APPENDIX A

Air Quality & Greenhouse Gas Emissions Quantification Report
October 2023

CPC-2018-1511-ZC-ZV-ZAA-CU-CUB-SPR
ENV-2018-1512-ND
Site Address: 3216 W. Street
Mixed Use- (Apartment/Hotel) Project

Air Quality & Greenhouse Gas Emissions Quantification Report

"H APARTMENT HOTEL DEVELOPMENT"
(Hotel & Residential Development)

3216, 3218, 3220, 3222 West 8th Street; 800, 810, 812, 812 1⁄2, 814, 814 1⁄2, South Mariposa Street, Los Angeles, CA 90005

Prepared By:

MaxSum Development, LLC
3016 E. Colorado Boulevard, Suite 5626
Pasadena, California 91117
626. 664. 5003 mobile
milan@maxsumdevelopment.com

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1.0 INTRODUCTION

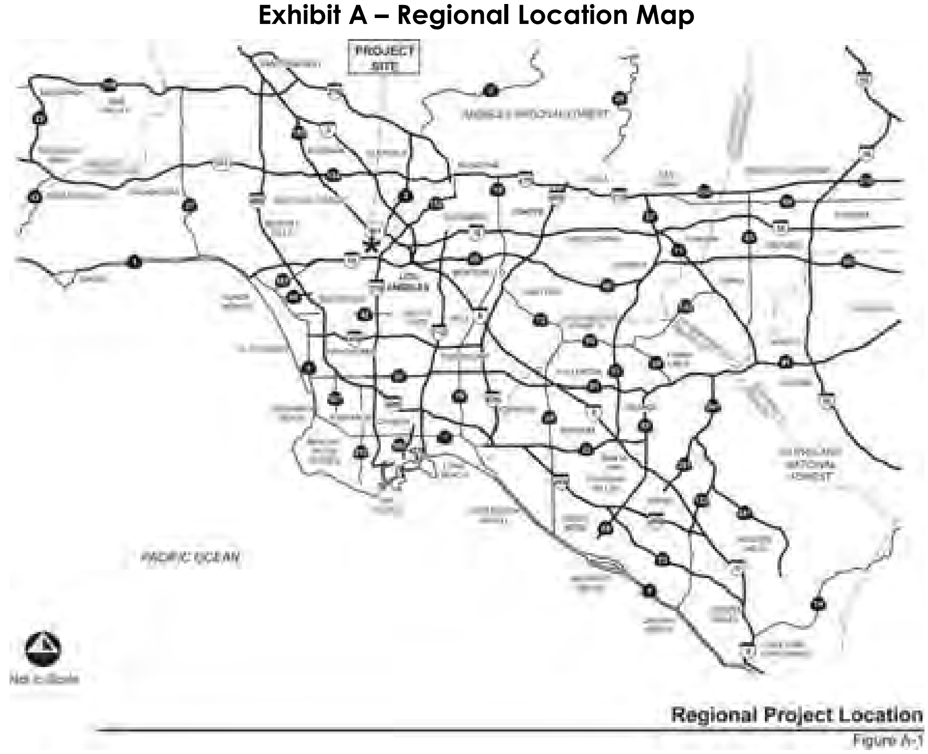
This technical report has been prepared to support the 3216 W. 8th Street Hotel Apartment Development ("Project") environmental review process and provide information regarding potential impacts to air quality and greenhouse gas emissions associated with the approval of the proposed project. The proposed project involves demolishing a two (2) story 4-unit residential apartment building with approximately 5,097 square feet of building area and the adjoining asphalt surface parking lot with 33 existing spaces, to construct a new single building with a varying height of six (6) stories 82'-0" and seven (7) stories 92'-6". The six (6) story portion will accommodate 20 residential units (4 affordable) in a floor area of approximately 28,314 square feet. The seven (7) story portion of the building will house a hotel with 60 guest rooms in a total floor area of approximately 38,601 square feet including 3,950 square feet of commercial/restaurant space on the ground level. The project size totals approximately 66,915 square feet of building area. The development will also be fitted with a three (3) level subterranean parking garage with 71 spaces including 42 bicycle stalls (12 short term and 30 long term). Additionally, a total of 5 trees will be provided.

This report describes the existing air quality in the project area and evaluates potential short- and long-term air quality impacts associated with development of the project.

1.1 PROJECT LOCATION

The project site lies within the City of Los Angeles, west of downtown Los Angeles, in the area commonly referred to as "Koreatown" within the Wilshire Community Plan Area. It is on the south side of 8th Street, at the southeast corner of 8th Street and Mariposa Avenue (Exhibit A, Regional Location Map).

Exhibit A – Regional Location Map



1.2 PROJECT DESCRIPTION

The proposed project involves demolishing a two (2) story 4-unit residential apartment building with approximately 5,097 square feet of building area and the adjoining asphalt surface parking lot with 33 existing spaces, to construct a new single building with a varying height of six (6) stories 82'-0" and seven (7) stories 92'-6". The six (6) story portion will accommodate 20 residential units (4 affordable) in a floor area of approximately 28,314 square feet. The seven (7) story portion of the building will house a hotel with 60 guest rooms in a total floor area of approximately 38,601 square feet including 3,950 square feet of commercial/restaurant space on the ground level. The project size totals approximately 66,915 square feet of building area. The development will also be fitted with a three (3) level subterranean parking garage with 71 spaces including 42 bicycle stalls (12 short term and 30 long term). Additionally, a total of 5 trees will be provided.

Construction is anticipated to begin in late 2024 and last for approximately 18-24 months. Construction activities would consist of demolition of the existing 5,097 square foot residential structure and 33 space asphalt surface parking lot; grading and excavation, including the export of soils; building construction; and exterior coating.

Project Location
(Southeast corner of 8th Street @ Mariposa Avenue)

2.0 ENVIRONMENTAL SETTING

2.1 CLIMATE AND METEOROLOGY

The project site is in the City of Los Angeles in Los Angeles County, which lies within the South Coast Air Basin (SoCAB). The project area is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SoCAB is a 6,600-square-mile coastal plain bounded by the Pacific Ocean to the southwest and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The air basin includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties and all of Orange County. The ambient concentrations of air pollutants are determined by the amount of emissions released by sources and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and sunlight. Therefore, existing air quality conditions in the area are determined by such natural factors as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources.

Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants. The topography and climate of Southern California combine to make the SoCAB an area of high air pollution potential. The air basin is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the southwest and high mountains on the rest of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The usually mild climatological pattern is disrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds. During the summer months, a warm air mass frequently descends over the cool, moist marine layer produced by the interaction between the ocean's surface and the lowest layer of the atmosphere. The warm upper layer forms a cap over the cool marine layer and inhibits the pollutants in the marine layer from dispersing upward. Light winds during the summer further limit ventilation. In addition, sunlight triggers the photochemical reactions that produce ozone.

Based on climate records from the Western Regional Climate Center (2016), the average annual maximum temperature in the city is 74 degrees Fahrenheit (°F) and the average annual minimum temperature is 56°F. The average precipitation in Los Angeles is about 15 inches annually, occurring primarily from December through March.

2.2 CRITERIA AIR POLLUTANTS OF CONCERN

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. These regulated air pollutants are known as criteria air pollutants and are categorized into primary and secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxides (NOX), sulfur dioxide (SO2), most particulate matter (PM10 and PM2.5), lead, and fugitive dust are primary air pollutants. Of these, CO, SO2, PM10, and PM2.5 are criteria pollutants. ROG and NOX are criteria pollutant precursors and go on to form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O3) and nitrogen dioxide (NO2) are the principal secondary pollutants. Presented below is a description of each of the primary and secondary criteria air pollutants and their known health effects.

Carbon monoxide (CO) is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation.

Reactive organic gases (ROG) are compounds comprising primarily atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Other sources of ROG include evaporative emissions associated with the use of paints and solvents, the application of asphalt paving, and the use of household consumer products such as aerosols. Adverse effects on human health are not caused directly by ROG, but rather by reactions of ROG to form secondary pollutants such as ozone.

Nitrogen oxides (NOX) serve as integral participants in the process of photochemical smog production. NOX acts as an acute respiratory irritant and increases susceptibility to respiratory pathogens. The two major forms of NOX are nitric oxide (NO) and nitrogen dioxide (NO2). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure.

Nitrogen dioxide (NO2), a reddish-brown irritating gas, is a byproduct of fuel combustion, produced by a combination of NO and oxygen. NO2 acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NO2 is only potentially irritating. There is some indication of a relationship between NO2 and chronic pulmonary fibrosis. Some increase in bronchitis in children has also been observed at concentrations below 0.3 parts per million (ppm). NO2 absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO2 also contributes to the formation of PM10 (see below) and ozone.

Sulfur dioxide (SO2) belongs to the family of sulfur oxide gases (SOX). SO2 is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. Fuel combustion is the primary source of SO2. At sufficiently high concentrations, SO2 may irritate the upper respiratory tract. At lower concentrations and when combined with particulates, SO2 may do greater harm by injuring lung tissue. A primary source of SO2 emissions is high sulfur content coal. Gasoline and natural gas have very low sulfur content and hence do not release significant quantities of SO2. Sulfur dioxide is a precursor to sulfate (SO4), which is a component of particulate matter. In addition, SO2 and NO2 can react with other substances in the air to form acids, which fall to the earth as rain, fog, snow, or dry particles.

Particulate matter (PM) is a mixture of pollutants in liquid and solid forms. Particulate matter may be classified as primary or secondary. Primary particulates are emitted directly by emission sources, whereas secondary particulates are formed through atmospheric reaction of gases. Particulates are usually classified according to size. The particle diameter can vary from approximately 0.005 micron to 100 microns. Particulate matter less than 10 microns in diameter is referred to as PM10 (coarse particulates) and less than 2.5 microns is referred to as PM2.5 (fine particulates).

Ozone (O3), or smog, is one of a number of substances called photochemical oxidants that are formed when ROG and NOX (both byproducts of the internal combustion engine) react with sunlight. O3 is present in relatively high concentrations in the Los Angeles region, and the damaging effects of photochemical smog are generally related to the concentrations of O3. Ozone poses a health threat, especially to those who already suffer from respiratory diseases. Additionally, O3 has been tied to crop damage, typically in the form of stunted growth and premature death. Ozone can also act as a corrosive, resulting in property damage such as the degradation of rubber products.

2.3 AMBIENT AIR QUALITY STANDARDS

Regulation of air pollution is achieved through both federal and state ambient air quality standards and emission limits for individual sources of air pollutants. Ambient air quality standards have been promulgated at the local, state, and federal levels for criteria pollutants. In addition, both the state and federal governments regulate the release of toxic air contaminants (TACs). Because Los Angeles is in the SoCAB, it is subject to the rules and regulations imposed by the SCAQMD and to the ambient air quality standards adopted by the California Air Resources Board (CARB) and the federal government.

The state of California has established health-based ambient air quality standards for 11 air pollutants. As shown in Table 1, these pollutants include O3, CO, NO2, SO2, PM10, PM2.5, sulfates, lead, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

TABLE 1 - AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards
Ozone (O_3)	8 Hour	0.070 ppm (137µg/m^3)
	1 Hour	0.09 ppm (180 µg/m^3)
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m^3)
	1 Hour	20 ppm (23 mg/m^3)
Nitrogen Dioxide (NO_2)	1 Hour	0.18 ppm (339 µg/m^3)
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)
Sulfur Dioxide (SO_2)	24 Hour	0.04 ppm (105 µg/m^3)
	3 Hour	—
	1 Hour	0.25 ppm (665 µg/m^3)
Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 µg/m^3
	24 Hour	50 µg/m^3
Particulate Matter – Fine ($PM_{2.5}$)	Annual Arithmetic Mean	12 µg/m^3
	24 Hour	N/A
Sulfates	24 Hour	25 µg/m^3
Lead	Calendar Quarter	N/A
	30 Day Average	1.5 µg/m^3)
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)
Vinyl Chloride (chloroethene)	24 Hour	0.01 ppm (26 µg/m^3)
Visibility-Reducing Particles	8 Hour (10:00 to 18:00 PST)	—

Source: CARB 2022
Notes: mg/m^3=milligrams per cubic meter; ppm=parts per million; ppb=parts per billion; µg/m^3=micrograms per cubic meter

As previously stated, O3, PM10, and PM2.5 are the most important pollutants affecting the SoCAB. Table 2 shows the state attainment status for the SoCAB and thus for Los Angeles. Areas with air quality that exceed adopted air quality standards are designated as nonattainment areas for the relevant air pollutants. Areas that comply with air quality standards are designated as attainment areas for the relevant air pollutants. "Unclassified" is used in areas that cannot be classified on the basis of available information as meeting or not meeting the standards. The region is nonattainment for state ozone, PM10, and PM2.5 standards (CARB 2016).

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

Pollutant	State Designation	Federal Designation
O_3	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Unclassified/Attainment
NO_2	Attainment	Unclassified/Attainment
SO_2	Attainment	Attainment
Lead	Attainment	Attainment

Source: CARB 2022

2.4 TOXIC AIR CONTAMINANTS

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome-plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage, and death.

To date, CARB has designated nearly 200 compounds as TACs. Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to a relatively few compounds, one of the most important in Southern California being particulate matter from diesel-fueled engines. In 1998, CARB identified particulate emissions from diesel-fueled engines (diesel PM) as TACs. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

In 2008, the SCAQMD updated the study on ambient concentrations of TACs and estimated the potential health risks from air toxics. The results showed that the overall risk for excess cancer from a lifetime exposure to ambient levels of air toxics was about 1,200 in a million. The largest contributor to this risk was diesel exhaust, accounting for 84 percent of the air toxics risk (SCAQMD 2008).

Land Use Compatibility with TAC Emission Sources

The location of a development project is a major factor in determining whether it will result in localized air quality impacts. The potential for adverse air quality impacts increases as the distance between the source of emissions and members of the public decreases. While impacts on all members of the population should be considered, impacts on sensitive receptors, such as schools or hospitals, are of particular concern. In 2005, CARB published an informational guide entitled Air Quality and Land Use Handbook: A Community Health Perspective. The guide provides information to aid local jurisdictions in addressing issues and concerns related to the placement of sensitive land uses near major sources of air pollution. The handbook includes recommended separation distances for various land uses, summarized in Table 3. However, these recommendations are not site-specific and should not be interpreted as mandated "buffer zones." It is also important to note that the recommendations of the handbook are advisory and need to be balanced with other state and local policies (CARB 2005).

TABLE 3
RECOMMENDATIONS ON SITING NEW SENSITIVE LAND USES NEAR AIR POLLUTANT SOURCES

Source Category	Advisory Recommendations
Freeways and High-Traffic Roads	• Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day.
Distribution Centers	• Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). • Take into account the configuration of existing distribution centers, and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	• Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. • Within 1 mile of a rail yard, consider possible siting limitations and mitigation.
Ports	• Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or CARB on the status of pending analyses of health risks.
Refineries	• Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	• Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloroethylene	• Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with three or more machines, consult with the local air district. • Do not site new sensitive land uses in the same building with perchloroethylene dry cleaners.

Source Category	Advisory Recommendations
Gasoline Dispensing Facilities	• Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gas-dispensing facilities.

Source: CARB 2005

Note: Recommendations are advisory, are not site-specific, and may not fully account for future reductions in emissions, including those resulting from compliance with existing/future regulatory requirements, such as reductions in diesel-exhaust emissions anticipated to occur with continued implementation of CARB's Diesel Risk Reduction Plan.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others because of the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases.

Residential areas are considered to be sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. The residential uses to the east, west and south of the proposed project site would be considered sensitive receptors.

2.5 AMBIENT AIR QUALITY

The SCAQMD maintains monitoring stations within district boundaries that monitor air quality and compliance with associated ambient standards. The project site is in Los Angeles, and the nearest air quality monitoring station is the Los Angeles North Main Street station (1630 North Main Street), located approximately 5.3 miles east of the project site. Air quality in the project area can be characterized by ambient air quality data collected at this monitoring station. The station currently only monitors the ambient concentrations of ozone, CO, NO2, and PM2.5. Historical data from the Los Angeles Station for the three most recent years (2019–2021) is shown in Table 4.

TABLE 4
SUMMARY OF AMBIENT AIR QUALITY DATA

Pollutant (Standard)[1]		Year 2019	Year 2020	Year 2021
Ozone:	Maximum 1-Hour Concentration (ppm)	0.122	0.142	0.110
	Days > CAAQS (0.09 ppm)	**14**	**33**	**4**
	Maximum 8-Hour Concentration (ppm)	0.094	0.115	0.083
	Days > NAAQS/CAAQS (0.070 ppm)	**34**	**62**	**31**
Carbon Monoxide:	Maximum 8-Hour Concentration (ppm)	*	*	*
	Days > CAAQS (9 ppm)	0	0	0
	Days > NAAQS (9 ppm)	0	0	0
Nitrogen Dioxide:[2]	Maximum 1-Hour Concentration (ppm)	0.0697	0.0618	0.0778
	Days > CAAQS (0.18 ppm)	0	0	0
Inhalable Particulates (PM10):[2]	Maximum 24-Hour Concentration (μg/m^3)	93.9	185.2	138.5
	Days > NAAQS (150 μg/m3)	0	0	*
	Days > CAAQS (50 μg/m3)	**15**	**34**	**14**
	Annual Average (μg/m3)	34	34	34
Ultra-Fine Particulates (PM2.5):	Maximum 24-Hour Concentration (μg/m3)	30.0	73.8	55.5
	Days > NAAQS (35 μg/m3)	**0**	**3**	**3**
	Annual Average (μg/m3)	11.9	11.0	11.6

Notes:
Source: California Air Resources Board. http://www.arb.ca.gov/adam/topfour/topfour1.php. Data from the Reseda Monitoring Station, unless otherwise noted.
(1) CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million
(2) Data obtained from the Los Angeles - North Main Street Station.
** Means there was insufficient data available to determine value.*

2.6 GREENHOUSE GAS EMISSION

Since the early 1990s, scientific consensus holds that the world's population is releasing greenhouse gases (GHGs) faster than the earth's natural systems can absorb them. These gases are released as byproducts of fossil fuel combustion, waste disposal, energy use, land use changes, and other human activities. This release of gases, such as carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O), creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring process known as the greenhouse effect, human activities have accelerated the generation of GHGs beyond natural levels. The overabundance of GHGs in the atmosphere has led to a warming of the earth and has the potential to severely impact the earth's climate system.

While often used interchangeably, there is a difference between the terms climate change and global warming. According to the National Academy of Sciences, climate change refers to any significant, measurable change of climate lasting for an extended period of time that can be caused by both natural factors and human activities. Global warming, on the other hand, is an average increase in the temperature of the atmosphere caused by increased GHG emissions. Use of the term climate change is becoming more prevalent because it encompasses all changes to the climate, not just temperature.

To fully understand global climate change, it is important to recognize the naturally occurring greenhouse effect and to define the GHGs that contribute to this phenomenon. Various gases in the earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that would have otherwise escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect.

Among the prominent GHGs contributing to the greenhouse effect are CO2, CH4, and N2O. Table 5 provides descriptions of the primary GHGs attributed to global climate change, including a description of their physical properties, primary sources, and contribution to the greenhouse effect.

TABLE 5 - GREENHOUSE GASES

Greenhouse Gas	Description
Carbon Dioxide (CO_2)	Carbon dioxide is a colorless, odorless gas. CO_2 is emitted in a number of ways, both naturally and through human activities. The largest source of CO_2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO_2 emissions. The atmospheric lifetime of CO_2 is variable because it is so readily exchanged in the atmosphere.[1]
Methane (CH_4)	Methane is a colorless, odorless gas and is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH_4 to the atmosphere. Natural sources of CH_4 include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH_4 is about 12 years.[2]
Nitrous Oxide (N_2O)	Nitrous oxide is a clear, colorless gas with a slightly sweet odor. Nitrous oxide is produced by both natural and human-related sources. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. Nitrous oxide is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 120 years.[3]

Sources: [1] EPA 2015a, [2] 2015b, [3] 2015c

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. Methane traps over 25 times more heat per molecule than CO2, and N2O absorbs 298 times more heat per molecule than CO2. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO2e), which weigh each gas by its global warming potential (GWP). Expressing GHG emissions in CO_2e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

As the name implies, global climate change is a global problem. Greenhouse gases are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern, respectively. According to CARB, California is a significant emitter of CO_2e in the world and produced 459 million gross metric tons of CO_2e in 2012. Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2010, accounting for 36 percent of total GHG emissions in the state. This category was followed by the electric power sector (including both in-state and out-of-state sources) (21 percent) and the industrial sector (19 percent). (CARB 2022).

3.0 RULES AND REGULATIONS

3.1 CRITERIA AIR POLLUTANT REGULATIONS

Development associated with the proposed project has the ability to release gaseous emissions of criteria pollutants and dust into the ambient air; therefore, the project falls under the ambient air quality standards promulgated on the local, state, and federal levels. The federal Clean Air Act of 1971 and the Clean Air Act Amendments (1977) established the national ambient air quality standards, which are promulgated by the US Environmental Protection Agency (EPA). The state of California has also adopted its own California ambient air quality standards, which are promulgated by CARB. Los Angeles is in the SoCAB, which is under the air quality regulatory jurisdiction of the SCAQMD and is subject to the rules and regulations adopted by the SCAQMD to achieve attainment with the national and state ambient air quality standards.

California has adopted various administrative initiatives and pieces of legislation relating to climate change, much of which set aggressive goals for GHG emissions reductions in the state. Although lead agencies must evaluate climate change and GHG emissions of projects subject to the California Environmental Quality Act (CEQA), the CEQA Guidelines do not require or suggest specific methodologies for performing an assessment or specific thresholds of significance and do not specify GHG reduction mitigation measures. Instead, the guidelines allow lead agencies to choose methodologies and make significance determinations based on substantial evidence, as discussed in further detail below. In addition, no state agency has promulgated binding regulations for analyzing GHG emissions, determining their significance, or mitigating significant effects in CEQA documents. Thus, lead agencies exercise their discretion in determining how to analyze GHGs.

STATE

California Global Warming Solutions Act (Assembly Bill 32)

One of the primary acts driving GHG regulation and analysis in California is the California Global Warming Solutions Act of 2006 (AB 32) (Health and Safety Code Sections 38500, 38501, 28510, 38530, 38550, 38560, 38561–38565, 38570, 38571, 38574, 38580, 38590, 38592–38599), which instructs CARB to develop and enforce regulations for the reporting and verifying of statewide GHG emissions. The act directed CARB to set a GHG emissions limit based on 1990 levels, to be achieved by 2020. The bill set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner. The heart of the bill is the requirement that statewide GHG emissions be reduced to 1990 levels by 2020.

<u>AB 32 Scoping Plan</u>

The Scoping Plan is a greenhouse gas emission (GHG) reduction roadmap developed and updated by the California Air Resources Board (CARB) at least once every five years, as required by Assembly Bill (AB) 32. It lays out the transformations needed across various sectors to reduce GHG emissions and reach the State's climate targets. CARB published the Final 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan Update) in November 2022, as the third update to the initial plan that was adopted in 2008. The initial 2008 Scoping Plan laid out a path to achieve the AB 32 target of returning to 1990 levels of GHG emissions by 2020, a reduction of approximately 15 percent below business as usual activities.[1] The 2008 Scoping Plan included a

[1] *CARB. 2008. Climate Change Scoping Plan.*

mix of incentives, regulations, and carbon pricing, laying out the portfolio approach to addressing climate change and clearly making the case for using multiple tools to meet California's GHG targets. The 2013 Scoping Plan Update (adopted in 2014) assessed progress toward achieving the 2020 target and made the case for addressing short-lived climate pollutants (SLCPs).[2] The 2017 Scoping Plan Update,[3] shifted focus to the newer Senate Bill (SB) 32 goal of a 40 percent reduction below 1990 levels by 2030 by laying out a detailed cost-effective and technologically feasible path to this target, and also assessed progress towards achieving the AB 32 goal of returning to 1990 GHG levels by 2020. The 2020 goal was ultimately reached in 2016, four years ahead of the schedule called for under AB 32.

The 2022 Scoping Plan Update is the most comprehensive and far-reaching Scoping Plan developed to date. It identifies a technologically feasible, cost-effective, and equity-focused path to achieve new targets for carbon neutrality by 2045 and to reduce anthropogenic GHG emissions to at least 85 percent below 1990 levels, while also assessing the progress California is making toward reducing its GHG emissions by at least 40 percent below 1990 levels by 2030, as called for in SB 32 and laid out in the 2017 Scoping Plan.[4] The 2030 target is an interim but important stepping stone along the critical path to the broader goal of deep decarbonization by 2045. The relatively longer path assessed in the 2022 Scoping Plan Update incorporates, coordinates, and leverages many existing and ongoing efforts to reduce GHGs and air pollution, while identifying new clean technologies and energy. Given the focus on carbon neutrality, the 2022 Scoping Plan Update also includes discussion for the first time of the natural and working lands sectors as sources for both sequestration and carbon storage, and as sources of emissions as a result of wildfires.

The 2022 Scoping Plan Scenario identifies the need to accelerate AB32's 2030 target, from 40 percent to 48 percent below 1990 levels. Cap-and-Trade regulation continues to play a large factor in the reduction of near-term emissions for meeting the 2030 reduction target. Every sector of the economy will need to begin to transition in this decade to meet these GHG reduction goals and achieve carbon neutrality no later than 2045. The 2022 Scoping Plan Update approaches decarbonization from two perspectives, managing a phasedown of existing energy sources and technologies, as well as increasing, developing, and deploying alternative clean energy sources and technology. The Scoping Plan Scenario is summarized in Table 2-1 starting on page 72 of the Scoping Plan. It includes references to relevant statutes and Executive Orders, although it is not comprehensive of all existing new authorities for directing or supporting the actions described. Table 2-1 identifies actions related to a variety of sectors such as: smart growth and reductions in Vehicle Miles Traveled (VMT); light-duty vehicles (LDV) and zero-emission vehicles (ZEV); truck ZEVs; reduce fossil energy, emissions, and GHGs for aviation ocean-going vessels, port operations, freight and passenger rail, oil and gas extraction; and petroleum refining; improvements in electricity generation; electrical appliances in new and existing residential and commercial buildings; electrification and emission reductions across industries such as the for food products,

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ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/document/adopted_scoping_plan.pdf.

2 *CARB. 2014. First Update to the Climate Change Scoping Plan. ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf.*

3 *CARB. 2017. California's 2017 Climate Change Scoping Plan. ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf.*

4 *CARB, California's 2017 Climate Change Scoping Plan, 2017, ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf.*

construction equipment, chemicals and allied products, pulp and paper, stone/clay/glass/cement, other industrial manufacturing, and agriculture; retiring of combined heat and power facilities; low carbon fuels for transportation, business, and industry; improvements in non-combustion methane emissions, and introduction of low GWP refrigerants.

Achieving the targets described in the 2022 Scoping Plan Update will require continued commitment to and successful implementation of existing policies and programs, and identification of new policy tools and technical solutions to go further, faster. California's Legislature and state agencies will continue to collaborate to achieve the state's climate, clean air, equity, and broader economic and environmental protection goals. It will be necessary to maintain and strengthen this collaborative effort, and to draw upon the assistance of the federal government, regional and local governments, tribes, communities, academic institutions, and the private sector to achieve the state's near-term and longer-term emission reduction goals and a more equitable future for all Californians. The Scoping Plan acknowledges that the path forward is not dependent on one agency, one state, or even one country. However, the State can lead by engaging Californians and demonstrating how actions at the state, regional, and local levels of governments, as well as action at community and individual levels, can contribute to addressing the challenge.

Aligning local jurisdiction action with state-level priorities to tackle climate change and the outcomes called for in the 2022 Scoping Plan Update is identified as critical to achieving the statutory targets for 2030 and 2045. The 2022 Scoping Plan Update discusses the role of local governments in meeting the State's GHG reductions goals. Local governments have the primary authority to plan, zone, approve, and permit how and where land is developed to accommodate population growth, economic growth, and the changing needs of their jurisdictions. They also make critical decisions on how and when to deploy transportation infrastructure, and can choose to support transit, walking, bicycling, and neighborhoods that do not force people into cars. Local governments also have the option to adopt building ordinances that exceed statewide building code requirements, and play a critical role in facilitating the rollout of ZEV infrastructure. As a result, local government decisions play a critical role in supporting state-level measures to contain the growth of GHG emissions associated with the transportation system and the built environment—the two largest GHG emissions sectors over which local governments have authority. The City has taken the initiative in combating climate change by developing programs and regulations such as the Green New Deal and Green Building Code.

Table 1
Estimated Statewide Greenhouse Gas Emissions Reductions in the 2022 Scoping Plan

Emissions Scenario	GHG Emissions ($MMTCO_2e$)
2019	
2019 State GHG Emissions	404
2030	
2030 BAU Forecast	312
2030 GHG Emissions without Carbon Removal and Capture	233
2030 GHG Emissions with Carbon Removal and Capture	226
2030 Emissions Target Set by AB 32 (i.e., 1990 level by 2030)	260
Reduction below Business-As-Usual necessary to achieve 1990 levels by 2030	52 (16.7%)[a]
2045	
2045 BAU Forecast	266
2045 GHG Emissions without Carbon Removal and Capture	72
2045 GHG Emissions with Carbon Removal and Capture	(3)

$MMTCO_2e$ = million metric tons of carbon dioxide equivalents; parenthetical numbers represent negative values.
[a] 312 – 260 = 52. 52 / 312 = 16.7%
Source: CARB, Final 2022 Climate Change Scoping Plan, November 2022.

The 2022 Scoping Plan Update reflects existing and recent direction in the Governor's Executive Orders and State Statutes, which identify policies, strategies, and regulations in support of and implementation of the Scoping Plan. Among these include Executive Order B-55-18 and AB 1279 (The California Climate Crisis Act), which identify the 2045 carbon neutrality and GHG reduction targets required for the Scoping Plan.

California Executive Orders

Two executive orders—California Executive Order 5-03-05 (2005) and California Executive Order B-30-15 (2015)—highlight GHG emissions reduction targets, though such targets have not been adopted by the state and remain only a goal of the executive orders. Specifically, Executive Order 5-03-05 seeks to achieve a reduction of GHG emissions of 80 percent below 1990 levels by 2050 and Executive Order B-30-15 seeks to achieve a reduction of GHG emissions of 40 percent below 1990 levels by 2030. Technically, a governor's executive order does not have the effect of new law but can only reinforce existing laws. For instance, as a result of the AB 32 legislation, the state's 2020 reduction target is backed by the adopted AB 32 Scoping Plan, which provides a specific regulatory framework of requirements for achieving the 2020 reduction target.

LOCAL

South Coast Air Quality Management District

The SCAQMD is the air pollution control agency for Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino Counties. The agency's primary responsibility is ensuring that the federal and state ambient air quality standards are attained and maintained in the SoCAB. The SCAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, and conducting public education campaigns, as well as many other activities. All projects are subject to SCAQMD rules and regulations in effect at the time of construction.

South Coast Air Quality Management District Rules and Regulations
The following is a list of noteworthy SCAQMD rules that are required of construction activities associated with the proposed project:

- Rule 402 (Nuisance) – This rule prohibits the 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. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

- Rule 403 (Fugitive Dust) – This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. This rule is intended to reduce PM10 emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM10 suppression techniques are summarized below.

a) Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.

b) All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.

c) All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.

d) The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.

e) Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the workday to remove soil tracked onto the paved surface.

Toxic Air Contaminant Regulations

In 1983, the California legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the federal Clean Air Act (42 United States Code Section 7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency, acting through CARB, is authorized to identify a substance as a TAC if it determines the substance is an air pollutant that may cause or contribute to an increase in mortality or to an increase in serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an airborne toxics control measure for sources that emit designated TACs. If there is a safe threshold for a substance (a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions. CARB has, to date, established formal control measures for 11 TACs, all of which are identified as having no safe threshold.

Air toxics from stationary sources are also regulated in California under the Air Toxics "Hot Spot" Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High-priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

CARB has designated 244 compounds as TACs. Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

3.2 GREENHOUSE GAS REGULATIONS LOCAL

South Coast Air Quality Management District

To provide guidance to local lead agencies on determining significance for GHG emissions in CEQA documents, SCAQMD staff is convening an ongoing GHG CEQA Significance Threshold Working Group. Members of the working group include government agencies implementing CEQA and representatives from various stakeholder groups that provide input to SCAQMD staff on developing the significance thresholds. On October 8, 2008, the SCAQMD released the Draft SCAQMD Staff CEQA GHG Significance Thresholds. These thresholds have not been finalized and continue to be developed through the working group. On September 28, 2010, SCAQMD Working Group Meeting #15 provided further guidance, including an interim screening level threshold of 4.8 metric tons of CO2e per service population (residents plus employees) per year in 2020 and 3.0 metric tons of CO2e per service population per year in 2035. The SCAQMD has not announced when staff is expecting to present a finalized version of these thresholds to the governing board. The SCAQMD has also adopted Rules 2700, 2701, and 2702 that address GHG reductions; however, these rules are currently applicable only to boilers and process heaters, forestry, and manure management projects.

4.0 PROJECT EMISSIONS

4.1 METHODOLOGY

Criteria Pollutants

This technical report focuses on the nature and magnitude of the change in the air quality environment due to implementation of the project. Air pollutant emissions associated with the project would result primarily from construction activities, including demolition and new construction that would generate air pollutant emissions at the project site and on roadways resulting from construction-related traffic. To a lesser degree, operation of the new hotel and commercial/restaurant use at the project site and associated traffic volumes generated by these new uses would also result in air pollutant emissions. The emissions generated by these activities and other secondary sources have been estimated and compared to the applicable thresholds of significance recommended by the SCAQMD and are described in more detail below.

Emissions were calculated using California Emissions Estimator Model, version 2020.4 is a statewide land use emissions computer model designed to provide a uniform platform for the use of government agencies, land use planners, and environmental professionals. This model was developed in coordination with the SCAQMD and is the most current emissions model approved for use in California by various other air districts.

<u>Construction Impacts</u>

Emissions for the construction activities were calculated using California Emissions Estimator Model, version 2020.4.0 Equipment for each phase of construction activity was based on data provided by the project applicant. Detailed assumptions and California Emissions Estimator Model, version 2020.4.0 inputs and outputs are included in Appendix A.

In addition to the project's regional pollutant emissions generated during construction, the local effects of the project's pollutant emissions on nearby sensitive receptors were analyzed. To determine whether construction activities associated with the proposed project would create significant adverse localized air quality impacts on nearby sensitive receptors, the worst-case daily emissions contribution from the project were evaluated against the SCAQMD's localized significance thresholds (LSTs). LSTs represent the daily maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards, and thus would not cause or contribute to localized air quality impacts. LSTs are developed based on the ambient concentrations of the subject pollutant for each of the 38 source receptor areas (SRAs) in the SoCAB. The City of Los Angeles is in SRA 2. The LSTs developed by the SCAQMD are based on the pounds of emissions per day that can be generated by a project without causing or contributing to adverse localized air quality impacts. The analysis of localized air quality impacts focuses only on on-site activities of a project and does not include emissions that are generated off-site such as from haul or delivery truck trips.

For the purpose of analyzing localized air quality impacts, the SCAQMD has developed LSTs for five project site sizes: 1 acre, 2 acres, 3 acres, 4 acres, and 5 acres. The LSTs established for each of the five site acreages represent the amount of pollutant emissions that would not exceed the most stringent applicable federal or state ambient air quality standards. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Given that the project site is 26,380 square feet (.60 acers), the LSTs for a 1-acre site were used to determine whether localized air quality impacts on nearby sensitive receptors would result from the project'sconstruction emissions. It should be noted that the closest sensitive receptor are the residential uses located approximately adjacent to the project site to the south and east. Therefore, a distance of 500 meters is utilized in this analysis. Where it is determined that the project's emissions would not exceed the LSTs for a 1-acre site, it can be concluded that no adverse localized air quality impacts would result during project construction.

<u>Operational Impacts</u>

Implementation of the proposed project would result in the development a 6 to 7-story apartment/hotel with 20 residential units and 60 hotel rooms with approximately 65,599 square feet including 2,924 square feet of commercial/restaurant space and 97 on-site parking spaces (in three levels of subterranean, and one level at grade). Operational emissions would occur from stationary (area sources) and mobile sources. As such, the net increase in long-term (i.e., operational) regional emissions of criteria air pollutants and precursors associated with the project, including mobile- and area-source emissions, were quantified using the California Emissions Estimator Model, version 2022.1.1.12 computer model. Area-source emissions, which are widely distributed and made up of many small emissions sources (e.g., building heating and cooling units, landscaping equipment, consumer products, painting operations), were calculated using California Emissions Estimator Model, version 2022.1.1.12 model defaults based on the size and type of land use proposed. Mobile emissions were estimated using the trip generation rates provided in the traffic study for the proposed project.

<u>Greenhouse Gas Impacts</u>

Project-related GHG emissions would include emissions from direct and indirect sources. The proposed project would result in direct and indirect emissions of CO2, N2O, and CH4, and would not result in other GHGs that would facilitate a meaningful analysis. Therefore, this analysis focuses on these three forms of GHG emissions. Direct project related GHG emissions include emissions from construction activities, area sources, and mobile sources, while indirect sources include emissions from electricity consumption, water demand, and solid waste generation. Operational GHG estimations are based on energy emissions from natural gas usage and automobile emissions. See Appendix A.

4.2 THRESHOLDS OF SIGNIFICANCE

Criteria Pollutants

Based on the CEQA Guidelines, a project would have a significant adverse effect on air quality resources if it would:

- Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

- Expose sensitive receptors to substantial pollutant concentrations.

- Create objectionable odors affecting a substantial number of people.

The SCAQMD developed the CEQA Air Quality Handbook (1993), which establishes suggested significance thresholds based on the volume of pollution emitted. According to the handbook, any project in the SoCAB with daily emissions that exceed any of the following thresholds as shown in Table 6 should be considered as having an individually and cumulatively significant air quality impact.

TABLE 6
SCAQMD REGIONAL THRESHOLDS OF SIGNIFICANCE

Mass Daily Thresholds (Pounds per Day)		
Pollutant	**Construction**	**Operation**
Reactive Organic Gases (ROG)	75	55
Nitrogen Oxides (NO_x)	100	55
Respirable Particulates (PM_{10})	150	150
Fine Particulates ($PM_{2.5}$)	55	55
Sulfur Oxides (SO_x)	150	150
Carbon Monoxide (CO)	550	550
Lead [1]	3	3

Source: SCAQMD 2022
Note: 1. Because the proposed project would not involve the development of any major lead emissions sources, lead emissions are not analyzed further in this report.

The SCAQMD developed localized significance threshold methodologies and mass rate look-up tables by source receptor area that can be used to determine whether a project may generate significant adverse localized air quality impacts. LSTs are developed based on the ambient concentrations of pollutants in each source receptor area. The LST methodology is described in the Final Localized Significance Threshold Methodology and is based on LST tables published by the SCAQMD (2009); both documents are available on the SCAQMD website (www.aqmd.gov).

The LST mass rate look-up tables provided by the SCAQMD allow a determination as to whether the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts. If the calculated on-site emissions for the proposed construction or operational activities are below the LST emission levels found on the LST mass rate look-up tables, the proposed construction or operation activity is not significant for air quality.

The LST mass rate look-up tables are applicable to the following pollutants only: nitrogen oxides (NOX), carbon monoxide (CO), and particulate matter less than 10 microns in aerodynamic diameter (PM10). Table entries are derived based on the location of the activity (i.e., the source/receptor area); the emission rates of NOX, CO, PM10, and PM2.5; and the distance to the nearest exposed individual.

The LST methodology presents mass emission rates for each SRA, project sizes of 1, 2, and 5 acres, and nearest receptor distances of 25, 50, 100, 200, and 500 meters. For project sizes between the values given, or with receptors at distances between the given receptors, the methodology uses linear interpolation to determine the thresholds. The SCAQMD recommends that LSTs be analyzed using the California Emissions Estimator Model, version 2020.4.0 equipment list based on the maximum number of acres disturbed on the peak day. Because the project site is .49 acres, the construction emissions estimated for the proposed project estimate that no more than 1 acre would be disturbed per day. Therefore, for the purposes of the LST analysis, maximum emissions were estimated using the emissions LST screening tables for a 1-acre site. The LSTs for a 1-acre site in SRA 2 (Los Angeles), which is where the project site is located, are shown in Table 7.

TABLE 7
SCAQMD LOCALIZED SIGNIFICANCE THRESHOLDS

Pollutant	Allowable emissions (lbs/day) as a function of receptor distance (meters) from site boundary				
	25	50	100	200	500
Nitrogen Oxides (NO_x)[1]	103	104	121	156	245
Carbon Monoxide (CO)	562	833	1,233	2,367	7,724
Respirable Particulates (PM_{10})	4	12	27	57	146
Fine Particulates ($PM_{2.5}$)	3	4	8	18	77

Source: SCAQMD 2022
Note: 1. The localized thresholds listed for NOx in this table take into consideration the gradual conversion of NO to NO_2.The analysis of localized air quality impacts associated with NOx emissions focuses on NO_2 levels as they are associated with adverse health effects.

Greenhouse Gas Emissions

The California Natural Resources Agency (CNRA) has noted that impacts of GHG emissions should focus on the cumulative impact on climate change. The public notice states:

While the Proposed Amendments do not foreclose the possibility that a single project may result in greenhouse gas emissions with a direct impact on the environment, the evidence before [CNRA] indicates that in most cases, the impact will be cumulative. Therefore, the Proposed Amendments emphasize that the analysis of greenhouse gas emissions should center on whether a project's incremental contribution of greenhouse gas emissions is cumulatively considerable. (CNRA 2009b)

Thus, the CEQA Amendments continue to make clear that the significance of GHG emissions is most appropriately considered on a cumulative level. Per Appendix G of the CEQA Guidelines, impacts related to climate change are considered significant if implementation of the proposed project would:

1) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

2) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

In order to assess the significance of a proposed project's environmental impacts, it is necessary to identify quantitative or qualitative thresholds which, if exceeded, would constitute a finding of significance. Determining a threshold of significance for a project's climate change impacts poses a special difficulty for lead agencies. Much of the science in this area is new and is evolving constantly. At the same time, neither the state nor local agencies are specialized in this area, nor are there currently state thresholds for determining whether a proposed project has a significant impact on climate change. The CEQA Amendments do not prescribe specific significance thresholds but instead leave considerable discretion to lead agencies to develop appropriate thresholds to apply to projects in their jurisdiction.

The SCAQMD has formed a GHG CEQA Significance Threshold Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. As of the last Working Group meeting (Meeting No. 15) held in September 2010, the SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency.

With the tiered approach, the project is compared with the requirements of each tier sequentially and would not result in a significant impact if it complies with any tier. Tier 1 excludes projects that are specifically exempt from Senate Bill (SB) 97 from resulting in a significant impact. Tier 2 excludes projects that are consistent with a GHG reduction plan that has a certified final CEQA document and complies with AB 32 GHG reduction goals. Tier 3 excludes projects with annual emissions lower than a screening threshold. For all nonindustrial projects, the SCAQMD is proposing a screening threshold of 3,000 metric tons (MT) of CO2eq (MTCO2eq) per year. The SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact.

Tier 4 consists of three decision tree options. Under the Tier 4 first option, the project would be excluded if design features and/or mitigation measures resulted in emissions 30 percent lower than business-as-usual emissions.1 Under the Tier 4 second option, the project would be excluded if it had early compliance with AB 32 through early implementation of CARB's Scoping Plan measures. Under the Tier 4 third option, the project would be excluded if it was below an efficiency-based threshold of 4.8 MTCO2eq per service population per year (MTCO2eq/yr).

Tier 5 would exclude projects that implement off-site mitigation (GHG reduction projects) or purchase offsets to reduce GHG emission impacts to less than the proposed screening level.

GHG efficiency metrics are utilized as thresholds to assess the GHG efficiency of a project on a per capita basis or on a service population basis (the sum of the number of jobs and the number of residents provided by a project), such that the project would allow for consistency with the goals of AB 32 (i.e., 1990 GHG emissions levels by 2020 and 2035). GHG efficiency thresholds can be determined by dividing the GHG emissions inventory goal of the state by the estimated 2035 population and employment. This method allows highly efficient projects with higher mass emissions to meet the overall reduction goals of AB 32, and is appropriate, because the threshold can be applied evenly to all project types (residential or commercial/retail only and mixed-use).

For the proposed project, the 3,000 MTCO2eq/yr nonindustrial screening threshold is used as the significance threshold in addition to the qualitative thresholds of significance set forth below from Section VII of CEQA Guidelines Appendix G.

4.3 CRITERIA POLLUTANT EMISSIONS ANALYSIS

Violation of Air Quality Standards – Construction

Construction emissions are calculated by estimating the types and number of pieces of equipment that would be used to grade, excavate, and balance fill at the project site and to construct the uses proposed under the project. These are analyzed according to the thresholds established by the SCAQMD. Construction activities associated with the proposed project would temporarily increase diesel emissions and would generate particulate matter (dust). Construction equipment on the project site that would generate volatile organic compounds (VOC) and nitrogen oxide (NOX) pollutants could include graders, dump trucks, and bulldozers. Some of this equipment would be used during grading activities and during construction of the building on the project site. This environmental assessment assumes that all construction equipment used would be diesel-powered. Construction of the proposed project is anticipated to require a maximum of 24 months and is proposed to begin in late 2023, concluding in late 2025. Construction phases would involve demolition, site preparation grading, building construction, and architectural coating. A total of .49 acres would be disturbed. Detailed assumptions and California Emissions Estimator Model, version 2022.1.1.20 inputs and outputs are included in Appendix A.

Table 8 identifies the estimated peak daily construction emissions, as calculated using the California Emissions Estimator Model, version 2022.1.1.20 model. As required by the SCAQMD's Rule 403 (Fugitive Dust), all construction activities that are capable of generating fugitive dust are required to implement dust control measures during each phase of project development to reduce the amount of particulate matter entrained in the ambient air. Therefore, the California Emissions Estimator Model, version 2022.1.1.20 model was modified to include fugitive dust controls required by the SCAQMD's Rule 403. It is assumed that all construction activity would occur sequentially; therefore, the total maximum daily emissions are provided, as well as the maximum emissions by construction phase.

As shown in Table 8, construction activities would not result in emissions that exceed the SCAQMD thresholds with incorporation of standard fugitive dust controls as required by the SCAQMD's Rule 403. Therefore, no adverse air quality impact would occur.

TABLE 8
ESTIMATED PEAK DAILY CONSTRUCTION EMISSIONS IN POUNDS PER DAY

		Unmitigated						Mitigated					
		ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
Year	Phase	lb/day											
2024	Demolition	2.3000 W	21.4972 W	20.3554 S	0.0428 S	2.1966 W	1.1121 W	2.3000 W	21.4972 W	20.3554 S	0.0428 S	2.1966 W	1.1121 W
2024	Site Preparation	2.7177 W	27.2136 W	18.9225 S	0.0398 S	21.0887 S	11.2878 S	2.7177 W	27.2136 W	18.9225 S	0.0398 S	21.0887 S	11.2878 S
2024	Grading	3.2813 W	32.4188 W	28.3748 S	0.0640 S	10.7638 S	4.9427 S	3.2813 W	32.4188 W	28.3748 S	0.0640 S	10.7638 S	4.9427 S
2024	Building Construction	2.2420 W	16.2230 W	24.3310 S	0.0591 S	3.5383 W	1.3787 W	2.2420 W	16.2230 W	24.3310 S	0.0591 S	3.5383 W	1.3787 W
2025	Building Construction	2.0934 W	15.1913 W	23.7492 S	0.0582 S	3.4520 W	1.2976 W	2.0934 W	15.1913 W	23.7492 S	0.0582 S	3.4520 W	1.2976 W
2025	Paving	0.9596 W	8.6098 W	15.0345 S	0.0242 S	0.5871 S	0.4303 S	0.9596 W	8.6098 W	15.0345 S	0.0242 S	0.5871 S	0.4303 S
2025	Architectural Coating	74.2298 W	1.2301 W	3.1787 S	7.1000e-003 S	0.5571 S	0.1873 S	74.2298 W	1.2301 W	3.1787 S	7.1000e-003 S	0.5571 S	0.1873 S
	Peak Daily Total	74.2298 W	32.4188 W	28.3748 S	0.0640 S	21.0887 S	11.2878 S	74.2298 W	32.4188 W	28.3748 S	0.0640 S	21.0887 S	11.2878 S
	Air District Threshold	**75**	**100**	**550**	**150**	**150**	**55**	**75**	**100**	**550**	**150**	**150**	**55**
	Exceed Significance?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

*Source: SCAQMD 2022 (calculation sheets are provided in **Appendix A**).*

Violation of Air Quality Standards – Operations

Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities after buildout of the proposed project. Stationary area source emissions would be generated by space and water heating devices and by the operation of landscape maintenance equipment. Mobile emissions would be generated by motor vehicles traveling to and from the project site.

The results of the California Emissions Estimator Model, version 2022.1.1.20 calculations for the daily operational emissions of the proposed project are presented in Table 9. The emissions reflect the net increase in emissions anticipated from the proposed project. As shown, the daily operational emissions are below the SCAQMD thresholds for all criteria pollutants; therefore, no adverse air quality impact would occur.

TABLE 9
ESTIMATED PEAK DAILY OPERATIONAL EMISSIONS IN POUNDS PER DAY

		Unmitigated						Mitigated					
		ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
	Operational Activity	lb/day											
On-Site	Offroad	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S
On-Site	Area	50.7006 S	3.7324 S	101.6791 S	0.2239 S	13.2177 S	13.2177 S	5.9309 S	2.7315 S	15.3008 S	0.0171 S	0.2865 S	0.2865 S
On-Site	Energy	0.0964 S	0.8399 S	0.4703 S	5.2600e-003 S	0.0666 S	0.0666 S	0.0845 S	0.7366 S	0.4136 S	4.6100e-003 S	0.0584 S	0.0584 S
Off-Site	Mobile	17.0524 S	14.4307 W	132.7232 W	0.2667 S	32.3479 W	8.7399 W	17.0524 S	14.4307 W	132.7232 W	0.2667 S	32.3479 W	8.7399 W
	Peak Daily Total	67.8494 S	19.0029 W	234.8726 W	0.4958 S	45.6322 W	22.0242 W	23.0678 S	17.8988 W	148.4377 W	0.2884 S	32.6928 W	9.0848 W
	Air District Threshold	**75**	**100**	**550**	**150**	**150**	**55**	**75**	**100**	**550**	**150**	**150**	**55**
	Exceed Significance?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

*Source: SCAQMD 2022 (calculation sheets are provided in **Appendix A**).*

Exposure of Sensitive Receptors to Pollutant Concentrations

Construction and operation of the project could potentially expose sensitive receptors located within and adjacent to the project site to CO hot spots, localized air quality impacts from criteria pollutants, and TACs from on-site sources during project construction, as well as TACs from

Carbon Monoxide

Typically, substantial pollutant concentrations of CO are associated with mobile sources (e.g., vehicle idling time). Localized concentrations of CO are associated with congested roadways or signalized intersections operating at poor levels of service (level of service E or lower). High concentrations of CO may negatively affect local sensitive receptors (e.g., residents, schoolchildren, or hospital patients).

A CO hot spot would occur if an exceedance of the state 1-hour standard of 20 ppm or the 8-hour standard of 9 ppm were to occur. When the SCAQMD CEQA Air Quality Handbook was first prepared in 1993, the SoCAB was designated nonattainment under the California and national ambient air quality standards for CO. The analysis prepared for CO attainment in the air basin by the SCAQMD can be used to assist in evaluating the potential for carbon monoxide exceedances in the SoCAB. CO attainment was thoroughly analyzed as part of the SCAQMD's Air Quality Management Plan (SCAQMD 2003) and the Revision to the 1992 Carbon Monoxide Attainment Plan (SCAQMD 1994). As discussed in the 1994 document, peak CO concentrations in the SoCAB are due to unusual meteorological and topographical conditions and are not due to the impact of particular intersections. Considering the region's unique meteorological conditions and the increasingly stringent CO emissions standards, carbon monoxide modeling was performed as part of the 1992 Carbon Monoxide Attainment Plan and subsequent plan updates and air quality management plans.

In the 1992 plan, a CO hot-spot analysis was conducted for four busy intersections in Los Angeles during the peak morning and afternoon time periods. The intersections evaluated were Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated in the 1992 plan and the subsequent 2003 Air Quality Management Plan was that at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day (SCAQMD 2003). The Los Angeles County Metropolitan Transportation Authority (MTA) evaluated the level of service (LOS) in the vicinity of the Wilshire Boulevard/Veteran Avenue intersection and found it to be LOS E during peak morning traffic and LOS F during peak afternoon traffic (MTA 2004).

The project would not produce maximum peak-hour traffic volumes traffic exceeding those at the intersections modeled in the 2003 plan, nor would there be any reason unique to area meteorology to conclude that this intersection would yield higher CO concentrations if modeled in detail. For these reasons, there would be no impact related to CO hot spots.

Localized Construction Air Quality Impacts – Criteria Air Pollutants

As discussed previously, the daily construction emissions generated on-site by the project were evaluated against the SCAQMD's localized significance thresholds for a 1-acre site with the nearest sensitive receptor being located within 500 meters. Therefore, a distance of 500 meters is used in this analysis to determine whether the emissions would cause or contribute to adverse localized air quality impacts. Table 10 identifies daily localized on-site emissions that are estimated to occur during construction of the project. Emissions for the construction activities were calculated using California Emissions Estimator Model, version 2022.1.1.20, utilizing the construction equipment data provided by the applicant. Detailed assumptions and California Emissions Estimator Model, version 2022.1.1.20 inputs and outputs are included on Appendix A.

TABLE 10
TOTAL CONSTRUCTION EMISSIONS AND LOCALIZED SIGNIFICANCE THRESHOLDS

Pollutant	Maximum On-Site Construction Emissions	Threshold of Significance[1]	Quantity of Pollutant Exceeding Threshold	Significant Impact?
CO	59.7	562	0	No
NO_2	102	103	0	No
PM_{10}	2.26	4	0	No
$PM_{2.5}$	2.13	3	0	No

Source: SCAQMD 2022

Note: 1. Thresholds of significance are measured at 500 meters from the proposed project site.

As shown in Table 10, the daily emissions generated by the proposed project on-site during all phases of construction would not exceed the established SCAQMD localized significance thresholds for NOX (in the form of NO2), CO, PM10, and PM2.5 for a 1-acre site in SRA 2. As such, it can be concluded that the project would not result in localized air quality impacts on the nearby surrounding land uses. Therefore, localized air quality impacts would not occur.

Localized Construction Air Quality Impacts – TACs

Project construction would result in short-term emissions of diesel PM, which is a TAC. Off-road heavy-duty diesel equipment would emit diesel PM during site preparation (e.g., excavation and grading), paving, installation of utilities, materials transport and handling, building construction, and other miscellaneous activities. The SCAQMD has not adopted a methodology for analyzing such impacts and has not recommended that health risk assessments be completed for construction-related emissions of TACs.

The dose to which receptors are exposed is the primary factor used to determine health risk (i.e., the potential exposure to TACs to be compared to applicable standards). Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the maximally exposed individual. Thus, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer period of time. 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 70-year exposure period; however, such assessments should be limited to the period or duration of activities associated with the proposed project.

The estimated 24-month construction period for the project would be much less than the 70-year period used for risk determination. Because off-road heavy-duty diesel equipment would be used only temporarily, project construction would not expose sensitive receptors to substantial emissions of TACs.

Project Operation – TACs

Because the project would result in the development of a 60-room hotel with 3,950 square feet of commercial/restaurant space, and 20 residential units (4 affordable) it would not involve or introduce any new stationary sources of TACs, such as diesel-fueled backup generators that are more commonly associated with large industrial uses. Therefore, the project would not expose surrounding sensitive receptors to TAC emissions.

Objectionable Odors

If approved, the site would allow for the development of a new single building with a varying height of six (6) stories 82'-0" and seven (7) stories 92'-6". The six (6) story portion will accommodate 20 residential units (4 affordable) in a floor area of approximately 28,314 square feet. The seven (7) story portion of the building will house a hotel with 60 guest rooms in a total floor area of approximately 38,601 square feet including 3,950 square feet of commercial/restaurant space on the ground level. The project size totals approximately 66,915 square feet of building area. The development will also be fitted with a three (3) level subterranean parking garage with 71 spaces including 42 bicycle stalls (12 short term and 30 long term). Additionally, a total of 5 trees will be provided.

This type of use would not be expected to result in any additional objectionable odors that would affect a substantial number of people. All trash will be disposed of in lidded containers and routinely emptied by the local waste hauler. Therefore, the proposed project would not result in objectionable odors that could affect a substantial number of people. There would be no impact.

Cumulative Impacts

The project site is in the SoCAB, which is under the jurisdiction of the SCAQMD. Despite consistent improvements in pollution levels in the basin over the past 30 years, levels of ozone (for which VOC and NOX are precursors), PM10, and PM2.5 are above federal and state standards. Therefore, projects could cumulatively exceed an air quality standard or contribute to an existing or projected air quality exceedance. In determining the significance of the proposed project's contribution, the SCAQMD neither recommends quantified analyses of cumulative construction or operational emissions nor provides separate methodologies or thresholds of significance to be used to assess cumulative construction or operational impacts. Instead, the SCAQMD recommends that a project's potential contribution to cumulative impacts be assessed using the same significance criteria as those for project-specific impacts. That is, individual development projects which generate construction-related or operational emissions that exceed the SCAQMD-recommended daily thresholds for project-specific impacts would also cause a cumulatively considerable increase in emissions for those pollutants for which the air basin is in nonattainment.

Since the proposed project does not exceed SCAQMD daily significance thresholds for criteria air pollutants, as described previously, implementation of the proposed project would not result in a cumulatively considerable net increase in criteria air pollutants for the project region.

4.4 GREENHOUSE GAS EMISSIONS ANALYSIS

Generation of Greenhouse Gas Emissions

GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects contributes substantially to the phenomenon of global climate change and its associated environmental impacts and as such is addressed only as a cumulative impact.

GHG emissions associated with the project would occur over the short term from construction activities, consisting primarily of emissions from equipment exhaust. Operational activities would result in direct GHG emissions from traffic increases (mobile sources) as well as indirect emissions, through electricity consumption, water use, and solid waste generation.

Based on current methodology, construction GHG emissions are amortized over the life of the project (30 years) and are combined with operational emissions to provide total estimated annual GHG emissions for the life of the proposed project. Construction activities are anticipated to result in a total of approximately 461.15 MTCO2e, and the amortized construction emissions would be 31.2 MTCO2e per year. Emissions estimates are based on the level of development and on-site operations and were calculated using California Emissions Estimator Model, version 2022.1.1.12 (Appendix A). Annual emissions for the operation of the project are 1,928.27 MTCO2e per year. Table 11 shows the total estimated annual GHG emissions from California Emissions Estimator Model, version 2022.1.1.20 by source. As indicated, the anticipated annual emissions for the project are lower than the annual threshold of 3,000 MTCO2e; therefore, this impact would be less than significant.

TABLE 11
ESTIMATED ANNUAL OPERATIONAL GHG EMISSIONS

Emissions Sources	**Metric Tons per Year**			
	CO_2	**CH_4[a]**	**N_2O[a]**	**CO_2e[a]**
Area	0.97	0.01	<0.005	9.33
Energy	0.10	0.04	<0.005	553
Mobile	3.90	0.05	0.04	854
Waste	0.00	0.37	0.00	12.8
Water	0.00	0.06	<0.005	6.79
Operational Source Subtotal				**1,495**
Total Construction				292
Amortized Construction[b]				31.2
Total				**1,555.4**
Threshold				3,000
Significant?				NO

Source: SCAQMD 2022 (calculation sheets are provided in **Appendix A**).

a. Totals will not add across rows, as emissions from CH_4 and N_2O need to be multiplied by their global warming potential in order to convert them to carbon dioxide equivalents (CO_{2e}). The math is not shown in the table. The global warming potentials for CH_4 and N_2O are 21 and 310, respectively. Further, the California Emissions Estimator Model, version 2022.1.1.12 only reports to the hundredth; therefore, rounding may have also occurred.

b. Amortization assumes project lifetime of 30 years.

Conflict with Applicable Plan, Policy, or Regulation

California has adopted several policies and regulations for the purpose of reducing GHG emissions. AB 32 was enacted in 2006 to reduce statewide GHG emissions to 1990 levels by 2020. SB 375 (Linking Regional Transportation Plans to State Greenhouse Gas Reduction Goals; codified at Government Code Sections 65080, 65400, 65583, 65584.01, 65584.02, 65584.04, 65587, 65588, 14522.1, 14522.2, and 65080.01 as well as Public Resources Code Sections 21061.3 and 21159.28 and Chapter 4.2.) was enacted in 2009 with the goal of reducing GHG emissions by limiting urban sprawl and its associated vehicle emissions. Per the requirements of SB 375, SCAG created a Sustainable Communities Strategy (SCS) that integrates transportation and land use elements in order to achieve the emissions reduction target. The SCS encourages transit-oriented development (TOD), which places residential uses and employment centers near mass transit stations to increase use of mass transit and reduce vehicle trips.

In addition, the project would be subject to applicable federal, state, and local regulatory requirements, further reducing project-related GHG emissions. The project would develop commercial land uses in close proximity to an area well served by transit. This would inherently reduce vehicle trips, vehicle miles traveled, and related GHG emissions. The project would not conflict with or impede implementation of reduction goals identified in AB 32, SB 375, and other strategies to help reduce GHG emissions. The project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions and impacts would be less than significant in this regard.

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APPENDIX A - CalEEMod Version: CalEEMod.2022.1.1.12
CalEEMod Model Emissions Printouts

H Hotel Apartment Summary Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	H Hotel Apartment
Construction Start Date	6/3/2024
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	0.50
Precipitation (days)	16.8
Location	3216 W 8th St, Los Angeles, CA 90005, USA
County	Los Angeles-South Coast
City	Los Angeles
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4016
EDFZ	16
Electric Utility	Los Angeles Department of Water & Power
Gas Utility	Southern California Gas
App Version	2022.1.1.20

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Hotel	60.0	Room	2.00	87,120	1,225	0.00	—	—
Apartments Mid Rise	20.0	Dwelling Unit	0.53	19,200	1,225	—	59.0	—
High Turnover (Sit Down Restaurant)	3.90	1000sqft	0.09	3,900	500	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-1-B	Use Cleaner-Fuel Equipment
Construction	C-4*	Use Local and Sustainable Building Materials
Construction	C-9	Use Dust Suppressants
Construction	C-10-A	Water Exposed Surfaces
Construction	C-10-B	Water Active Demolition Sites
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Construction	C-12	Sweep Paved Roads
Construction	C-13	Use Low-VOC Paints for Construction
Transportation	T-4	Integrate A ordable and Below Market Rate Housing
Transportation	T-10	Provide End-of-Trip Bicycle Facilities
Transportation	T-14*	Provide Electric Vehicle Charging Infrastructure
Transportation	T-34*	Provide Bike Parking
Transportation	T-50*	Required Project Contributions to Transportation Infrastructure Improvement
Energy	E-2	Require Energy Efficient Appliances
Water	W-2	Use Grey Water
Water	W-4	Require Low-Flow Water Fixtures
Water	W-5	Design Water-Efficient Landscapes
Water	W-7	Adopt a Water Conservation Strategy
Waste	S-1/S-2	Implement Waste Reduction Plan
Waste	S-4*	Recycle Demolished Construction Material

Natural Lands	N-2	Expand Urban Tree Planting
Area Sources	AS-1	Use Low-VOC Cleaning Supplies
Area Sources	AS-2	Use Low-VOC Paints

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.00	1.67	15.9	17.1	0.04	0.67	2.30	2.89	0.62	0.36	0.90	—	5,158	5,158	0.24	0.40	5.79	5,290
Mit.	2.00	1.67	15.9	17.1	0.04	0.67	1.33	1.91	0.62	0.26	0.79	—	5,158	5,158	0.24	0.40	5.79	5,290
% Reduced	—	—	—	—	—	—	42%	34%	—	29%	12%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.85	11.4	15.7	15.3	0.04	0.64	7.21	7.86	0.59	3.46	4.05	—	5,154	5,154	0.24	0.40	0.15	5,279
Mit.	1.85	6.18	15.7	15.3	0.04	0.64	2.89	3.54	0.59	1.37	1.96	—	5,154	5,154	0.24	0.40	0.15	5,279
% Reduced	—	46%	—	—	—	—	60%	55%	—	60%	52%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.27	1.85	8.54	11.0	0.02	0.32	1.36	1.68	0.29	0.54	0.83	—	2,356	2,356	0.10	0.15	1.09	2,382
Mit.	1.27	1.28	8.54	11.0	0.02	0.32	0.84	1.16	0.29	0.28	0.58	—	2,356	2,356	0.10	0.15	1.09	2,382
% Reduced	—	31%	—	—	—	—	38%	31%	—	47%	30%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.23	0.34	1.56	2.00	< 0.005	0.06	0.25	0.31	0.05	0.10	0.15	—	390	390	0.02	0.02	0.18	394
Mit.	0.23	0.23	1.56	2.00	< 0.005	0.06	0.15	0.21	0.05	0.05	0.11	—	390	390	0.02	0.02	0.18	394
% Reduced	—	31%	—	—	—	—	38%	31%	—	47%	30%	—	—	—	—	—	—	—
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	500	150	—	150	—	—	55.0	—	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	No	—	—	No	—	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	No	—	—	No	—	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	500	150	—	150	—	—	55.0	—	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	No	—	—	No	—	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	No	—	—	No	—	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	Yes	Yes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mit.	Yes	Yes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.7	12.3	3.77	46.2	0.10	1.54	6.87	8.40	1.50	1.74	3.25	245	11,063	11,307	6.90	0.34	165	11,747
Mit.	10.7	12.1	3.76	46.0	0.10	—	—	—	—	—	—	216	10,867	11,082	3.97	0.33	165	11,445
% Reduced	< 0.5%	2%	< 0.5%	< 0.5%	—	—	—	—	—	—	—	12%	2%	2%	42%	4%	< 0.5%	3%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.83	11.5	3.97	38.8	0.10	1.53	6.87	8.39	1.50	1.74	3.24	245	10,732	10,977	6.91	0.36	143	11,399
Mit.	9.81	11.3	3.95	38.6	0.10	—	—	—	—	—	—	216	10,538	10,754	3.98	0.34	143	11,099
% Reduced	< 0.5%	2%	< 0.5%	< 0.5%	—	—	—	—	—	—	—	12%	2%	2%	42%	4%	< 0.5%	3%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.38	6.60	3.00	26.9	0.06	0.19	4.96	5.15	0.19	1.26	1.45	70.1	8,571	8,641	6.32	0.28	150	9,032
Mit.	4.36	6.41	2.99	26.8	0.06	—	—	—	—	—	—	41.0	8,380	8,421	3.39	0.27	150	8,736
% Reduced	1%	3%	1%	1%	—	—	—	—	—	—	—	41%	2%	3%	46%	4%	< 0.5%	3%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.80	1.21	0.55	4.91	0.01	0.03	0.91	0.94	0.03	0.23	0.26	11.6	1,419	1,431	1.05	0.05	24.8	1,495
Mit.	0.79	1.17	0.54	4.88	0.01	—	—	—	—	—	—	6.79	1,387	1,394	0.56	0.04	24.8	1,446
% Reduced	1%	3%	1%	1%	1%	—	—	—	—	—	—	41%	2%	3%	46%	4%	< 0.5%	3%
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	55.0	55.0	550	150	—	150	—	—	55.0	—	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	No	—	—	No	—	—	—	—	—	—	—	—

Mit.	—	No	No	No	No	—	No	—	—	No	—	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	55.0	55.0	550	150	—	150	—	—	55.0	—	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	No	—	—	No	—	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	No	—	—	No	—	—	—	—	—	—	—	—

6. Climate Risk Detailed Report

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score

Temperature and Extreme Heat	1	1	2	1
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

7. Health and Equity Details

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	68.0
Healthy Places Index Score for Project Location (b)	7.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	H Hotel Apartment
Construction Start Date	6/3/2024
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	0.50
Precipitation (days)	16.8
Location	3216 W 8th St, Los Angeles, CA 90005, USA
County	Los Angeles-South Coast
City	Los Angeles
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4016
EDFZ	16
Electric Utility	Los Angeles Department of Water & Power
Gas Utility	Southern California Gas
App Version	2022.1.1.20

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Hotel	60.0	Room	2.00	87,120	1,225	0.00	—	—
Apartments Mid Rise	20.0	Dwelling Unit	0.53	19,200	1,225	—	59.0	—
High Turnover (Sit Down Restaurant)	3.90	1000sqft	0.09	3,900	500	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-1-B	Use Cleaner-Fuel Equipment
Construction	C-4*	Use Local and Sustainable Building Materials
Construction	C-9	Use Dust Suppressants
Construction	C-10-A	Water Exposed Surfaces
Construction	C-10-B	Water Active Demolition Sites
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Construction	C-12	Sweep Paved Roads
Construction	C-13	Use Low-VOC Paints for Construction
Transportation	T-4	Integrate A ordable and Below Market Rate Housing
Transportation	T-10	Provide End-of-Trip Bicycle Facilities
Transportation	T-14*	Provide Electric Vehicle Charging Infrastructure
Transportation	T-34*	Provide Bike Parking
Transportation	T-50*	Required Project Contributions to Transportation Infrastructure Improvement
Energy	E-2	Require Energy Efficient Appliances
Water	W-2	Use Grey Water
Water	W-4	Require Low-Flow Water Fixtures
Water	W-5	Design Water-Efficient Landscapes
Water	W-7	Adopt a Water Conservation Strategy
Waste	S-1/S-2	Implement Waste Reduction Plan
Waste	S-4*	Recycle Demolished Construction Material

Natural Lands	N-2	Expand Urban Tree Planting
Area Sources	AS-1	Use Low-VOC Cleaning Supplies
Area Sources	AS-2	Use Low-VOC Paints

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.00	1.67	15.9	17.1	0.04	0.67	2.30	2.89	0.62	0.36	0.90	—	5,158	5,158	0.24	0.40	5.79	5,290
Mit.	2.00	1.67	15.9	17.1	0.04	0.67	1.33	1.91	0.62	0.26	0.79	—	5,158	5,158	0.24	0.40	5.79	5,290
% Reduced	—	—	—	—	—	—	42%	34%	—	29%	12%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.85	11.4	15.7	15.3	0.04	0.64	7.21	7.86	0.59	3.46	4.05	—	5,154	5,154	0.24	0.40	0.15	5,279
Mit.	1.85	6.18	15.7	15.3	0.04	0.64	2.89	3.54	0.59	1.37	1.96	—	5,154	5,154	0.24	0.40	0.15	5,279
% Reduced	—	46%	—	—	—	—	60%	55%	—	60%	52%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.27	1.85	8.54	11.0	0.02	0.32	1.36	1.68	0.29	0.54	0.83	—	2,356	2,356	0.10	0.15	1.09	2,382
Mit.	1.27	1.28	8.54	11.0	0.02	0.32	0.84	1.16	0.29	0.28	0.58	—	2,356	2,356	0.10	0.15	1.09	2,382
% Reduced	—	31%	—	—	—	—	38%	31%	—	47%	30%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.23	0.34	1.56	2.00	< 0.005	0.06	0.25	0.31	0.05	0.10	0.15	—	390	390	0.02	0.02	0.18	394
Mit.	0.23	0.23	1.56	2.00	< 0.005	0.06	0.15	0.21	0.05	0.05	0.11	—	390	390	0.02	0.02	0.18	394
% Reduced	—	31%	—	—	—	—	38%	31%	—	47%	30%	—	—	—	—	—	—	—
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	500	150	—	150	—	—	55.0	—	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	No	—	—	No	—	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	No	—	—	No	—	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	500	150	—	150	—	—	55.0	—	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	No	—	—	No	—	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	No	—	—	No	—	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	Yes	Yes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mit.	Yes	Yes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.00	1.67	15.9	17.1	0.04	0.67	2.30	2.89	0.62	0.36	0.90	—	5,158	5,158	0.24	0.40	5.79	5,290
2025	1.78	1.48	11.4	15.8	0.03	0.41	0.83	1.25	0.38	0.20	0.58	—	3,470	3,470	0.14	0.12	4.15	3,513
2026	1.67	1.39	10.9	15.4	0.03	0.37	0.83	1.20	0.34	0.20	0.54	—	3,446	3,446	0.14	0.12	3.85	3,488
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.77	1.39	15.7	13.0	0.04	0.58	2.30	2.89	0.54	0.36	0.90	—	5,154	5,154	0.24	0.40	0.15	5,279
2025	1.85	1.55	14.1	15.3	0.04	0.64	7.21	7.86	0.59	3.46	4.05	—	5,112	5,112	0.24	0.39	0.15	5,233
2026	1.67	11.4	11.0	15.0	0.03	0.37	0.83	1.20	0.34	0.20	0.54	—	3,409	3,409	0.14	0.12	0.10	3,448
2027	0.18	11.4	0.88	1.66	< 0.005	0.02	0.14	0.16	0.02	0.03	0.05	—	266	266	0.01	0.01	0.01	268
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.74	0.59	6.52	5.61	0.02	0.24	0.85	1.09	0.23	0.13	0.36	—	2,003	2,003	0.09	0.15	0.92	2,050
2025	1.27	1.06	8.54	11.0	0.02	0.32	1.36	1.68	0.29	0.54	0.83	—	2,356	2,356	0.10	0.07	1.09	2,382
2026	0.74	1.85	4.94	7.15	0.01	0.18	0.29	0.47	0.17	0.07	0.24	—	1,386	1,386	0.06	0.04	0.54	1,399
2027	0.02	1.42	0.11	0.21	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	33.6	33.6	< 0.005	< 0.005	0.02	33.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.14	0.11	1.19	1.02	< 0.005	0.04	0.15	0.20	0.04	0.02	0.07	—	332	332	0.02	0.02	0.15	339
2025	0.23	0.19	1.56	2.00	< 0.005	0.06	0.25	0.31	0.05	0.10	0.15	—	390	390	0.02	0.01	0.18	394
2026	0.13	0.34	0.90	1.31	< 0.005	0.03	0.05	0.09	0.03	0.01	0.04	—	230	230	0.01	0.01	0.09	232
2027	< 0.005	0.26	0.02	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.56	5.56	< 0.005	< 0.005	< 0.005	5.60

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.00	1.67	15.9	17.1	0.04	0.67	1.33	1.91	0.62	0.26	0.79	—	5,158	5,158	0.24	0.40	5.79	5,290
2025	1.78	1.48	11.4	15.8	0.03	0.41	0.83	1.25	0.38	0.20	0.58	—	3,470	3,470	0.14	0.12	4.15	3,513
2026	1.67	1.39	10.9	15.4	0.03	0.37	0.83	1.20	0.34	0.20	0.54	—	3,446	3,446	0.14	0.12	3.85	3,488
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.77	1.39	15.7	13.0	0.04	0.58	1.33	1.91	0.54	0.26	0.79	—	5,154	5,154	0.24	0.40	0.15	5,279
2025	1.85	1.55	14.1	15.3	0.04	0.64	2.89	3.54	0.59	1.37	1.96	—	5,112	5,112	0.24	0.39	0.15	5,233
2026	1.67	6.18	11.0	15.0	0.03	0.37	0.83	1.20	0.34	0.20	0.54	—	3,409	3,409	0.14	0.12	0.10	3,448
2027	0.18	6.17	0.88	1.66	< 0.005	0.02	0.14	0.16	0.02	0.03	0.05	—	266	266	0.01	0.01	0.01	268
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.74	0.59	6.52	5.61	0.02	0.24	0.50	0.74	0.23	0.10	0.32	—	2,003	2,003	0.09	0.15	0.92	2,050
2025	1.27	1.06	8.54	11.0	0.02	0.32	0.84	1.16	0.29	0.28	0.58	—	2,356	2,356	0.10	0.07	1.09	2,382
2026	0.74	1.28	4.94	7.15	0.01	0.18	0.29	0.47	0.17	0.07	0.24	—	1,386	1,386	0.06	0.04	0.54	1,399
2027	0.02	0.77	0.11	0.21	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	33.6	33.6	< 0.005	< 0.005	0.02	33.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.14	0.11	1.19	1.02	< 0.005	0.04	0.09	0.14	0.04	0.02	0.06	—	332	332	0.02	0.02	0.15	339
2025	0.23	0.19	1.56	2.00	< 0.005	0.06	0.15	0.21	0.05	0.05	0.11	—	390	390	0.02	0.01	0.18	394
2026	0.13	0.23	0.90	1.31	< 0.005	0.03	0.05	0.09	0.03	0.01	0.04	—	230	230	0.01	0.01	0.09	232
2027	< 0.005	0.14	0.02	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.56	5.56	< 0.005	< 0.005	< 0.005	5.60

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.7	12.3	3.77	46.2	0.10	1.54	6.87	8.40	1.50	1.74	3.25	245	11,063	11,307	6.90	0.34	165	11,747
Mit.	10.7	12.1	3.76	46.0	0.10	—	—	—	—	—	—	216	10,867	11,082	3.97	0.33	165	11,445
% Reduced	< 0.5%	2%	< 0.5%	< 0.5%	—	—	—	—	—	—	—	12%	2%	2%	42%	4%	< 0.5%	3%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.83	11.5	3.97	38.8	0.10	1.53	6.87	8.39	1.50	1.74	3.24	245	10,732	10,977	6.91	0.36	143	11,399
Mit.	9.81	11.3	3.95	38.6	0.10	—	—	—	—	—	—	216	10,538	10,754	3.98	0.34	143	11,099
% Reduced	< 0.5%	2%	< 0.5%	< 0.5%	—	—	—	—	—	—	—	12%	2%	2%	42%	4%	< 0.5%	3%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.38	6.60	3.00	26.9	0.06	0.19	4.96	5.15	0.19	1.26	1.45	70.1	8,571	8,641	6.32	0.28	150	9,032
Mit.	4.36	6.41	2.99	26.8	0.06	—	—	—	—	—	—	41.0	8,380	8,421	3.39	0.27	150	8,736
% Reduced	1%	3%	1%	1%	—	—	—	—	—	—	—	41%	2%	3%	46%	4%	< 0.5%	3%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.80	1.21	0.55	4.91	0.01	0.03	0.91	0.94	0.03	0.23	0.26	11.6	1,419	1,431	1.05	0.05	24.8	1,495
Mit.	0.79	1.17	0.54	4.88	0.01	—	—	—	—	—	—	6.79	1,387	1,394	0.56	0.04	24.8	1,446
% Reduced	1%	3%	1%	1%	1%	—	—	—	—	—	—	41%	2%	3%	46%	4%	< 0.5%	3%
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	55.0	55.0	550	150	—	150	—	—	55.0	—	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	No	—	—	No	—	—	—	—	—	—	—	—

Mit.	—	No	No	No	No	—	No	—	—	No	—	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	55.0	55.0	550	150	—	150	—	—	55.0	—	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	No	—	—	No	—	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	No	—	—	No	—	—	—	—	—	—	—	—

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.00	3.64	2.60	30.3	0.07	0.05	6.87	6.91	0.04	1.74	1.79	—	7,493	7,493	0.36	0.29	22.9	7,612
Area	6.60	8.60	0.46	15.3	0.03	1.44	—	1.44	1.41	—	1.41	187	377	565	0.56	0.01	—	581
Energy	0.08	0.04	0.72	0.58	< 0.005	0.05	—	0.05	0.05	—	0.05	—	3,148	3,148	0.24	0.02	—	3,161
Water	—	—	—	—	—	—	—	—	—	—	—	6.61	44.9	51.5	0.68	0.02	—	73.5
Waste	—	—	—	—	—	—	—	—	—	—	—	50.7	0.00	50.7	5.06	0.00	—	177
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	142	142
Total	10.7	12.3	3.77	46.2	0.10	1.54	6.87	8.40	1.50	1.74	3.25	245	11,063	11,307	6.90	0.34	165	11,747
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.96	3.60	2.84	28.0	0.07	0.05	6.87	6.91	0.04	1.74	1.79	—	7,182	7,182	0.37	0.31	0.59	7,284
Area	5.79	7.85	0.41	10.2	0.03	1.43	—	1.43	1.40	—	1.40	187	358	545	0.56	0.01	—	561
Energy	0.08	0.04	0.72	0.58	< 0.005	0.05	—	0.05	0.05	—	0.05	—	3,148	3,148	0.24	0.02	—	3,161
Water	—	—	—	—	—	—	—	—	—	—	—	6.61	44.9	51.5	0.68	0.02	—	73.5
Waste	—	—	—	—	—	—	—	—	—	—	—	50.7	0.00	50.7	5.06	0.00	—	177

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	142	142
Total	9.83	11.5	3.97	38.8	0.10	1.53	6.87	8.39	1.50	1.74	3.24	245	10,732	10,977	6.91	0.36	143	11,399
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.35	3.07	2.23	22.2	0.05	0.03	4.96	5.00	0.03	1.26	1.29	—	5,341	5,341	0.30	0.24	7.23	5,427
Area	0.95	3.49	0.06	4.19	< 0.005	0.10	—	0.10	0.10	—	0.10	12.8	37.7	50.6	0.04	< 0.005	—	51.7
Energy	0.08	0.04	0.72	0.58	< 0.005	0.05	—	0.05	0.05	—	0.05	—	3,148	3,148	0.24	0.02	—	3,161
Water	—	—	—	—	—	—	—	—	—	—	—	6.61	44.9	51.5	0.68	0.02	—	73.5
Waste	—	—	—	—	—	—	—	—	—	—	—	50.7	0.00	50.7	5.06	0.00	—	177
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	142	142
Total	4.38	6.60	3.00	26.9	0.06	0.19	4.96	5.15	0.19	1.26	1.45	70.1	8,571	8,641	6.32	0.28	150	9,032
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.61	0.56	0.41	4.04	0.01	0.01	0.91	0.91	0.01	0.23	0.24	—	884	884	0.05	0.04	1.20	898
Area	0.17	0.64	0.01	0.76	< 0.005	0.02	—	0.02	0.02	—	0.02	2.12	6.25	8.37	0.01	< 0.005	—	8.56
Energy	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	521	521	0.04	< 0.005	—	523
Water	—	—	—	—	—	—	—	—	—	—	—	1.09	7.43	8.53	0.11	< 0.005	—	12.2
Waste	—	—	—	—	—	—	—	—	—	—	—	8.39	0.00	8.39	0.84	0.00	—	29.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23.6	23.6
Total	0.80	1.21	0.55	4.91	0.01	0.03	0.91	0.94	0.03	0.23	0.26	11.6	1,419	1,431	1.05	0.05	24.8	1,495

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.97	3.62	2.58	30.1	0.07	0.05	6.82	6.87	0.04	1.73	1.78	—	7,448	7,448	0.35	0.29	22.8	7,567
Area	6.60	8.42	0.46	15.3	0.03	1.44	—	1.44	1.41	—	1.41	187	377	565	0.56	0.01	—	581

Energy	0.08	0.04	0.72	0.58	< 0.005	0.05	—	0.05	0.05	—	0.05	—	3,023	3,023	0.23	0.02	—	3,035
Water	—	—	—	—	—	—	—	—	—	—	—	2.86	19.2	22.1	0.29	0.01	—	31.6
Waste	—	—	—	—	—	—	—	—	—	—	—	25.3	0.00	25.3	2.53	0.00	—	88.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	142	142
Vegetation	—	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN	—	—	—	—	—	—	—
Total	10.7	12.1	3.76	46.0	0.10	NaN	NaN	NaN	NaN	NaN	NaN	216	10,867	11,082	3.97	0.33	165	11,445
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.94	3.57	2.82	27.8	0.07	0.05	6.82	6.87	0.04	1.73	1.78	—	7,139	7,139	0.37	0.31	0.59	7,240
Area	5.79	7.67	0.41	10.2	0.03	1.43	—	1.43	1.40	—	1.40	187	358	545	0.56	0.01	—	561
Energy	0.08	0.04	0.72	0.58	< 0.005	0.05	—	0.05	0.05	—	0.05	—	3,023	3,023	0.23	0.02	—	3,035
Water	—	—	—	—	—	—	—	—	—	—	—	2.86	19.2	22.1	0.29	0.01	—	31.6
Waste	—	—	—	—	—	—	—	—	—	—	—	25.3	0.00	25.3	2.53	0.00	—	88.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	142	142
Vegetation	—	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN	—	—	—	—	—	—	—
Total	9.81	11.3	3.95	38.6	0.10	NaN	NaN	NaN	NaN	NaN	NaN	216	10,538	10,754	3.98	0.34	143	11,099
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.33	3.05	2.21	22.0	0.05	0.03	4.92	4.96	0.03	1.25	1.28	—	5,301	5,301	0.30	0.24	7.17	5,386
Area	0.95	3.32	0.06	4.19	< 0.005	0.10	—	0.10	0.10	—	0.10	12.8	37.7	50.6	0.04	< 0.005	—	51.7
Energy	0.08	0.04	0.72	0.58	< 0.005	0.05	—	0.05	0.05	—	0.05	—	3,023	3,023	0.23	0.02	—	3,035
Water	—	—	—	—	—	—	—	—	—	—	—	2.86	19.2	22.1	0.29	0.01	—	31.6
Waste	—	—	—	—	—	—	—	—	—	—	—	25.3	0.00	25.3	2.53	0.00	—	88.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	142	142
Vegetation	—	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN	—	—	—	—	—	—	—
Total	4.36	6.41	2.99	26.8	0.06	NaN	NaN	NaN	NaN	NaN	NaN	41.0	8,380	8,421	3.39	0.27	150	8,736

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.61	0.56	0.40	4.01	0.01	0.01	0.90	0.90	0.01	0.23	0.23	—	878	878	0.05	0.04	1.19	892
Area	0.17	0.61	0.01	0.76	< 0.005	0.02	—	0.02	0.02	—	0.02	2.12	6.25	8.37	0.01	< 0.005	—	8.56
Energy	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	500	500	0.04	< 0.005	—	503
Water	—	—	—	—	—	—	—	—	—	—	—	0.47	3.18	3.66	0.05	< 0.005	—	5.23
Waste	—	—	—	—	—	—	—	—	—	—	—	4.19	0.00	4.19	0.42	0.00	—	14.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23.6	23.6
Vegetation	—	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN	—	—	—	—	—	—	—
Total	0.79	1.17	0.54	4.88	0.01	NaN	NaN	NaN	NaN	NaN	NaN	6.79	1,387	1,394	0.56	0.04	24.8	1,446

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.61	15.6	16.0	0.02	0.67	—	0.67	0.62	—	0.62	—	2,494	2,494	0.10	0.02	—	2,502
Demolition	—	—	—	—	—	—	0.24	0.24	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.85	0.88	< 0.005	0.04	—	0.04	0.03	—	0.03	—	137	137	0.01	< 0.005	—	137
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.6	22.6	< 0.005	< 0.005	—	22.7
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.94	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	176	176	0.01	0.01	0.70	179
Vendor	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	0.00
Hauling	0.02	< 0.005	0.26	0.10	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	208	208	0.01	0.03	0.48	219
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.30	9.30	< 0.005	< 0.005	0.02	9.43
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.01	12.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.54	1.54	< 0.005	< 0.005	< 0.005	1.56

Vendor	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	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.89	1.89	< 0.005	< 0.005	< 0.005	1.98

3.2. Demolition (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.61	15.6	16.0	0.02	0.67	—	0.67	0.62	—	0.62	—	2,494	2,494	0.10	0.02	—	2,502
Demolition	—	—	—	—	—	—	0.15	0.15	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.85	0.88	< 0.005	0.04	—	0.04	0.03	—	0.03	—	137	137	0.01	< 0.005	—	137
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.6	22.6	< 0.005	< 0.005	—	22.7
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.94	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	176	176	0.01	0.01	0.70	179
Vendor	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	0.00
Hauling	0.02	< 0.005	0.26	0.10	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	208	208	0.01	0.03	0.48	219
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.30	9.30	< 0.005	< 0.005	0.02	9.43
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.01	12.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.54	1.54	< 0.005	< 0.005	< 0.005	1.56
Vendor	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	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.89	1.89	< 0.005	< 0.005	< 0.005	1.98

3.3. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.56	1.31	12.7	11.4	0.03	0.55	—	0.55	0.51	—	0.51	—	2,716	2,716	0.11	0.02	—	2,725
Dust From Material Movement	—	—	—	—	—	—	1.59	1.59	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.31	12.7	11.4	0.03	0.55	—	0.55	0.51	—	0.51	—	2,716	2,716	0.11	0.02	—	2,725
Dust From Material Movement	—	—	—	—	—	—	1.59	1.59	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	4.53	4.10	0.01	0.20	—	0.20	0.18	—	0.18	—	973	973	0.04	0.01	—	976
Dust From Material Movement	—	—	—	—	—	—	0.57	0.57	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.83	0.75	< 0.005	0.04	—	0.04	0.03	—	0.03	—	161	161	0.01	< 0.005	—	162
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.01	0.01	—	—	—	—	—	—	—

Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.57	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	106	106	< 0.005	< 0.005	0.42	107
Vendor	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	0.00
Hauling	0.18	0.05	2.92	1.13	0.02	0.03	0.61	0.64	0.03	0.17	0.20	—	2,337	2,337	0.13	0.37	5.37	2,457
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.48	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	100	100	< 0.005	< 0.005	0.01	102
Vendor	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	0.00
Hauling	0.18	0.05	3.03	1.12	0.02	0.03	0.61	0.64	0.03	0.17	0.20	—	2,338	2,338	0.13	0.37	0.14	2,453
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.02	0.18	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	36.5	36.5	< 0.005	< 0.005	0.06	37.0
Vendor	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	0.00
Hauling	0.06	0.02	1.10	0.40	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	837	837	0.05	0.13	0.83	879
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.04	6.04	< 0.005	< 0.005	0.01	6.12
Vendor	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	0.00
Hauling	0.01	< 0.005	0.20	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	139	139	0.01	0.02	0.14	146

3.4. Site Preparation (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.31	12.7	11.4	0.03	0.55	—	0.55	0.51	—	0.51	—	2,716	2,716	0.11	0.02	—	2,725
Dust From Material Movement	—	—	—	—	—	—	0.62	0.62	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.31	12.7	11.4	0.03	0.55	—	0.55	0.51	—	0.51	—	2,716	2,716	0.11	0.02	—	2,725
Dust From Material Movement	—	—	—	—	—	—	0.62	0.62	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	4.53	4.10	0.01	0.20	—	0.20	0.18	—	0.18	—	973	973	0.04	0.01	—	976
Dust From Material Movement	—	—	—	—	—	—	0.22	0.22	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.83	0.75	< 0.005	0.04	—	0.04	0.03	—	0.03	—	161	161	0.01	< 0.005	—	162

Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.57	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	106	106	< 0.005	< 0.005	0.42	107
Vendor	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	0.00
Hauling	0.18	0.05	2.92	1.13	0.02	0.03	0.61	0.64	0.03	0.17	0.20	—	2,337	2,337	0.13	0.37	5.37	2,457
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.48	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	100	100	< 0.005	< 0.005	0.01	102
Vendor	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	0.00
Hauling	0.18	0.05	3.03	1.12	0.02	0.03	0.61	0.64	0.03	0.17	0.20	—	2,338	2,338	0.13	0.37	0.14	2,453
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.02	0.18	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	36.5	36.5	< 0.005	< 0.005	0.06	37.0
Vendor	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	0.00
Hauling	0.06	0.02	1.10	0.40	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	837	837	0.05	0.13	0.83	879
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.04	6.04	< 0.005	< 0.005	0.01	6.12
Vendor	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	0.00
Hauling	0.01	< 0.005	0.20	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	139	139	0.01	0.02	0.14	146

3.5. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.42	1.19	10.9	11.0	0.03	0.47	—	0.47	0.43	—	0.43	—	2,717	2,717	0.11	0.02	—	2,726
Dust From Material Movement	—	—	—	—	—	—	1.59	1.59	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.32	5.32	< 0.005	< 0.005	—	5.33
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.88	0.88	< 0.005	< 0.005	—	0.88
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	98.3	98.3	< 0.005	< 0.005	0.01	99.5
Vendor	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	0.00
Hauling	0.18	0.03	2.93	1.11	0.02	0.03	0.61	0.64	0.03	0.17	0.20	—	2,297	2,297	0.12	0.36	0.14	2,408
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.20
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.49	4.49	< 0.005	< 0.005	< 0.005	4.71
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Vendor	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	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.74	0.74	< 0.005	< 0.005	< 0.005	0.78

3.6. Site Preparation (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.42	1.19	10.9	11.0	0.03	0.47	—	0.47	0.43	—	0.43	—	2,717	2,717	0.11	0.02	—	2,726
Dust From Material Movement	—	—	—	—	—	—	0.62	0.62	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.32	5.32	< 0.005	< 0.005	—	5.33
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.88	0.88	< 0.005	< 0.005	—	0.88
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	98.3	98.3	< 0.005	< 0.005	0.01	99.5
Vendor	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	0.00
Hauling	0.18	0.03	2.93	1.11	0.02	0.03	0.61	0.64	0.03	0.17	0.20	—	2,297	2,297	0.12	0.36	0.14	2,408
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.20
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.49	4.49	< 0.005	< 0.005	< 0.005	4.71
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Vendor	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	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.74	0.74	< 0.005	< 0.005	< 0.005	0.78

3.7. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.80	1.51	14.1	14.5	0.02	0.64	—	0.64	0.59	—	0.59	—	2,455	2,455	0.10	0.02	—	2,463

Dust From Material Movement	—	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.70	1.75	< 0.005	0.08	—	0.08	0.07	—	0.07	—	296	296	0.01	< 0.005	—	297
Dust From Material Movement	—	—	—	—	—	—	0.85	0.85	—	0.41	0.41	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.31	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	49.0	49.0	< 0.005	< 0.005	—	49.2
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.59	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	131	131	0.01	< 0.005	0.01	133
Vendor	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	0.00
Hauling	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	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.0	16.0	< 0.005	< 0.005	0.03	16.2
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.65	2.65	< 0.005	< 0.005	< 0.005	2.69
Vendor	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	0.00
Hauling	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	0.00

3.8. Grading (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.80	1.51	14.1	14.5	0.02	0.64	—	0.64	0.59	—	0.59	—	2,455	2,455	0.10	0.02	—	2,463
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.70	1.75	< 0.005	0.08	—	0.08	0.07	—	0.07	—	296	296	0.01	< 0.005	—	297

Dust From Material Movement	—	—	—	—	—	—	0.33	0.33	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.31	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	49.0	49.0	< 0.005	< 0.005	—	49.2
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.59	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	131	131	0.01	< 0.005	0.01	133
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.0	16.0	< 0.005	< 0.005	0.03	16.2
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.65	2.65	< 0.005	< 0.005	< 0.005	2.69
Vendor	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	0.00

Hauling	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	0.00

3.9. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.24	10.6	11.9	0.02	0.40	—	0.40	0.37	—	0.37	—	2,201	2,201	0.09	0.02	—	2,209
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.24	10.6	11.9	0.02	0.40	—	0.40	0.37	—	0.37	—	2,201	2,201	0.09	0.02	—	2,209
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.73	6.26	7.01	0.01	0.24	—	0.24	0.22	—	0.22	—	1,301	1,301	0.05	0.01	—	1,305
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.14	1.28	< 0.005	0.04	—	0.04	0.04	—	0.04	—	215	215	0.01	< 0.005	—	216
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.23	0.23	3.66	0.00	0.00	0.69	0.69	0.00	0.16	0.16	—	728	728	0.03	0.02	2.66	739
Vendor	0.04	0.02	0.62	0.30	< 0.005	0.01	0.15	0.15	< 0.005	0.04	0.04	—	541	541	0.02	0.08	1.48	566
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.22	0.25	3.10	0.00	0.00	0.69	0.69	0.00	0.16	0.16	—	690	690	0.03	0.03	0.07	698
Vendor	0.04	0.02	0.64	0.30	< 0.005	0.01	0.15	0.15	< 0.005	0.04	0.04	—	541	541	0.02	0.08	0.04	565
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.16	1.93	0.00	0.00	0.40	0.40	0.00	0.09	0.09	—	414	414	0.02	0.01	0.68	419
Vendor	0.02	0.01	0.38	0.18	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	320	320	0.01	0.04	0.38	334
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.35	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	68.5	68.5	< 0.005	< 0.005	0.11	69.4
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	53.0	53.0	< 0.005	0.01	0.06	55.3
Hauling	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	0.00

3.10. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.49	1.24	10.6	11.9	0.02	0.40	—	0.40	0.37	—	0.37	—	2,201	2,201	0.09	0.02	—	2,209
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.24	10.6	11.9	0.02	0.40	—	0.40	0.37	—	0.37	—	2,201	2,201	0.09	0.02	—	2,209
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.73	6.26	7.01	0.01	0.24	—	0.24	0.22	—	0.22	—	1,301	1,301	0.05	0.01	—	1,305
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.14	1.28	< 0.005	0.04	—	0.04	0.04	—	0.04	—	215	215	0.01	< 0.005	—	216
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.23	0.23	3.66	0.00	0.00	0.69	0.69	0.00	0.16	0.16	—	728	728	0.03	0.02	2.66	739
Vendor	0.04	0.02	0.62	0.30	< 0.005	0.01	0.15	0.15	< 0.005	0.04	0.04	—	541	541	0.02	0.08	1.48	566
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.22	0.25	3.10	0.00	0.00	0.69	0.69	0.00	0.16	0.16	—	690	690	0.03	0.03	0.07	698

Vendor	0.04	0.02	0.64	0.30	< 0.005	0.01	0.15	0.15	< 0.005	0.04	0.04	—	541	541	0.02	0.08	0.04	565
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.16	1.93	0.00	0.00	0.40	0.40	0.00	0.09	0.09	—	414	414	0.02	0.01	0.68	419
Vendor	0.02	0.01	0.38	0.18	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	320	320	0.01	0.04	0.38	334
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.35	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	68.5	68.5	< 0.005	< 0.005	0.11	69.4
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	53.0	53.0	< 0.005	0.01	0.06	55.3
Hauling	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	0.00

3.11. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.41	1.18	10.1	11.8	0.02	0.36	—	0.36	0.33	—	0.33	—	2,201	2,201	0.09	0.02	—	2,208
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.41	1.18	10.1	11.8	0.02	0.36	—	0.36	0.33	—	0.33	—	2,201	2,201	0.09	0.02	—	2,208
Onsite truck	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	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.29	2.47	2.88	0.01	0.09	—	0.09	0.08	—	0.08	—	538	538	0.02	< 0.005	—	540
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.45	0.52	< 0.005	0.02	—	0.02	0.01	—	0.01	—	89.1	89.1	< 0.005	< 0.005	—	89.4
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.20	3.40	0.00	0.00	0.69	0.69	0.00	0.16	0.16	—	713	713	0.03	0.02	2.41	724
Vendor	0.04	0.02	0.59	0.28	< 0.005	0.01	0.15	0.15	< 0.005	0.04	0.04	—	532	532	0.02	0.08	1.44	556
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.23	2.90	0.00	0.00	0.69	0.69	0.00	0.16	0.16	—	676	676	0.03	0.02	0.06	684
Vendor	0.04	0.02	0.61	0.29	< 0.005	0.01	0.15	0.15	< 0.005	0.04	0.04	—	532	532	0.02	0.08	0.04	555
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.06	0.74	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	168	168	0.01	0.01	0.26	170
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	130	130	0.01	0.02	0.15	136
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.8	27.8	< 0.005	< 0.005	0.04	28.2

Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.5	21.5	< 0.005	< 0.005	0.03	22.5
Hauling	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	0.00

3.12. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.41	1.18	10.1	11.8	0.02	0.36	—	0.36	0.33	—	0.33	—	2,201	2,201	0.09	0.02	—	2,208
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.41	1.18	10.1	11.8	0.02	0.36	—	0.36	0.33	—	0.33	—	2,201	2,201	0.09	0.02	—	2,208
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.29	2.47	2.88	0.01	0.09	—	0.09	0.08	—	0.08	—	538	538	0.02	< 0.005	—	540
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.45	0.52	< 0.005	0.02	—	0.02	0.01	—	0.01	—	89.1	89.1	< 0.005	< 0.005	—	89.4
Onsite truck	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	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.20	3.40	0.00	0.00	0.69	0.69	0.00	0.16	0.16	—	713	713	0.03	0.02	2.41	724
Vendor	0.04	0.02	0.59	0.28	< 0.005	0.01	0.15	0.15	< 0.005	0.04	0.04	—	532	532	0.02	0.08	1.44	556
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.23	2.90	0.00	0.00	0.69	0.69	0.00	0.16	0.16	—	676	676	0.03	0.02	0.06	684
Vendor	0.04	0.02	0.61	0.29	< 0.005	0.01	0.15	0.15	< 0.005	0.04	0.04	—	532	532	0.02	0.08	0.04	555
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.06	0.74	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	168	168	0.01	0.01	0.26	170
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	130	130	0.01	0.02	0.15	136
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.8	27.8	< 0.005	< 0.005	0.04	28.2
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.5	21.5	< 0.005	< 0.005	0.03	22.5
Hauling	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	0.00

3.13. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.79	0.67	5.88	8.19	0.01	0.25	—	0.25	0.23	—	0.23	—	1,244	1,244	0.05	0.01	—	1,248
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	0.67	5.88	8.19	0.01	0.25	—	0.25	0.23	—	0.23	—	1,244	1,244	0.05	0.01	—	1,248
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.24	2.13	2.96	< 0.005	0.09	—	0.09	0.08	—	0.08	—	450	450	0.02	< 0.005	—	451
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.39	0.54	< 0.005	0.02	—	0.02	0.02	—	0.02	—	74.5	74.5	< 0.005	< 0.005	—	74.7
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.97	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	203	203	0.01	0.01	0.69	206
Vendor	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	0.00

Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.07	0.83	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	193	193	0.01	0.01	0.02	195
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	70.7	70.7	< 0.005	< 0.005	0.11	71.7
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.7	11.7	< 0.005	< 0.005	0.02	11.9
Vendor	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	0.00
Hauling	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	0.00

3.14. Paving (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	0.67	5.88	8.19	0.01	0.25	—	0.25	0.23	—	0.23	—	1,244	1,244	0.05	0.01	—	1,248
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	0.67	5.88	8.19	0.01	0.25	—	0.25	0.23	—	0.23	—	1,244	1,244	0.05	0.01	—	1,248
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.24	2.13	2.96	< 0.005	0.09	—	0.09	0.08	—	0.08	—	450	450	0.02	< 0.005	—	451
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.39	0.54	< 0.005	0.02	—	0.02	0.02	—	0.02	—	74.5	74.5	< 0.005	< 0.005	—	74.7
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.97	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	203	203	0.01	0.01	0.69	206
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.07	0.83	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	193	193	0.01	0.01	0.02	195

Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	70.7	70.7	< 0.005	< 0.005	0.11	71.7
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.7	11.7	< 0.005	< 0.005	0.02	11.9
Vendor	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	0.00
Hauling	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	0.00

3.15. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	11.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.01	0.09	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.6	14.6	< 0.005	< 0.005	—	14.7
Architectural Coatings	—	1.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.42	2.42	< 0.005	< 0.005	—	2.43
Architectural Coatings	—	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.58	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	135	135	0.01	< 0.005	0.01	137
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	15.0	15.0	< 0.005	< 0.005	0.02	15.2
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.49	2.49	< 0.005	< 0.005	< 0.005	2.52

Vendor	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	0.00
Hauling	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	0.00

3.16. Architectural Coating (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	6.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.09	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.6	14.6	< 0.005	< 0.005	—	14.7
Architectural Coatings	—	0.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.42	2.42	< 0.005	< 0.005	—	2.43

Architect Coatings	—	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.58	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	135	135	0.01	< 0.005	0.01	137
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	15.0	15.0	< 0.005	< 0.005	0.02	15.2
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.49	2.49	< 0.005	< 0.005	< 0.005	2.52
Vendor	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	0.00
Hauling	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	0.00

3.17. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	11.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.7	16.7	< 0.005	< 0.005	—	16.8
Architectural Coatings	—	1.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.77	2.77	< 0.005	< 0.005	—	2.78
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.54	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	133	133	< 0.005	< 0.005	0.01	134
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.9	16.9	< 0.005	< 0.005	0.02	17.1
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.79	2.79	< 0.005	< 0.005	< 0.005	2.83
Vendor	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	0.00
Hauling	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	0.00

3.18. Architectural Coating (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	6.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.7	16.7	< 0.005	< 0.005	—	16.8
Architect ural Coatings	—	0.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.77	2.77	< 0.005	< 0.005	—	2.78
Architect ural Coatings	—	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.54	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	133	133	< 0.005	< 0.005	0.01	134
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.9	16.9	< 0.005	< 0.005	0.02	17.1
Vendor	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	0.00

Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.79	2.79	< 0.005	< 0.005	< 0.005	2.83
Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	1.72	1.57	1.12	13.1	0.03	0.02	2.97	2.99	0.02	0.75	0.77	—	3,243	3,243	0.15	0.13	9.92	3,295
Apartments Mid Rise	0.37	0.33	0.23	2.68	0.01	< 0.005	0.60	0.60	< 0.005	0.15	0.16	—	653	653	0.03	0.03	1.99	663
High Turnover (Sit Down Restaurant)	1.91	1.74	1.24	14.5	0.04	0.02	3.30	3.32	0.02	0.84	0.86	—	3,597	3,597	0.17	0.14	11.0	3,654
Total	4.00	3.64	2.60	30.3	0.07	0.05	6.87	6.91	0.04	1.74	1.79	—	7,493	7,493	0.36	0.29	22.9	7,612
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	1.71	1.55	1.23	12.1	0.03	0.02	2.97	2.99	0.02	0.75	0.77	—	3,109	3,109	0.16	0.13	0.26	3,153

Apartments Mid Rise	0.36	0.33	0.25	2.48	0.01	< 0.005	0.60	0.60	< 0.005	0.15	0.16	—	626	626	0.03	0.03	0.05	635
High Turnover (Sit Down Restaurant)	1.89	1.72	1.36	13.4	0.03	0.02	3.30	3.32	0.02	0.84	0.86	—	3,448	3,448	0.18	0.15	0.29	3,497
Total	3.96	3.60	2.84	28.0	0.07	0.05	6.87	6.91	0.04	1.74	1.79	—	7,182	7,182	0.37	0.31	0.59	7,284
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.30	0.27	0.22	2.17	0.01	< 0.005	0.51	0.52	< 0.005	0.13	0.13	—	498	498	0.03	0.02	0.68	505
Apartments Mid Rise	0.06	0.06	0.04	0.44	< 0.005	< 0.005	0.10	0.10	< 0.005	0.03	0.03	—	99.6	99.6	0.01	< 0.005	0.14	101
High Turnover (Sit Down Restaurant)	0.25	0.24	0.15	1.44	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08	—	287	287	0.02	0.01	0.38	292
Total	0.61	0.56	0.41	4.04	0.01	0.01	0.91	0.91	0.01	0.23	0.24	—	884	884	0.05	0.04	1.20	898

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	1.72	1.57	1.12	13.1	0.03	0.02	2.97	2.99	0.02	0.75	0.77	—	3,240	3,240	0.15	0.13	9.91	3,291
Apartments Mid Rise	0.35	0.32	0.22	2.52	0.01	< 0.005	0.56	0.57	< 0.005	0.14	0.15	—	615	615	0.03	0.02	1.88	625
High Turnover (Sit Down Restaurant)	1.91	1.74	1.24	14.5	0.04	0.02	3.29	3.31	0.02	0.84	0.86	—	3,593	3,593	0.17	0.14	11.0	3,650

Total	3.97	3.62	2.58	30.1	0.07	0.05	6.82	6.87	0.04	1.73	1.78	—	7,448	7,448	0.35	0.29	22.8	7,567
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	1.70	1.55	1.23	12.1	0.03	0.02	2.97	2.99	0.02	0.75	0.77	—	3,105	3,105	0.16	0.13	0.26	3,149
Apartments Mid Rise	0.34	0.31	0.24	2.34	0.01	< 0.005	0.56	0.57	< 0.005	0.14	0.15	—	590	590	0.03	0.03	0.05	598
High Turnover (Sit Down Restaurant)	1.89	1.72	1.36	13.4	0.03	0.02	3.29	3.31	0.02	0.84	0.86	—	3,444	3,444	0.18	0.15	0.28	3,492
Total	3.94	3.57	2.82	27.8	0.07	0.05	6.82	6.87	0.04	1.73	1.78	—	7,139	7,139	0.37	0.31	0.59	7,240
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.30	0.27	0.22	2.16	0.01	< 0.005	0.51	0.52	< 0.005	0.13	0.13	—	497	497	0.03	0.02	0.68	505
Apartments Mid Rise	0.06	0.05	0.04	0.42	< 0.005	< 0.005	0.10	0.10	< 0.005	0.02	0.03	—	93.9	93.9	< 0.005	< 0.005	0.13	95.4
High Turnover (Sit Down Restaurant)	0.25	0.23	0.15	1.43	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08	—	287	287	0.02	0.01	0.38	292
Total	0.61	0.56	0.40	4.01	0.01	0.01	0.90	0.90	0.01	0.23	0.23	—	878	878	0.05	0.04	1.19	892

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hotel	—	—	—	—	—	—	—	—	—	—	—	—	1,925	1,925	0.14	0.02	—	1,934
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	124	124	0.01	< 0.005	—	125
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	240	240	0.02	< 0.005	—	241
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,290	2,290	0.16	0.02	—	2,301
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	1,925	1,925	0.14	0.02	—	1,934
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	124	124	0.01	< 0.005	—	125
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	240	240	0.02	< 0.005	—	241
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,290	2,290	0.16	0.02	—	2,301
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	319	319	0.02	< 0.005	—	320
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	20.6	20.6	< 0.005	< 0.005	—	20.7
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	39.8	39.8	< 0.005	< 0.005	—	40.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	379	379	0.03	< 0.005	—	381

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	1,836	1,836	0.13	0.02	—	1,845
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	116	116	0.01	< 0.005	—	117
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	213	213	0.02	< 0.005	—	214
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,165	2,165	0.15	0.02	—	2,175
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	1,836	1,836	0.13	0.02	—	1,845
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	116	116	0.01	< 0.005	—	117
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	213	213	0.02	< 0.005	—	214
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,165	2,165	0.15	0.02	—	2,175
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	304	304	0.02	< 0.005	—	305
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	19.2	19.2	< 0.005	< 0.005	—	19.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	35.2	35.2	< 0.005	< 0.005	—	35.4

Total	—	—	—	—	—	—	—	—	—	—	—	—	358	358	0.03	< 0.005	—	360

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.06	0.03	0.57	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	676	676	0.06	< 0.005	—	678
Apartments Mid Rise	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.6	63.6	0.01	< 0.005	—	63.8
High Turnover (Sit Down Restaurant)	0.01	0.01	0.10	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	118	118	0.01	< 0.005	—	119
Total	0.08	0.04	0.72	0.58	< 0.005	0.05	—	0.05	0.05	—	0.05	—	858	858	0.08	< 0.005	—	860
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.06	0.03	0.57	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	676	676	0.06	< 0.005	—	678
Apartments Mid Rise	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.6	63.6	0.01	< 0.005	—	63.8
High Turnover (Sit Down Restaurant)	0.01	0.01	0.10	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	118	118	0.01	< 0.005	—	119
Total	0.08	0.04	0.72	0.58	< 0.005	0.05	—	0.05	0.05	—	0.05	—	858	858	0.08	< 0.005	—	860
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	112	112	0.01	< 0.005	—	112

Apartments	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.6
High Turnover (Sit Down Restaurant)	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.6	19.6	< 0.005	< 0.005	—	19.7
Total	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	142

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.06	0.03	0.57	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	676	676	0.06	< 0.005	—	678
Apartments Mid Rise	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.6	63.6	0.01	< 0.005	—	63.8
High Turnover (Sit Down Restaurant)	0.01	0.01	0.10	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	118	118	0.01	< 0.005	—	119
Total	0.08	0.04	0.72	0.58	< 0.005	0.05	—	0.05	0.05	—	0.05	—	858	858	0.08	< 0.005	—	860
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.06	0.03	0.57	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	676	676	0.06	< 0.005	—	678
Apartments Mid Rise	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.6	63.6	0.01	< 0.005	—	63.8

High Turnover (Sit Down Restaurant)	0.01	0.01	0.10	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	118	118	0.01	< 0.005	—	119
Total	0.08	0.04	0.72	0.58	< 0.005	0.05	—	0.05	0.05	—	0.05	—	858	858	0.08	< 0.005	—	860
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	112	112	0.01	< 0.005	—	112
Apartments Mid Rise	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.6
High Turnover (Sit Down Restaurant)	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.6	19.6	< 0.005	< 0.005	—	19.7
Total	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	142

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	5.79	5.22	0.41	10.2	0.03	1.43	—	1.43	1.40	—	1.40	187	358	545	0.56	0.01	—	561
Consumer Products	—	2.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipme	0.81	0.75	0.04	5.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	19.3	19.3	< 0.005	< 0.005	—	19.4
Total	6.60	8.60	0.46	15.3	0.03	1.44	—	1.44	1.41	—	1.41	187	377	565	0.56	0.01	—	581
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	5.79	5.22	0.41	10.2	0.03	1.43	—	1.43	1.40	—	1.40	187	358	545	0.56	0.01	—	561
Consumer Products	—	2.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	5.79	7.85	0.41	10.2	0.03	1.43	—	1.43	1.40	—	1.40	187	358	545	0.56	0.01	—	561
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.07	0.07	0.01	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	2.12	4.06	6.18	0.01	< 0.005	—	6.36
Consumer Products	—	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.10	0.09	0.01	0.64	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.19	2.19	< 0.005	< 0.005	—	2.20
Total	0.17	0.64	0.01	0.76	< 0.005	0.02	—	0.02	0.02	—	0.02	2.12	6.25	8.37	0.01	< 0.005	—	8.56

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	5.79	5.22	0.41	10.2	0.03	1.43	—	1.43	1.40	—	1.40	187	358	545	0.56	0.01	—	561
Consumer Products	—	2.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.81	0.75	0.04	5.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	19.3	19.3	< 0.005	< 0.005	—	19.4
Total	6.60	8.42	0.46	15.3	0.03	1.44	—	1.44	1.41	—	1.41	187	377	565	0.56	0.01	—	581
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	5.79	5.22	0.41	10.2	0.03	1.43	—	1.43	1.40	—	1.40	187	358	545	0.56	0.01	—	561
Consumer Products	—	2.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	5.79	7.67	0.41	10.2	0.03	1.43	—	1.43	1.40	—	1.40	187	358	545	0.56	0.01	—	561
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.07	0.07	0.01	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	2.12	4.06	6.18	0.01	< 0.005	—	6.36
Consumer Products	—	0.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	0.10	0.09	0.01	0.64	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.19	2.19	< 0.005	< 0.005	—	2.20
Total	0.17	0.61	0.01	0.76	< 0.005	0.02	—	0.02	0.02	—	0.02	2.12	6.25	8.37	0.01	< 0.005	—	8.56

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	2.92	19.8	22.7	0.30	0.01	—	32.4
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1.43	9.81	11.2	0.15	< 0.005	—	16.0
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	2.27	15.3	17.6	0.23	0.01	—	25.1
Total	—	—	—	—	—	—	—	—	—	—	—	6.61	44.9	51.5	0.68	0.02	—	73.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	2.92	19.8	22.7	0.30	0.01	—	32.4
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1.43	9.81	11.2	0.15	< 0.005	—	16.0
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	2.27	15.3	17.6	0.23	0.01	—	25.1

Total	—	—	—	—	—	—	—	—	—	—	—	6.61	44.9	51.5	0.68	0.02	—	73.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	0.48	3.27	3.76	0.05	< 0.005	—	5.36
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	0.24	1.62	1.86	0.02	< 0.005	—	2.65
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	0.38	2.54	2.91	0.04	< 0.005	—	4.16
Total	—	—	—	—	—	—	—	—	—	—	—	1.09	7.43	8.53	0.11	< 0.005	—	12.2

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	1.29	8.68	9.97	0.13	< 0.005	—	14.2
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	0.57	3.80	4.37	0.06	< 0.005	—	6.27
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1.00	6.75	7.75	0.10	< 0.005	—	11.1
Total	—	—	—	—	—	—	—	—	—	—	—	2.86	19.2	22.1	0.29	0.01	—	31.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	1.29	8.68	9.97	0.13	< 0.005	—	14.2

Apartments	—	—	—	—	—	—	—	—	—	—	—	0.57	3.80	4.37	0.06	< 0.005	—	6.27
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1.00	6.75	7.75	0.10	< 0.005	—	11.1
Total	—	—	—	—	—	—	—	—	—	—	—	2.86	19.2	22.1	0.29	0.01	—	31.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	0.21	1.44	1.65	0.02	< 0.005	—	2.36
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	0.09	0.63	0.72	0.01	< 0.005	—	1.04
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	0.17	1.12	1.28	0.02	< 0.005	—	1.83
Total	—	—	—	—	—	—	—	—	—	—	—	0.47	3.18	3.66	0.05	< 0.005	—	5.23

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	17.7	0.00	17.7	1.77	0.00	—	61.9
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	7.94	0.00	7.94	0.79	0.00	—	27.8

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	25.0	0.00	25.0	2.50	0.00	—	87.5
Total	—	—	—	—	—	—	—	—	—	—	—	50.7	0.00	50.7	5.06	0.00	—	177
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	17.7	0.00	17.7	1.77	0.00	—	61.9
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	7.94	0.00	7.94	0.79	0.00	—	27.8
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	25.0	0.00	25.0	2.50	0.00	—	87.5
Total	—	—	—	—	—	—	—	—	—	—	—	50.7	0.00	50.7	5.06	0.00	—	177
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	2.93	0.00	2.93	0.29	0.00	—	10.3
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1.32	0.00	1.32	0.13	0.00	—	4.60
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	4.14	0.00	4.14	0.41	0.00	—	14.5
Total	—	—	—	—	—	—	—	—	—	—	—	8.39	0.00	8.39	0.84	0.00	—	29.3

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	8.85	0.00	8.85	0.88	0.00	—	31.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	3.97	0.00	3.97	0.40	0.00	—	13.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	12.5	0.00	12.5	1.25	0.00	—	43.8
Total	—	—	—	—	—	—	—	—	—	—	—	25.3	0.00	25.3	2.53	0.00	—	88.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	8.85	0.00	8.85	0.88	0.00	—	31.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	3.97	0.00	3.97	0.40	0.00	—	13.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	12.5	0.00	12.5	1.25	0.00	—	43.8
Total	—	—	—	—	—	—	—	—	—	—	—	25.3	0.00	25.3	2.53	0.00	—	88.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	1.47	0.00	1.47	0.15	0.00	—	5.13
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	0.66	0.00	0.66	0.07	0.00	—	2.30
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	2.07	0.00	2.07	0.21	0.00	—	7.24
Total	—	—	—	—	—	—	—	—	—	—	—	4.19	0.00	4.19	0.42	0.00	—	14.7

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	136	136
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.14	0.14
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.10	6.10
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	142	142
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	136	136
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.14	0.14
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.10	6.10
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	142	142
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22.5	22.5

Apartments	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.01	1.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23.6	23.6

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	136	136
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.14	0.14
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.10	6.10
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	142	142
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	136	136
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.14	0.14

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.10	6.10
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	142	142
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22.5	22.5
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.01	1.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23.6	23.6

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
undefined	—	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
undefined	—	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
undefined	—	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
undefined	—	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
undefined	—	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
undefined	—	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description

Demolition	Demolition	6/3/2024	7/1/2024	5.00	20.0	—
Site Preparation	Site Preparation	7/2/2024	1/1/2025	5.00	132	—
Grading	Grading	1/2/2025	3/4/2025	5.00	44.0	—
Building Construction	Building Construction	3/5/2025	5/5/2026	5.00	305	—
Paving	Paving	5/6/2026	11/5/2026	5.00	132	—
Architectural Coating	Architectural Coating	11/6/2026	3/5/2027	5.00	86.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37

Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37

Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	2.95	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	33.1	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT

Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	52.6	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	17.1	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	10.5	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	2.95	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT

Site Preparation	Hauling	33.1	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	52.6	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	17.1	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	10.5	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	38,880	12,960	136,530	45,510	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	5,097	—
Site Preparation	—	35,000	198	0.00	—
Grading	—	—	44.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Hotel	0.00	0%
Apartments Mid Rise	—	0%
High Turnover (Sit Down Restaurant)	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O

2024	0.00	690	0.05	0.01
2025	0.00	690	0.05	0.01
2026	0.00	690	0.05	0.01
2027	0.00	690	0.05	0.01

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Hotel	502	491	357	175,012	4,191	4,106	2,983	1,462,426
Apartments Mid Rise	109	98.2	81.8	37,751	842	760	633	292,090
High Turnover (Sit Down Restaurant)	438	477	556	167,961	1,445	3,989	4,648	827,101

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Hotel	501	491	357	174,811	4,187	4,101	2,980	1,460,746
Apartments Mid Rise	103	92.6	77.1	35,592	794	716	597	275,383
High Turnover (Sit Down Restaurant)	437	477	556	167,768	1,443	3,984	4,643	826,151

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—

Wood Fireplaces	1
Gas Fireplaces	17
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	2
Conventional Wood Stoves	0
Catalytic Wood Stoves	1
Non-Catalytic Wood Stoves	1
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	1
Gas Fireplaces	17
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	2
Conventional Wood Stoves	0
Catalytic Wood Stoves	1
Non-Catalytic Wood Stoves	1
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
38880	12,960	136,530	45,510	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Hotel	1,017,814	690	0.0489	0.0069	2,109,232
Apartments Mid Rise	65,670	690	0.0489	0.0069	198,507
High Turnover (Sit Down Restaurant)	127,023	690	0.0489	0.0069	369,446

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Hotel	970,633	690	0.0489	0.0069	2,109,232
Apartments Mid Rise	61,354	690	0.0489	0.0069	198,507
High Turnover (Sit Down Restaurant)	112,432	690	0.0489	0.0069	369,446

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Hotel	1,522,006	17,180
Apartments Mid Rise	745,476	20,998
High Turnover (Sit Down Restaurant)	1,183,781	7,012

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Hotel	671,129	3,954
Apartments Mid Rise	298,675	5,863
High Turnover (Sit Down Restaurant)	522,640	1,614

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Hotel	32.9	—
Apartments Mid Rise	14.7	—
High Turnover (Sit Down Restaurant)	46.4	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Hotel	16.4	—
Apartments Mid Rise	7.37	—

High Turnover (Sit Down Restaurant)	23.2	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0

Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
—	5.00	—	—

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	7.60	annual days of extreme heat
Extreme Precipitation	5.70	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A

Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	2	1
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

6.4.1. Temperature and Extreme Heat

User Selected Measures	Co-Benefits Achieved	Exposure Reduction	Sensitivity Reduction	Adaptive Capacity Increase
D-3: Install Drought Resistant Landscaping	Water Conservation	—	2.00	2.00

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	48.5
AQ-PM	84.6
AQ-DPM	74.3
Drinking Water	92.5
Lead Risk Housing	94.5
Pesticides	0.00
Toxic Releases	78.1
Traffic	56.1
Effect Indicators	—
CleanUp Sites	44.2
Groundwater	22.7
Haz Waste Facilities/Generators	8.95
Impaired Water Bodies	0.00
Solid Waste	22.1
Sensitive Population	—
Asthma	20.0
Cardio-vascular	10.5
Low Birth Weights	34.2

Socioeconomic Factor Indicators	—
Education	90.2
Housing	77.2
Linguistic	99.0
Poverty	95.2
Unemployment	83.2

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	5.954061337
Employed	45.74618247
Median HI	8.109842166
Education	—
Bachelor's or higher	26.78044399
High school enrollment	100
Preschool enrollment	20.3131015
Transportation	—
Auto Access	0.757089696
Active commuting	97.89554729
Social	—
2-parent households	28.80790453
Voting	3.464647761
Neighborhood	—
Alcohol availability	4.516874118
Park access	49.92942384

Retail density	74.41293468
Supermarket access	94.25125112
Tree canopy	13.38380598
Housing	—
Homeownership	1.475683306
Housing habitability	4.760682664
Low-inc homeowner severe housing cost burden	99.12742205
Low-inc renter severe housing cost burden	31.10483767
Uncrowded housing	1.167714616
Health Outcomes	—
Insured adults	1.308866932
Arthritis	80.8
Asthma ER Admissions	74.0
High Blood Pressure	71.3
Cancer (excluding skin)	96.9
Asthma	30.0
Coronary Heart Disease	63.8
Chronic Obstructive Pulmonary Disease	31.1
Diagnosed Diabetes	17.6
Life Expectancy at Birth	56.3
Cognitively Disabled	44.8
Physically Disabled	63.7
Heart Attack ER Admissions	86.8
Mental Health Not Good	10.1
Chronic Kidney Disease	45.1
Obesity	17.0
Pedestrian Injuries	19.6

Physical Health Not Good	9.4
Stroke	39.4
Health Risk Behaviors	—
Binge Drinking	76.5
Current Smoker	7.4
No Leisure Time for Physical Activity	7.9
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	19.0
Elderly	94.7
English Speaking	0.8
Foreign-born	99.2
Outdoor Workers	6.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	1.0
Traffic Density	0.0
Traffic Access	87.4
Other Indices	—
Hardship	95.3
Other Decision Support	—
2016 Voting	2.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	68.0
Healthy Places Index Score for Project Location (b)	7.00

Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	The amount construction and timing of all trades requires additional timing at each stage of construction.