total NO_x Emissions	13.5	22.8	9.30	
CO (lb/day)	Area Source	0.0105	0.00601	-0.0045	550 No
	Energy Consumption	0.636	0.352	-0.284	
	Mobile Source	25.8	43.0	17.2	
	Total CO Emissions	26.4	43.3	16.9	
SO_x (lb/day)	Area Source	0	0	0	150 No
	Energy Consumption	0.00454	0.00251	-0.00203	
	Mobile Source	0.146	0.146	0	
	Total SO_x Emissions	0.150	0.148	-0.0020	
PM₁₀ (lb/day)	Area Source	0.00004	0.00002	-0.00002	150 No
	Energy Consumption	0.0576	0.0319	-0.0257	
	Mobile Source	5.68	11.1	5.37	
	Total PM₁₀ Emissions	5.74	11.1	5.35	
PM_{2.5} (lb/day)	Area Source	0.00004	0.00002	-0.00002	55 No
	Energy Consumption	0.0576	0.0319	-0.0257	
	Mobile Source	1.57	3.03	1.46	
	Total PM_{2.5} Emissions	1.63	3.06	1.43	

Source: CalEEMod v.2016.3.2, output included in Attachment A. Emissions in this table are the higher of the Summer and Winter emissions.

Neither the net increase in operational emissions for VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} nor the stand-alone Project emissions would exceed the SCAQMD regional

operational significance thresholds. Therefore, the proposed Project would result in a less-than-significant impact related to regional operational emissions.

Emissions generated by the proposed Project would be below emissions thresholds established in SCAQMD's *Air Quality Significance Thresholds* and would not be expected to result in significant air quality impacts. Therefore, the proposed Project would not conflict with the AQMP and would not conflict with or obstruct implementation of the AQMP.

With respect to the proposed Project's construction and operation-related air quality emissions and cumulative Basin-wide conditions, the SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the 2016 AQMP pursuant to Federal Clean Air Act (FCAA) mandates. As such, the proposed Project would implement Compliance Measure AQ-1, which requires compliance with SCAQMD Rule 403 requirements. Rule 403 requires that fugitive dust be controlled with the best available control measures in order to reduce dust so that it does not remain visible in the atmosphere beyond the property line of the proposed project. In addition, the proposed Project would comply with adopted 2016 AQMP emissions control measures. Per SCAQMD rules and mandates, as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, all construction projects throughout the Basin would be required to comply with these same requirements (i.e., Rule 403 compliance, the implementation of all feasible mitigation measures, and compliance with adopted 2016 AQMP emissions control measures).

As for City of Monrovia General Plan air quality measures and requirements, AIR-A is satisfied by this technical study. As the analysis demonstrates NO_x emissions from construction will not be significant, no mitigation for heavy-duty diesel engines is required. The Project will comply with AIR-C by compliance with measure AQ-2 below.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: No air quality mitigation measures are required. However, please refer to Compliance Measures AQ-1 and AQ-2 below that are required for Project construction.

Compliance Measure AQ-1:

- Construction Emissions: During construction activities, the Project shall comply with regional rules that assist in reducing short-term air pollutant emissions. The SCAQMD 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, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rules 403 and 402 are as follows:
 - The Project Construction Contractor shall develop and implement dust-control methods that shall achieve this control level in a SCAQMD Rule 403

dust control plan, designate personnel to monitor the dust control program, and order increased watering, as necessary, to ensure a 55 percent control level. Those duties shall include holiday and weekend periods when work may not be in progress. Additional control measures to reduce fugitive dust shall include, but are not limited to, the following:

- Apply water twice daily, or nontoxic soil stabilizers according to manufacturer's specifications, to all unpaved parking or staging areas or unpaved road surfaces or as needed to areas where soil is disturbed.
 - Use low-sulfur fuel for stationary construction equipment. This is required by SCAQMD Rules 431.1 and 431.2.
 - During earthmoving or excavation operations, fugitive dust emissions shall be controlled by regular watering to prevent excessive amounts of dust, ceasing earthmoving and excavation activities during periods of high winds (i.e. winds greater than 20 miles per hour (mph) averaged over 1 hour), and minimizing the area disturbed by earthmoving or excavation operations at all times.
 - After earthmoving or excavation operations, fugitive dust emissions shall be controlled by revegetating and watering portions of the construction area to remain inactive longer than a period of 3 months and watering all active portions of the construction site.
 - At all times, fugitive dust emissions shall be controlled by limiting the on-site vehicle speed to 15 mph and paving road improvements as soon as feasible.
 - At all times during the construction phase, ozone precursor emissions from mobile equipment shall be controlled by maintaining equipment engines in good condition and in proper tune according to manufacturers' specifications.
- Outdoor storage piles of construction materials shall be kept covered, watered, or otherwise chemically stabilized with a chemical wetting agent to minimize fugitive dust emissions and wind erosion.

Compliance Measure AQ-2:

- Idling Restrictions: During construction activities, the Project shall comply with Mitigation Measure AIR-C of the *City of Monrovia General Plan Proposed Land Use and Circulations Elements Environmental Impact Report* (Monrovia 2008a) to reduce diesel engine emissions of ozone precursors ROG_s and NO_x, particulate matter less than 10 microns in size (PM₁₀), particulate matter less than 2.5 microns in size (PM_{2.5}), and diesel particulate matter (DPM).
- Idling of diesel-powered vehicles and equipment shall not be permitted during periods of non-active vehicle use. Diesel-powered engines shall not be allowed

to idle for more than 5 consecutive minutes in a 60-minute period when the equipment is not in use, occupied by an operator, or otherwise in motion, except as follows:

- When equipment is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control;
- When it is necessary to operate auxiliary systems installed on the equipment, only when such system operation is necessary to accomplish the intended use of the equipment;
- To bring the equipment to the manufacturers' recommended operating temperature;
- When the ambient temperature is below 40 degrees Fahrenheit (°F) or above 85°F; or when equipment is being repaired.

b) Would the Project 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?

As discussed previously, the proposed Project construction and operations would not result in a significant air quality impact, as emissions would not exceed the SCAQMD adopted significance thresholds. Additionally, adherence to SCAQMD rules and regulations would alleviate potential impacts related to cumulative conditions on a project-by-project basis. Emission reduction technology, strategies, and plans are constantly being developed. As a result, the proposed Project would not contribute to a cumulatively considerable net increase of any non-attainment criteria pollutant. Therefore, cumulative construction and operational impacts associated with implementation of the proposed project would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: No mitigation measures are required.

c) Would the Project expose sensitive receptors to substantial pollutant concentrations?

As described in Response 4.0(b), the proposed Project would not significantly increase long-term emissions within the Project vicinity. Project implementation may expose surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, construction contractors would be required to implement measures to reduce or eliminate emissions by following the SCAQMD's standard construction practices (Rules 402 and 403). Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. 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. Some of the applicable dust suppression techniques from Rule 403 are summarized below:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least twice daily (locations where grading is to occur will be thoroughly watered prior to earthmoving).
- All trucks hauling demolished material, dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 ft. of freeboard in accordance with the requirements of California Vehicle Code Section 23114 (freeboard means vertical space between the top of the load and top of the trailer).

SCAQMD has issued guidance on applying CalEEMod results to localized impact analyses. Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. Table 4-3 provides the peak daily emissions by construction phase. The peak emissions in each phase are compared to the localized significance thresholds (LSTs). Table 4-3 shows that the construction emission rates would not exceed the LSTs for any phase, for the nearest sensitive receptors in the Project vicinity.

TABLE 4-3 LOCALIZED CONSTRUCTION EMISSIONS				
Emissions Source	Peak Day Emissions (lbs/day)			
	NO_x	CO	PM₁₀	PM_{2.5}
Demolition Phase	16.6	14.0	1.38	0.865
Site Preparation	14.6	7.09	3.04	1.88
Grading	12.0	5.94	2.60	1.60
Building Construction	12.5	12.7	0.589	0.569
Paving	6.77	8.81	0.347	0.321
Architectural Coating	1.41	1.81	0.082	0.082
SCAQMD Localized Threshold	128	953	7	5
Significant Impact?	No	No	No	No

Source: CalEEMod v. 2016.3.2, output attached in Attachment A. Emissions in this table are the higher of the Summer and Winter emissions.

SCAQMD Localized Significance Thresholds, October 2009

www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook for 2-acre project site in Source Receptor Area 9 (East San Gabriel Valley) at receptor distance of 25 m.

Daily construction emissions for NO_x, CO, PM₁₀ and PM_{2.5} would not exceed the SCAQMD LSTs for any construction phase. Therefore, the proposed Project would

result in a less-than-significant impact related to sensitive receptors, due to localized construction emissions.

Localized operational CalEEMod results do not include off-site mobile emissions per SCAQMD guidance (SCAQMD 2003a). Table 4-4 shows that the operational emission rates would not exceed the LSTs for the nearest sensitive receptors in the Project vicinity.

TABLE 4-4 LOCALIZED OPERATIONAL EMISSIONS				
Emissions Source	Peak Day Emissions (lbs/day)			
	NO_x	CO	PM₁₀	PM_{2.5}
Area Source	0.00005	0.0060	0.00002	0.00002
Energy Consumption	0.419	0.352	0.0319	0.0319
Total	0.419	0.358	0.0319	0.0319
SCAQMD Localized Thresholds	128	953	2	2
Significant Impact?	No	No	No	No

Source: CalEEMod v. 2016.3.2, output attached in Attachment A. Emissions in this table are the higher of the Summer and Winter emissions.

SCAQMD Localized Significance Thresholds, October 2009

www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook for 2-acre project site in Source Receptor Area 9 (East San Gabriel Valley) at receptor distance of 25 m.

Daily operational emissions for NO_x, CO, PM₁₀ and PM_{2.5} would not exceed the SCAQMD LSTs. Therefore, sensitive receptors would not be expected to be exposed to substantial pollutant concentrations during construction and operations of the proposed Project and impacts would be less than significant, with no mitigation required.

The Project will result in a net change in traffic, from the current Claim Jumper use to the operation of the Chick-Fil-A and Starbucks restaurants. According to the traffic study (LLG 2021), the project's peak net traffic change is estimated to be about 140 vehicles/hr. This peak net traffic value does not exceed the 44,000 vehicles/hour used as the significance threshold. Therefore, no further review of CO hotspots was completed and the impacts from traffic on CO impacts at sensitive receptors is not considered to be significant.

Emissions of diesel particulate matter (DPM) associated with heavy-duty construction equipment are a TAC. The majority of heavy-duty equipment construction activity would occur from demolition and site preparation activity. Since PM_{2.5} emissions from construction are well below the significance threshold, and since these are short-term emissions, the DPM emissions during construction are not expected to contribute to

a significant health impact to sensitive receptors, exceeding the 10 in million cancer risk, or the 1.0 chronic or acute hazard index. The impacts from DPM and TACs from the Project are not considered to be significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: No mitigation measures beyond those required by Rules 402 and 403 are required.

d) Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

SCAQMD's *CEQA Air Quality Handbook* (SCAQMD 1993) identifies various secondary significance criteria related to odorous air contaminants. Substantial odor-generating sources include land uses such as agricultural activities, feedlots, wastewater treatment facilities, landfills, or heavy manufacturing uses. Pursuant to SCAQMD Rule 402, these sources shall include a quantitative assessment of potential odors and meteorological conditions. The Project does not propose any such uses or activities that would result in potentially significant odor impacts. Some objectionable odors may emanate from the operation of diesel-powered construction equipment during construction of the proposed Project. However, these odors would be limited to the construction period and would disperse quickly; therefore, these odors would not be considered a significant impact.

The proposed Project involves two drive-through restaurants, which do not typically produce objectionable odors, since cooking odors are not considered to be objectionable odors. It is not expected that the restaurants will operate a charbroiler, but if so, the restaurants may need to comply with SCAQMD Rule 1138 emission control requirements. On-site trash receptacles would have the potential to create adverse odors; however, trash receptacles would be located and maintained in a manner that would promote odor control to reduce potential odor impacts and would be removed from the site at least once per week. Therefore, adherence with applicable provisions in Compliance Measure AQ-3 would further ensure that no significant impacts related to objectionable odors would result from the proposed Project, and no mitigation would be required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: No mitigation is required. However, refer to Compliance Measure AQ-3, below.

Compliance Measure AQ-3 Odors. Throughout operation of the proposed Project, the Director of the City of Monrovia Community Development Department, or designee, shall ensure that the Project complies with applicable provisions of Section 8.10.30 of the City's Municipal Code, which requires that every person in control of the day-to-day operations at any commercial premise provide for the collection and proper disposal of solid waste at least once per week.

5.0 GREENHOUSE GAS IMPACT ANALYSIS

The following sections address the criteria set forth in the Greenhouse Gas Emissions section in Appendix G of the state CEQA Guidelines (criteria listed in Section VIII). The greenhouse gas modeling and analysis spreadsheets and output that are cited throughout these sections are included in Attachment B.

a) Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction and operation of the proposed Project would generate GHG emissions, with the majority of energy consumption (and associated generation of GHG emissions) occurring during the Project's operations. Overall, the following activities associated with the proposed Project could directly or indirectly contribute to the generation of GHG emissions:

- **Construction Activities:** GHGs would be emitted through the operation of construction equipment and from worker and supply vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO₂, CH₄, and N₂O.
- **Gas, Electricity and Water Use:** Natural Gas use during Project operations results in the emission of two GHGs: CH₄ (the major component of natural gas) and CO₂ (from the combustion of natural gas). Electricity use can result in GHG production if the electricity is generated by combusting fossil fuel. California's water conveyance system is energy intensive.
- **Solid Waste Disposal:** Solid waste (e.g. food waste, trash from receptacles, and construction waste) generated by the Project operations could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH₄ from the anaerobic decomposition of organic materials. CH₄ is 25 times more potent a GHG than CO₂. However, landfill CH₄ can also be a source of energy. In addition, many materials in landfills do not decompose fully, and the carbon that remains is sequestered in the landfill and not released into the atmosphere.
- **Motor Vehicle Use:** Transportation associated with the Project operations would result in GHG emissions from the combustion of fossil fuels in daily automobile trips.

Construction Emissions

Construction activities produce combustion emissions from various sources such as site preparation, earthwork, building erection, building construction, architectural coatings, on-site construction vehicles, equipment hauling materials to and from the

site, and motor vehicles transporting the construction crew. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change. Table 5-1 presents the annual construction emissions based on the CalEEMod emissions estimates.

TABLE 5-1 ESTIMATED ON-SITE AND OFF-SITE CONSTRUCTION GHG EMISSIONS¹			
Emissions Source	Annual Emissions (MT/yr)		
	CO₂	CH₄	CO₂e
Off-Site GHG Emissions			
Demolition Phase	2.66	1.60E-04	2.67
Site Preparation	5.90	3.90E-04	5.91
Grading	0.516	1.00E-05	0.52
Building Construction	29.4	1.28E-03	29.4
Paving	1.08	3.00E-05	1.08
Architectural Coating	0.276	1.00E-05	0.28
On-Site GHG Emissions			
Demolition Phase	10.5	2.69E-03	10.6
Site Preparation	7.56	2.44E-03	7.62
Grading	8.67	2.80E-03	8.74
Building Construction	102	1.77E-02	102
Paving	10.6	3.36E-03	10.7
Architectural Coating	1.28	8.00E-05	1.28
Total Construction CO₂e:			181
Total Construction CO₂e (Amortized over 30 years):			6.03

Source: CalEEMod v.2016.3.2, output attached in Attachment B.

1. Emissions of N₂O are present in combustion emissions associated with construction, however CalEEMod does not calculate N₂O emissions from construction phases and it is considered negligible.

As shown in Table 5-1, Project construction would generate approximately 181 MT of CO₂e in the year of construction activities. Per SCAQMD guidance, due to the long-term nature of the GHGs in the atmosphere, instead of determining significance of construction emissions alone, the total construction emissions are amortized over 30 years (an estimate of the life of the Project) and combined with GHG emissions calculated for the operations analysis. To amortize the emissions over the life of the Project, the SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year Project life. As such, construction emissions amortized over a 30-year period would result in approximately 6.03 MT of CO₂e per year.

Operational Emissions

Long-term operation of the proposed Project would generate GHG emissions from area and mobile sources, as well as indirect emissions from stationary sources associated with energy consumption and waste generation.

Based on SCAQMD guidance, construction emissions were amortized over 30 years and added to the total Project operational emissions. Mobile source emissions of GHGs would include Project-generated vehicle trips associated with on-site facilities and customers/visitors to the Project site. Area source emissions include activities such as landscaping and maintenance and use of consumer products. Increases in stationary source emissions would also occur at off-site utility providers as a result of an increased demand for electricity, natural gas, water, and waste by the proposed Project.

The existing land use is a Claim Jumper restaurant with an adjacent uncovered parking lot. This type of land use is categorized in CalEEMod as "High Turnover (Sit Down Restaurant)" and "Parking Lot" Land Use subcategories. Because the existing land use currently has GHG emissions that will be replaced by the proposed Project emissions, the existing operational GHG emissions were analyzed in CalEEMod to subtract from the proposed Project's operational GHG emissions. Operational Net GHG emissions are presented in Table 5-2 below, including the addition of the amortized construction emissions from Table 5-1.

Non-default operational assumptions in CalEEMod:

- Install high efficiency lighting (20% lighting energy reduction).
- Use water-efficient landscaping.
- Institute Recycling and Composting Services (note CalRecycle set a goal of 75% reduction in waste by recycling, composting, or source reduction of solid waste. <https://www.calrecycle.ca.gov/75percent>. An assumption of 65% reduction in waste disposal is a conservative approach).

Mobile Source emissions are conservatively estimated based upon default trip generation data for a "Fast Food Restaurant with Drive Thru" contained in CalEEMod; whereas the traffic study (LLG 2021) presents much lower empirically derived weekday trip generation rates based upon traffic at existing Chick-fil-A restaurants and adjusted for pass-by trips. For example, the average daily trip rate for the Chick-fil-A in CalEEMod using defaults ranged from 2,263 on weekdays (3,355 total, including Starbucks) to 3,294 on Saturdays (4,882 total, including Starbucks); compared to the trip generation rates of 1,145 (2,047 total, including Starbucks) on weekdays as presented in the traffic study. For this reason, the mobile source emissions presented herein are conservative and have not been corrected to reflect the lesser rates of the traffic study. Moreover, the CalEEMod analysis emissions are

conservative given that the CalEEMod cannot be corrected to reflect the fact that Chick-fil-A stores are not open on Sundays.

TABLE 5-2 OPERATIONAL NET GREENHOUSE GAS EMISSIONS – EXISTING BUILDING AND PROJECT				
Pollutant	Emission Source	Existing Building Emissions (MT/yr)	Project Emissions (MT/yr)	Project Increase /Decrease in Emissions (MT/yr)
CO ₂ e (MT/yr)	Area Source	0.0027	0.0016	-0.0011
	Energy Consumption	334	180	-153
	Mobile Source	1,055	1,754	699
	Waste	73.1	13.7	-59.5
	Water	21.3	12.6	-8.72
	Total Emissions	1,483	1,960	477
	Amortized Construction Emissions	--	6.03	6.03
Total Net Project CO₂e Emissions (MT/yr):				484
SCAQMD Tier 3 Threshold				3,000
Significant?				No

Source: CalEEMod v.2016.3.2, output included in Attachment B.

With standard conditions and mitigation measures incorporated, the proposed Project would not generate emissions that exceed SCAQMD recommended CEQA thresholds for GHG impacts.

Significance Determination: Less than Significant Impact.

Mitigation Measures: No mitigation is required.

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

The proposed Project would not conflict with CARB's Scoping Plan, the City's General Plan, or the City's Energy Plan. The Project consistency with these plans is described in more detail below.

CARB Scoping Plan

The Project would be consistent with the 2017 Scoping Plan as it would be consistent with the policies of the Plan, as discussed below:

- **Ensure the State Achieves the 2030 Target.** By implementing required GHG reduction measures in its Project design the Project will be consistent with the state's goals of reducing emissions by 40% below 1990 levels in 2030.
- **Provide Air Quality Co-Benefits.** The Project would provide co-benefits to air quality through its GHG reduction measures, including meeting CALGreen requirements
- **Waste Reduction.** The project would be consistent with statewide solid waste reduction goals and include waste recycling.

City of Monrovia General Plan

Although implementation of the Project may increase overall VMT through additional trips and energy and natural gas usage compared to current conditions, the Project will be developed with more energy-efficient measures than the current Claim Jumper use, thus ensuring that the proposed Project would not result in the wasteful or inefficient use of energy resources. This would be a less than significant impact, and consistent with the City of Monrovia General Plan.

City of Monrovia Energy Plan

The City of Monrovia has an *Energy Action Plan* that seeks to decrease energy use and dependence. The plan suggests the need for citizen involvement and focuses heavily on actionable items related to managing City facilities and vehicles. Additionally, the City requires consistency with energy saving strategies (such as Title 24 which requires energy efficient practices). The Project will be consistent with Title 24 building codes, and therefore is consistent with the goals of the Energy Action Plan.

Significance Determination: Less than Significant Impact.

Mitigation Measures: No mitigation is required.

6.0 CONCLUSIONS

The potential air emissions of criteria pollutants, toxic air compounds, and odors associated with the construction and operation of the Project were evaluated. It was determined that the impacts from those air emissions are less than significant. Comparison of these emissions to the SCAQMD regional and localized significance

thresholds demonstrates that the proposed Project will not result in potentially significant impacts, and that the following air quality CEQA criteria are met:

- (a) The Project does not conflict with or obstruct implementation of applicable air quality plan;
- (b) The Project will not 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;
- (c) The Project will not expose sensitive receptors to substantial pollutant concentrations; and
- (d) The Project will not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The direct and indirect emissions of greenhouse gases associated with the construction and operation of the Project were evaluated and it was determined that they are less than significant. Comparison of these emissions to the SCAQMD interim threshold for Tier 3 projects demonstrates that the proposed Project will not result in potentially significant impacts, and that the following GHG CEQA criteria are met:

- (a) The Project does not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- (b) The Project does not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

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ATTACHMENT A

CALEEMOD RESULTS: DAILY EMISSIONS SUMMER AND WINTER

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

Chick-fil-A & Starbucks Monrovia

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	51.90	1000sqft	1.19	51,900.00	0
City Park	0.20	Acre	0.20	8,786.00	0
Fast Food Restaurant with Drive Thru	4.56	1000sqft	0.10	4,562.00	0
Fast Food Restaurant with Drive Thru	2.20	1000sqft	0.05	2,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

Project Characteristics - Construction Phase - Per the Draft IS/MND.

Land Use - Total lot acreage = approx. 2 acres.

Land Use - Pocket Park is located in the SE corner of the project site (8,786 sq ft)

Construction Phase - Construction schedule per client.

Demolition -

Grading - Project site is approx. 2 acres in size.

Construction Off-road Equipment Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation - CA state is aiming for 75% reduction by 2020. Assume 65%.

Energy Use -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	4.00	14.00
tblConstructionPhase	NumDays	200.00	112.00
tblConstructionPhase	NumDays	10.00	18.00
tblGrading	AcresOfGrading	5.25	1.50
tblGrading	AcresOfGrading	5.00	1.00
tblLandUse	LandUseSquareFeet	8,712.00	8,786.00
tblLandUse	LandUseSquareFeet	4,560.00	4,562.00
tblTripsAndVMT	HaulingTripNumber	0.00	150.00

2.0 Emissions Summary

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

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	7.9247	18.1538	14.7098	0.0298	5.7269	0.8427	6.3602	3.0034	0.7875	3.5864	0.0000	2,981.2242	2,981.2242	0.6260	0.0000	2,996.7876
Maximum	7.9247	18.1538	14.7098	0.0298	5.7269	0.8427	6.3602	3.0034	0.7875	3.5864	0.0000	2,981.2242	2,981.2242	0.6260	0.0000	2,996.7876

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	7.9247	18.1538	14.7098	0.0298	2.7704	0.8427	3.4037	1.4041	0.7875	1.9871	0.0000	2,981.2242	2,981.2242	0.6260	0.0000	2,996.7876
Maximum	7.9247	18.1538	14.7098	0.0298	2.7704	0.8427	3.4037	1.4041	0.7875	1.9871	0.0000	2,981.2242	2,981.2242	0.6260	0.0000	2,996.7876

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	51.62	0.00	46.48	53.25	0.00	44.59	0.00	0.00	0.00	0.00	0.00	0.00

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1744	5.0000e-005	6.0100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	0.0461	0.4191	0.3521	2.5100e-003		0.0319	0.0319		0.0319	0.0319		502.9490	502.9490	9.6400e-003	9.2200e-003	505.9377
Mobile	5.5311	22.3773	42.9628	0.1459	10.9501	0.1060	11.0561	2.9297	0.0985	3.0282		14,916.7594	14,916.7594	0.7854		14,936.3955
Total	5.7516	22.7965	43.3208	0.1484	10.9501	0.1379	11.0880	2.9297	0.1303	3.0600		15,419.7213	15,419.7213	0.7951	9.2200e-003	15,442.3470

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1744	5.0000e-005	6.0100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	0.0461	0.4191	0.3521	2.5100e-003		0.0319	0.0319		0.0319	0.0319		502.9490	502.9490	9.6400e-003	9.2200e-003	505.9377
Mobile	5.5311	22.3773	42.9628	0.1459	10.9501	0.1060	11.0561	2.9297	0.0985	3.0282		14,916.7594	14,916.7594	0.7854		14,936.3955
Total	5.7516	22.7965	43.3208	0.1484	10.9501	0.1379	11.0880	2.9297	0.1303	3.0600		15,419.7213	15,419.7213	0.7951	9.2200e-003	15,442.3470

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/4/2022	4/15/2022	5	10	
2	Site Preparation	Site Preparation	4/18/2022	4/29/2022	5	10	
3	Grading	Grading	5/2/2022	5/19/2022	5	14	
4	Building Construction	Building Construction	5/20/2022	10/24/2022	5	112	
5	Paving	Paving	10/25/2022	11/17/2022	5	18	
6	Architectural Coating	Architectural Coating	11/18/2022	12/1/2022	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.19

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,118; Non-Residential Outdoor: 3,373; Striped Parking Area: 3,114 (Architectural Coating – sqft)

OffRoad Equipment

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

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

Trips and VMT

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

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	56.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	150.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	28.00	11.00	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	6.00	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	lb/day										lb/day					
Fugitive Dust					1.2025	0.0000	1.2025	0.1821	0.0000	0.1821			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	1.2025	0.8379	2.0404	0.1821	0.7829	0.9650		2,323.4168	2,323.4168	0.5921		2,338.2191

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

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	lb/day										lb/day					
Hauling	0.0386	1.3091	0.2965	4.2400e-003	0.0979	3.7800e-003	0.1016	0.0268	3.6100e-003	0.0304		459.0628	459.0628	0.0304		459.8235
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0515	0.0322	0.4529	1.3900e-003	0.1453	1.0400e-003	0.1464	0.0385	9.6000e-004	0.0395		138.8041	138.8041	3.5000e-003		138.8916
Total	0.0901	1.3412	0.7493	5.6300e-003	0.2432	4.8200e-003	0.2480	0.0654	4.5700e-003	0.0699		597.8669	597.8669	0.0339		598.7151

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.5411	0.0000	0.5411	0.0819	0.0000	0.0819			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	0.5411	0.8379	1.3790	0.0819	0.7829	0.8648	0.0000	2,323.4168	2,323.4168	0.5921		2,338.2191

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

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	lb/day										lb/day					
Hauling	0.0386	1.3091	0.2965	4.2400e-003	0.0979	3.7800e-003	0.1016	0.0268	3.6100e-003	0.0304		459.0628	459.0628	0.0304		459.8235
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0515	0.0322	0.4529	1.3900e-003	0.1453	1.0400e-003	0.1464	0.0385	9.6000e-004	0.0395		138.8041	138.8041	3.5000e-003		138.8916
Total	0.0901	1.3412	0.7493	5.6300e-003	0.2432	4.8200e-003	0.2480	0.0654	4.5700e-003	0.0699		597.8669	597.8669	0.0339		598.7151

3.3 Site Preparation - 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					5.3754	0.0000	5.3754	2.9079	0.0000	2.9079			0.0000			0.0000
Off-Road	1.3122	14.6277	7.0939	0.0172		0.6225	0.6225		0.5727	0.5727		1,666.1738	1,666.1738	0.5389		1,679.6457
Total	1.3122	14.6277	7.0939	0.0172	5.3754	0.6225	5.9979	2.9079	0.5727	3.4806		1,666.1738	1,666.1738	0.5389		1,679.6457

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

3.3 Site Preparation - 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	lb/day										lb/day					
Hauling	0.1034	3.5064	0.7942	0.0114	0.2621	0.0101	0.2722	0.0718	9.6800e-003	0.0815		1,229.6324	1,229.6324	0.0815		1,231.6702
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0317	0.0198	0.2787	8.6000e-004	0.0894	6.4000e-004	0.0901	0.0237	5.9000e-004	0.0243		85.4179	85.4179	2.1500e-003		85.4717
Total	0.1350	3.5262	1.0728	0.0122	0.3515	0.0108	0.3623	0.0955	0.0103	0.1058		1,315.0503	1,315.0503	0.0837		1,317.1419

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					2.4189	0.0000	2.4189	1.3086	0.0000	1.3086			0.0000			0.0000
Off-Road	1.3122	14.6277	7.0939	0.0172		0.6225	0.6225		0.5727	0.5727	0.0000	1,666.1738	1,666.1738	0.5389		1,679.6457
Total	1.3122	14.6277	7.0939	0.0172	2.4189	0.6225	3.0414	1.3086	0.5727	1.8813	0.0000	1,666.1738	1,666.1738	0.5389		1,679.6457

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

3.3 Site Preparation - 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	lb/day										lb/day					
Hauling	0.1034	3.5064	0.7942	0.0114	0.2621	0.0101	0.2722	0.0718	9.6800e-003	0.0815		1,229.6324	1,229.6324	0.0815		1,231.6702
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0317	0.0198	0.2787	8.6000e-004	0.0894	6.4000e-004	0.0901	0.0237	5.9000e-004	0.0243		85.4179	85.4179	2.1500e-003		85.4717
Total	0.1350	3.5262	1.0728	0.0122	0.3515	0.0108	0.3623	0.0955	0.0103	0.1058		1,315.0503	1,315.0503	0.0837		1,317.1419

3.4 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					4.6302	0.0000	4.6302	2.4949	0.0000	2.4949			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759		1,364.8198	1,364.8198	0.4414		1,375.8551
Total	1.0832	12.0046	5.9360	0.0141	4.6302	0.5173	5.1475	2.4949	0.4759	2.9708		1,364.8198	1,364.8198	0.4414		1,375.8551

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

3.4 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0317	0.0198	0.2787	8.6000e-004	0.0894	6.4000e-004	0.0901	0.0237	5.9000e-004	0.0243		85.4179	85.4179	2.1500e-003		85.4717
Total	0.0317	0.0198	0.2787	8.6000e-004	0.0894	6.4000e-004	0.0901	0.0237	5.9000e-004	0.0243		85.4179	85.4179	2.1500e-003		85.4717

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					2.0836	0.0000	2.0836	1.1227	0.0000	1.1227			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759	0.0000	1,364.8198	1,364.8198	0.4414		1,375.8551
Total	1.0832	12.0046	5.9360	0.0141	2.0836	0.5173	2.6009	1.1227	0.4759	1.5986	0.0000	1,364.8198	1,364.8198	0.4414		1,375.8551

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

3.4 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0317	0.0198	0.2787	8.6000e-004	0.0894	6.4000e-004	0.0901	0.0237	5.9000e-004	0.0243		85.4179	85.4179	2.1500e-003		85.4717
Total	0.0317	0.0198	0.2787	8.6000e-004	0.0894	6.4000e-004	0.0901	0.0237	5.9000e-004	0.0243		85.4179	85.4179	2.1500e-003		85.4717

3.5 Building Construction - 2022**Unmitigated Construction On-Site**

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

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

3.5 Building Construction - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0287	0.9959	0.2353	2.7800e-003	0.0704	1.8300e-003	0.0722	0.0203	1.7500e-003	0.0220		297.0650	297.0650	0.0175		297.5013
Worker	0.1109	0.0692	0.9754	3.0000e-003	0.3130	2.2400e-003	0.3152	0.0830	2.0600e-003	0.0851		298.9627	298.9627	7.5400e-003		299.1511
Total	0.1396	1.0651	1.2107	5.7800e-003	0.3834	4.0700e-003	0.3874	0.1033	3.8100e-003	0.1071		596.0277	596.0277	0.0250		596.6524

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

3.5 Building Construction - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0287	0.9959	0.2353	2.7800e-003	0.0704	1.8300e-003	0.0722	0.0203	1.7500e-003	0.0220		297.0650	297.0650	0.0175		297.5013
Worker	0.1109	0.0692	0.9754	3.0000e-003	0.3130	2.2400e-003	0.3152	0.0830	2.0600e-003	0.0851		298.9627	298.9627	7.5400e-003		299.1511
Total	0.1396	1.0651	1.2107	5.7800e-003	0.3834	4.0700e-003	0.3874	0.1033	3.8100e-003	0.1071		596.0277	596.0277	0.0250		596.6524

3.6 Paving - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205		1,297.3789	1,297.3789	0.4113		1,307.6608
Paving	0.1732					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8609	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205		1,297.3789	1,297.3789	0.4113		1,307.6608

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

3.6 Paving - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0515	0.0322	0.4529	1.3900e-003	0.1453	1.0400e-003	0.1464	0.0385	9.6000e-004	0.0395		138.8041	138.8041	3.5000e-003		138.8916
Total	0.0515	0.0322	0.4529	1.3900e-003	0.1453	1.0400e-003	0.1464	0.0385	9.6000e-004	0.0395		138.8041	138.8041	3.5000e-003		138.8916

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205	0.0000	1,297.3789	1,297.3789	0.4113		1,307.6608
Paving	0.1732					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8609	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205	0.0000	1,297.3789	1,297.3789	0.4113		1,307.6608

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

3.6 Paving - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0515	0.0322	0.4529	1.3900e-003	0.1453	1.0400e-003	0.1464	0.0385	9.6000e-004	0.0395		138.8041	138.8041	3.5000e-003		138.8916
Total	0.0515	0.0322	0.4529	1.3900e-003	0.1453	1.0400e-003	0.1464	0.0385	9.6000e-004	0.0395		138.8041	138.8041	3.5000e-003		138.8916

3.7 Architectural Coating - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.6964					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	7.9010	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

3.7 Architectural Coating - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0238	0.0148	0.2090	6.4000e-004	0.0671	4.8000e-004	0.0676	0.0178	4.4000e-004	0.0182		64.0634	64.0634	1.6100e-003		64.1038
Total	0.0238	0.0148	0.2090	6.4000e-004	0.0671	4.8000e-004	0.0676	0.0178	4.4000e-004	0.0182		64.0634	64.0634	1.6100e-003		64.1038

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	7.6964					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	7.9010	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

3.7 Architectural Coating - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0238	0.0148	0.2090	6.4000e-004	0.0671	4.8000e-004	0.0676	0.0178	4.4000e-004	0.0182		64.0634	64.0634	1.6100e-003		64.1038
Total	0.0238	0.0148	0.2090	6.4000e-004	0.0671	4.8000e-004	0.0676	0.0178	4.4000e-004	0.0182		64.0634	64.0634	1.6100e-003		64.1038

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	5.5311	22.3773	42.9628	0.1459	10.9501	0.1060	11.0561	2.9297	0.0985	3.0282		14,916.7594	14,916.7594	0.7854		14,936.3955
Unmitigated	5.5311	22.3773	42.9628	0.1459	10.9501	0.1060	11.0561	2.9297	0.0985	3.0282		14,916.7594	14,916.7594	0.7854		14,936.3955

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.38	4.55	3.35	4,024	4,024
Fast Food Restaurant with Drive Thru	2,262.31	3,292.46	2474.80	2,567,645	2,567,645
Fast Food Restaurant with Drive Thru	1,091.46	1,588.47	1193.98	1,238,776	1,238,776
Parking Lot	0.00	0.00	0.00		
Total	3,354.15	4,885.47	3,672.14	3,810,444	3,810,444

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868
Fast Food Restaurant with Drive Thru	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868
Parking Lot	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0461	0.4191	0.3521	2.5100e-003		0.0319	0.0319		0.0319	0.0319		502.9490	502.9490	9.6400e-003	9.2200e-003	505.9377
NaturalGas Unmitigated	0.0461	0.4191	0.3521	2.5100e-003		0.0319	0.0319		0.0319	0.0319		502.9490	502.9490	9.6400e-003	9.2200e-003	505.9377

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	1390.88	0.0150	0.1364	0.1145	8.2000e-004		0.0104	0.0104		0.0104	0.0104		163.6332	163.6332	3.1400e-003	3.0000e-003	164.6056
Fast Food Restaurant with Drive Thru	2884.18	0.0311	0.2828	0.2375	1.7000e-003		0.0215	0.0215		0.0215	0.0215		339.3158	339.3158	6.5000e-003	6.2200e-003	341.3321
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0461	0.4191	0.3521	2.5200e-003		0.0319	0.0319		0.0319	0.0319		502.9490	502.9490	9.6400e-003	9.2200e-003	505.9377

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	1.39088	0.0150	0.1364	0.1145	8.2000e-004		0.0104	0.0104		0.0104	0.0104		163.6332	163.6332	3.1400e-003	3.0000e-003	164.6056
Fast Food Restaurant with Drive Thru	2.88418	0.0311	0.2828	0.2375	1.7000e-003		0.0215	0.0215		0.0215	0.0215		339.3158	339.3158	6.5000e-003	6.2200e-003	341.3321
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0461	0.4191	0.3521	2.5200e-003		0.0319	0.0319		0.0319	0.0319		502.9490	502.9490	9.6400e-003	9.2200e-003	505.9377

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1744	5.0000e-005	6.0100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Unmitigated	0.1744	5.0000e-005	6.0100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137

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	0.0211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1527					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	5.0000e-005	6.0100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	0.1744	5.0000e-005	6.0100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

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	0.0211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1527					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	5.0000e-005	6.0100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	0.1744	5.0000e-005	6.0100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137

7.0 Water Detail**7.1 Mitigation Measures Water**

Use Water Efficient Landscaping

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Summer

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

Chick-fil-A & Starbucks Monrovia

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	51.90	1000sqft	1.19	51,900.00	0
City Park	0.20	Acre	0.20	8,786.00	0
Fast Food Restaurant with Drive Thru	4.56	1000sqft	0.10	4,562.00	0
Fast Food Restaurant with Drive Thru	2.20	1000sqft	0.05	2,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

Project Characteristics - Construction Phase - Per the Draft IS/MND.

Land Use - Total lot acreage = approx. 2 acres.

Land Use - Pocket Park is located in the SE corner of the project site (8,786 sq ft)

Construction Phase - Construction schedule per client.

Demolition -

Grading - Project site is approx. 2 acres in size.

Construction Off-road Equipment Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation - CA state is aiming for 75% reduction by 2020. Assume 65%.

Energy Use -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	4.00	14.00
tblConstructionPhase	NumDays	200.00	112.00
tblConstructionPhase	NumDays	10.00	18.00
tblGrading	AcresOfGrading	5.25	1.50
tblGrading	AcresOfGrading	5.00	1.00
tblLandUse	LandUseSquareFeet	8,712.00	8,786.00
tblLandUse	LandUseSquareFeet	4,560.00	4,562.00
tblTripsAndVMT	HaulingTripNumber	0.00	150.00

2.0 Emissions Summary

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

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	7.9270	18.1932	14.6842	0.0296	5.7269	0.8428	6.3603	3.0034	0.7875	3.5866	0.0000	2,952.7517	2,952.7517	0.6270	0.0000	2,968.3949
Maximum	7.9270	18.1932	14.6842	0.0296	5.7269	0.8428	6.3603	3.0034	0.7875	3.5866	0.0000	2,952.7517	2,952.7517	0.6270	0.0000	2,968.3949

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	7.9270	18.1932	14.6842	0.0296	2.7704	0.8428	3.4039	1.4041	0.7875	1.9872	0.0000	2,952.7517	2,952.7517	0.6270	0.0000	2,968.3949
Maximum	7.9270	18.1932	14.6842	0.0296	2.7704	0.8428	3.4039	1.4041	0.7875	1.9872	0.0000	2,952.7517	2,952.7517	0.6270	0.0000	2,968.3949

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	51.62	0.00	46.48	53.25	0.00	44.59	0.00	0.00	0.00	0.00	0.00	0.00

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1744	5.0000e-005	6.0100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	0.0461	0.4191	0.3521	2.5100e-003		0.0319	0.0319		0.0319	0.0319		502.9490	502.9490	9.6400e-003	9.2200e-003	505.9377
Mobile	5.1879	22.3547	42.7050	0.1375	10.9501	0.1073	11.0574	2.9297	0.0997	3.0294		14,051.2531	14,051.2531	0.8115		14,071.5417
Total	5.4084	22.7738	43.0631	0.1400	10.9501	0.1392	11.0893	2.9297	0.1316	3.0613		14,554.2150	14,554.2150	0.8212	9.2200e-003	14,577.4932

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1744	5.0000e-005	6.0100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	0.0461	0.4191	0.3521	2.5100e-003		0.0319	0.0319		0.0319	0.0319		502.9490	502.9490	9.6400e-003	9.2200e-003	505.9377
Mobile	5.1879	22.3547	42.7050	0.1375	10.9501	0.1073	11.0574	2.9297	0.0997	3.0294		14,051.2531	14,051.2531	0.8115		14,071.5417
Total	5.4084	22.7738	43.0631	0.1400	10.9501	0.1392	11.0893	2.9297	0.1316	3.0613		14,554.2150	14,554.2150	0.8212	9.2200e-003	14,577.4932

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/4/2022	4/15/2022	5	10	
2	Site Preparation	Site Preparation	4/18/2022	4/29/2022	5	10	
3	Grading	Grading	5/2/2022	5/19/2022	5	14	
4	Building Construction	Building Construction	5/20/2022	10/24/2022	5	112	
5	Paving	Paving	10/25/2022	11/17/2022	5	18	
6	Architectural Coating	Architectural Coating	11/18/2022	12/1/2022	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.19

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,118; Non-Residential Outdoor: 3,373; Striped Parking Area: 3,114 (Architectural Coating – sqft)

OffRoad Equipment

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

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

Trips and VMT

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

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	56.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	150.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	28.00	11.00	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	6.00	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	lb/day										lb/day					
Fugitive Dust					1.2025	0.0000	1.2025	0.1821	0.0000	0.1821			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	1.2025	0.8379	2.0404	0.1821	0.7829	0.9650		2,323.4168	2,323.4168	0.5921		2,338.2191

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

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	lb/day										lb/day					
Hauling	0.0397	1.3231	0.3175	4.1600e-003	0.0979	3.8400e-003	0.1017	0.0268	3.6700e-003	0.0305		450.4994	450.4994	0.0317		451.2914
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0564	0.0352	0.4062	1.3000e-003	0.1453	1.0400e-003	0.1464	0.0385	9.6000e-004	0.0395		129.8098	129.8098	3.2600e-003		129.8912
Total	0.0961	1.3582	0.7237	5.4600e-003	0.2432	4.8800e-003	0.2480	0.0654	4.6300e-003	0.0700		580.3092	580.3092	0.0349		581.1826

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.5411	0.0000	0.5411	0.0819	0.0000	0.0819			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	0.5411	0.8379	1.3790	0.0819	0.7829	0.8648	0.0000	2,323.4168	2,323.4168	0.5921		2,338.2191

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

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	lb/day										lb/day					
Hauling	0.0397	1.3231	0.3175	4.1600e-003	0.0979	3.8400e-003	0.1017	0.0268	3.6700e-003	0.0305		450.4994	450.4994	0.0317		451.2914
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0564	0.0352	0.4062	1.3000e-003	0.1453	1.0400e-003	0.1464	0.0385	9.6000e-004	0.0395		129.8098	129.8098	3.2600e-003		129.8912
Total	0.0961	1.3582	0.7237	5.4600e-003	0.2432	4.8800e-003	0.2480	0.0654	4.6300e-003	0.0700		580.3092	580.3092	0.0349		581.1826

3.3 Site Preparation - 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					5.3754	0.0000	5.3754	2.9079	0.0000	2.9079			0.0000			0.0000
Off-Road	1.3122	14.6277	7.0939	0.0172		0.6225	0.6225		0.5727	0.5727		1,666.1738	1,666.1738	0.5389		1,679.6457
Total	1.3122	14.6277	7.0939	0.0172	5.3754	0.6225	5.9979	2.9079	0.5727	3.4806		1,666.1738	1,666.1738	0.5389		1,679.6457

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

3.3 Site Preparation - 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	lb/day										lb/day					
Hauling	0.1063	3.5439	0.8504	0.0111	0.2621	0.0103	0.2724	0.0718	9.8300e-003	0.0817		1,206.6949	1,206.6949	0.0849		1,208.8162
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0217	0.2500	8.0000e-004	0.0894	6.4000e-004	0.0901	0.0237	5.9000e-004	0.0243		79.8829	79.8829	2.0100e-003		79.9331
Total	0.1410	3.5656	1.1004	0.0119	0.3515	0.0109	0.3624	0.0955	0.0104	0.1060		1,286.5778	1,286.5778	0.0869		1,288.7492

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					2.4189	0.0000	2.4189	1.3086	0.0000	1.3086			0.0000			0.0000
Off-Road	1.3122	14.6277	7.0939	0.0172		0.6225	0.6225		0.5727	0.5727	0.0000	1,666.1738	1,666.1738	0.5389		1,679.6457
Total	1.3122	14.6277	7.0939	0.0172	2.4189	0.6225	3.0414	1.3086	0.5727	1.8813	0.0000	1,666.1738	1,666.1738	0.5389		1,679.6457

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

3.3 Site Preparation - 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	lb/day										lb/day					
Hauling	0.1063	3.5439	0.8504	0.0111	0.2621	0.0103	0.2724	0.0718	9.8300e-003	0.0817		1,206.6949	1,206.6949	0.0849		1,208.8162
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0217	0.2500	8.0000e-004	0.0894	6.4000e-004	0.0901	0.0237	5.9000e-004	0.0243		79.8829	79.8829	2.0100e-003		79.9331
Total	0.1410	3.5656	1.1004	0.0119	0.3515	0.0109	0.3624	0.0955	0.0104	0.1060		1,286.5778	1,286.5778	0.0869		1,288.7492

3.4 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					4.6302	0.0000	4.6302	2.4949	0.0000	2.4949			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759		1,364.8198	1,364.8198	0.4414		1,375.8551
Total	1.0832	12.0046	5.9360	0.0141	4.6302	0.5173	5.1475	2.4949	0.4759	2.9708		1,364.8198	1,364.8198	0.4414		1,375.8551

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

3.4 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0217	0.2500	8.0000e-004	0.0894	6.4000e-004	0.0901	0.0237	5.9000e-004	0.0243		79.8829	79.8829	2.0100e-003		79.9331
Total	0.0347	0.0217	0.2500	8.0000e-004	0.0894	6.4000e-004	0.0901	0.0237	5.9000e-004	0.0243		79.8829	79.8829	2.0100e-003		79.9331

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					2.0836	0.0000	2.0836	1.1227	0.0000	1.1227			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759	0.0000	1,364.8198	1,364.8198	0.4414		1,375.8551
Total	1.0832	12.0046	5.9360	0.0141	2.0836	0.5173	2.6009	1.1227	0.4759	1.5986	0.0000	1,364.8198	1,364.8198	0.4414		1,375.8551

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

3.4 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0217	0.2500	8.0000e-004	0.0894	6.4000e-004	0.0901	0.0237	5.9000e-004	0.0243		79.8829	79.8829	2.0100e-003		79.9331
Total	0.0347	0.0217	0.2500	8.0000e-004	0.0894	6.4000e-004	0.0901	0.0237	5.9000e-004	0.0243		79.8829	79.8829	2.0100e-003		79.9331

3.5 Building Construction - 2022**Unmitigated Construction On-Site**

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

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

3.5 Building Construction - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	0.9919	0.2634	2.7000e-003	0.0704	1.8900e-003	0.0723	0.0203	1.8100e-003	0.0221		288.4137	288.4137	0.0187		288.8819
Worker	0.1214	0.0758	0.8749	2.8000e-003	0.3130	2.2400e-003	0.3152	0.0830	2.0600e-003	0.0851		279.5902	279.5902	7.0200e-003		279.7657
Total	0.1517	1.0677	1.1384	5.5000e-003	0.3834	4.1300e-003	0.3875	0.1033	3.8700e-003	0.1071		568.0039	568.0039	0.0258		568.6476

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

3.5 Building Construction - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	0.9919	0.2634	2.7000e-003	0.0704	1.8900e-003	0.0723	0.0203	1.8100e-003	0.0221		288.4137	288.4137	0.0187		288.8819
Worker	0.1214	0.0758	0.8749	2.8000e-003	0.3130	2.2400e-003	0.3152	0.0830	2.0600e-003	0.0851		279.5902	279.5902	7.0200e-003		279.7657
Total	0.1517	1.0677	1.1384	5.5000e-003	0.3834	4.1300e-003	0.3875	0.1033	3.8700e-003	0.1071		568.0039	568.0039	0.0258		568.6476

3.6 Paving - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205		1,297.3789	1,297.3789	0.4113		1,307.6608
Paving	0.1732					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8609	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205		1,297.3789	1,297.3789	0.4113		1,307.6608

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

3.6 Paving - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0564	0.0352	0.4062	1.3000e-003	0.1453	1.0400e-003	0.1464	0.0385	9.6000e-004	0.0395		129.8098	129.8098	3.2600e-003		129.8912
Total	0.0564	0.0352	0.4062	1.3000e-003	0.1453	1.0400e-003	0.1464	0.0385	9.6000e-004	0.0395		129.8098	129.8098	3.2600e-003		129.8912

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205	0.0000	1,297.3789	1,297.3789	0.4113		1,307.6608
Paving	0.1732					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8609	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205	0.0000	1,297.3789	1,297.3789	0.4113		1,307.6608

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

3.6 Paving - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0564	0.0352	0.4062	1.3000e-003	0.1453	1.0400e-003	0.1464	0.0385	9.6000e-004	0.0395		129.8098	129.8098	3.2600e-003		129.8912
Total	0.0564	0.0352	0.4062	1.3000e-003	0.1453	1.0400e-003	0.1464	0.0385	9.6000e-004	0.0395		129.8098	129.8098	3.2600e-003		129.8912

3.7 Architectural Coating - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.6964					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	7.9010	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

3.7 Architectural Coating - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0260	0.0162	0.1875	6.0000e-004	0.0671	4.8000e-004	0.0676	0.0178	4.4000e-004	0.0182		59.9122	59.9122	1.5000e-003		59.9498
Total	0.0260	0.0162	0.1875	6.0000e-004	0.0671	4.8000e-004	0.0676	0.0178	4.4000e-004	0.0182		59.9122	59.9122	1.5000e-003		59.9498

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	7.6964					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	7.9010	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

3.7 Architectural Coating - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0260	0.0162	0.1875	6.0000e-004	0.0671	4.8000e-004	0.0676	0.0178	4.4000e-004	0.0182		59.9122	59.9122	1.5000e-003		59.9498
Total	0.0260	0.0162	0.1875	6.0000e-004	0.0671	4.8000e-004	0.0676	0.0178	4.4000e-004	0.0182		59.9122	59.9122	1.5000e-003		59.9498

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	5.1879	22.3547	42.7050	0.1375	10.9501	0.1073	11.0574	2.9297	0.0997	3.0294		14,051.253 1	14,051.253 1	0.8115		14,071.541 7
Unmitigated	5.1879	22.3547	42.7050	0.1375	10.9501	0.1073	11.0574	2.9297	0.0997	3.0294		14,051.253 1	14,051.253 1	0.8115		14,071.541 7

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.38	4.55	3.35	4,024	4,024
Fast Food Restaurant with Drive Thru	2,262.31	3,292.46	2474.80	2,567,645	2,567,645
Fast Food Restaurant with Drive Thru	1,091.46	1,588.47	1193.98	1,238,776	1,238,776
Parking Lot	0.00	0.00	0.00		
Total	3,354.15	4,885.47	3,672.14	3,810,444	3,810,444

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868
Fast Food Restaurant with Drive Thru	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868
Parking Lot	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0461	0.4191	0.3521	2.5100e-003		0.0319	0.0319		0.0319	0.0319		502.9490	502.9490	9.6400e-003	9.2200e-003	505.9377
NaturalGas Unmitigated	0.0461	0.4191	0.3521	2.5100e-003		0.0319	0.0319		0.0319	0.0319		502.9490	502.9490	9.6400e-003	9.2200e-003	505.9377

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	1390.88	0.0150	0.1364	0.1145	8.2000e-004		0.0104	0.0104		0.0104	0.0104		163.6332	163.6332	3.1400e-003	3.0000e-003	164.6056
Fast Food Restaurant with Drive Thru	2884.18	0.0311	0.2828	0.2375	1.7000e-003		0.0215	0.0215		0.0215	0.0215		339.3158	339.3158	6.5000e-003	6.2200e-003	341.3321
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0461	0.4191	0.3521	2.5200e-003		0.0319	0.0319		0.0319	0.0319		502.9490	502.9490	9.6400e-003	9.2200e-003	505.9377

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	2.88418	0.0311	0.2828	0.2375	1.7000e-003		0.0215	0.0215		0.0215	0.0215		339.3158	339.3158	6.5000e-003	6.2200e-003	341.3321
Fast Food Restaurant with Drive Thru	1.39088	0.0150	0.1364	0.1145	8.2000e-004		0.0104	0.0104		0.0104	0.0104		163.6332	163.6332	3.1400e-003	3.0000e-003	164.6056
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0461	0.4191	0.3521	2.5200e-003		0.0319	0.0319		0.0319	0.0319		502.9490	502.9490	9.6400e-003	9.2200e-003	505.9377

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1744	5.0000e-005	6.0100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Unmitigated	0.1744	5.0000e-005	6.0100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137

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	0.0211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1527					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	5.0000e-005	6.0100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	0.1744	5.0000e-005	6.0100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

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	0.0211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1527					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	5.0000e-005	6.0100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	0.1744	5.0000e-005	6.0100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137

7.0 Water Detail**7.1 Mitigation Measures Water**

Use Water Efficient Landscaping

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Winter

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

CFA-SB Monrovia_Existing Bldg
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	89.50	1000sqft	2.05	89,500.00	0
High Turnover (Sit Down Restaurant)	12.22	1000sqft	0.28	12,216.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No Construction

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	3.00	0.00
tblConstructionPhase	NumDays	6.00	0.00
tblConstructionPhase	NumDays	220.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	9/7/2020	8/10/2020
tblConstructionPhase	PhaseEndDate	9/10/2020	9/7/2020
tblConstructionPhase	PhaseEndDate	9/18/2020	9/10/2020
tblConstructionPhase	PhaseEndDate	7/23/2021	9/18/2020
tblConstructionPhase	PhaseEndDate	8/6/2021	7/23/2021
tblConstructionPhase	PhaseEndDate	8/20/2021	8/6/2021
tblGrading	AcresOfGrading	0.00	3.00
tblGrading	AcresOfGrading	0.00	4.50

2.0 Emissions Summary

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

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					
2020	0.0000	0.0000	0.0000	0.0000	0.0000	3.8830	0.0000	0.0000	3.6251	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.6787	0.0000	0.0000	0.6330	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	3.8830	0.0000	0.0000	3.6251	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

[illegible][illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3124	1.0000e-004	0.0105	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0223	0.0223	6.0000e-005		0.0238
Energy	0.0833	0.7572	0.6360	4.5400e-003		0.0576	0.0576		0.0576	0.0576		908.6105	908.6105	0.0174	0.0167	914.0100
Mobile	2.9138	12.6772	25.7562	0.0781	5.6062	0.0777	5.6839	1.5001	0.0729	1.5730		7,951.0375	7,951.0375	0.4605		7,962.5497
Total	3.3095	13.4345	26.4027	0.0827	5.6062	0.1353	5.7415	1.5001	0.1305	1.6306		8,859.6703	8,859.6703	0.4780	0.0167	8,876.5834

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3124	1.0000e-004	0.0105	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0223	0.0223	6.0000e-005		0.0238
Energy	0.0833	0.7572	0.6360	4.5400e-003		0.0576	0.0576		0.0576	0.0576		908.6105	908.6105	0.0174	0.0167	914.0100
Mobile	2.9138	12.6772	25.7562	0.0781	5.6062	0.0777	5.6839	1.5001	0.0729	1.5730		7,951.0375	7,951.0375	0.4605		7,962.5497
Total	3.3095	13.4345	26.4027	0.0827	5.6062	0.1353	5.7415	1.5001	0.1305	1.6306		8,859.6703	8,859.6703	0.4780	0.0167	8,876.5834

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

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

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/11/2020	8/10/2020	5	0	
2	Site Preparation	Site Preparation	9/8/2020	9/7/2020	5	0	
3	Grading	Grading	9/11/2020	9/10/2020	5	0	
4	Building Construction	Building Construction	9/19/2020	9/18/2020	5	0	
5	Paving	Paving	7/24/2021	7/23/2021	5	0	
6	Architectural Coating	Architectural Coating	8/7/2021	8/6/2021	5	0	

Acres of Grading (Site Preparation Phase): 4.5**Acres of Grading (Grading Phase): 3****Acres of Paving: 2.05****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 18,324; Non-Residential Outdoor: 6,108; Striped Parking Area: 5,370 (Architectural Coating – sqft)****OffRoad Equipment**

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	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	8.00	231	0.29
Building Construction	Forklifts	2	7.00	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	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	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

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

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	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	43.00	17.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	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

3.2 Demolition - 2020

Unmitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

3.2 Demolition - 2020

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

3.2 Demolition - 2020

Mitigated Construction Off-Site

[illegible]

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

[illegible]

3.4 Grading - 2020

Unmitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

3.4 Grading - 2020

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

3.4 Grading - 2020

Mitigated Construction Off-Site

[illegible]

3.5 Building Construction - 2020

Unmitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

3.5 Building Construction - 2020

Mitigated Construction Off-Site

[illegible]

3.6 Paving - 2021

Unmitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

3.6 Paving - 2021

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

3.6 Paving - 2021

Mitigated Construction Off-Site

[illegible]

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

3.7 Architectural Coating - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	2.9138	12.6772	25.7562	0.0781	5.6062	0.0777	5.6839	1.5001	0.0729	1.5730		7,951.0375	7,951.0375	0.4605		7,962.5497
Unmitigated	2.9138	12.6772	25.7562	0.0781	5.6062	0.0777	5.6839	1.5001	0.0729	1.5730		7,951.0375	7,951.0375	0.4605		7,962.5497

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	1,553.26	1,934.65	1610.56	2,202,242	2,202,242
Parking Lot	0.00	0.00	0.00		
Total	1,553.26	1,934.65	1,610.56	2,202,242	2,202,242

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High Turnover (Sit Down)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High Turnover (Sit Down Restaurant)	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Parking Lot	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956

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	0.0833	0.7572	0.6360	4.5400e-003		0.0576	0.0576		0.0576	0.0576		908.6105	908.6105	0.0174	0.0167	914.0100
NaturalGas Unmitigated	0.0833	0.7572	0.6360	4.5400e-003		0.0576	0.0576		0.0576	0.0576		908.6105	908.6105	0.0174	0.0167	914.0100

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

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					
High Turnover (Sit Down Restaurant)	7723.19	0.0833	0.7572	0.6360	4.5400e-003		0.0576	0.0576		0.0576	0.0576		908.6105	908.6105	0.0174	0.0167	914.0100
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0833	0.7572	0.6360	4.5400e-003		0.0576	0.0576		0.0576	0.0576		908.6105	908.6105	0.0174	0.0167	914.0100

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					
High Turnover (Sit Down Restaurant)	7.72319	0.0833	0.7572	0.6360	4.5400e-003		0.0576	0.0576		0.0576	0.0576		908.6105	908.6105	0.0174	0.0167	914.0100
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0833	0.7572	0.6360	4.5400e-003		0.0576	0.0576		0.0576	0.0576		908.6105	908.6105	0.0174	0.0167	914.0100

6.0 Area Detail**6.1 Mitigation Measures Area**

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.3124	1.0000e-004	0.0105	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0223	0.0223	6.0000e-005		0.0238
Unmitigated	0.3124	1.0000e-004	0.0105	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0223	0.0223	6.0000e-005		0.0238

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	0.0378					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2736					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.8000e-004	1.0000e-004	0.0105	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0223	0.0223	6.0000e-005		0.0238
Total	0.3124	1.0000e-004	0.0105	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0223	0.0223	6.0000e-005		0.0238

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

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	0.0378					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2736					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.8000e-004	1.0000e-004	0.0105	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0223	0.0223	6.0000e-005		0.0238
Total	0.3124	1.0000e-004	0.0105	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0223	0.0223	6.0000e-005		0.0238

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Summer

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

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

Equipment Type	Number
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11.0 Vegetation

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

CFA-SB Monrovia_Existing Bldg

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	89.50	1000sqft	2.05	89,500.00	0
High Turnover (Sit Down Restaurant)	12.22	1000sqft	0.28	12,216.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No Construction

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	3.00	0.00
tblConstructionPhase	NumDays	6.00	0.00
tblConstructionPhase	NumDays	220.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	9/7/2020	8/10/2020
tblConstructionPhase	PhaseEndDate	9/10/2020	9/7/2020
tblConstructionPhase	PhaseEndDate	9/18/2020	9/10/2020
tblConstructionPhase	PhaseEndDate	7/23/2021	9/18/2020
tblConstructionPhase	PhaseEndDate	8/6/2021	7/23/2021
tblConstructionPhase	PhaseEndDate	8/20/2021	8/6/2021
tblGrading	AcresOfGrading	0.00	3.00
tblGrading	AcresOfGrading	0.00	4.50

2.0 Emissions Summary

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

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					
2020	0.0000	0.0000	0.0000	0.0000	0.0000	3.8831	0.0000	0.0000	3.6252	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.6787	0.0000	0.0000	0.6330	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	3.8831	0.0000	0.0000	3.6252	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3124	1.0000e-004	0.0105	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0223	0.0223	6.0000e-005		0.0238
Energy	0.0833	0.7572	0.6360	4.5400e-003		0.0576	0.0576		0.0576	0.0576		908.6105	908.6105	0.0174	0.0167	914.0100
Mobile	2.7608	12.7404	25.3519	0.0737	5.6062	0.0787	5.6849	1.5001	0.0738	1.5739		7,501.0626	7,501.0626	0.4722		7,512.8669
Total	3.1565	13.4976	25.9984	0.0782	5.6062	0.1362	5.7425	1.5001	0.1314	1.6315		8,409.6954	8,409.6954	0.4897	0.0167	8,426.9006

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3124	1.0000e-004	0.0105	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0223	0.0223	6.0000e-005		0.0238
Energy	0.0833	0.7572	0.6360	4.5400e-003		0.0576	0.0576		0.0576	0.0576		908.6105	908.6105	0.0174	0.0167	914.0100
Mobile	2.7608	12.7404	25.3519	0.0737	5.6062	0.0787	5.6849	1.5001	0.0738	1.5739		7,501.0626	7,501.0626	0.4722		7,512.8669
Total	3.1565	13.4976	25.9984	0.0782	5.6062	0.1362	5.7425	1.5001	0.1314	1.6315		8,409.6954	8,409.6954	0.4897	0.0167	8,426.9006

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/11/2020	8/10/2020	5	0	
2	Site Preparation	Site Preparation	9/8/2020	9/7/2020	5	0	
3	Grading	Grading	9/11/2020	9/10/2020	5	0	
4	Building Construction	Building Construction	9/19/2020	9/18/2020	5	0	
5	Paving	Paving	7/24/2021	7/23/2021	5	0	
6	Architectural Coating	Architectural Coating	8/7/2021	8/6/2021	5	0	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 2.05

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 18,324; Non-Residential Outdoor: 6,108; Striped Parking Area: 5,370 (Architectural Coating – sqft)

OffRoad Equipment

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	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	8.00	231	0.29
Building Construction	Forklifts	2	7.00	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	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	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

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

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	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	43.00	17.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	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

3.2 Demolition - 2020

Unmitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

3.2 Demolition - 2020

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

3.2 Demolition - 2020

Mitigated Construction Off-Site

[illegible]

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

[illegible]

CFA-SB Monrovia Existing Bldg - South Coast AQMD Air District, Winter

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

CFA-SB Monrovia Existing Bldg - South Coast AQMD Air District, Winter

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

[illegible]

3.4 Grading - 2020

Unmitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

3.4 Grading - 2020

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

3.4 Grading - 2020

Mitigated Construction Off-Site

[illegible]

3.5 Building Construction - 2020

Unmitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

3.5 Building Construction - 2020

Mitigated Construction Off-Site

[illegible]

3.6 Paving - 2021

Unmitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

3.6 Paving - 2021

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

3.6 Paving - 2021

Mitigated Construction Off-Site

[illegible]

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

3.7 Architectural Coating - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	2.7608	12.7404	25.3519	0.0737	5.6062	0.0787	5.6849	1.5001	0.0738	1.5739		7,501.0626	7,501.0626	0.4722		7,512.8669
Unmitigated	2.7608	12.7404	25.3519	0.0737	5.6062	0.0787	5.6849	1.5001	0.0738	1.5739		7,501.0626	7,501.0626	0.4722		7,512.8669

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	1,553.26	1,934.65	1610.56	2,202,242	2,202,242
Parking Lot	0.00	0.00	0.00		
Total	1,553.26	1,934.65	1,610.56	2,202,242	2,202,242

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High Turnover (Sit Down)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High Turnover (Sit Down Restaurant)	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Parking Lot	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956

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	0.0833	0.7572	0.6360	4.5400e-003		0.0576	0.0576		0.0576	0.0576		908.6105	908.6105	0.0174	0.0167	914.0100
NaturalGas Unmitigated	0.0833	0.7572	0.6360	4.5400e-003		0.0576	0.0576		0.0576	0.0576		908.6105	908.6105	0.0174	0.0167	914.0100

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

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					
High Turnover (Sit Down Restaurant)	7723.19	0.0833	0.7572	0.6360	4.5400e-003		0.0576	0.0576		0.0576	0.0576		908.6105	908.6105	0.0174	0.0167	914.0100
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0833	0.7572	0.6360	4.5400e-003		0.0576	0.0576		0.0576	0.0576		908.6105	908.6105	0.0174	0.0167	914.0100

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					
High Turnover (Sit Down Restaurant)	7.72319	0.0833	0.7572	0.6360	4.5400e-003		0.0576	0.0576		0.0576	0.0576		908.6105	908.6105	0.0174	0.0167	914.0100
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0833	0.7572	0.6360	4.5400e-003		0.0576	0.0576		0.0576	0.0576		908.6105	908.6105	0.0174	0.0167	914.0100

6.0 Area Detail**6.1 Mitigation Measures Area**

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.3124	1.0000e-004	0.0105	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0223	0.0223	6.0000e-005		0.0238
Unmitigated	0.3124	1.0000e-004	0.0105	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0223	0.0223	6.0000e-005		0.0238

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	0.0378					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2736					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.8000e-004	1.0000e-004	0.0105	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0223	0.0223	6.0000e-005		0.0238
Total	0.3124	1.0000e-004	0.0105	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0223	0.0223	6.0000e-005		0.0238

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

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	0.0378					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2736					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.8000e-004	1.0000e-004	0.0105	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0223	0.0223	6.0000e-005		0.0238
Total	0.3124	1.0000e-004	0.0105	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0223	0.0223	6.0000e-005		0.0238

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Winter

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

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

Equipment Type	Number
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11.0 Vegetation

ATTACHMENT B

CALEEMOD RESULTS: ANNUAL EMISSIONS GREENHOUSE GAS CO₂E

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Annual

Chick-fil-A & Starbucks Monrovia

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	51.90	1000sqft	1.19	51,900.00	0
City Park	0.20	Acre	0.20	8,786.00	0
Fast Food Restaurant with Drive Thru	4.56	1000sqft	0.10	4,562.00	0
Fast Food Restaurant with Drive Thru	2.20	1000sqft	0.05	2,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Annual

Project Characteristics - Construction Phase - Per the Draft IS/MND.

Land Use - Total lot acreage = approx. 2 acres.

Land Use - Pocket Park is located in the SE corner of the project site (8,786 sq ft)

Construction Phase - Construction schedule per client.

Demolition -

Grading - Project site is approx. 2 acres in size.

Construction Off-road Equipment Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation - CA state is aiming for 75% reduction by 2020. Assume 65%.

Energy Use -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	4.00	14.00
tblConstructionPhase	NumDays	200.00	112.00
tblConstructionPhase	NumDays	10.00	18.00
tblGrading	AcresOfGrading	5.25	1.50
tblGrading	AcresOfGrading	5.00	1.00
tblLandUse	LandUseSquareFeet	8,712.00	8,786.00
tblLandUse	LandUseSquareFeet	4,560.00	4,562.00
tblTripsAndVMT	HaulingTripNumber	0.00	150.00

2.0 Emissions Summary

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Annual

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	0.1719	1.0950	1.0278	2.1000e-003	0.0915	0.0478	0.1393	0.0400	0.0456	0.0856	0.0000	180.1080	180.1080	0.0310	0.0000	180.8818
Maximum	0.1719	1.0950	1.0278	2.1000e-003	0.0915	0.0478	0.1393	0.0400	0.0456	0.0856	0.0000	180.1080	180.1080	0.0310	0.0000	180.8818

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	0.1719	1.0950	1.0278	2.1000e-003	0.0556	0.0478	0.1034	0.0219	0.0456	0.0675	0.0000	180.1079	180.1079	0.0310	0.0000	180.8816
Maximum	0.1719	1.0950	1.0278	2.1000e-003	0.0556	0.0478	0.1034	0.0219	0.0456	0.0675	0.0000	180.1079	180.1079	0.0310	0.0000	180.8816

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	39.24	0.00	25.79	45.29	0.00	21.16	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-4-2022	7-3-2022	0.4999	0.4999
2	7-4-2022	9-30-2022	0.4881	0.4881
		Highest	0.4999	0.4999

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	0.0318	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4600e-003	1.4600e-003	0.0000	0.0000	1.5600e-003
Energy	8.4100e-003	0.0765	0.0643	4.6000e-004		5.8100e-003	5.8100e-003		5.8100e-003	5.8100e-003	0.0000	184.1570	184.1570	5.7600e-003	2.3900e-003	185.0128
Mobile	0.6765	3.0571	5.7610	0.0189	1.4479	0.0143	1.4622	0.3880	0.0133	0.4013	0.0000	1,751.2634	1,751.2634	0.0972	0.0000	1,753.6937
Waste						0.0000	0.0000		0.0000	0.0000	15.7643	0.0000	15.7643	0.9316	0.0000	39.0553
Water						0.0000	0.0000		0.0000	0.0000	0.6490	9.7934	10.4425	0.0671	1.6600e-003	12.6131
Total	0.7167	3.1336	5.8260	0.0193	1.4479	0.0201	1.4680	0.3880	0.0191	0.4071	16.4133	1,945.2153	1,961.6286	1.1017	4.0500e-003	1,990.3765

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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	0.0318	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4600e-003	1.4600e-003	0.0000	0.0000	1.5600e-003
Energy	8.4100e-003	0.0765	0.0643	4.6000e-004		5.8100e-003	5.8100e-003		5.8100e-003	5.8100e-003	0.0000	179.6083	179.6083	5.5700e-003	2.3500e-003	180.4477
Mobile	0.6765	3.0571	5.7610	0.0189	1.4479	0.0143	1.4622	0.3880	0.0133	0.4013	0.0000	1,751.2634	1,751.2634	0.0972	0.0000	1,753.6937
Waste						0.0000	0.0000		0.0000	0.0000	5.5175	0.0000	5.5175	0.3261	0.0000	13.6694
Water						0.0000	0.0000		0.0000	0.0000	0.6490	9.7934	10.4425	0.0671	1.6600e-003	12.6131
Total	0.7167	3.1336	5.8260	0.0193	1.4479	0.0201	1.4680	0.3880	0.0191	0.4071	6.1665	1,940.6665	1,946.8330	0.4959	4.0100e-003	1,960.4255

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.43	0.23	0.75	54.99	0.99	1.50

3.0 Construction Detail**Construction Phase**

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/4/2022	4/15/2022	5	10	
2	Site Preparation	Site Preparation	4/18/2022	4/29/2022	5	10	
3	Grading	Grading	5/2/2022	5/19/2022	5	14	
4	Building Construction	Building Construction	5/20/2022	10/24/2022	5	112	
5	Paving	Paving	10/25/2022	11/17/2022	5	18	
6	Architectural Coating	Architectural Coating	11/18/2022	12/1/2022	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.19

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,118; Non-Residential Outdoor: 3,373; Striped Parking Area: 3,114 (Architectural Coating – sqft)

OffRoad Equipment

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Annual

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

Trips and VMT

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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	56.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	150.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	28.00	11.00	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	6.00	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					6.0100e-003	0.0000	6.0100e-003	9.1000e-004	0.0000	9.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.4400e-003	0.0831	0.0698	1.2000e-004		4.1900e-003	4.1900e-003		3.9100e-003	3.9100e-003	0.0000	10.5388	10.5388	2.6900e-003	0.0000	10.6060
Total	8.4400e-003	0.0831	0.0698	1.2000e-004	6.0100e-003	4.1900e-003	0.0102	9.1000e-004	3.9100e-003	4.8200e-003	0.0000	10.5388	10.5388	2.6900e-003	0.0000	10.6060

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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	2.0000e-004	6.7400e-003	1.5300e-003	2.0000e-005	4.8000e-004	2.0000e-005	5.0000e-004	1.3000e-004	2.0000e-005	1.5000e-004	0.0000	2.0660	2.0660	1.4000e-004	0.0000	2.0695
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	1.8000e-004	2.0900e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5989	0.5989	2.0000e-005	0.0000	0.5993
Total	4.5000e-004	6.9200e-003	3.6200e-003	3.0000e-005	1.1900e-003	3.0000e-005	1.2200e-003	3.2000e-004	2.0000e-005	3.4000e-004	0.0000	2.6649	2.6649	1.6000e-004	0.0000	2.6688

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7100e-003	0.0000	2.7100e-003	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.4400e-003	0.0831	0.0698	1.2000e-004		4.1900e-003	4.1900e-003		3.9100e-003	3.9100e-003	0.0000	10.5388	10.5388	2.6900e-003	0.0000	10.6060
Total	8.4400e-003	0.0831	0.0698	1.2000e-004	2.7100e-003	4.1900e-003	6.9000e-003	4.1000e-004	3.9100e-003	4.3200e-003	0.0000	10.5388	10.5388	2.6900e-003	0.0000	10.6060

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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	2.0000e-004	6.7400e-003	1.5300e-003	2.0000e-005	4.8000e-004	2.0000e-005	5.0000e-004	1.3000e-004	2.0000e-005	1.5000e-004	0.0000	2.0660	2.0660	1.4000e-004	0.0000	2.0695
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	1.8000e-004	2.0900e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5989	0.5989	2.0000e-005	0.0000	0.5993
Total	4.5000e-004	6.9200e-003	3.6200e-003	3.0000e-005	1.1900e-003	3.0000e-005	1.2200e-003	3.2000e-004	2.0000e-005	3.4000e-004	0.0000	2.6649	2.6649	1.6000e-004	0.0000	2.6688

3.3 Site Preparation - 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					0.0269	0.0000	0.0269	0.0145	0.0000	0.0145	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5600e-003	0.0731	0.0355	9.0000e-005		3.1100e-003	3.1100e-003		2.8600e-003	2.8600e-003	0.0000	7.5576	7.5576	2.4400e-003	0.0000	7.6187
Total	6.5600e-003	0.0731	0.0355	9.0000e-005	0.0269	3.1100e-003	0.0300	0.0145	2.8600e-003	0.0174	0.0000	7.5576	7.5576	2.4400e-003	0.0000	7.6187

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3.3 Site Preparation - 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	5.2000e-004	0.0180	4.0900e-003	6.0000e-005	1.2900e-003	5.0000e-005	1.3400e-003	3.5000e-004	5.0000e-005	4.0000e-004	0.0000	5.5338	5.5338	3.8000e-004	0.0000	5.5432
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.1000e-004	1.2900e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3686	0.3686	1.0000e-005	0.0000	0.3688
Total	6.8000e-004	0.0182	5.3800e-003	6.0000e-005	1.7300e-003	5.0000e-005	1.7800e-003	4.7000e-004	5.0000e-005	5.2000e-004	0.0000	5.9024	5.9024	3.9000e-004	0.0000	5.9120

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0121	0.0000	0.0121	6.5400e-003	0.0000	6.5400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5600e-003	0.0731	0.0355	9.0000e-005		3.1100e-003	3.1100e-003		2.8600e-003	2.8600e-003	0.0000	7.5576	7.5576	2.4400e-003	0.0000	7.6187
Total	6.5600e-003	0.0731	0.0355	9.0000e-005	0.0121	3.1100e-003	0.0152	6.5400e-003	2.8600e-003	9.4000e-003	0.0000	7.5576	7.5576	2.4400e-003	0.0000	7.6187

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3.3 Site Preparation - 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	5.2000e-004	0.0180	4.0900e-003	6.0000e-005	1.2900e-003	5.0000e-005	1.3400e-003	3.5000e-004	5.0000e-005	4.0000e-004	0.0000	5.5338	5.5338	3.8000e-004	0.0000	5.5432
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.1000e-004	1.2900e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3686	0.3686	1.0000e-005	0.0000	0.3688
Total	6.8000e-004	0.0182	5.3800e-003	6.0000e-005	1.7300e-003	5.0000e-005	1.7800e-003	4.7000e-004	5.0000e-005	5.2000e-004	0.0000	5.9024	5.9024	3.9000e-004	0.0000	5.9120

3.4 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					0.0324	0.0000	0.0324	0.0175	0.0000	0.0175	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5800e-003	0.0840	0.0416	1.0000e-004		3.6200e-003	3.6200e-003		3.3300e-003	3.3300e-003	0.0000	8.6670	8.6670	2.8000e-003	0.0000	8.7371
Total	7.5800e-003	0.0840	0.0416	1.0000e-004	0.0324	3.6200e-003	0.0360	0.0175	3.3300e-003	0.0208	0.0000	8.6670	8.6670	2.8000e-003	0.0000	8.7371

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3.4 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.6000e-004	1.8000e-003	1.0000e-005	6.1000e-004	0.0000	6.2000e-004	1.6000e-004	0.0000	1.7000e-004	0.0000	0.5160	0.5160	1.0000e-005	0.0000	0.5163
Total	2.2000e-004	1.6000e-004	1.8000e-003	1.0000e-005	6.1000e-004	0.0000	6.2000e-004	1.6000e-004	0.0000	1.7000e-004	0.0000	0.5160	0.5160	1.0000e-005	0.0000	0.5163

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0146	0.0000	0.0146	7.8600e-003	0.0000	7.8600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5800e-003	0.0840	0.0416	1.0000e-004		3.6200e-003	3.6200e-003		3.3300e-003	3.3300e-003	0.0000	8.6670	8.6670	2.8000e-003	0.0000	8.7371
Total	7.5800e-003	0.0840	0.0416	1.0000e-004	0.0146	3.6200e-003	0.0182	7.8600e-003	3.3300e-003	0.0112	0.0000	8.6670	8.6670	2.8000e-003	0.0000	8.7371

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3.4 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.6000e-004	1.8000e-003	1.0000e-005	6.1000e-004	0.0000	6.2000e-004	1.6000e-004	0.0000	1.7000e-004	0.0000	0.5160	0.5160	1.0000e-005	0.0000	0.5163
Total	2.2000e-004	1.6000e-004	1.8000e-003	1.0000e-005	6.1000e-004	0.0000	6.2000e-004	1.6000e-004	0.0000	1.7000e-004	0.0000	0.5160	0.5160	1.0000e-005	0.0000	0.5163

3.5 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0923	0.7002	0.7127	1.2300e-003		0.0330	0.0330		0.0319	0.0319	0.0000	101.6831	101.6831	0.0177	0.0000	102.1258
Total	0.0923	0.7002	0.7127	1.2300e-003		0.0330	0.0330		0.0319	0.0319	0.0000	101.6831	101.6831	0.0177	0.0000	102.1258

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3.5 Building Construction - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6400e-003	0.0565	0.0140	1.5000e-004	3.8800e-003	1.0000e-004	3.9900e-003	1.1200e-003	1.0000e-004	1.2200e-003	0.0000	14.9070	14.9070	9.2000e-004	0.0000	14.9299
Worker	6.1400e-003	4.3600e-003	0.0505	1.6000e-004	0.0172	1.3000e-004	0.0173	4.5700e-003	1.2000e-004	4.6800e-003	0.0000	14.4475	14.4475	3.6000e-004	0.0000	14.4566
Total	7.7800e-003	0.0609	0.0644	3.1000e-004	0.0211	2.3000e-004	0.0213	5.6900e-003	2.2000e-004	5.9000e-003	0.0000	29.3545	29.3545	1.2800e-003	0.0000	29.3865

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0923	0.7002	0.7127	1.2300e-003		0.0330	0.0330		0.0319	0.0319	0.0000	101.6830	101.6830	0.0177	0.0000	102.1257
Total	0.0923	0.7002	0.7127	1.2300e-003		0.0330	0.0330		0.0319	0.0319	0.0000	101.6830	101.6830	0.0177	0.0000	102.1257

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3.5 Building Construction - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6400e-003	0.0565	0.0140	1.5000e-004	3.8800e-003	1.0000e-004	3.9900e-003	1.1200e-003	1.0000e-004	1.2200e-003	0.0000	14.9070	14.9070	9.2000e-004	0.0000	14.9299
Worker	6.1400e-003	4.3600e-003	0.0505	1.6000e-004	0.0172	1.3000e-004	0.0173	4.5700e-003	1.2000e-004	4.6800e-003	0.0000	14.4475	14.4475	3.6000e-004	0.0000	14.4566
Total	7.7800e-003	0.0609	0.0644	3.1000e-004	0.0211	2.3000e-004	0.0213	5.6900e-003	2.2000e-004	5.9000e-003	0.0000	29.3545	29.3545	1.2800e-003	0.0000	29.3865

3.6 Paving - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.1900e-003	0.0610	0.0793	1.2000e-004		3.1300e-003	3.1300e-003		2.8800e-003	2.8800e-003	0.0000	10.5927	10.5927	3.3600e-003	0.0000	10.6766
Paving	1.5600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.7500e-003	0.0610	0.0793	1.2000e-004		3.1300e-003	3.1300e-003		2.8800e-003	2.8800e-003	0.0000	10.5927	10.5927	3.3600e-003	0.0000	10.6766

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3.6 Paving - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.3000e-004	3.7600e-003	1.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.0780	1.0780	3.0000e-005	0.0000	1.0787
Total	4.6000e-004	3.3000e-004	3.7600e-003	1.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.0780	1.0780	3.0000e-005	0.0000	1.0787

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.1900e-003	0.0610	0.0793	1.2000e-004		3.1300e-003	3.1300e-003		2.8800e-003	2.8800e-003	0.0000	10.5927	10.5927	3.3600e-003	0.0000	10.6766
Paving	1.5600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.7500e-003	0.0610	0.0793	1.2000e-004		3.1300e-003	3.1300e-003		2.8800e-003	2.8800e-003	0.0000	10.5927	10.5927	3.3600e-003	0.0000	10.6766

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3.6 Paving - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.3000e-004	3.7600e-003	1.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.0780	1.0780	3.0000e-005	0.0000	1.0787
Total	4.6000e-004	3.3000e-004	3.7600e-003	1.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.0780	1.0780	3.0000e-005	0.0000	1.0787

3.7 Architectural Coating - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0385					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	0.0395	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787

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3.7 Architectural Coating - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	8.0000e-005	9.7000e-004	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2764	0.2764	1.0000e-005	0.0000	0.2766
Total	1.2000e-004	8.0000e-005	9.7000e-004	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2764	0.2764	1.0000e-005	0.0000	0.2766

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0385					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	0.0395	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787

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3.7 Architectural Coating - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	8.0000e-005	9.7000e-004	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2764	0.2764	1.0000e-005	0.0000	0.2766
Total	1.2000e-004	8.0000e-005	9.7000e-004	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2764	0.2764	1.0000e-005	0.0000	0.2766

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	0.6765	3.0571	5.7610	0.0189	1.4479	0.0143	1.4622	0.3880	0.0133	0.4013	0.0000	1,751.2634	1,751.2634	0.0972	0.0000	1,753.6937
Unmitigated	0.6765	3.0571	5.7610	0.0189	1.4479	0.0143	1.4622	0.3880	0.0133	0.4013	0.0000	1,751.2634	1,751.2634	0.0972	0.0000	1,753.6937

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.38	4.55	3.35	4,024	4,024
Fast Food Restaurant with Drive Thru	2,262.31	3,292.46	2474.80	2,567,645	2,567,645
Fast Food Restaurant with Drive Thru	1,091.46	1,588.47	1193.98	1,238,776	1,238,776
Parking Lot	0.00	0.00	0.00		
Total	3,354.15	4,885.47	3,672.14	3,810,444	3,810,444

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868
Fast Food Restaurant with Drive Thru	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868
Parking Lot	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	96.3394	96.3394	3.9800e-003	8.2000e-004	96.6841
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	100.8882	100.8882	4.1700e-003	8.6000e-004	101.2491
NaturalGas Mitigated	8.4100e-003	0.0765	0.0643	4.6000e-004		5.8100e-003	5.8100e-003		5.8100e-003	5.8100e-003	0.0000	83.2688	83.2688	1.6000e-003	1.5300e-003	83.7637
NaturalGas Unmitigated	8.4100e-003	0.0765	0.0643	4.6000e-004		5.8100e-003	5.8100e-003		5.8100e-003	5.8100e-003	0.0000	83.2688	83.2688	1.6000e-003	1.5300e-003	83.7637

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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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	1.05273e+006	5.6800e-003	0.0516	0.0434	3.1000e-004		3.9200e-003	3.9200e-003		3.9200e-003	3.9200e-003	0.0000	56.1775	56.1775	1.0800e-003	1.0300e-003	56.5114
Fast Food Restaurant with Drive Thru	507672	2.7400e-003	0.0249	0.0209	1.5000e-004		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	27.0913	27.0913	5.2000e-004	5.0000e-004	27.2523
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		8.4200e-003	0.0765	0.0643	4.6000e-004		5.8100e-003	5.8100e-003		5.8100e-003	5.8100e-003	0.0000	83.2688	83.2688	1.6000e-003	1.5300e-003	83.7637

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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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	507672	2.7400e-003	0.0249	0.0209	1.5000e-004		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	27.0913	27.0913	5.2000e-004	5.0000e-004	27.2523
Fast Food Restaurant with Drive Thru	1.05273e+006	5.6800e-003	0.0516	0.0434	3.1000e-004		3.9200e-003	3.9200e-003		3.9200e-003	3.9200e-003	0.0000	56.1775	56.1775	1.0800e-003	1.0300e-003	56.5114
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		8.4200e-003	0.0765	0.0643	4.6000e-004		5.8100e-003	5.8100e-003		5.8100e-003	5.8100e-003	0.0000	83.2688	83.2688	1.6000e-003	1.5300e-003	83.7637

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Annual

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	201367	64.1597	2.6500e-003	5.5000e-004	64.3893
Fast Food Restaurant with Drive Thru	97108	30.9407	1.2800e-003	2.6000e-004	31.0514
Parking Lot	18165	5.7878	2.4000e-004	5.0000e-005	5.8085
Total		100.8882	4.1700e-003	8.6000e-004	101.2491

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Annual

5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	194186	61.8719	2.5500e-003	5.3000e-004	62.0932
Fast Food Restaurant with Drive Thru	93645.2	29.8374	1.2300e-003	2.5000e-004	29.9441
Parking Lot	14532	4.6302	1.9000e-004	4.0000e-005	4.6468
Total		96.3394	3.9700e-003	8.2000e-004	96.6841

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

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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	0.0318	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4600e-003	1.4600e-003	0.0000	0.0000	1.5600e-003
Unmitigated	0.0318	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4600e-003	1.4600e-003	0.0000	0.0000	1.5600e-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	3.8500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0279					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4600e-003	1.4600e-003	0.0000	0.0000	1.5600e-003
Total	0.0318	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4600e-003	1.4600e-003	0.0000	0.0000	1.5600e-003

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Annual

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	3.8500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0279					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4600e-003	1.4600e-003	0.0000	0.0000	1.5600e-003
Total	0.0318	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4600e-003	1.4600e-003	0.0000	0.0000	1.5600e-003

7.0 Water Detail**7.1 Mitigation Measures Water**

Use Water Efficient Landscaping

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	10.4425	0.0671	1.6600e-003	12.6131
Unmitigated	10.4425	0.0671	1.6600e-003	12.6131

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.238296	0.8435	3.0000e-005	1.0000e-005	0.8466
Fast Food Restaurant with Drive Thru	2.04582 / 0.130584	9.5989	0.0670	1.6500e-003	11.7666
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		10.4425	0.0671	1.6600e-003	12.6131

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.238296	0.8435	3.0000e-005	1.0000e-005	0.8466
Fast Food Restaurant with Drive Thru	2.04582 / 0.130584	9.5989	0.0670	1.6500e-003	11.7666
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		10.4425	0.0671	1.6600e-003	12.6131

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	5.5175	0.3261	0.0000	13.6694
Unmitigated	15.7643	0.9316	0.0000	39.0553

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.02	4.0600e-003	2.4000e-004	0.0000	0.0101
Fast Food Restaurant with Drive Thru	77.64	15.7602	0.9314	0.0000	39.0453
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		15.7643	0.9316	0.0000	39.0553

Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Annual

8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.007	1.4200e-003	8.0000e-005	0.0000	3.5200e-003
Fast Food Restaurant with Drive Thru	27.174	5.5161	0.3260	0.0000	13.6659
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		5.5175	0.3261	0.0000	13.6694

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
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Chick-fil-A & Starbucks Monrovia - South Coast AQMD Air District, Annual

11.0 Vegetation

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CFA-SB Monrovia_Existing Bldg

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	89.50	1000sqft	2.05	89,500.00	0
High Turnover (Sit Down Restaurant)	12.22	1000sqft	0.28	12,216.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No Construction

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	3.00	0.00
tblConstructionPhase	NumDays	6.00	0.00
tblConstructionPhase	NumDays	220.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	9/7/2020	8/10/2020
tblConstructionPhase	PhaseEndDate	9/10/2020	9/7/2020
tblConstructionPhase	PhaseEndDate	9/18/2020	9/10/2020
tblConstructionPhase	PhaseEndDate	7/23/2021	9/18/2020
tblConstructionPhase	PhaseEndDate	8/6/2021	7/23/2021
tblConstructionPhase	PhaseEndDate	8/20/2021	8/6/2021
tblGrading	AcresOfGrading	0.00	3.00
tblGrading	AcresOfGrading	0.00	4.50

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0570	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5200e-003	2.5200e-003	1.0000e-005	0.0000	2.6900e-003
Energy	0.0152	0.1382	0.1161	8.3000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	332.2167	332.2167	0.0104	4.3100e-003	333.7610
Mobile	0.4065	1.9712	3.8673	0.0114	0.8368	0.0119	0.8487	0.2243	0.0111	0.2354	0.0000	1,053.1032	1,053.1032	0.0640	0.0000	1,054.7037
Waste						0.0000	0.0000		0.0000	0.0000	29.5190	0.0000	29.5190	1.7445	0.0000	73.1319
Water						0.0000	0.0000		0.0000	0.0000	1.1768	16.2266	17.4034	0.1215	2.9900e-003	21.3335
Total	0.4787	2.1094	3.9847	0.0122	0.8368	0.0224	0.8592	0.2243	0.0216	0.2459	30.6957	1,401.5491	1,432.2448	1.9405	7.3000e-003	1,482.9327

CFA-SB Monrovia_Existing Bldg - South Coast AQMD Air District, Annual

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	0.0570	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5200e-003	2.5200e-003	1.0000e-005	0.0000	2.6900e-003
Energy	0.0152	0.1382	0.1161	8.3000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	332.2167	332.2167	0.0104	4.3100e-003	333.7610
Mobile	0.4065	1.9712	3.8673	0.0114	0.8368	0.0119	0.8487	0.2243	0.0111	0.2354	0.0000	1,053.1032	1,053.1032	0.0640	0.0000	1,054.7037
Waste						0.0000	0.0000		0.0000	0.0000	29.5190	0.0000	29.5190	1.7445	0.0000	73.1319
Water						0.0000	0.0000		0.0000	0.0000	1.1768	16.2266	17.4034	0.1215	2.9900e-003	21.3335
Total	0.4787	2.1094	3.9847	0.0122	0.8368	0.0224	0.8592	0.2243	0.0216	0.2459	30.6957	1,401.5491	1,432.2448	1.9405	7.3000e-003	1,482.9327

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

3.0 Construction Detail**Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/11/2020	8/10/2020	5	0	
2	Site Preparation	Site Preparation	9/8/2020	9/7/2020	5	0	
3	Grading	Grading	9/11/2020	9/10/2020	5	0	
4	Building Construction	Building Construction	9/19/2020	9/18/2020	5	0	
5	Paving	Paving	7/24/2021	7/23/2021	5	0	
6	Architectural Coating	Architectural Coating	8/7/2021	8/6/2021	5	0	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 2.05

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 18,324; Non-Residential Outdoor: 6,108; Striped Parking Area: 5,370 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	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	8.00	231	0.29
Building Construction	Forklifts	2	7.00	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	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	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

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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	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	43.00	17.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	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

3.2 Demolition - 2020

Unmitigated Construction On-Site

[illegible]

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3.2 Demolition - 2020

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

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3.2 Demolition - 2020

Mitigated Construction Off-Site

[illegible]

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

[illegible]

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3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

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3.3 Site Preparation - 2020

Mitigated Construction Off-Site

[illegible]

3.4 Grading - 2020

Unmitigated Construction On-Site

[illegible]

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3.4 Grading - 2020

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

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3.4 Grading - 2020

Mitigated Construction Off-Site

[illegible]

3.5 Building Construction - 2020

Unmitigated Construction On-Site

[illegible]

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3.5 Building Construction - 2020

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

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3.5 Building Construction - 2020

Mitigated Construction Off-Site

[illegible]

3.6 Paving - 2021

Unmitigated Construction On-Site

[illegible]

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3.6 Paving - 2021

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

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3.6 Paving - 2021

Mitigated Construction Off-Site

[illegible]

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

[illegible]

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3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

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3.7 Architectural Coating - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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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	0.4065	1.9712	3.8673	0.0114	0.8368	0.0119	0.8487	0.2243	0.0111	0.2354	0.0000	1,053.1032	1,053.1032	0.0640	0.0000	1,054.7037
Unmitigated	0.4065	1.9712	3.8673	0.0114	0.8368	0.0119	0.8487	0.2243	0.0111	0.2354	0.0000	1,053.1032	1,053.1032	0.0640	0.0000	1,054.7037

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	1,553.26	1,934.65	1610.56	2,202,242	2,202,242
Parking Lot	0.00	0.00	0.00		
Total	1,553.26	1,934.65	1,610.56	2,202,242	2,202,242

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High Turnover (Sit Down)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High Turnover (Sit Down Restaurant)	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Parking Lot	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956

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	181.7860	181.7860	7.5000e-003	1.5500e-003	182.4364
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	181.7860	181.7860	7.5000e-003	1.5500e-003	182.4364
NaturalGas Mitigated	0.0152	0.1382	0.1161	8.3000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	150.4307	150.4307	2.8800e-003	2.7600e-003	151.3246
NaturalGas Unmitigated	0.0152	0.1382	0.1161	8.3000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	150.4307	150.4307	2.8800e-003	2.7600e-003	151.3246

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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					
High Turnover (Sit Down Restaurant)	2.81896e+006	0.0152	0.1382	0.1161	8.3000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	150.4307	150.4307	2.8800e-003	2.7600e-003	151.3246
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0152	0.1382	0.1161	8.3000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	150.4307	150.4307	2.8800e-003	2.7600e-003	151.3246

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					
High Turnover (Sit Down Restaurant)	2.81896e+006	0.0152	0.1382	0.1161	8.3000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	150.4307	150.4307	2.8800e-003	2.7600e-003	151.3246
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0152	0.1382	0.1161	8.3000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	150.4307	150.4307	2.8800e-003	2.7600e-003	151.3246

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	539214	171.8052	7.0900e-003	1.4700e-003	172.4199
Parking Lot	31325	9.9808	4.1000e-004	9.0000e-005	10.0165
Total		181.7860	7.5000e-003	1.5600e-003	182.4364

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	539214	171.8052	7.0900e-003	1.4700e-003	172.4199
Parking Lot	31325	9.9808	4.1000e-004	9.0000e-005	10.0165
Total		181.7860	7.5000e-003	1.5600e-003	182.4364

6.0 Area Detail**6.1 Mitigation Measures Area**

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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	0.0570	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5200e-003	2.5200e-003	1.0000e-005	0.0000	2.6900e-003
Unmitigated	0.0570	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5200e-003	2.5200e-003	1.0000e-005	0.0000	2.6900e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.9100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0499					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-004	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5200e-003	2.5200e-003	1.0000e-005	0.0000	2.6900e-003
Total	0.0570	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5200e-003	2.5200e-003	1.0000e-005	0.0000	2.6900e-003

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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	6.9100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0499					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-004	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5200e-003	2.5200e-003	1.0000e-005	0.0000	2.6900e-003
Total	0.0570	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5200e-003	2.5200e-003	1.0000e-005	0.0000	2.6900e-003

7.0 Water Detail**7.1 Mitigation Measures Water**

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	17.4034	0.1215	2.9900e-003	21.3335
Unmitigated	17.4034	0.1215	2.9900e-003	21.3335

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	3.70918 / 0.236756	17.4034	0.1215	2.9900e-003	21.3335
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		17.4034	0.1215	2.9900e-003	21.3335

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	3.70918 / 0.236756	17.4034	0.1215	2.9900e-003	21.3335
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		17.4034	0.1215	2.9900e-003	21.3335

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	29.5190	1.7445	0.0000	73.1319
Unmitigated	29.5190	1.7445	0.0000	73.1319

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8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	145.42	29.5190	1.7445	0.0000	73.1319
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		29.5190	1.7445	0.0000	73.1319

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	145.42	29.5190	1.7445	0.0000	73.1319
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		29.5190	1.7445	0.0000	73.1319

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation
