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VIA EMAIL
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Subject: Revised Air Quality Analysis for the Street Lights Fullerton Project in the City of Fullerton, California

Dear Ms. Allen:

This Letter Report presents the results of the air quality emissions analysis for the proposed Street Lights Fullerton Project located at 223, 225, and 229 East Orangethorpe Avenue and 1101, and 1111 South Lemon Street, in the City of Fullerton, California (hereinafter referred to as the "Project"). This analysis addresses the potential air quality impacts associated with the Project in accordance with the California Environmental Quality Act (CEQA) (California Public Resources Code §21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, Title 14, §15000 et seq.).

PROJECT SETTING AND DESCRIPTION

The Project Applicant, Street Lights Residential, proposes to develop a 4.47-acre site with in-fill mixed-use multi-family residential and neighborhood commercial development, which includes 329 multi-family residential units and 5,995 sf of retail uses in a 380,123-sf, 5-story structure. The Project involves demolition and removal of the existing structures and associated improvements, including surface parking lots, to accommodate the proposed development. A total of 550 parking spaces would be provided within a 6-story parking structure. The Project site is currently developed with two single-story multi-tenant commercial buildings, associated asphalt concrete paved surface parking, and two restaurants abutting Lemon Street. The commercial spaces are mostly vacant, and all existing uses on the Project site are slated for demolition to accommodate development of the proposed Project. Please refer to Exhibit 1, Regional Location and Local Vicinity.

AIR QUALITY ANALYSIS

Relevant elements of the proposed Project related to the analysis of potential air quality impacts include (1) demolition of on-site paving and existing buildings (250 truckloads of export), which would require export of demolition and construction debris; (2) on-site grading activities, which are expected to export approximately 500 truckloads of soil of soils; (3) the use of construction equipment during construction of the Project uses; and (4) the vehicle trips generated by the proposed Project.

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The Project site is located in the Orange County portion of the South Coast Air Basin (SoCAB), and, for air quality regulation and permitting, is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SoCAB is a 6,600-square-mile area bound by the Pacific Ocean to the west, the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and the San Diego County line to the south. The SoCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area of Riverside County. The SoCAB's terrain and geographical location (i.e., a coastal plain with connecting broad valleys and low hills) determine its distinctive semi-arid climate, which is characterized by moderate temperatures, oceanic influence, and precipitation that is limited to a few storms during the winter (i.e., November through April).

Air Quality Background Information

The SCAQMD has established quantitative thresholds for short-term (construction) emissions and long-term (operational) emissions for the following criteria pollutants: ozone, carbon monoxide, nitrogen oxides, sulfur dioxide, and particulate matter 10 and 2.5 microns. The characteristics and health effects of these criteria pollutants are described below:

- Ozone (O_3) is a nearly colorless gas that is formed by photochemical reaction (when nitrogen dioxide is broken down by sunlight). Ground-level O_3 exposure can cause a variety of health problems, including lung irritation, wheezing, coughing, pain when taking a deep breath, and breathing difficulties during exercise or outdoor activities; permanent lung damage; aggravated asthma; and increased susceptibility to respiratory illnesses.
- Carbon monoxide (CO) is a colorless and odorless toxic gas which, in the urban environment, is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can lead to headaches, aggravation of cardiovascular disease, and impairment of central nervous system functions.
- Nitrogen oxides (NOx) are yellowish-brown gases, which at high levels can cause breathing difficulties. NOx are formed when nitric oxide (a pollutant from internal combustion processes) combines with oxygen.
- Sulfur dioxide (SO_2) is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Health effects include acute respiratory symptoms and difficulty in breathing for children.
- Particulate Matter 10 (PM10) and Particulate Matter 2.5 (PM2.5) refer to particulate matter less than ten microns and two and one-half microns in diameter, respectively. Particulates of this size cause a greater health risk than larger-sized particles since fine particles can more easily cause irritation. Particulate matter includes both aerosols and solid particles. An example of particulate matter is fugitive dust. Short-term exposure to high PM2.5 levels is associated with premature mortality and increased hospital admissions and emergency room visits. Long-term exposure to high PM2.5 levels is associated with premature mortality and development of chronic respiratory disease. Short-term exposure to high PM10 levels is associated with hospital admissions for cardiopulmonary diseases, increased respiratory symptoms, and possible premature mortality.

Existing Air Quality Conditions

Air quality data for the Project site is represented by the Anaheim-Pampas Lane monitoring station located at 1630 West Pampas Lane, Anaheim. The monitoring station is located approximately 2.3 miles southwest of the Project site. Pollutants measured at the Anaheim-Pampas Lane Monitoring Station include O_3, PM10, PM2.5, and NO_2. The monitoring data presented in Table 1, Air Quality Levels Measured at the Anaheim-Pampas Lane Monitoring Station, were obtained from the California Air Resources Board (CARB 2021a). Federal and State air quality standards are presented with the number of times those standards were exceeded.

TABLE 1
AIR QUALITY LEVELS MEASURED AT THE ANAHEIM-PAMPAS LANE MONITORING STATION

Pollutant	California Standard	National Standard	Year	Max. Level	Days State Standard Exceeded	Days National Standard Exceeded
O_3 (1 hour)	0.09 ppm	None	2017	0.090	0	0
			2018	0.112	1	1
			2019	0.096	1	1
O_3 (8 hour)	0.070 ppm	0.070 ppm	2017	0.076	4	4
			2018	0.071	1	1
			2019	0.082	1	1
PM10 (24 hour)	50 µg/m^3	150 µg/m^3	2017	95.7	5	0
			2018	94.6	2	0
			2019	127.1	4	0
PM10 (AAM)	20 µg/m^3	None	2017	—	—	—
			2018	—	—	—
			2019	—	—	—
NO_2 (1 Hour)	0.18 ppm	0.100 ppm	2017	0.081	0	0
			2018	0.066	0	0
			2019	0.059	0	0
PM2.5 (24 Hour)	None	35 µg/m^3	2017	56.2	N/A	7
			2018	68.0	N/A	7
			2019	37.1	N/A	4

—: Data Not Reported or insufficient data available to determine the value; O_3: ozone; ppm: parts per million; PM10: respirable particulate matter with a diameter of 10 microns or less; µg/m^3: micrograms per cubic meter; AAM: Annual Arithmetic Mean; NO_2: nitrogen dioxide; CO: carbon monoxide; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; SO_2: sulfur dioxide. N/A indicates that there is no applicable standard.

[a] California maximum levels were used.

Source: CARB 2021a.

Regulatory Background

Pollutants and Standards

The U.S. Environmental Protection Agency (USEPA) defines seven criteria air pollutants: O_3, CO, NO_2, sulfur dioxide (SO_2), PM10, PM2.5, and lead. These pollutants are called criteria pollutants because the USEPA has established National Ambient Air Quality Standards (NAAQS) for the concentrations of these pollutants (USEPA 2021a). CARB has also established standards for the criteria pollutants, known as California Ambient Air Quality Standards (CAAQS), and the State standards are generally more restrictive than the NAAQS. When a region has air quality that fails to meet the standards, the USEPA and the CARB designate the region as "nonattainment" and the regional air quality agency must develop plans to attain the standards.

Based on monitored air pollutant concentrations, the USEPA and the CARB designate an area's status in attaining the NAAQS and the CAAQS, respectively, for selected criteria pollutants. These attainment designations are shown in Table 2. As identified in Table 2, Los Angeles County is a nonattainment area for O_3, PM10, PM2.5, and lead.

TABLE 2
ATTAINMENT STATUS OF CRITERIA POLLUTANTS
IN THE SOUTH COAST AIR BASIN

Pollutant	State	Federal
O_3 (1 hour)	Nonattainment	No standards
O_3 (8 hour)	Nonattainment	Nonattainment
PM10	Nonattainment	Attainment/Maintenance
PM2.5	Nonattainment	Nonattainment
CO	Attainment	Attainment/Maintenance
NO_2	Attainment	Attainment/Maintenance
SO_2	Attainment	Attainment
Lead	Attainment	Attainment/Nonattainment*
All others	Attainment/Unclassified	No standards

O_3: ozone; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; NO_2: nitrogen dioxide; SO_2: sulfur dioxide; SoCAB: South Coast Air Basin.

* Los Angeles County is classified nonattainment for lead; the remainder of the SoCAB is in attainment of the State and federal standards.

Source: SCAQMD 2016

CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for coordinating and administering both the federal and State air pollution control programs in California. In this capacity, CARB conducts research, sets the CAAQS (as shown in Table 3), compiles emission inventories, develops suggested control measures, oversees local programs, and prepares the State Implementation Plan (SIP). For regions that do not attain the CAAQS, CARB requires the air districts to prepare plans for attaining the standards. These plans are then integrated into the SIP. CARB establishes emissions standards for (1) motor vehicles sold in California, (2) consumer products (e.g., hair spray, aerosol paints, barbecue lighter fluid), and (3) various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

O_3 is a secondary pollutant and is created when nitrogen oxides (NOx) and VOCs react in the presence of sunlight. The predominant source of air emissions generated by project development would be from vehicle emissions. Motor vehicles primarily emit CO, NOx, and VOCs. The NAAQS and CAAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. The NAAQS and CAAQS for O_3, CO, NO_2, SO_2, PM10, PM2.5, and lead are shown in Table 3.

The SCAQMD was established in 1977 by merging the individual air pollution control districts of the four counties within the SoCAB: Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The SCAQMD and the Southern California Association of Governments (SCAG), in coordination with local governments and the private sector, develop the Air Quality Management Plan (AQMP) for the SoCAB to satisfy these requirements. The AQMP is the most important air management document for the SoCAB because it provides the blueprint for meeting State and federal ambient air quality standards.

On November 28, 2007, CARB submitted a SIP revision to the USEPA for O_3, PM2.5 (1997 Standard), CO, and NO_2 in the SoCAB. This revision is identified as the "2007 South Coast SIP". The 2007 South Coast SIP demonstrates attainment of the federal PM2.5 standard in the SoCAB by 2014, and attainment of the federal 8-hour O_3 standard by 2023. This SIP also includes a request to reclassify the O_3 attainment designation from "severe" to "extreme". The USEPA approved the redesignation effective June 4, 2010. The "extreme" designation requires the attainment of the 8-hour O_3 standard in the SoCAB by June 2024. CARB approved PM2.5 SIP revisions in April 2011, and the O_3 SIP revisions in July 2011. The USEPA approved the PM2.5 SIP on September 25, 2013, and has approved 47 of the 62 1997, 8-hour O_3 SIP requirements (USEPA 2016). On November 30, 2014, the USEPA proposed a finding that the SoCAB has attained the 1997 PM2.5 standards (USEPA 2014). The comment period closed on January 22, 2015; no subsequent action has been taken.

On September 30, 2015, the USEPA proposed to approve elements of the South Coast 2012 PM2.5 Plan and 2015 Supplement, which addresses Clean Air Act requirements for the 2006 PM2.5 NAAQS, and proposed to reclassify the area as a "serious" nonattainment area for the 2006 PM2.5 standard. The reclassification is based on the determination that the area cannot practicably attain the 2006 PM2.5 NAAQS by the moderate area attainment date (December 31, 2015). On December 22, 2015, the EPA reclassified the South Coast area as a "Serious" nonattainment area for the 2006 PM2.5 standard. The final reclassification requires the State to submit a "serious area" plan that provides for attainment of the 2006 PM2.5 NAAQS as expeditiously as practicable as and no later than December 31, 2019 (USEPA 2016). On December 4, 2020, the South Coast Air District adopted the *South Coast Air Basin Attainment Plan for 2006 24-Hour PM2.5 Standard* (Plan) to meet the Clean Air Act requirements. CARB was scheduled to consider adopting the Plan on December 10, 2020 for submittal into the California SIP. However, this item has been moved to the February 25, 2021 CARB meeting (CARB 2021b).

TABLE 3
CALIFORNIA AND FEDERAL AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards	Federal Standards	
			Primary[a]	Secondary[b]
O_3	1 Hour	0.09 ppm (180 µg/m^3)	—	—
	8 Hour	0.070 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)	Same as Primary
PM10	24 Hour	50 µg/m^3	150 µg/m^3	Same as Primary
	AAM	20 µg/m^3	–	Same as Primary
PM2.5	24 Hour	–	35 µg/m^3	Same as Primary
	AAM	12 µg/m^3	12.0 µg/m^3	15.0 µg/m^3
CO	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	—
	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)	—	—
NO_2	AAM	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as Primary
	1 Hour	0.18 ppm (339 µg/m^3)	0.100 ppm (188 µg/m^3)	—
SO_2	24 Hour	0.04 ppm (105 µg/m^3)	—	—
	3 Hour	—	—	0.5 ppm (1,300 µg/m^3)
	1 Hour	0.25 ppm (655 µg/m^3)	0.075 ppm (196 µg/m^3)	—
Lead	30-day Avg.	1.5 µg/m^3	—	—
	Calendar Quarter	—	1.5 µg/m^3	Same as Primary
	Rolling 3-month Avg.	—	0.15 µg/m^3	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	**No Federal Standards**	
Sulfates	24 Hour	25 µg/m^3		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m^3)		

O_3: ozone; ppm: parts per million; µg/m^3: micrograms per cubic meter; PM10: respirable particulate matter 10 microns or less in diameter; AAM: Annual Arithmetic Mean; —: No Standard; PM2.5: fine particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; mg/m^3: milligrams per cubic meter; NO_2: nitrogen dioxide; SO_2: sulfur dioxide; km: kilometer.

[a] *National Primary Standards:* The levels of air quality necessary, within an adequate margin of safety, to protect the public health.

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

Note: More detailed information in the data presented in this table can be found at the CARB website (www.arb.ca.gov).

Source: CARB 2016

On March 3, 2017, the SCAQMD adopted the 2016 AQMP, which is a regional and multi-agency effort (SCAQMD, CARB, SCAG, and USEPA). The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including the SCAG 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS); updated emission inventory

methodologies for various source categories; and SCAG's latest growth forecasts. The main purpose of an AQMP is to bring an area into compliance with the requirements of federal and State air quality standards. For a project to be consistent with the AQMP, the pollutants emitted from the project should not (1) exceed the SCAQMD CEQA air quality significance thresholds or (2) conflict with or exceed the assumptions in the AQMP.

On October 1, 2015, the USEPA strengthened the National Ambient Air Quality Standards (NAAQS) for ground-level ozone, lowering the primary and secondary ozone standard levels to 70 parts per billion. The South Coast Air Basin is classified as an "extreme" non-attainment area for the 2015 Ozone NAAQS. The 2022 AQMP will be developed to address the requirements for meeting this standard. The 2022 AQMP will represent a comprehensive analysis of emissions, meteorology, regional air quality modeling, regional growth projections, and the impact of existing and proposed control measures (SCAQMD 2021).

Sensitive Air Quality Receptors

Sensitive receptors include, but are not limited to, children, the elderly, persons with preexisting respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. These sensitive receptors include, but are not limited to, schools, parks, hospitals, high-density residential areas, and convalescent homes. The Project site is surrounded with commercial and warehouse uses. The nearest sensitive receptors are residential uses located north of the Project site, approximately 760 feet from the Project's northern boundary.

Thresholds of Significance

The SCAQMD's Air Quality Analysis Handbook (CEQA Handbook) provides significance thresholds for both construction and operation of projects within the SCAQMD's jurisdictional boundaries (SCAQMD 2019). The SCAQMD recommends that projects be evaluated in terms of the quantitative thresholds established to assess both the regional and localized impacts of project-related air pollutant emissions. The City of Fullerton uses the current SCAQMD thresholds to determine whether a proposed project would have a significant impact. These SCAQMD thresholds are identified in Table 4.

TABLE 4
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AIR QUALITY SIGNIFICANCE THRESHOLDS

Mass Daily Thresholds[a]		
Pollutant	**Construction**	**Operation**
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day

TABLE 4
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AIR QUALITY SIGNIFICANCE THRESHOLDS

TACs, Odor, and GHG Thresholds	
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)
Odor	Project creates an odor nuisance pursuant to South Coast AQMD Rule 402
GHG	10,000 MT/yr CO_2e for industrial facilities
Ambient Air Quality Standards for Criteria Pollutants[b, c]	
NO_2 1-hour average annual arithmetic mean	South Coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (State) 0.03 ppm (State) and 0.0534 ppm (federal)
PM10 24-hour average annual average	 10.4 µg/m^3 (construction)[c] & 2.5 µg/m^3 (operation) 1.0 µg/m^3
PM2.5 24-hour average	 10.4 µg/m^3 (construction)[c] & 2.5 µg/m^3 (operation)
SO_2 1-hour average 24-hour average	 0.25 ppm (State) & 0.075 ppm (federal – 99th percentile) 0.04 ppm (State)
Sulfate 24-hour average	 25 µg/m^3 (State)
CO 1-hour average 8-hour average	South Coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20.0 ppm (State) and 35 ppm (federal) 9.0 ppm (State/federal)
Lead 30-day average Rolling 3-month average	 1.5 µg/m^3 (State) 0.15 µg/m^3 (federal)

NOx: nitrogen oxides, lbs/day: pounds per day, VOC: volatile organic compound, PM10: respirable particulate matter with a diameter of 10 microns or less, PM2.5: fine particulate matter with a diameter of 2.5 microns or less, SO_2: sulfur oxides, CO: carbon monoxide, TACs: toxic air contaminants, GHG: greenhouse gases, MT/yr CO_2e: metric tons per year of carbon dioxide equivalents, NO_2: nitrogen dioxide, ppm: parts per million, µg/m^3: micrograms per cubic meter; South Coast AQMD: South Coast Air Quality Management District

[a] Source: South Coast AQMD CEQA Handbook (South Coast AQMD 1993)
[b] Ambient air quality thresholds for criteria pollutants based on South Coast AQMD Rule 1303, Table A-2 unless otherwise stated
[c] Ambient air quality threshold is based on South Coast AQMD Rule 403

Source: South Coast AQMD 2019

These regional emission thresholds cannot be used to correlate whether a specific health impact would occur to an individual receptor. These significance thresholds were developed to assist Lead Agencies with a consistent threshold that could be used to determine whether a project's emissions could significantly contribute to the total emissions occurring within an air basin. The totality of the air basin's emissions would determine whether it would be in attainment of the CAAQS and NAAQS.

Regulatory Requirements

RR AQ-1 All construction activities shall be conducted in compliance with South Coast Air Quality Management District's Rule 403, Fugitive Dust, for controlling fugitive dust and avoiding nuisance. Contractor compliance with Rule 403 requirements shall be mandated in the contractor's specifications.

RR AQ-2 All construction activities shall be conducted in compliance with South Coast Air Quality Management District Rule 402, Nuisance, which states that a project shall not "discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property".

AIR QUALITY IMPACT FINDINGS

The following questions correspond to the questions in the Air Quality section of the Initial Study Checklist in Appendix G of the State CEQA Guidelines.

Question AQ-1 Would the Project conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. The SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary. It is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources and has prepared an AQMP that establishes a program of rules and regulations directed at attaining the NAAQS and CAAQS.

As stated above, the SCAQMD adopted the 2016 AQMP on March 3, 2017 (SCAQMD 2017). The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including the SCAG 2016–2040 RTP/SCS, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts.

The main purpose of an AQMP is to bring an area into compliance with the requirements of federal and State air quality standards. For a project to be consistent with the AQMP, the pollutants emitted from the project should not (1) exceed the SCAQMD CEQA air quality significance thresholds or (2) conflict with or exceed the assumptions in the AQMP.

In order to be consistent with the AQMP, the following analysis compares the project's construction and operational emissions with the SCAQMD CEQA air quality significance thresholds shown in Table 4. A project may have a significant impact where project-related emissions would exceed federal, State, or regional standards or thresholds, or where project-related emissions would substantially contribute to an existing or projected air quality violation.

A project with daily emission rates below the SCAQMD's established air quality significance thresholds (shown in Table 4) would have a less than significant effect on regional air quality. Project emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 computer program (CAPCOA 2017). CalEEMod is designed to model construction and operational emissions for land development projects and allows for the input of project- and county-specific information. For air quality modeling purposes, construction of the project was based on the project's construction assumptions and default assumptions derived from CalEEMod. The input for operational emissions was based on the vehicle trip generation rates provided in the transportation impact analysis and the proposed building area. Additional input details are included in Attachment A.

Construction Emissions

Air pollutant emissions would occur from construction equipment exhaust; dust from demolition and site grading; exhaust and particulate emissions from trucks hauling demolition and construction debris, soil, and building materials to and from the Project site; from automobiles and light trucks driven to and from the Project site by construction workers; and VOCs from painting and asphalt paving operations. The proposed Project would comply with applicable SCAQMD rules and regulations, including Rule 403 for fugitive dust control (RR AQ-1). Rule 403 measures include regular watering of active grading areas and unpaved roads, limiting vehicle speeds on unpaved surfaces, stabilizing stockpiled earth, and curtailing grading operations during high wind conditions. Watering of active grading areas is included in the CalEEMod emissions analysis and results in reduced PM10 and PM2.5 emissions. The emission reductions associated with compliance with this rule have been included in the emissions calculations.

Regional Emissions Thresholds – Maximum Daily Regional Emissions

Table 5, Estimated Maximum Daily Regional Construction Emissions, presents the estimated maximum daily emissions during construction of the proposed Project and compares the estimated emissions with the SCAQMD's daily regional emission thresholds. As shown in Table 5, Project construction mass daily emissions would be less than the SCAQMD's thresholds for all criteria air pollutants and the impact would be less than significant.

TABLE 5
ESTIMATED MAXIMUM DAILY REGIONAL CONSTRUCTION EMISSIONS

Year	Emissions (lbs/day)					
	VOC	NOx	CO	SOx	PM10	PM2.5
2021	2	22	27	<1	2	1
2022	12	25	32	<1	7	3
2023	11	20	30	<1	5	2
Maximum	**12**	**25**	**32**	**<1**	**7**	**3**
SCAQMD Thresholds (Table 4)	***75***	***100***	***550***	***150***	***150***	***55***
Exceeds SCAQMD Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SCAQMD: South Coast Air Quality Management District.

Source: SCAQMD 2019 (thresholds); see Attachment A for CalEEMod model outputs.

Construction-Phase Localized Significance Thresholds

In addition to the mass daily emissions thresholds established by the SCAQMD, short-term local impacts to nearby sensitive receptors from on-site emissions of NO_2, CO, PM10, and PM2.5 are examined based on SCAQMD's localized significance threshold (LST) methodology. To assess local air quality impacts for development projects without complex dispersion modeling, the SCAQMD developed screening (lookup) tables to assist lead agencies in evaluating impacts. The LST method was developed to provide a conservative estimate of the level of project-generated air pollutants that have the potential to exceed the NAAQS or CAAQS, which could consequently result in adverse health impacts. Exceedance of the LST does not describe the prevalence or magnitude of health effects, but rather assesses the potential for a project-related health effect to occur. The LST method cannot provide an estimate of health effects related to ozone. Reactive organic gases (ROGs) and NO_x are pollutants that contribute to the formation of ozone, otherwise known as ozone precursors. It would be too speculative to determine how an individual project could affect the formation of ozone, and how it could affect the health for a specific receptor: ozone does not fully form within the proximity of a project site, and the formation of ozone is affected by solar irradiance, meteorological conditions, presence of ozone precursors from other sources, and other factors. As such, modeling of ozone concentrations is conducted on the "macro" scale of an air basin for all pollutant sources within the basin, and not for an individual project. Consequently, the LST analysis focuses on a project-level analysis of the four criteria pollutants of greatest concern (CO, NO_x, PM_{10}, and $PM_{2.5}$).

The LST method is recommended to be limited to projects that are five acres or less. For the purposes of an LST analysis, the SCAQMD considers receptors where it is possible that an individual could remain for 1 hour for NO_2 and CO exposure and 24 hours for PM10 and PM2.5 exposure. The emissions limits in the lookup tables are based on the SCAQMD's Ambient Air Quality Standards (SCAQMD 2016). The closest receptors to the Project site that could be exposed for 1 hour are commercial uses adjacent to the Project site, and the closest receptors the Project site that could be exposed for 24 hours are residences 760 feet (232 meters) north of the Project's northern boundary. The emissions screening thresholds used in this analysis are for receptors within 25 meters (82 feet) of the Project site for NO_x and CO, and 232 meters for PM10 and PM2.5; the thresholds for receptors farther away would be higher, and the Project emissions would be a smaller fraction of the thresholds.

Table 6, Construction-Phase Localized Significance Threshold Emissions, shows the maximum daily on-site emissions for construction activities compared with the SCAQMD LST screening thresholds. The Project site is approximately 4.47 acres in area. The thresholds shown are from the lookup tables for a site disturbance area that is 1 acre, which is based on the maximum equipment used on-site. The Project's maximum daily on-site emissions for all pollutants would occur during overlapping phases of the grading/excavation and building construction phase. As shown in Table 6, localized emissions for all criteria pollutants would be less than their respective screening thresholds. Therefore, localized air quality impacts would be less than significant.

TABLE 6
CONSTRUCTION-PHASE
LOCALIZED SIGNIFICANCE THRESHOLD EMISSIONS

Emissions and Thresholds	Emissions (lbs/day)			
	NOx	CO	PM10	PM2.5
Project maximum daily on-site emissions	21	26	3	2
Localized Significance Threshold	**103**	**522**	**62**	**26**
Exceed threshold?	**No**	**No**	**No**	**No**

lbs/day: pounds per day; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter.

Note: Data is for SCAQMD Source Receptor Area 16, North Orange County

Source: SCAQMD 2009 (thresholds); see Attachment A for CalEEMod model outputs.

Operational Emissions

The following section provides an analysis of potential long-term air quality impacts to regional air quality with the long-term operation of the proposed Project. The potential operations-related air emissions have been analyzed below for the regional criteria pollutant emissions and cumulative impacts.

Operations-Related Criteria Pollutant Analysis

Operational emissions are comprised of area, energy, and mobile source emissions. The principal source of VOC emissions associated with the Project would result from the use of consumer products; the primary source of CO, NOx, PM10, and PM2.5 emissions would be mobile sources. Area and energy source emissions are based on CalEEMod assumptions for the specific land uses and size. Mobile source emissions are based on estimated Project-related trip generation forecasts, as contained in the Project traffic impact analysis. The Project would generate 2,035 daily trips. Estimated peak daily operational emissions are shown in Table 7.

TABLE 7
PEAK DAILY OPERATIONAL EMISSIONS

Source	Emissions (lbs/day)					
	VOC	NOx	CO	SOx	PM10	PM2.5
Area sources	9	<1	27	<1	<1	<1
Energy sources	<1	1	<1	<1	<1	<1
Mobile sources	3	7	35	<1	14	4
Total Operational Emissions*	**12**	**9**	**63**	**<1**	**14**	**4**
SCAQMD Significance Thresholds (Table 4)	***55***	***55***	***550***	***150***	***150***	***55***
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**

lbs/day: pounds per day; VOC: volatile organic compounds; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SCAQMD: South Coast Air Quality Management District.

* Some totals do not add due to rounding.

Note: CalEEMod model data sheets are included in Attachment A.

As shown in Table 7, the Project's operational emissions would be less than the SCAQMD CEQA significance thresholds for all criteria pollutants. It should be noted that the analysis provided above in Table 7 is conservative, because it provides the gross emissions, and does not deduct operational emissions from existing uses. Therefore, the Project's operational impact on regional emissions would be less than significant, and no mitigation is required.

With respect to the first criterion, based on the air quality modeling analysis conducted for the proposed Project, above, construction and operation of the Project would not exceed the SCAQMD's CEQA thresholds of significance and consequently would not result in an increase in the frequency or severity of existing air quality violations nor cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emissions reductions in the AQMP. Therefore, the Project is consistent with the first criterion.

With respect to the second criterion, the proposed Project was assessed as to whether it would exceed the assumptions in the AQMP. The SCAQMD's current air quality planning document is the 2016 Air Quality Management Plan (2016 AQMP). The 2016 AQMP is a regional and multi-agency effort among the SCAQMD, CARB, SCAG, and USEPA. The 2016 AQMP includes an analysis of emissions, meteorology, atmospheric chemistry, regional growth projections, and the impact of existing control measures. The purpose of the 2016 AQMP is to set forth a comprehensive program that would promote reductions in criteria pollutants, greenhouse gases, and toxic risk and efficiencies in energy use, transportation, and goods movement. The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including SCAG's 2016-2040 RTP/SCS; updated emission inventory methods for various source categories; and SCAG's latest growth forecasts (SCAQMD 2017). The 2016 AQMP includes strategies and measures necessary to meet the NAAQS. The AQMP is based on projections of energy usage and vehicle trips from land uses within the SoCAB. The Project site is within the Fullerton Town Center (FTC—Focus Area D-Harbor Gateway in The Fullerton Plan). Growth within the FTC—Focus Area D was factored into the 2016-2040 RTP/SCS through the Orange County Projections (OCP) process, and as such, it includes growth associated with the Project. The vision of The Fullerton Plan for the Harbor Gateway Focus Area is high density development, which would consist of residential, commercial, and mixed-uses with convenient access to regional transportation. The Project would be consistent with the FTC focus area vision and would not exceed the assumptions in the AQMP. Implementation of the Project results in emissions which are less than the significance thresholds adopted by the SCAQMD (as detailed in the emissions analyses above). In addition, the proposed residential uses provide housing near commercial uses, and this would minimize travel to and from this destination, which would reduce transportation-related emissions and be consistent with the goals of the AQMP. As such, the proposed Project is not anticipated to exceed the AQMP assumptions for the Project site and is found to be consistent with the AQMP for the second criterion. Therefore, the Project would not result in an inconsistency with the SCAQMD's 2016 AQMP. Less than significant impacts would occur, and no mitigation is required.

Question AQ-2 Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment under an applicable federal or State ambient air quality standard?

Less than Significant Impact. A project may have a significant impact where project-related emissions would exceed federal, State, or regional standards or thresholds, or where project-related emissions would substantially contribute to an existing or projected air quality violation. As identified in Table 2, Orange County is a nonattainment area for O_3, PM10, and PM2.5. The Project would generate PM10, PM2.5, and O_3 precursors (NOx and VOC) during short-term construction and long-term operations. The SCAQMD has developed construction and operations thresholds to determine whether projects would considerably contribute toward a violation of ambient air quality standards.

Construction Activities

Construction activities associated with the proposed Project would result in less than significant construction-related regional and localized air quality impacts, as quantified above in Tables 5 and 6, respectively. SCAQMD's policy with respect to cumulative impacts associated with the above referenced pollutants and their precursors is that impacts that would be directly less than significant would also be cumulatively less than significant (SCAQMD 2003). As discussed under Question AQ-1, short-term construction emissions would be less than significant. Therefore, consistent with SCAQMD policy, the cumulative construction impact of criteria pollutants would be less than significant.

Operational Activities

As shown in Table 7 under Question AQ-1, operational emissions for all analyzed pollutants would be below the SCAQMD CEQA significance thresholds. Therefore, the Project would not contribute to a cumulatively considerable net increase of a pollutant for which the SoCAB is in nonattainment. Emissions of nonattainment pollutants or their precursors would not be cumulatively considerable and would be less than significant; no mitigation would be required.

Question AQ-3 Would the Project result in exposure of sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. A significant impact may occur when a project would generate pollutant concentrations to a degree that would significantly affect sensitive receptors, which include populations that are more susceptible to the effects of air pollution than the population at large. Exposure of sensitive receptors is addressed for the following situations: CO hotspots and criteria pollutants and toxic air contaminants (TACs, specifically diesel particulate matter [DPM]) from on-site construction. Operational, long-term TACs may be generated by some industrial land uses; commercial land uses (e.g., gas stations and dry cleaners); and diesel trucks on freeways. Residential land uses do not generate substantial quantities of TACs and are therefore not addressed in this report.

Carbon Monoxide Hotspot

In an urban setting, vehicle exhaust is the primary source of CO. Consequently, the highest CO concentrations generally are found close to congested intersections. Under typical meteorological conditions, CO concentrations tend to decrease as the distance from the emissions source (e.g., congested intersection) increases. Therefore, for purposes of providing a conservative worst-case impact analysis, CO concentrations typically are analyzed at congested intersection locations. If impacts are less than significant close to congested intersections, impacts also would be less than significant at more distant sensitive-receptor and other locations. The proposed Project would have less daily, morning, and evening peak hour trips than under the existing land uses occurring at the site. The Project would not result in an increase in CO concentrations occurring at nearby intersections. As such, Project related vehicles would not result in a significant impact related to CO hotspots.

Criteria Pollutants from On-Site Construction

Exposure of persons to NOx, CO, PM10, and PM2.5 emissions is discussed in response to Question AQ-1 above. As shown in Table 6, in response to Question AQ-1, localized emissions for all criteria pollutants would be less than their respective screening thresholds. Therefore, localized air quality impacts to sensitive receptors would be less than significant.

Toxic Air Contaminant Emissions from On-Site Construction

Construction activities would result in short-term, Project-generated emissions of DPM from the exhaust of off-road, heavy-duty diesel equipment used for site preparation (e.g., demolition, excavation, and grading); paving; building construction; and other miscellaneous activities. CARB identified DPM as a TAC in 1998. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Thus, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer time period. According to the Office of Environmental Health Hazard Assessment, health risk assessments—which determine the exposure of sensitive receptors to TAC emissions—should be based on a 40-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the Project.

There would be relatively few pieces of off-road, heavy-duty diesel equipment in operation, and the total construction period of less than two years would be relatively short when compared to a 40-year exposure period. Combined with the highly dispersive properties of DPM and additional reductions in particulate emissions from newer construction equipment, as required by USEPA and CARB regulations, construction emissions of TACs would not expose sensitive receptors to substantial emissions of TACs. The impact would be less than significant, and no mitigation is required.

Question AQ-4 Would the Project result in other emissions (such as those leading to odors) affecting a substantial number of people?

Less than Significant Impact. Potential operational odors could be created by cooking activities and trash collection associated with residential and retail uses. These odors would be similar to those of existing uses surrounding the Project site and throughout the City, and odors would be confined to the immediate vicinity of the proposed dwelling units. Furthermore, according to the SCAQMD's *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). The Project does not include any uses identified by the SCAQMD as being associated with odors and, therefore, would not produce objectionable odors. The Project uses are also regulated from nuisance odors or other objectionable emissions by SCAQMD Rule 402 (RR AQ-2). Rule 402 prohibits any the discharge from any source of air contaminants or other material which would cause injury, detriment, nuisance, or annoyance to people or the public. As such, the Project would have a less than significant impact with regard to other emissions. No mitigation is required.

CONCLUSION

The Project was analyzed for potential air quality emissions from both the construction and operational phases. The Project would not conflict with or obstruct implementation of the SCAQMD 2016 Air Quality Management Plan, and as such, there would be a less than significant impact. As previously shown in Tables 5 through 7, air quality impacts from construction and operation of the Project would be less than SCAQMD air quality thresholds. Project-related construction and operational emissions would not be cumulatively considerable, and the impact would be less than significant. Sensitive receptors near the Project site would not be exposed to substantial pollutant concentrations, and the impact would be less than significant. The Project would not produce other emissions that would affect a substantial number of people, and impacts would be less than significant. In conclusion, the Project would have less than significant impacts for all Project-related air quality emissions.

Thank you for the opportunity to assist on this Project. If you have any questions or comments, please contact me at 626.351.2000.

Sincerely,

PSOMAS

Tin Cheung
Director of Air Quality, Climate Change, and Noise Services

Daria Sarraf
Project Manager

Enclosures: Exhibit 1 – Regional Location and Local Vicinity
Attachment A – CalEEMod Data

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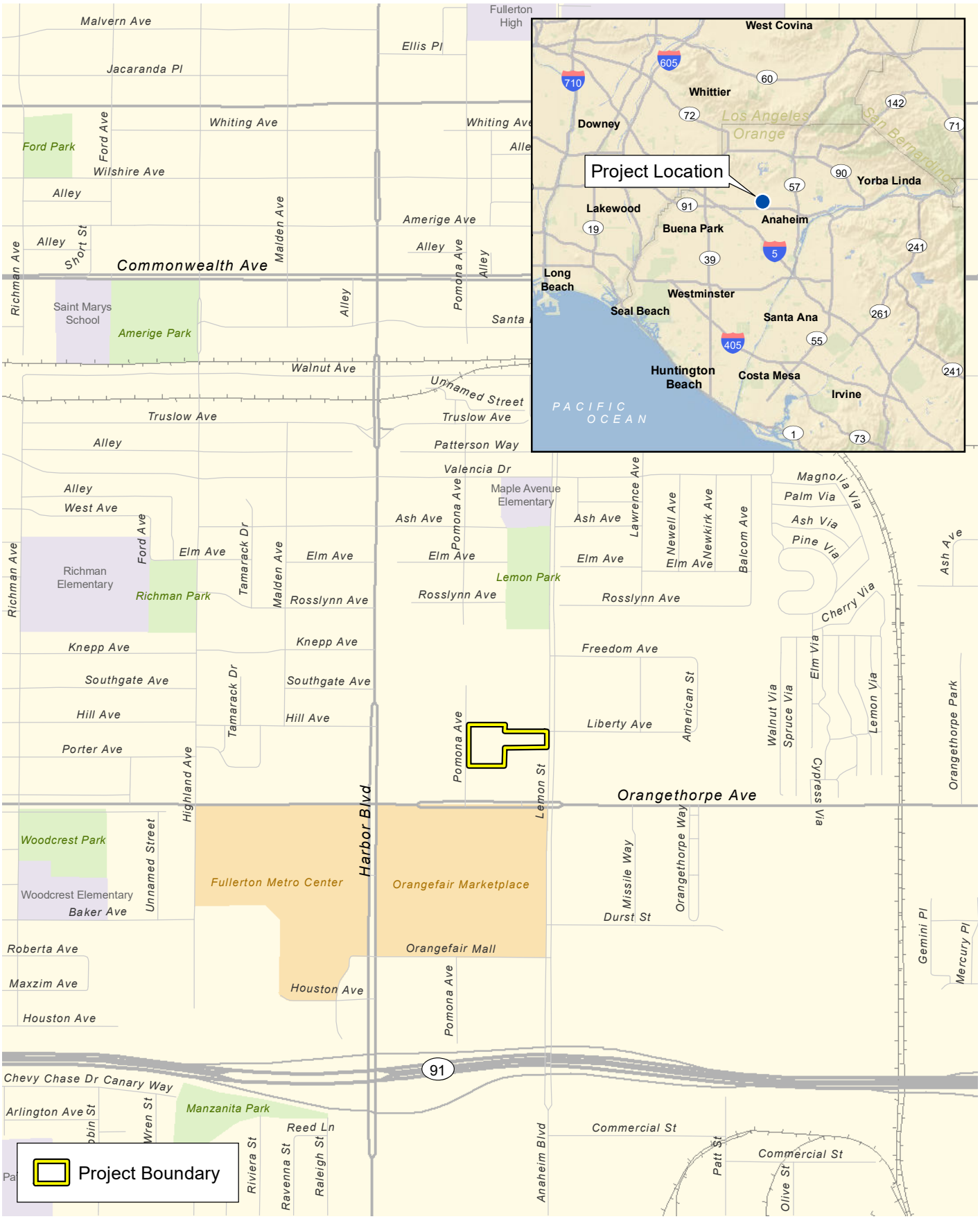

Regional Location and Local Vicinity

Exhibit 1

Street Lights Fullerton Project

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1,000 500 0 1,000 Feet

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ATTACHMENT A

CALEEMOD DATA

Attached is the output data from the CalEEMod criteria air pollutant emissions model.

Street Lights Fullerton - Orange County, Winter

Street Lights Fullerton

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking with Elevator	187.00	1000sqft	4.29	187,000.00	0
Apartments Mid Rise	329.00	Dwelling Unit	8.66	375,000.00	941
Strip Mall	6.50	1000sqft	0.15	6,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	399.04	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SCE intensity factor: https://www.edison.com/content/dam/eix/documents/sustainability/eix-esg-pilot-quantitative-section-sce.pdf

Land Use - .

Construction Phase - .

Off-road Equipment -

Off-road Equipment - .

Off-road Equipment - 2 saws, 2 excavators, 2 generators, 2 backhoes.

Off-road Equipment - 2 excavators, 1 rubber tired dozer, 2 backhoes, 1 plate compactor

Off-road Equipment - .

Trips and VMT - .

Demolition - .

Grading - .

Energy Use -

Construction Off-road Equipment Mitigation - gas powered saws

Woodstoves - 2 natural gas fireplaces outdoors

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstructionPhase	NumDays	20.00	313.00
tblConstructionPhase	NumDays	300.00	469.00
tblConstructionPhase	NumDays	20.00	88.00
tblConstructionPhase	NumDays	30.00	102.00
tblConstructionPhase	NumDays	20.00	129.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	279.65	2.00
tblFireplaces	NumberWood	16.45	0.00
tblFleetMix	HHD	0.02	0.01
tblFleetMix	LDA	0.56	0.67
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.21	0.17
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	5.7840e-003	5.9930e-003
tblFleetMix	MCY	4.9410e-003	4.9940e-003

tblFleetMix	MDV	0.11	0.06
tblFleetMix	MH	9.0400e-004	1.0760e-003
tblFleetMix	MHD	0.03	0.01
tblFleetMix	OBUS	1.7750e-003	1.6920e-003
tblFleetMix	SBUS	5.9800e-004	6.0300e-004
tblFleetMix	UBUS	1.5240e-003	1.6880e-003
tblGrading	MaterialExported	0.00	8,000.00
tblLandUse	LandUseSquareFeet	329,000.00	375,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	399.04
tblTripsAndVMT	HaulingTripNumber	494.00	500.00
tblTripsAndVMT	VendorTripNumber	67.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblVehicleTrips	ST_TR	6.39	5.23
tblVehicleTrips	ST_TR	42.04	35.81
tblVehicleTrips	SU_TR	5.86	4.79
tblVehicleTrips	SU_TR	20.43	17.40

tblVehicleTrips	WD_TR	6.65	5.44
tblVehicleTrips	WD_TR	44.32	37.75
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	2.4410	22.0160	26.7587	0.0484	1.5513	1.1202	2.6715	0.2737	1.0853	1.3590	0.0000	4,704.2548	4,704.2548	0.7056	0.0000	4,721.8950
2022	11.7088	25.0196	30.8098	0.0754	9.9621	1.1143	11.0764	4.3565	1.0322	5.3886	0.0000	7,455.2176	7,455.2176	1.1745	0.0000	7,484.5813
2023	11.3746	19.7511	29.4784	0.0726	4.4455	0.9110	5.3565	1.1804	0.8490	2.0294	0.0000	7,103.7538	7,103.7538	1.0092	0.0000	7,128.9843
Maximum	**11.7088**	**25.0196**	**30.8098**	**0.0754**	**9.9621**	**1.1202**	**11.0764**	**4.3565**	**1.0853**	**5.3886**	**0.0000**	**7,455.2176**	**7,455.2176**	**1.1745**	**0.0000**	**7,484.5813**

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					
2021	2.4410	22.0160	26.7587	0.0484	0.8097	1.1202	1.9299	0.1614	1.0853	1.2467	0.0000	4,704.2548	4,704.2548	0.7056	0.0000	4,721.8950
2022	11.7088	25.0196	30.8098	0.0754	6.2832	1.1143	7.3976	2.3364	1.0322	3.3686	0.0000	7,455.2176	7,455.2176	1.1745	0.0000	7,484.5813
2023	11.3746	19.7511	29.4784	0.0726	4.4455	0.9110	5.3565	1.1804	0.8490	2.0294	0.0000	7,103.7538	7,103.7538	1.0092	0.0000	7,128.9843

Maximum	**11.7088**	**25.0196**	**30.8098**	**0.0754**	**6.2832**	**1.1202**	**7.3976**	**2.3364**	**1.0853**	**3.3686**	**0.0000**	**7,455.2176**	**7,455.2176**	**1.1745**	**0.0000**	**7,484.5813**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**27.70**	**0.00**	**23.14**	**36.70**	**0.00**	**24.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.1172	0.3463	27.1828	1.6500e-003		0.1530	0.1530		0.1530	0.1530	0.0000	91.2690	91.2690	0.0479	7.8000e-004	92.6984
Energy	0.1115	0.9527	0.4069	6.0800e-003		0.0770	0.0770		0.0770	0.0770		1,215.9982	1,215.9982	0.0233	0.0223	1,223.2242
Mobile	2.5572	7.2774	33.5458	0.1271	13.9027	0.0983	14.0011	3.7094	0.0912	3.8006		12,874.7974	12,874.7974	0.5174		12,887.7325
Total	**11.7858**	**8.5764**	**61.1355**	**0.1348**	**13.9027**	**0.3284**	**14.2311**	**3.7094**	**0.3212**	**4.0307**	**0.0000**	**14,182.0646**	**14,182.0646**	**0.5886**	**0.0231**	**14,203.6551**

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	9.1172	0.3463	27.1828	1.6500e-003		0.1530	0.1530		0.1530	0.1530	0.0000	91.2690	91.2690	0.0479	7.8000e-004	92.6984
Energy	0.1115	0.9527	0.4069	6.0800e-003		0.0770	0.0770		0.0770	0.0770		1,215.9982	1,215.9982	0.0233	0.0223	1,223.2242
Mobile	2.5572	7.2774	33.5458	0.1271	13.9027	0.0983	14.0011	3.7094	0.0912	3.8006		12,874.7974	12,874.7974	0.5174		12,887.7325

Total	11.7858	8.5764	61.1355	0.1348	13.9027	0.3284	14.2311	3.7094	0.3212	4.0307	0.0000	14,182.0646	14,182.0646	0.5886	0.0231	14,203.6551

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/6/2021	1/15/2022	6	88	
2	Grading-Excavation	Grading	1/16/2022	5/15/2022	6	102	
3	Building Construction	Building Construction	5/1/2022	10/30/2023	6	469	
4	Architectural Coating	Architectural Coating	11/1/2022	10/31/2023	6	313	
5	Paving	Paving	12/1/2022	4/30/2023	6	129	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.29

Residential Indoor: 759,375; Residential Outdoor: 253,125; Non-Residential Indoor: 9,750; Non-Residential Outdoor: 3,250; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	2	8.00	81	0.73
Demolition	Excavators	2	8.00	158	0.38
Demolition	Generator Sets	2	8.00	84	0.74
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading-Excavation	Excavators	2	8.00	158	0.38
Grading-Excavation	Graders	0	8.00	187	0.41

Grading-Excavation	Plate Compactors	1	8.00	8	0.43
Grading-Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Grading-Excavation	Scrapers	0	8.00	367	0.48
Grading-Excavation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Plate Compactors	1	8.00	8	0.43
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Excavators	1	8.00	158	0.38
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Paving	Rubber Tired Dozers	1	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	20.00	0.00	500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading-Excavation	6	15.00	0.00	1,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	318.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	64.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Water Exposed Area

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2159	0.0000	1.2159	0.1841	0.0000	0.1841			0.0000			0.0000
Off-Road	2.3174	20.5065	25.7816	0.0422		1.1141	1.1141		1.0795	1.0795		4,033.5825	4,033.5825	0.6506		4,049.8474
Total	**2.3174**	**20.5065**	**25.7816**	**0.0422**	**1.2159**	**1.1141**	**2.3300**	**0.1841**	**1.0795**	**1.2636**		**4,033.5825**	**4,033.5825**	**0.6506**		**4,049.8474**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0419	1.4615	0.4166	4.2200e-003	0.1119	4.6200e-003	0.1166	0.0303	4.4200e-003	0.0347		471.5059	471.5059	0.0508		472.7746
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0817	0.0480	0.5605	2.0000e-003	0.2236	1.4500e-003	0.2250	0.0593	1.3300e-003	0.0606		199.1664	199.1664	4.2600e-003		199.2731
Total	**0.1237**	**1.5095**	**0.9771**	**6.2200e-003**	**0.3355**	**6.0700e-003**	**0.3416**	**0.0896**	**5.7500e-003**	**0.0953**		**670.6723**	**670.6723**	**0.0550**		**672.0476**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive 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					0.4742	0.0000	0.4742	0.0718	0.0000	0.0718			0.0000			0.0000
Off-Road	2.3174	20.5065	25.7816	0.0422		1.1141	1.1141		1.0795	1.0795	0.0000	4,033.5825	4,033.5825	0.6506		4,049.8474
Total	**2.3174**	**20.5065**	**25.7816**	**0.0422**	**0.4742**	**1.1141**	**1.5883**	**0.0718**	**1.0795**	**1.1513**	**0.0000**	**4,033.5825**	**4,033.5825**	**0.6506**		**4,049.8474**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0419	1.4615	0.4166	4.2200e-003	0.1119	4.6200e-003	0.1166	0.0303	4.4200e-003	0.0347		471.5059	471.5059	0.0508		472.7746
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0817	0.0480	0.5605	2.0000e-003	0.2236	1.4500e-003	0.2250	0.0593	1.3300e-003	0.0606		199.1664	199.1664	4.2600e-003		199.2731
Total	**0.1237**	**1.5095**	**0.9771**	**6.2200e-003**	**0.3355**	**6.0700e-003**	**0.3416**	**0.0896**	**5.7500e-003**	**0.0953**		**670.6723**	**670.6723**	**0.0550**		**672.0476**

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					1.2159	0.0000	1.2159	0.1841	0.0000	0.1841			0.0000			0.0000
Off-Road	2.1097	18.3641	25.6674	0.0422		0.9462	0.9462		0.9181	0.9181		4,033.9069	4,033.9069	0.6421		4,049.9604

Total	**2.1097**	**18.3641**	**25.6674**	**0.0422**	**1.2159**	**0.9462**	**2.1621**	**0.1841**	**0.9181**	**1.1022**		**4,033.9069**	**4,033.9069**	**0.6421**		**4,049.9604**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0398	1.3416	0.4177	4.1600e-003	0.5323	4.0000e-003	0.5363	0.1335	3.8200e-003	0.1373		465.2497	465.2497	0.0501		466.5009
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0774	0.0435	0.5224	1.9200e-003	0.2236	1.4200e-003	0.2250	0.0593	1.3100e-003	0.0606		191.7958	191.7958	3.8700e-003		191.8925
Total	**0.1172**	**1.3851**	**0.9400**	**6.0800e-003**	**0.7559**	**5.4200e-003**	**0.7613**	**0.1927**	**5.1300e-003**	**0.1979**		**657.0455**	**657.0455**	**0.0539**		**658.3934**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive 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					0.4742	0.0000	0.4742	0.0718	0.0000	0.0718			0.0000			0.0000
Off-Road	2.1097	18.3641	25.6674	0.0422		0.9462	0.9462		0.9181	0.9181	0.0000	4,033.9069	4,033.9069	0.6421		4,049.9604
Total	**2.1097**	**18.3641**	**25.6674**	**0.0422**	**0.4742**	**0.9462**	**1.4204**	**0.0718**	**0.9181**	**0.9899**	**0.0000**	**4,033.9069**	**4,033.9069**	**0.6421**		**4,049.9604**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0398	1.3416	0.4177	4.1600e-003	0.5323	4.0000e-003	0.5363	0.1335	3.8200e-003	0.1373		465.2497	465.2497	0.0501		466.5009
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0774	0.0435	0.5224	1.9200e-003	0.2236	1.4200e-003	0.2250	0.0593	1.3100e-003	0.0606		191.7958	191.7958	3.8700e-003		191.8925
Total	**0.1172**	**1.3851**	**0.9400**	**6.0800e-003**	**0.7559**	**5.4200e-003**	**0.7613**	**0.1927**	**5.1300e-003**	**0.1979**		**657.0455**	**657.0455**	**0.0539**		**658.3934**

3.3 Grading-Excavation - 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					6.0310	0.0000	6.0310	3.3116	0.0000	3.3116			0.0000			0.0000
Off-Road	1.6115	15.9502	14.7786	0.0256		0.7792	0.7792		0.7177	0.7177		2,464.0232	2,464.0232	0.7893		2,483.7568
Total	**1.6115**	**15.9502**	**14.7786**	**0.0256**	**6.0310**	**0.7792**	**6.8102**	**3.3116**	**0.7177**	**4.0292**		**2,464.0232**	**2,464.0232**	**0.7893**		**2,483.7568**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0687	2.3150	0.7207	7.1700e-003	0.1707	6.8900e-003	0.1776	0.0467	6.6000e-003	0.0533		802.7838	802.7838	0.0864		804.9427
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0581	0.0326	0.3918	1.4400e-003	0.1677	1.0600e-003	0.1687	0.0445	9.8000e-004	0.0455		143.8468	143.8468	2.9000e-003		143.9194
Total	**0.1268**	**2.3476**	**1.1125**	**8.6100e-003**	**0.3383**	**7.9500e-003**	**0.3463**	**0.0912**	**7.5800e-003**	**0.0988**		**946.6306**	**946.6306**	**0.0893**		**948.8621**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive 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					2.3521	0.0000	2.3521	1.2915	0.0000	1.2915			0.0000			0.0000
Off-Road	1.6115	15.9502	14.7786	0.0256		0.7792	0.7792		0.7177	0.7177	0.0000	2,464.0232	2,464.0232	0.7893		2,483.7568
Total	**1.6115**	**15.9502**	**14.7786**	**0.0256**	**2.3521**	**0.7792**	**3.1313**	**1.2915**	**0.7177**	**2.0092**	**0.0000**	**2,464.0232**	**2,464.0232**	**0.7893**		**2,483.7568**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0687	2.3150	0.7207	7.1700e-003	0.1707	6.8900e-003	0.1776	0.0467	6.6000e-003	0.0533		802.7838	802.7838	0.0864		804.9427
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0581	0.0326	0.3918	1.4400e-003	0.1677	1.0600e-003	0.1687	0.0445	9.8000e-004	0.0455		143.8468	143.8468	2.9000e-003		143.9194
Total	**0.1268**	**2.3476**	**1.1125**	**8.6100e-003**	**0.3383**	**7.9500e-003**	**0.3463**	**0.0912**	**7.5800e-003**	**0.0988**		**946.6306**	**946.6306**	**0.0893**		**948.8621**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7087	5.4996	6.4517	9.2100e-003		0.3035	0.3035		0.2852	0.2852		839.2577	839.2577	0.2216		844.7973
Total	**0.7087**	**5.4996**	**6.4517**	**9.2100e-003**		**0.3035**	**0.3035**		**0.2852**	**0.2852**		**839.2577**	**839.2577**	**0.2216**		**844.7973**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0158	0.5309	0.1615	1.4300e-003	0.0383	1.0600e-003	0.0394	0.0110	1.0100e-003	0.0120		155.7536	155.7536	0.0128		156.0742
Worker	1.2313	0.6913	8.3055	0.0306	3.5545	0.0226	3.5771	0.9427	0.0208	0.9634		3,049.5525	3,049.5525	0.0615		3,051.0910
Total	**1.2471**	**1.2222**	**8.4670**	**0.0320**	**3.5928**	**0.0236**	**3.6164**	**0.9537**	**0.0218**	**0.9755**		**3,205.3061**	**3,205.3061**	**0.0744**		**3,207.1652**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.7087	5.4996	6.4517	9.2100e-003		0.3035	0.3035		0.2852	0.2852	0.0000	839.2577	839.2577	0.2216		844.7973
Total	**0.7087**	**5.4996**	**6.4517**	**9.2100e-003**		**0.3035**	**0.3035**		**0.2852**	**0.2852**	**0.0000**	**839.2577**	**839.2577**	**0.2216**		**844.7973**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0158	0.5309	0.1615	1.4300e-003	0.0383	1.0600e-003	0.0394	0.0110	1.0100e-003	0.0120		155.7536	155.7536	0.0128		156.0742
Worker	1.2313	0.6913	8.3055	0.0306	3.5545	0.0226	3.5771	0.9427	0.0208	0.9634		3,049.5525	3,049.5525	0.0615		3,051.0910
Total	**1.2471**	**1.2222**	**8.4670**	**0.0320**	**3.5928**	**0.0236**	**3.6164**	**0.9537**	**0.0218**	**0.9755**		**3,205.3061**	**3,205.3061**	**0.0744**		**3,207.1652**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6510	5.1269	6.4093	9.2100e-003		0.2593	0.2593		0.2438	0.2438		839.5953	839.5953	0.2195		845.0829

Total	**0.6510**	**5.1269**	**6.4093**	**9.2100e-003**		**0.2593**	**0.2593**		**0.2438**	**0.2438**		**839.5953**	**839.5953**	**0.2195**		**845.0829**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0120	0.3996	0.1484	1.3800e-003	0.0383	5.1000e-004	0.0389	0.0110	4.9000e-004	0.0115		151.0856	151.0856	0.0119		151.3820
Worker	1.1696	0.6275	7.7335	0.0294	3.5545	0.0222	3.5767	0.9427	0.0204	0.9631		2,932.4636	2,932.4636	0.0558		2,933.8577
Total	**1.1816**	**1.0271**	**7.8819**	**0.0308**	**3.5928**	**0.0227**	**3.6155**	**0.9537**	**0.0209**	**0.9746**		**3,083.5492**	**3,083.5492**	**0.0676**		**3,085.2397**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.6510	5.1269	6.4093	9.2100e-003		0.2593	0.2593		0.2438	0.2438	0.0000	839.5953	839.5953	0.2195		845.0829
Total	**0.6510**	**5.1269**	**6.4093**	**9.2100e-003**		**0.2593**	**0.2593**		**0.2438**	**0.2438**	**0.0000**	**839.5953**	**839.5953**	**0.2195**		**845.0829**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0120	0.3996	0.1484	1.3800e-003	0.0383	5.1000e-004	0.0389	0.0110	4.9000e-004	0.0115		151.0856	151.0856	0.0119		151.3820
Worker	1.1696	0.6275	7.7335	0.0294	3.5545	0.0222	3.5767	0.9427	0.0204	0.9631		2,932.4636	2,932.4636	0.0558		2,933.8577
Total	**1.1816**	**1.0271**	**7.8819**	**0.0308**	**3.5928**	**0.0227**	**3.6155**	**0.9537**	**0.0209**	**0.9746**		**3,083.5492**	**3,083.5492**	**0.0676**		**3,085.2397**

3.5 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	7.8554					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	**8.0599**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	5.2700e-003	0.1770	0.0538	4.8000e-004	0.0128	3.5000e-004	0.0131	3.6800e-003	3.4000e-004	4.0100e-003		51.9179	51.9179	4.2700e-003		52.0247
Worker	0.2478	0.1391	1.6716	6.1500e-003	0.7154	4.5400e-003	0.7199	0.1897	4.1800e-003	0.1939		613.7464	613.7464	0.0124		614.0560
Total	**0.2531**	**0.3161**	**1.7254**	**6.6300e-003**	**0.7282**	**4.8900e-003**	**0.7330**	**0.1934**	**4.5200e-003**	**0.1979**		**665.6643**	**665.6643**	**0.0167**		**666.0808**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive 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	7.8554					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	**8.0599**	**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**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	5.2700e-003	0.1770	0.0538	4.8000e-004	0.0128	3.5000e-004	0.0131	3.6800e-003	3.4000e-004	4.0100e-003		51.9179	51.9179	4.2700e-003		52.0247
Worker	0.2478	0.1391	1.6716	6.1500e-003	0.7154	4.5400e-003	0.7199	0.1897	4.1800e-003	0.1939		613.7464	613.7464	0.0124		614.0560
Total	**0.2531**	**0.3161**	**1.7254**	**6.6300e-003**	**0.7282**	**4.8900e-003**	**0.7330**	**0.1934**	**4.5200e-003**	**0.1979**		**665.6643**	**665.6643**	**0.0167**		**666.0808**

3.5 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.8554					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**8.0470**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	4.0100e-003	0.1332	0.0495	4.6000e-004	0.0128	1.7000e-004	0.0130	3.6800e-003	1.6000e-004	3.8400e-003		50.3619	50.3619	3.9500e-003		50.4607
Worker	0.2354	0.1263	1.5564	5.9200e-003	0.7154	4.4600e-003	0.7198	0.1897	4.1100e-003	0.1938		590.1814	590.1814	0.0112		590.4619
Total	**0.2394**	**0.2595**	**1.6059**	**6.3800e-003**	**0.7282**	**4.6300e-003**	**0.7328**	**0.1934**	**4.2700e-003**	**0.1977**		**640.5432**	**640.5432**	**0.0152**		**640.9226**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive 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	7.8554					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**8.0470**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	4.0100e-003	0.1332	0.0495	4.6000e-004	0.0128	1.7000e-004	0.0130	3.6800e-003	1.6000e-004	3.8400e-003		50.3619	50.3619	3.9500e-003		50.4607
Worker	0.2354	0.1263	1.5564	5.9200e-003	0.7154	4.4600e-003	0.7198	0.1897	4.1100e-003	0.1938		590.1814	590.1814	0.0112		590.4619
Total	**0.2394**	**0.2595**	**1.6059**	**6.3800e-003**	**0.7282**	**4.6300e-003**	**0.7328**	**0.1934**	**4.2700e-003**	**0.1977**		**640.5432**	**640.5432**	**0.0152**		**640.9226**

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	1.3960	14.0460	11.9291	0.0219		0.6728	0.6728		0.6190	0.6190		2,115.9874	2,115.9874	0.6844		2,133.0963

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3960**	**14.0460**	**11.9291**	**0.0219**		**0.6728**	**0.6728**		**0.6190**	**0.6190**		**2,115.9874**	**2,115.9874**	**0.6844**		**2,133.0963**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	5.2700e-003	0.1770	0.0538	4.8000e-004	0.0128	3.5000e-004	0.0131	3.6800e-003	3.4000e-004	4.0100e-003		51.9179	51.9179	4.2700e-003		52.0247
Worker	0.0387	0.0217	0.2612	9.6000e-004	0.1118	7.1000e-004	0.1125	0.0296	6.5000e-004	0.0303		95.8979	95.8979	1.9400e-003		95.9463
Total	**0.0440**	**0.1987**	**0.3150**	**1.4400e-003**	**0.1246**	**1.0600e-003**	**0.1256**	**0.0333**	**9.9000e-004**	**0.0343**		**147.8157**	**147.8157**	**6.2100e-003**		**147.9710**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive 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	1.3960	14.0460	11.9291	0.0219		0.6728	0.6728		0.6190	0.6190	0.0000	2,115.9874	2,115.9874	0.6844		2,133.0963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3960**	**14.0460**	**11.9291**	**0.0219**		**0.6728**	**0.6728**		**0.6190**	**0.6190**	**0.0000**	**2,115.9874**	**2,115.9874**	**0.6844**		**2,133.0963**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	5.2700e-003	0.1770	0.0538	4.8000e-004	0.0128	3.5000e-004	0.0131	3.6800e-003	3.4000e-004	4.0100e-003		51.9179	51.9179	4.2700e-003		52.0247
Worker	0.0387	0.0217	0.2612	9.6000e-004	0.1118	7.1000e-004	0.1125	0.0296	6.5000e-004	0.0303		95.8979	95.8979	1.9400e-003		95.9463
Total	**0.0440**	**0.1987**	**0.3150**	**1.4400e-003**	**0.1246**	**1.0600e-003**	**0.1256**	**0.0333**	**9.9000e-004**	**0.0343**		**147.8157**	**147.8157**	**6.2100e-003**		**147.9710**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2148	11.8816	11.4776	0.0219		0.5526	0.5526		0.5084	0.5084		2,116.0405	2,116.0405	0.6844		2,133.1497
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2148**	**11.8816**	**11.4776**	**0.0219**		**0.5526**	**0.5526**		**0.5084**	**0.5084**		**2,116.0405**	**2,116.0405**	**0.6844**		**2,133.1497**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	4.0100e-003	0.1332	0.0495	4.6000e-004	0.0128	1.7000e-004	0.0130	3.6800e-003	1.6000e-004	3.8400e-003		50.3619	50.3619	3.9500e-003		50.4607
Worker	0.0368	0.0197	0.2432	9.2000e-004	0.1118	7.0000e-004	0.1125	0.0296	6.4000e-004	0.0303		92.2158	92.2158	1.7500e-003		92.2597
Total	**0.0408**	**0.1529**	**0.2927**	**1.3800e-003**	**0.1246**	**8.7000e-004**	**0.1254**	**0.0333**	**8.0000e-004**	**0.0341**		**142.5777**	**142.5777**	**5.7000e-003**		**142.7204**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive 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	1.2148	11.8816	11.4776	0.0219		0.5526	0.5526		0.5084	0.5084	0.0000	2,116.0405	2,116.0405	0.6844		2,133.1497
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2148**	**11.8816**	**11.4776**	**0.0219**		**0.5526**	**0.5526**		**0.5084**	**0.5084**	**0.0000**	**2,116.0405**	**2,116.0405**	**0.6844**		**2,133.1497**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	4.0100e-003	0.1332	0.0495	4.6000e-004	0.0128	1.7000e-004	0.0130	3.6800e-003	1.6000e-004	3.8400e-003		50.3619	50.3619	3.9500e-003		50.4607
Worker	0.0368	0.0197	0.2432	9.2000e-004	0.1118	7.0000e-004	0.1125	0.0296	6.4000e-004	0.0303		92.2158	92.2158	1.7500e-003		92.2597
Total	**0.0408**	**0.1529**	**0.2927**	**1.3800e-003**	**0.1246**	**8.7000e-004**	**0.1254**	**0.0333**	**8.0000e-004**	**0.0341**		**142.5777**	**142.5777**	**5.7000e-003**		**142.7204**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.5572	7.2774	33.5458	0.1271	13.9027	0.0983	14.0011	3.7094	0.0912	3.8006		12,874.7974	12,874.7974	0.5174		12,887.7325
Unmitigated	2.5572	7.2774	33.5458	0.1271	13.9027	0.0983	14.0011	3.7094	0.0912	3.8006		12,874.7974	12,874.7974	0.5174		12,887.7325

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,789.76	1,720.67	1575.91	5,977,761	5,977,761
Strip Mall	245.38	232.77	113.10	427,470	427,470
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	2,035.14	1,953.44	1,689.01	6,405,230	6,405,230

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.672006	0.045726	0.165417	0.062031	0.018096	0.005993	0.010339	0.010339	0.001692	0.001688	0.004994	0.000603	0.001076
Strip Mall	0.563406	0.043070	0.209298	0.109958	0.015015	0.005784	0.026182	0.017546	0.001775	0.001524	0.004941	0.000598	0.000904
Unenclosed Parking with Elevator	0.563406	0.043070	0.209298	0.109958	0.015015	0.005784	0.026182	0.017546	0.001775	0.001524	0.004941	0.000598	0.000904

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	0.1115	0.9527	0.4069	6.0800e-003		0.0770	0.0770		0.0770	0.0770		1,215.9982	1,215.9982	0.0233	0.0223	1,223.2242
NaturalGas Unmitigated	0.1115	0.9527	0.4069	6.0800e-003		0.0770	0.0770		0.0770	0.0770		1,215.9982	1,215.9982	0.0233	0.0223	1,223.2242

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					
Apartments Mid Rise	10300.4	0.1111	0.9493	0.4039	6.0600e-003		0.0768	0.0768		0.0768	0.0768		1,211.8080	1,211.8080	0.0232	0.0222	1,219.0092

Strip Mall	35.6164	3.8000e-004	3.4900e-003	2.9300e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		4.1902	4.1902	8.0000e-005	8.0000e-005	4.2151
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1115**	**0.9527**	**0.4069**	**6.0800e-003**		**0.0770**	**0.0770**		**0.0770**	**0.0770**		**1,215.9982**	**1,215.9982**	**0.0233**	**0.0223**	**1,223.2243**

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					
Apartments Mid Rise	10.3004	0.1111	0.9493	0.4039	6.0600e-003		0.0768	0.0768		0.0768	0.0768		1,211.8080	1,211.8080	0.0232	0.0222	1,219.0092
Strip Mall	0.0356164	3.8000e-004	3.4900e-003	2.9300e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		4.1902	4.1902	8.0000e-005	8.0000e-005	4.2151
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1115**	**0.9527**	**0.4069**	**6.0800e-003**		**0.0770**	**0.0770**		**0.0770**	**0.0770**		**1,215.9982**	**1,215.9982**	**0.0233**	**0.0223**	**1,223.2243**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.1172	0.3463	27.1828	1.6500e-003		0.1530	0.1530		0.1530	0.1530	0.0000	91.2690	91.2690	0.0479	7.8000e-004	92.6984

Unmitigated	9.1172	0.3463	27.1828	1.6500e-003		0.1530	0.1530		0.1530	0.1530	0.0000	91.2690	91.2690	0.0479	7.8000e-004	92.6984

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	0.6736					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.6199					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	3.8800e-003	0.0332	0.0141	2.1000e-004		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003	0.0000	42.3529	42.3529	8.1000e-004	7.8000e-004	42.6046
Landscaping	0.8197	0.3131	27.1687	1.4300e-003		0.1503	0.1503		0.1503	0.1503		48.9161	48.9161	0.0471		50.0938
Total	**9.1172**	**0.3463**	**27.1828**	**1.6400e-003**		**0.1530**	**0.1530**		**0.1530**	**0.1530**	**0.0000**	**91.2690**	**91.2690**	**0.0479**	**7.8000e-004**	**92.6984**

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	0.6736					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.6199					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	3.8800e-003	0.0332	0.0141	2.1000e-004		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003	0.0000	42.3529	42.3529	8.1000e-004	7.8000e-004	42.6046
Landscaping	0.8197	0.3131	27.1687	1.4300e-003		0.1503	0.1503		0.1503	0.1503		48.9161	48.9161	0.0471		50.0938

Total	9.1172	0.3463	27.1828	1.6400e-003		0.1530	0.1530		0.1530	0.1530	0.0000	91.2690	91.2690	0.0479	7.8000e-004	92.6984

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Street Lights Fullerton - Orange County, Summer

Street Lights Fullerton

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking with Elevator	187.00	1000sqft	4.29	187,000.00	0
Apartments Mid Rise	329.00	Dwelling Unit	8.66	375,000.00	941
Strip Mall	6.50	1000sqft	0.15	6,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	399.04	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SCE intensity factor: https://www.edison.com/content/dam/eix/documents/sustainability/eix-esg-pilot-quantitative-section-sce.pdf

Land Use - .

Construction Phase - .

Off-road Equipment -

Off-road Equipment - .

Off-road Equipment - 2 saws, 2 excavators, 2 generators, 2 backhoes.

Off-road Equipment - 2 excavators, 1 rubber tired dozer, 2 backhoes, 1 plate compactor

Off-road Equipment - .

Trips and VMT - .

Demolition - .

Grading - .

Energy Use -

Construction Off-road Equipment Mitigation - gas powered saws

Woodstoves - 2 natural gas fireplaces outdoors

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstructionPhase	NumDays	20.00	313.00
tblConstructionPhase	NumDays	300.00	469.00
tblConstructionPhase	NumDays	20.00	88.00
tblConstructionPhase	NumDays	30.00	102.00
tblConstructionPhase	NumDays	20.00	129.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	279.65	2.00
tblFireplaces	NumberWood	16.45	0.00
tblFleetMix	HHD	0.02	0.01
tblFleetMix	LDA	0.56	0.67
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.21	0.17
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	5.7840e-003	5.9930e-003
tblFleetMix	MCY	4.9410e-003	4.9940e-003

tblFleetMix	MDV	0.11	0.06
tblFleetMix	MH	9.0400e-004	1.0760e-003
tblFleetMix	MHD	0.03	0.01
tblFleetMix	OBUS	1.7750e-003	1.6920e-003
tblFleetMix	SBUS	5.9800e-004	6.0300e-004
tblFleetMix	UBUS	1.5240e-003	1.6880e-003
tblGrading	MaterialExported	0.00	8,000.00
tblLandUse	LandUseSquareFeet	329,000.00	375,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	399.04
tblTripsAndVMT	HaulingTripNumber	494.00	500.00
tblTripsAndVMT	VendorTripNumber	67.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblVehicleTrips	ST_TR	6.39	5.23
tblVehicleTrips	ST_TR	42.04	35.81
tblVehicleTrips	SU_TR	5.86	4.79
tblVehicleTrips	SU_TR	20.43	17.40

tblVehicleTrips	WD_TR	6.65	5.44
tblVehicleTrips	WD_TR	44.32	37.75
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	2.4305	21.9946	26.7859	0.0486	1.5513	1.1201	2.6715	0.2737	1.0852	1.3589	0.0000	4,722.7815	4,722.7815	0.7047	0.0000	4,740.3999
2022	11.5269	24.9313	31.5524	0.0773	9.9621	1.1142	11.0763	4.3565	1.0320	5.3885	0.0000	7,652.1481	7,652.1481	1.1759	0.0000	7,681.5456
2023	11.1982	19.6856	30.2904	0.0747	4.4455	0.9109	5.3564	1.1804	0.8489	2.0294	0.0000	7,314.2083	7,314.2083	1.0125	0.0000	7,339.5196
Maximum	**11.5269**	**24.9313**	**31.5524**	**0.0773**	**9.9621**	**1.1201**	**11.0763**	**4.3565**	**1.0852**	**5.3885**	**0.0000**	**7,652.1481**	**7,652.1481**	**1.1759**	**0.0000**	**7,681.5456**

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					
2021	2.4305	21.9946	26.7859	0.0486	0.8097	1.1201	1.9298	0.1614	1.0852	1.2466	0.0000	4,722.7815	4,722.7815	0.7047	0.0000	4,740.3999
2022	11.5269	24.9313	31.5524	0.0773	6.2832	1.1142	7.3974	2.3364	1.0320	3.3684	0.0000	7,652.1481	7,652.1481	1.1759	0.0000	7,681.5456
2023	11.1982	19.6856	30.2904	0.0747	4.4455	0.9109	5.3564	1.1804	0.8489	2.0294	0.0000	7,314.2083	7,314.2083	1.0125	0.0000	7,339.5196

Maximum	**11.5269**	**24.9313**	**31.5524**	**0.0773**	**6.2832**	**1.1201**	**7.3974**	**2.3364**	**1.0852**	**3.3684**	**0.0000**	**7,652.1481**	**7,652.1481**	**1.1759**	**0.0000**	**7,681.5456**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**27.70**	**0.00**	**23.14**	**36.70**	**0.00**	**24.30**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.1172	0.3463	27.1828	1.6500e-003		0.1530	0.1530		0.1530	0.1530	0.0000	91.2690	91.2690	0.0479	7.8000e-004	92.6984
Energy	0.1115	0.9527	0.4069	6.0800e-003		0.0770	0.0770		0.0770	0.0770		1,215.9982	1,215.9982	0.0233	0.0223	1,223.2242
Mobile	2.6077	7.0176	35.2540	0.1333	13.9027	0.0981	14.0008	3.7094	0.0910	3.8004		13,498.6620	13,498.6620	0.5212		13,511.6925
Total	**11.8363**	**8.3167**	**62.8438**	**0.1410**	**13.9027**	**0.3281**	**14.2309**	**3.7094**	**0.3210**	**4.0304**	**0.0000**	**14,805.9292**	**14,805.9292**	**0.5925**	**0.0231**	**14,827.6152**

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	9.1172	0.3463	27.1828	1.6500e-003		0.1530	0.1530		0.1530	0.1530	0.0000	91.2690	91.2690	0.0479	7.8000e-004	92.6984
Energy	0.1115	0.9527	0.4069	6.0800e-003		0.0770	0.0770		0.0770	0.0770		1,215.9982	1,215.9982	0.0233	0.0223	1,223.2242
Mobile	2.6077	7.0176	35.2540	0.1333	13.9027	0.0981	14.0008	3.7094	0.0910	3.8004		13,498.6620	13,498.6620	0.5212		13,511.6925

Total	11.8363	8.3167	62.8438	0.1410	13.9027	0.3281	14.2309	3.7094	0.3210	4.0304	0.0000	14,805.9292	14,805.9292	0.5925	0.0231	14,827.6152

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/6/2021	1/15/2022	6	88	
2	Grading-Excavation	Grading	1/16/2022	5/15/2022	6	102	
3	Building Construction	Building Construction	5/1/2022	10/30/2023	6	469	
4	Architectural Coating	Architectural Coating	11/1/2022	10/31/2023	6	313	
5	Paving	Paving	12/1/2022	4/30/2023	6	129	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.29

Residential Indoor: 759,375; Residential Outdoor: 253,125; Non-Residential Indoor: 9,750; Non-Residential Outdoor: 3,250; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	2	8.00	81	0.73
Demolition	Excavators	2	8.00	158	0.38
Demolition	Generator Sets	2	8.00	84	0.74
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading-Excavation	Excavators	2	8.00	158	0.38
Grading-Excavation	Graders	0	8.00	187	0.41

Grading-Excavation	Plate Compactors	1	8.00	8	0.43
Grading-Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Grading-Excavation	Scrapers	0	8.00	367	0.48
Grading-Excavation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Plate Compactors	1	8.00	8	0.43
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Excavators	1	8.00	158	0.38
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Paving	Rubber Tired Dozers	1	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	20.00	0.00	500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading-Excavation	6	15.00	0.00	1,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	318.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	64.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Water Exposed Area

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2159	0.0000	1.2159	0.1841	0.0000	0.1841			0.0000			0.0000
Off-Road	2.3174	20.5065	25.7816	0.0422		1.1141	1.1141		1.0795	1.0795		4,033.5825	4,033.5825	0.6506		4,049.8474
Total	**2.3174**	**20.5065**	**25.7816**	**0.0422**	**1.2159**	**1.1141**	**2.3300**	**0.1841**	**1.0795**	**1.2636**		**4,033.5825**	**4,033.5825**	**0.6506**		**4,049.8474**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0409	1.4444	0.3968	4.2900e-003	0.1119	4.5400e-003	0.1165	0.0303	4.3400e-003	0.0346		478.7601	478.7601	0.0496		480.0011
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0722	0.0437	0.6075	2.1100e-003	0.2236	1.4500e-003	0.2250	0.0593	1.3300e-003	0.0606		210.4388	210.4388	4.5100e-003		210.5515
Total	**0.1131**	**1.4881**	**1.0043**	**6.4000e-003**	**0.3355**	**5.9900e-003**	**0.3415**	**0.0896**	**5.6700e-003**	**0.0952**		**689.1990**	**689.1990**	**0.0542**		**690.5526**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive 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					0.4742	0.0000	0.4742	0.0718	0.0000	0.0718			0.0000			0.0000
Off-Road	2.3174	20.5065	25.7816	0.0422		1.1141	1.1141		1.0795	1.0795	0.0000	4,033.5825	4,033.5825	0.6506		4,049.8474
Total	**2.3174**	**20.5065**	**25.7816**	**0.0422**	**0.4742**	**1.1141**	**1.5883**	**0.0718**	**1.0795**	**1.1513**	**0.0000**	**4,033.5825**	**4,033.5825**	**0.6506**		**4,049.8474**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0409	1.4444	0.3968	4.2900e-003	0.1119	4.5400e-003	0.1165	0.0303	4.3400e-003	0.0346		478.7601	478.7601	0.0496		480.0011
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0722	0.0437	0.6075	2.1100e-003	0.2236	1.4500e-003	0.2250	0.0593	1.3300e-003	0.0606		210.4388	210.4388	4.5100e-003		210.5515
Total	**0.1131**	**1.4881**	**1.0043**	**6.4000e-003**	**0.3355**	**5.9900e-003**	**0.3415**	**0.0896**	**5.6700e-003**	**0.0952**		**689.1990**	**689.1990**	**0.0542**		**690.5526**

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					1.2159	0.0000	1.2159	0.1841	0.0000	0.1841			0.0000			0.0000
Off-Road	2.1097	18.3641	25.6674	0.0422		0.9462	0.9462		0.9181	0.9181		4,033.9069	4,033.9069	0.6421		4,049.9604

Total	**2.1097**	**18.3641**	**25.6674**	**0.0422**	**1.2159**	**0.9462**	**2.1621**	**0.1841**	**0.9181**	**1.1022**		**4,033.9069**	**4,033.9069**	**0.6421**		**4,049.9604**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0388	1.3272	0.3989	4.2200e-003	0.5323	3.9200e-003	0.5362	0.1335	3.7500e-003	0.1372		472.4544	472.4544	0.0490		473.6799
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0682	0.0396	0.5670	2.0300e-003	0.2236	1.4200e-003	0.2250	0.0593	1.3100e-003	0.0606		202.6403	202.6403	4.0900e-003		202.7426
Total	**0.1071**	**1.3668**	**0.9659**	**6.2500e-003**	**0.7559**	**5.3400e-003**	**0.7612**	**0.1927**	**5.0600e-003**	**0.1978**		**675.0947**	**675.0947**	**0.0531**		**676.4225**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive 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					0.4742	0.0000	0.4742	0.0718	0.0000	0.0718			0.0000			0.0000
Off-Road	2.1097	18.3641	25.6674	0.0422		0.9462	0.9462		0.9181	0.9181	0.0000	4,033.9069	4,033.9069	0.6421		4,049.9604
Total	**2.1097**	**18.3641**	**25.6674**	**0.0422**	**0.4742**	**0.9462**	**1.4204**	**0.0718**	**0.9181**	**0.9899**	**0.0000**	**4,033.9069**	**4,033.9069**	**0.6421**		**4,049.9604**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0388	1.3272	0.3989	4.2200e-003	0.5323	3.9200e-003	0.5362	0.1335	3.7500e-003	0.1372		472.4544	472.4544	0.0490		473.6799
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0682	0.0396	0.5670	2.0300e-003	0.2236	1.4200e-003	0.2250	0.0593	1.3100e-003	0.0606		202.6403	202.6403	4.0900e-003		202.7426
Total	**0.1071**	**1.3668**	**0.9659**	**6.2500e-003**	**0.7559**	**5.3400e-003**	**0.7612**	**0.1927**	**5.0600e-003**	**0.1978**		**675.0947**	**675.0947**	**0.0531**		**676.4225**

3.3 Grading-Excavation - 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					6.0310	0.0000	6.0310	3.3116	0.0000	3.3116			0.0000			0.0000
Off-Road	1.6115	15.9502	14.7786	0.0256		0.7792	0.7792		0.7177	0.7177		2,464.0232	2,464.0232	0.7893		2,483.7568
Total	**1.6115**	**15.9502**	**14.7786**	**0.0256**	**6.0310**	**0.7792**	**6.8102**	**3.3116**	**0.7177**	**4.0292**		**2,464.0232**	**2,464.0232**	**0.7893**		**2,483.7568**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0670	2.2901	0.6883	7.2800e-003	0.1707	6.7700e-003	0.1775	0.0467	6.4800e-003	0.0532		815.2155	815.2155	0.0846		817.3300
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0512	0.0297	0.4252	1.5200e-003	0.1677	1.0600e-003	0.1687	0.0445	9.8000e-004	0.0455		151.9802	151.9802	3.0700e-003		152.0569
Total	**0.1182**	**2.3198**	**1.1135**	**8.8000e-003**	**0.3383**	**7.8300e-003**	**0.3462**	**0.0912**	**7.4600e-003**	**0.0987**		**967.1957**	**967.1957**	**0.0877**		**969.3869**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive 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					2.3521	0.0000	2.3521	1.2915	0.0000	1.2915			0.0000			0.0000
Off-Road	1.6115	15.9502	14.7786	0.0256		0.7792	0.7792		0.7177	0.7177	0.0000	2,464.0232	2,464.0232	0.7893		2,483.7568
Total	**1.6115**	**15.9502**	**14.7786**	**0.0256**	**2.3521**	**0.7792**	**3.1313**	**1.2915**	**0.7177**	**2.0092**	**0.0000**	**2,464.0232**	**2,464.0232**	**0.7893**		**2,483.7568**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0670	2.2901	0.6883	7.2800e-003	0.1707	6.7700e-003	0.1775	0.0467	6.4800e-003	0.0532		815.2155	815.2155	0.0846		817.3300
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0512	0.0297	0.4252	1.5200e-003	0.1677	1.0600e-003	0.1687	0.0445	9.8000e-004	0.0455		151.9802	151.9802	3.0700e-003		152.0569
Total	**0.1182**	**2.3198**	**1.1135**	**8.8000e-003**	**0.3383**	**7.8300e-003**	**0.3462**	**0.0912**	**7.4600e-003**	**0.0987**		**967.1957**	**967.1957**	**0.0877**		**969.3869**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7087	5.4996	6.4517	9.2100e-003		0.3035	0.3035		0.2852	0.2852		839.2577	839.2577	0.2216		844.7973
Total	**0.7087**	**5.4996**	**6.4517**	**9.2100e-003**		**0.3035**	**0.3035**		**0.2852**	**0.2852**		**839.2577**	**839.2577**	**0.2216**		**844.7973**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0151	0.5325	0.1474	1.4600e-003	0.0383	1.0200e-003	0.0394	0.0110	9.7000e-004	0.0120		159.6916	159.6916	0.0123		159.9978
Worker	1.0847	0.6292	9.0146	0.0323	3.5545	0.0226	3.5771	0.9427	0.0208	0.9634		3,221.9799	3,221.9799	0.0651		3,223.6068
Total	**1.0998**	**1.1617**	**9.1620**	**0.0338**	**3.5928**	**0.0236**	**3.6164**	**0.9537**	**0.0217**	**0.9754**		**3,381.6715**	**3,381.6715**	**0.0773**		**3,383.6046**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.7087	5.4996	6.4517	9.2100e-003		0.3035	0.3035		0.2852	0.2852	0.0000	839.2577	839.2577	0.2216		844.7973
Total	**0.7087**	**5.4996**	**6.4517**	**9.2100e-003**		**0.3035**	**0.3035**		**0.2852**	**0.2852**	**0.0000**	**839.2577**	**839.2577**	**0.2216**		**844.7973**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0151	0.5325	0.1474	1.4600e-003	0.0383	1.0200e-003	0.0394	0.0110	9.7000e-004	0.0120		159.6916	159.6916	0.0123		159.9978
Worker	1.0847	0.6292	9.0146	0.0323	3.5545	0.0226	3.5771	0.9427	0.0208	0.9634		3,221.9799	3,221.9799	0.0651		3,223.6068
Total	**1.0998**	**1.1617**	**9.1620**	**0.0338**	**3.5928**	**0.0236**	**3.6164**	**0.9537**	**0.0217**	**0.9754**		**3,381.6715**	**3,381.6715**	**0.0773**		**3,383.6046**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6510	5.1269	6.4093	9.2100e-003		0.2593	0.2593		0.2438	0.2438		839.5953	839.5953	0.2195		845.0829

Total	**0.6510**	**5.1269**	**6.4093**	**9.2100e-003**		**0.2593**	**0.2593**		**0.2438**	**0.2438**		**839.5953**	**839.5953**	**0.2195**		**845.0829**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0115	0.4019	0.1376	1.4200e-003	0.0383	4.8000e-004	0.0388	0.0110	4.6000e-004	0.0115		154.8399	154.8399	0.0114		155.1246
Worker	1.0273	0.5713	8.4068	0.0311	3.5545	0.0222	3.5767	0.9427	0.0204	0.9631		3,098.1133	3,098.1133	0.0590		3,099.5890
Total	**1.0387**	**0.9732**	**8.5444**	**0.0325**	**3.5928**	**0.0227**	**3.6155**	**0.9537**	**0.0209**	**0.9746**		**3,252.9533**	**3,252.9533**	**0.0704**		**3,254.7136**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.6510	5.1269	6.4093	9.2100e-003		0.2593	0.2593		0.2438	0.2438	0.0000	839.5953	839.5953	0.2195		845.0829
Total	**0.6510**	**5.1269**	**6.4093**	**9.2100e-003**		**0.2593**	**0.2593**		**0.2438**	**0.2438**	**0.0000**	**839.5953**	**839.5953**	**0.2195**		**845.0829**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	0.0115	0.4019	0.1376	1.4200e-003	0.0383	4.8000e-004	0.0388	0.0110	4.6000e-004	0.0115		154.8399	154.8399	0.0114		155.1246
Worker	1.0273	0.5713	8.4068	0.0311	3.5545	0.0222	3.5767	0.9427	0.0204	0.9631		3,098.1133	3,098.1133	0.0590		3,099.5890
Total	**1.0387**	**0.9732**	**8.5444**	**0.0325**	**3.5928**	**0.0227**	**3.6155**	**0.9537**	**0.0209**	**0.9746**		**3,252.9533**	**3,252.9533**	**0.0704**		**3,254.7136**

3.5 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	7.8554					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	**8.0599**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	5.0200e-003	0.1775	0.0491	4.9000e-004	0.0128	3.4000e-004	0.0131	3.6800e-003	3.2000e-004	4.0000e-003		53.2305	53.2305	4.0800e-003		53.3326
Worker	0.2183	0.1266	1.8143	6.5000e-003	0.7154	4.5400e-003	0.7199	0.1897	4.1800e-003	0.1939		648.4488	648.4488	0.0131		648.7762
Total	**0.2233**	**0.3041**	**1.8634**	**6.9900e-003**	**0.7282**	**4.8800e-003**	**0.7330**	**0.1934**	**4.5000e-003**	**0.1979**		**701.6793**	**701.6793**	**0.0172**		**702.1088**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive 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	7.8554					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	**8.0599**	**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**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	5.0200e-003	0.1775	0.0491	4.9000e-004	0.0128	3.4000e-004	0.0131	3.6800e-003	3.2000e-004	4.0000e-003		53.2305	53.2305	4.0800e-003		53.3326
Worker	0.2183	0.1266	1.8143	6.5000e-003	0.7154	4.5400e-003	0.7199	0.1897	4.1800e-003	0.1939		648.4488	648.4488	0.0131		648.7762
Total	**0.2233**	**0.3041**	**1.8634**	**6.9900e-003**	**0.7282**	**4.8800e-003**	**0.7330**	**0.1934**	**4.5000e-003**	**0.1979**		**701.6793**	**701.6793**	**0.0172**		**702.1088**

3.5 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.8554					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**8.0470**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	3.8200e-003	0.1340	0.0459	4.7000e-004	0.0128	1.6000e-004	0.0129	3.6800e-003	1.5000e-004	3.8300e-003		51.6133	51.6133	3.8000e-003		51.7082
Worker	0.2067	0.1150	1.6919	6.2500e-003	0.7154	4.4600e-003	0.7198	0.1897	4.1100e-003	0.1938		623.5197	623.5197	0.0119		623.8167
Total	**0.2106**	**0.2490**	**1.7378**	**6.7200e-003**	**0.7282**	**4.6200e-003**	**0.7328**	**0.1934**	**4.2600e-003**	**0.1977**		**675.1330**	**675.1330**	**0.0157**		**675.5249**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive 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	7.8554					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**8.0470**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	3.8200e-003	0.1340	0.0459	4.7000e-004	0.0128	1.6000e-004	0.0129	3.6800e-003	1.5000e-004	3.8300e-003		51.6133	51.6133	3.8000e-003		51.7082
Worker	0.2067	0.1150	1.6919	6.2500e-003	0.7154	4.4600e-003	0.7198	0.1897	4.1100e-003	0.1938		623.5197	623.5197	0.0119		623.8167
Total	**0.2106**	**0.2490**	**1.7378**	**6.7200e-003**	**0.7282**	**4.6200e-003**	**0.7328**	**0.1934**	**4.2600e-003**	**0.1977**		**675.1330**	**675.1330**	**0.0157**		**675.5249**

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	1.3960	14.0460	11.9291	0.0219		0.6728	0.6728		0.6190	0.6190		2,115.9874	2,115.9874	0.6844		2,133.0963

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3960**	**14.0460**	**11.9291**	**0.0219**		**0.6728**	**0.6728**		**0.6190**	**0.6190**		**2,115.9874**	**2,115.9874**	**0.6844**		**2,133.0963**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	5.0200e-003	0.1775	0.0491	4.9000e-004	0.0128	3.4000e-004	0.0131	3.6800e-003	3.2000e-004	4.0000e-003		53.2305	53.2305	4.0800e-003		53.3326
Worker	0.0341	0.0198	0.2835	1.0200e-003	0.1118	7.1000e-004	0.1125	0.0296	6.5000e-004	0.0303		101.3201	101.3201	2.0500e-003		101.3713
Total	**0.0391**	**0.1973**	**0.3326**	**1.5100e-003**	**0.1246**	**1.0500e-003**	**0.1256**	**0.0333**	**9.7000e-004**	**0.0343**		**154.5506**	**154.5506**	**6.1300e-003**		**154.7039**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive 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	1.3960	14.0460	11.9291	0.0219		0.6728	0.6728		0.6190	0.6190	0.0000	2,115.9874	2,115.9874	0.6844		2,133.0963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3960**	**14.0460**	**11.9291**	**0.0219**		**0.6728**	**0.6728**		**0.6190**	**0.6190**	**0.0000**	**2,115.9874**	**2,115.9874**	**0.6844**		**2,133.0963**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	5.0200e-003	0.1775	0.0491	4.9000e-004	0.0128	3.4000e-004	0.0131	3.6800e-003	3.2000e-004	4.0000e-003		53.2305	53.2305	4.0800e-003		53.3326
Worker	0.0341	0.0198	0.2835	1.0200e-003	0.1118	7.1000e-004	0.1125	0.0296	6.5000e-004	0.0303		101.3201	101.3201	2.0500e-003		101.3713
Total	**0.0391**	**0.1973**	**0.3326**	**1.5100e-003**	**0.1246**	**1.0500e-003**	**0.1256**	**0.0333**	**9.7000e-004**	**0.0343**		**154.5506**	**154.5506**	**6.1300e-003**		**154.7039**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2148	11.8816	11.4776	0.0219		0.5526	0.5526		0.5084	0.5084		2,116.0405	2,116.0405	0.6844		2,133.1497
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2148**	**11.8816**	**11.4776**	**0.0219**		**0.5526**	**0.5526**		**0.5084**	**0.5084**		**2,116.0405**	**2,116.0405**	**0.6844**		**2,133.1497**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	3.8200e-003	0.1340	0.0459	4.7000e-004	0.0128	1.6000e-004	0.0129	3.6800e-003	1.5000e-004	3.8300e-003		51.6133	51.6133	3.8000e-003		51.7082
Worker	0.0323	0.0180	0.2644	9.8000e-004	0.1118	7.0000e-004	0.1125	0.0296	6.4000e-004	0.0303		97.4250	97.4250	1.8600e-003		97.4714
Total	**0.0361**	**0.1519**	**0.3102**	**1.4500e-003**	**0.1246**	**8.6000e-004**	**0.1254**	**0.0333**	**7.9000e-004**	**0.0341**		**149.0383**	**149.0383**	**5.6600e-003**		**149.1796**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive 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	1.2148	11.8816	11.4776	0.0219		0.5526	0.5526		0.5084	0.5084	0.0000	2,116.0405	2,116.0405	0.6844		2,133.1497
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2148**	**11.8816**	**11.4776**	**0.0219**		**0.5526**	**0.5526**		**0.5084**	**0.5084**	**0.0000**	**2,116.0405**	**2,116.0405**	**0.6844**		**2,133.1497**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive 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	3.8200e-003	0.1340	0.0459	4.7000e-004	0.0128	1.6000e-004	0.0129	3.6800e-003	1.5000e-004	3.8300e-003		51.6133	51.6133	3.8000e-003		51.7082
Worker	0.0323	0.0180	0.2644	9.8000e-004	0.1118	7.0000e-004	0.1125	0.0296	6.4000e-004	0.0303		97.4250	97.4250	1.8600e-003		97.4714
Total	**0.0361**	**0.1519**	**0.3102**	**1.4500e-003**	**0.1246**	**8.6000e-004**	**0.1254**	**0.0333**	**7.9000e-004**	**0.0341**		**149.0383**	**149.0383**	**5.6600e-003**		**149.1796**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.6077	7.0176	35.2540	0.1333	13.9027	0.0981	14.0008	3.7094	0.0910	3.8004		13,498.6620	13,498.6620	0.5212		13,511.6925
Unmitigated	2.6077	7.0176	35.2540	0.1333	13.9027	0.0981	14.0008	3.7094	0.0910	3.8004		13,498.6620	13,498.6620	0.5212		13,511.6925

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,789.76	1,720.67	1575.91	5,977,761	5,977,761
Strip Mall	245.38	232.77	113.10	427,470	427,470
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	2,035.14	1,953.44	1,689.01	6,405,230	6,405,230

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.672006	0.045726	0.165417	0.062031	0.018096	0.005993	0.010339	0.010339	0.001692	0.001688	0.004994	0.000603	0.001076
Strip Mall	0.563406	0.043070	0.209298	0.109958	0.015015	0.005784	0.026182	0.017546	0.001775	0.001524	0.004941	0.000598	0.000904
Unenclosed Parking with Elevator	0.563406	0.043070	0.209298	0.109958	0.015015	0.005784	0.026182	0.017546	0.001775	0.001524	0.004941	0.000598	0.000904

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	0.1115	0.9527	0.4069	6.0800e-003		0.0770	0.0770		0.0770	0.0770		1,215.9982	1,215.9982	0.0233	0.0223	1,223.2242
NaturalGas Unmitigated	0.1115	0.9527	0.4069	6.0800e-003		0.0770	0.0770		0.0770	0.0770		1,215.9982	1,215.9982	0.0233	0.0223	1,223.2242

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					
Apartments Mid Rise	10300.4	0.1111	0.9493	0.4039	6.0600e-003		0.0768	0.0768		0.0768	0.0768		1,211.8080	1,211.8080	0.0232	0.0222	1,219.0092

Strip Mall	35.6164	3.8000e-004	3.4900e-003	2.9300e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		4.1902	4.1902	8.0000e-005	8.0000e-005	4.2151
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1115**	**0.9527**	**0.4069**	**6.0800e-003**		**0.0770**	**0.0770**		**0.0770**	**0.0770**		**1,215.9982**	**1,215.9982**	**0.0233**	**0.0223**	**1,223.2243**

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					
Apartments Mid Rise	10.3004	0.1111	0.9493	0.4039	6.0600e-003		0.0768	0.0768		0.0768	0.0768		1,211.8080	1,211.8080	0.0232	0.0222	1,219.0092
Strip Mall	0.0356164	3.8000e-004	3.4900e-003	2.9300e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		4.1902	4.1902	8.0000e-005	8.0000e-005	4.2151
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1115**	**0.9527**	**0.4069**	**6.0800e-003**		**0.0770**	**0.0770**		**0.0770**	**0.0770**		**1,215.9982**	**1,215.9982**	**0.0233**	**0.0223**	**1,223.2243**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.1172	0.3463	27.1828	1.6500e-003		0.1530	0.1530		0.1530	0.1530	0.0000	91.2690	91.2690	0.0479	7.8000e-004	92.6984

Unmitigated	9.1172	0.3463	27.1828	1.6500e-003		0.1530	0.1530		0.1530	0.1530	0.0000	91.2690	91.2690	0.0479	7.8000e-004	92.6984

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	0.6736					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.6199					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	3.8800e-003	0.0332	0.0141	2.1000e-004		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003	0.0000	42.3529	42.3529	8.1000e-004	7.8000e-004	42.6046
Landscaping	0.8197	0.3131	27.1687	1.4300e-003		0.1503	0.1503		0.1503	0.1503		48.9161	48.9161	0.0471		50.0938
Total	**9.1172**	**0.3463**	**27.1828**	**1.6400e-003**		**0.1530**	**0.1530**		**0.1530**	**0.1530**	**0.0000**	**91.2690**	**91.2690**	**0.0479**	**7.8000e-004**	**92.6984**

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	0.6736					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.6199					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	3.8800e-003	0.0332	0.0141	2.1000e-004		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003	0.0000	42.3529	42.3529	8.1000e-004	7.8000e-004	42.6046
Landscaping	0.8197	0.3131	27.1687	1.4300e-003		0.1503	0.1503		0.1503	0.1503		48.9161	48.9161	0.0471		50.0938

Total	9.1172	0.3463	27.1828	1.6400e-003		0.1530	0.1530		0.1530	0.1530	0.0000	91.2690	91.2690	0.0479	7.8000e-004	92.6984

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation