901 MISSION AVENUE MIXED-USE PROJECT

AIR QUALITY/GREENHOUSE GAS STUDY

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EXECUTIVE SUMMARY

The proposed Project (Project) is located on an undeveloped 1.5 acre site comprising the block bounded by Mission Avenue (north), South Horne Street (east), South Clementine Street (west) and Seagaze Drive (south). The site is zoned Downtown Subdistrict 2 and is bisected by an unnamed paved street corridor. This street segment would be vacated as part of the proposed Project. The project would develop 273 multifamily apartment and 4,006 square feet (sf) of space for commercial uses. The 273 apartments would be available to serve the housing needs of downtown Oceanside with 10% (28 apartments), reserved for low-income households. The residential rental apartment homes would be located within the upper five floors (3-8) of the building. The commercial space and parking level 1 would be located on the ground floor. Parking levels 2-3 would be subterranean. A total of 322 parking spaces would be provided in a four-level parking garage under the building. Of the four levels, 2.5 would be subterranean. On the Mission Avenue frontage, five parallel parking spaces in addition to a loading zone will be provided.

The project would provide a total of 25,866 square feet of studio units, 97,589 square feet of one-bedroom units and 83,896 square feet of two-bedroom units. The units would be arranged in a "stacked flat" configuration. Each unit would be open to an exterior wall along the perimeter of the building or into an interior courtyard that is open to the sky.

Air Quality Management Plan Consistency. The project is consistent with the Downtown District zoning designation and is anticipated in the local plans and SANDAG's population and employment growth projections. Thus, the project would be within SANDAG's population growth forecast and would not conflict with the State Implementation Plan or Regional Air Quality Strategy.

Construction and Operational Emissions. Project construction and operational emissions would not exceed the San Diego Air Pollution Control District thresholds. Thus, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.

Expose Sensitive Receptors to Substantial Pollutant Concentrations. The project would not cause or contribute to CO hot spots, impacts related to indoor air quality or otherwise expose receptors to substantial pollutant concentrations.

Odors. The project would provide 273 residential units, associated parking and related infrastructure improvements. These uses would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Greenhouse Gas Emissions. The proposed project's annual Greenhouse Gas emissions would not exceed the Service Population threshold of 3.5 Metric Tons of Carbon Dioxide Equivalent emissions each year. Further, the project would be consistent with the City of Oceanside Climate Action Plan, 2017 and 2022 CARB Scoping Plan, the City of Oceanside General Plan and the SANDAG Regional Plan; San Diego Forward, adopted in December 2021. Impacts related to air quality and greenhouse gas emissions would be less than significant.

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AIR QUALITY and GREENHOUSE GAS STUDY

This report is an analysis of the potential air quality and greenhouse gas impacts associated with the 901 Mission Avenue Mixed-Use Project, a multifamily residential development proposed for construction and operation on the southwestern corner of Mission Avenue and North Horne Street in the City of Oceanside, California. This study analyzes the potential for impacts associated with construction activity and project operation.

PROJECT DESCRIPTION

The proposed Project (Project) is located on an undeveloped 1.5 acre site comprising the block bounded by Mission Avenue (north), South Horne Street (east), South Clementine Street (west) and Seagaze Drive (south). The site is zoned Downtown Subdistrict 2 and is bisected by an unnamed paved street corridor. This street segment would be vacated as part of the proposed Project. The project would develop 273 multifamily apartment and 4,006 square feet (sf) of space for commercial uses. The 273 apartments would be available to serve the housing needs of downtown Oceanside with 10% (28 apartments), reserved for low-income households. The residential rental apartment homes would be located within the upper five floors (3-8) of the building. The commercial space and parking level 1 would be located on the ground floor. Parking levels 2-3 would be subterranean. A total of 322 parking spaces would be provided in a four-level parking garage under the building. Of the four levels, 2.5 would be subterranean. On the Mission Avenue frontage, five parallel parking spaces in addition to a loading zone will be provided.

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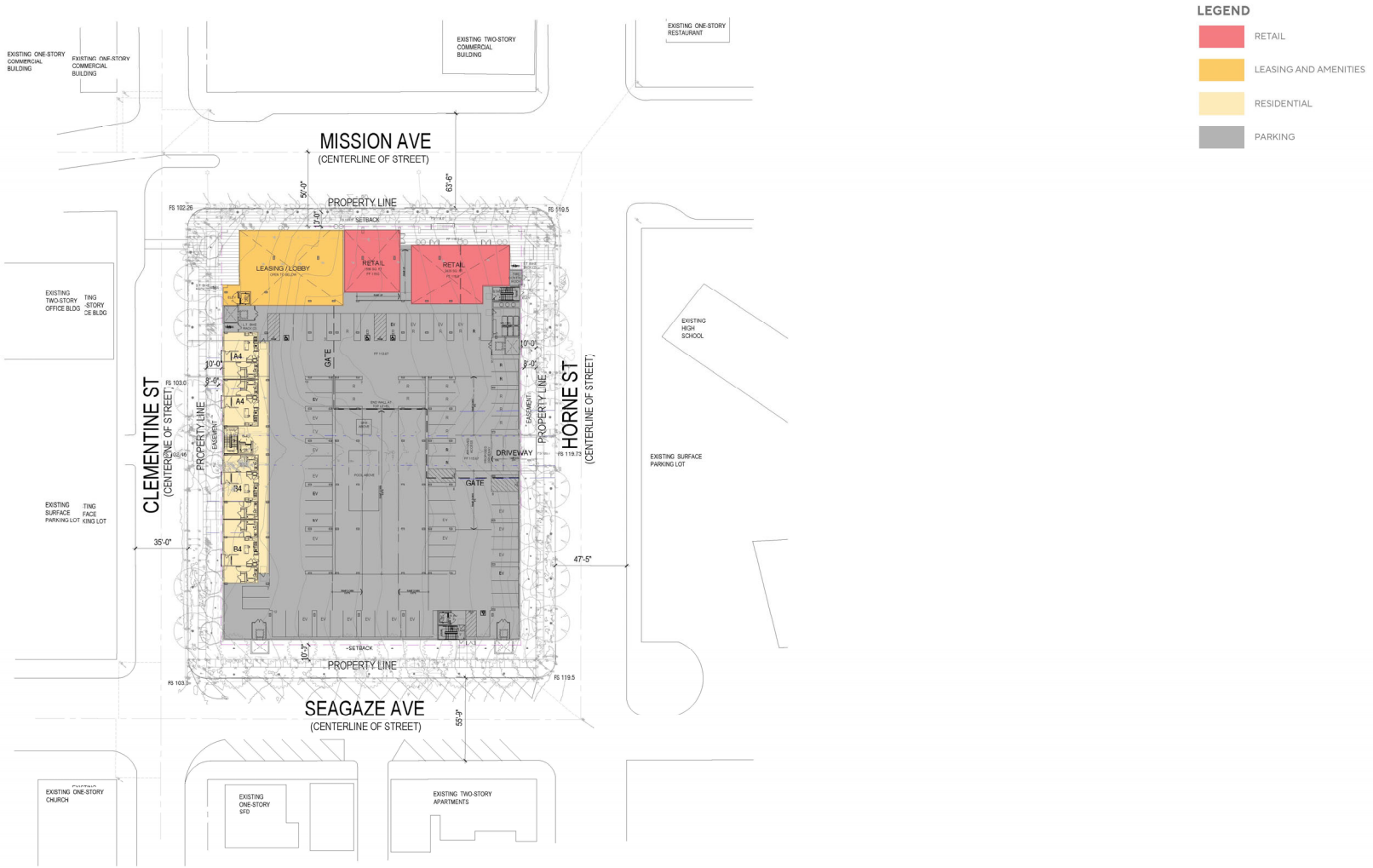
Access to the 3-level parking garage is separated would be provided from North Clementine Street. The levels would be connected by ramps; thus, vehicles will circulate between floors. Resident parking will all be assigned. The uppermost (P1) garage level accessible from South North Horne Street provides resident parking controlled by an entry gate. Taking advantage of the site grade, the first (P1) parking level entry is at grade with North Horne Street. The lowest parking level (P3) is below the alley grade. To accommodate the parking garage, approximately 58,400 cubic yards of soil export will be excavated from the site.

Construction of the project is expected to begin in November 2026 and completed in January 2029. The project site is shown in Figure 1 - Vicinity Map). The preliminary site plan is shown on Figure 2 – Proposed Site Plan.

Figure 1 - Vicinity Map

- Project Site



901 MISSION AVENUE MIXED-USE

OCEANSIDE, CA

MIXED-USE BUILDING SITE PLAN

1"=30"

0 30' 60' 90' 120'

A1.0

JOB NO. 2023-0939

DATE 05-22-2024

Figure 2— Site Plan

Project Design Features

To reduce air quality and greenhouse gas emissions to the extent feasible, the project would incorporate the project design features (PDFs). As defined herein, design features are project design elements not otherwise required by law that address compliance with CEQA impact areas:

- During construction, the contractror will overlap the architectural coating phase with the final 45 days of building construction to reflect actual construction methods;
- Per City of Oceanside Development Code Section 3047, *Renewable Energy Facilities*, project will install photovoltaic generating panels on the building rooftop and walls. The project will provide 306.7 kWh to support a portion o fthe daily electrical demand; and
- A total of 90% of indoor and outdoor lighting shall be LED or other high-efficiency lightbulbs.

The following measures are intended to demonstrate compliance with statewide regulations; and thus, have been incorporated into the the air emissions modeling

- The project will provide recycling bins in the trash enclosure areas;
- The project will install drought-tolerant vegetation and water-efficient irrigation systems;
- The project will install low-water use appliances and fixtures;
- The project will install Energy Star, or equivalent, dishwashers, clothes washers, refrigerators, and fans;
- The project will be compliant with San Diego Air Pollution Control District (SDAPCD) Rule 67.0.1 (d) which requires the use of low Volitile Organic Compound (VOC) paint (no greater than 50 grams/Liter) for use on buildng interior and exterior surface and 100 grams/Liter for traffic marking coatings; and
- The project will provide bicycle parking facilities.

Dust Control Methods

The project would implement various construction dust control strategies as design features to be compliant with SDAPCD Rule 55. Compliance with these dust control measures are listed as follows and would be identified on grading plan approvals:

- During clearing, grading, earth-moving, excavation, or transportation of cut or fill materials, water trucks or sprinkler systems shall be used to prevent dust from leaving the site and to create a crust after each day's activities cease;

- During construction, water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this would include wetting down such areas later in the morning, after work is completed for the day, and whenever winds exceed 15 mph during active operations. Watering of active disturbance areas, including active grading areas and unpaved roads,

would occur approximately every 2 hours of active operations, approximately three times per work day (at a minimum):

- All grading and excavation operations shall be halted when wind speeds exceed 25 miles per hour;

- Dirt and debris spilled onto paved surfaces at the project site and on the adjacent roadways shall be swept, vacuumed, and/or washed at the end of each workday; and

- All trucks hauling dirt, sand, soil, or other loose material to and from the construction site shall be covered and/or a minimum 2 feet of freeboard shall be maintained.

REGULATORY SETTING

Air Pollution Regulation

Air pollutants are regulated at the national, State, and air basin level; each agency has a different degree of control. The United States Environmental Protection Agency (USEPA) regulates at the national level; the California Air Resources Control Board (CARB) regulates at the State level; and the SDAPCD regulates air quality in San Diego County.

The federal and state governments have been empowered by the federal and state Clean Air Acts to regulate the emission of airborne pollutants and have established ambient air quality standards for the protection of public health. The USEPA is the federal agency designated to administer national air quality regulations, while CARB is the state equivalent in the California Environmental Protection Agency. Local control over air quality management is provided by CARB through multi-county and county-level Air Pollution Control Districts (APCDs) (also referred to as Air Quality Management Districts). CARB establishes statewide air quality standards and is responsible for the control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. CARB has established 15 air basins statewide. The City of Oceanside is located in the San Diego Air Basin (SDAB), which is under the jurisdiction of the SDAPCD.

California Air Resources Board

CARB, which became part of the California EPA (CalEPA) in 1991, is responsible for ensuring implementation of the California Clean Air Act (CCAA), meeting state requirements of the federal Clean Air Act and establishing California Ambient Air Quality Standards (CAAQSs). It is also responsible for setting emission standards for vehicles sold in California and for other emission sources such as consumer products and certain off-road equipment. CARB also established passenger vehicle fuel specifications and oversees the functions of local air pollution control districts and air quality management districts, which in turn administer air quality activities at the regional and county level. The CCAA is administered by CARB at the state level and by the Air Quality Management Districts at the regional level. Both state and federal

standards are summarized in Table 1. The federal "primary" standards have been established to protect the public health. The federal "secondary" standards are intended to protect the nation's welfare and account for air pollutant effects on soil, water, visibility, materials, vegetation, and other aspects of the general welfare.

Table 1
Ambient Air Quality Standards

Pollutant	Average Time	California Standards	National Standards
Ozone (O_3)	1 hour	0.09 ppm	--
	8 hours	0.070 ppm	0.070 ppm
Carbon Monoxide (CO)	8 hours	9.0 ppm	9 ppm
	1 hour	20 ppm	35 ppm
Nitrogen Dioxide (NO_2)	Annual Average	0.030 ppm	0.053 ppm
	1 hour	0.18 ppm	100 ppb
Sulfur Dioxide (SO_2)	Annual Average	--	0.03 ppm
	24 hours	0.04 ppm	0.14 ppm
	1 hour	0.25 ppm	75 ppb
Respirable Particulate Matter (PM_{10})	24 hours	50 mg/m^3	150 mg/m^3
	Annual Arithmetic Mean	20 mg/m^3	--
Fine Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	12 mg/m^3	12 mg/m^3
	24 hours	--	35 mg/m^3
Sulfates	24 hours	25 mg/m^3	--
Lead	30-day Average	1.5 mg/m^3	--
	Calendar Quarter	--	1.5 mg/m^3
	3-month Rolling Average	--	0.15 mg/m^3
Hydrogen Sulfide	1 hour	0.03 ppm	--
Vinyl Chloride	24 hours	0.010 ppm	--

Notes:
ppm = parts per million
ppb – parts per billion
mg/m3 = micrograms per cubic meter
mg/m3 = milligrams per cubic meter
Source: California Air Resources Board 2016

San Diego Air Pollution Control District

The SDAPCD was created to protect the public from the harmful effects of air pollution, achieve and maintain air quality standards, foster community involvement and develop and implement cost-effective programs that meet state and federal mandates while considering environmental and economic impacts.

Specifically, the SDAPCD is responsible for monitoring air quality and planning, implementing, and enforcing programs designed to attain and maintain state and federal ambient air quality standards in the district. Programs developed include air quality rules and regulations that regulate stationary source emissions, including area sources, point sources, and certain mobile source emissions. The SDAPCD is also responsible for establishing permitting requirements for stationary sources and ensuring that new, modified or relocated stationary sources do not create net emissions increases; and thus, are consistent with the region's air quality goals. The SDAPCD provides significance thresholds in Regulation II, Rule 20.2, Table 20-2-1. "AQIA Trigger Levels." These trigger levels were established for stationary sources of air pollution and are commonly used for environmental evaluations. The SDAPCD enforces air quality rules and regulations through a variety of means, including inspections, educational or training programs, or fines, when necessary. The project site is within the SDAB; and thus, is subject to SDAPCD rules and regulations.

State Implementation Plan/Air Quality Management Plan/Regional Air Quality Strategy

The federal Clean Air Act Amendments (CAAA) mandate that states submit and implement a State Implementation Plan (SIP) for areas not meeting air quality standards. SIPs are comprehensive plans that describe how an area will attain national and state ambient air quality standards. SIPs are a compilation of new and previously submitted plans, programs (i.e., monitoring, modeling and permitting programs), district rules, state regulations and federal controls and include pollution control measures that demonstrate how the standards will be met through those measures.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB forwards SIP revisions to the USEPA for approval and publication in the Federal Register. Thus, the Regional Air Quality Strategy (RAQS) and Air Quality Management Plan (AQMP) prepared by SDAPCD and referenced herein become part of the SIP as the material relates to efforts ongoing in San Diego County to achieve the national and state ambient air quality standards. The most recent SIP element for San Diego County was submitted in December 2016. The document identifies control measures and associated emission reductions necessary to demonstrate attainment of the 2008 Federal 8-hour ozone standard by July 20, 2018.

The San Diego RAQS was developed pursuant to California Clean Air Act (CCAA) requirements. The RAQS was initially adopted in 1991 and was updated in 1995, 1998, 2001, 2004, 2009 and 2016. The 2022 RAQS update is under development. Until it is adopted, the 2016 is applicable and can be found at the following:
https://www.sdapcd.org/content/sdapcd/planning.html

The RAQS identifies feasible emission control measures to provide progress in San Diego County toward attaining the State ozone standard. The pollutants addressed in the RAQS are volatile organic compounds (VOC) (also referred to as Reactive Organic Gases (ROG)) and oxides of nitrogen (NOx), precursors to the photochemical formation of ozone (the primary component of smog). The RAQS was initially adopted by the SDAPCD on June 30, 1992, and

amended on March 2, 1993, in response to ARB comments. At present, no attainment plan for particulate matter less than 10 microns in diameter (PM_{10}) or particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) is required by the state regulations; however, SDAPCD has adopted measures to reduce particulate matter in the SDAB. These measures range from regulation against open burning to incentive programs that introduce cleaner technology. These measures can be found in a report titled "Measures to Reduce Particulate Matter in San Diego County, December 2005: https://www.sdapcd.org/content/dam/sdapcd/documents/grants/planning/PM-Measures.pdf

The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in the County, to estimate future emissions and then determine strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends as well as land use plans developed by the cities and the County as part of the development of the individual General Plans. As such, projects that propose development consistent with the growth anticipated by the general plans would be consistent with the RAQS. In the event that a project would propose development which is less dense than anticipated within the General Plan, the project would likewise be consistent with the RAQS. If a project proposes development that is greater than that anticipated in the General Plan and SANDAG's growth projections, the project might conflict with the RAQS and SIP; and thus, have a potentially significant impact on air quality.

Under state law, the SDAPCD is required to prepare an AQMP for pollutants for which the SDAB is designated non-attainment. Each iteration of the SDAPCD's AQMP is an update of the previous plan and has a 20-year horizon. Currently the SDAPCD has implemented the 2*020 Plan for Attaining the National Ambient Air Quality Standard for Ozone in San Diego County* (October 2020) and a 2004 Carbon Monoxide Plan. The 2020 ozone plan was submitted to CARB on October 20, 2020. It was adopted and submitted to the USEPA for review on December 28, 2020. Comments from the USEPA are pending. This plans is available for download on the ARB website located at the following URL: https://www.sdapcd.org/content/dam/sdapcd/documents/grants/planning/Att%20A%20(Attainment%20Plan)_ws.pdf

SDAPCD Rules and Regulations

As stated above, SDAPCD is responsible for planning, implementing, and enforcing federal and state ambient standards in the SDAB. The following rules and regulations apply to all sources in the jurisdiction of SDAPCD, and would apply to the project.

SDAPCD Regulation IV: Prohibitions; Rule 50: Visible Emissions. Prohibits discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than 3 minutes in any period of 60 consecutive minutes that is darker in shade than that designated as Number 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or of such opacity as to obscure an observer's view to a

degree greater than does smoke of a shade designated as Number 1 on the Ringelmann Chart (SDAPCD 1997).

SDAPCD Regulation IV: Prohibitions; Rule 51: Nuisance. Prohibits the discharge, from any source, of such quantities of air contaminants or other materials that cause or have a tendency to cause injury, detriment, nuisance, annoyance to people and/or the public, or damage to any business or property (SDAPCD 1976).

SDAPCD Regulation IV: Prohibitions; Rule 55: Fugitive Dust. Regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and inactive disturbed areas, as well as track-out and carry-out onto paved roads beyond a project site (SDAPCD 2009b).

SDAPCD Regulation IV: Prohibitions; Rule 67.0.1: Architectural Coatings. Requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories (SDAPCD 2015).

SDAPCD Regulation XII: Toxic Air Contaminates; Rule 1200: Toxic Air Contaminants – New Source Review. Requires new or modified stationary source units with the potential to emit Toxic Air Contaminatnts (TACs) above rule threshold levels to either demonstrate that they will not increase the maximum incremental cancer risk above 1 in 1 million at every receptor location, or demonstrate that toxics best available control technology (T-BACT) will be employed if maximum incremental cancer risk is equal to or less than 10 in 1 million, or demonstrate compliance with SDAPCD's protocol for those sources with an increase in maximum incremental cancer risk at any receptor location of greater than 10 in 1 million but less than 100 in 1 million (SDAPCD 2017b).

SDAPCD Regulation XII: Toxic Air Contaminates; Rule 1210: Toxic Air Contaminant Public Health Risks – Public Notification and Risk Reduction. Requires each stationary source that is required to prepare a public risk assessment to provide written public notice of risks at or above the following levels: maximum incremental cancer risks equal to or greater than 10 in 1 million, or cancer burden equal to or greater than 1.0, or total acute noncancer health hazard index equal to or greater than 1.0, or total chronic non-cancer health hazard index equal to or greater than 1.0 (SDAPCD 2017c).

Regional Climate and Local Air Quality

The weather of San Diego County is profoundly influenced by the Pacific Ocean and its semi-permanent high-pressure systems that result in dry, warm summers and mild, occasionally wet winters. The average minimum temperature for January ranges from the mid-40s to the high-50s degrees Fahrenheit (4 to 15 degrees Celsius) across the county. July maximum temperatures average in the mid-80s to the high-90s degrees Fahrenheit (high-20s to the high-30s degrees

Celsius). Most of the county's precipitation falls from November to April, with infrequent (approximately 10 percent) precipitation during the summer. The average seasonal precipitation along the coast is approximately 10 inches (254 millimeters); the amount increases with elevations as moist air is lifted over the mountains.

The interaction of ocean, land, and the Pacific High-Pressure Zone maintains clear skies for much of the year and drives the prevailing winds. Local terrain is often the dominant factor inland and winds in inland mountainous areas tend to blow upwards in the valleys during the day and down the hills and valleys at night.

In conjunction with the onshore/offshore wind patterns, there are two types of temperature inversions (reversals of the normal decrease of temperature with height), which occur within the region that affect atmospheric dispersive capability and that act to degrade local air quality. In the summer, an inversion at about 1,100 to 2,500 feet (335 to 765 meters) is formed over the entire coastal plain when the warm air mass over land is undercut by a shallow layer of cool marine air flowing onshore. The prevailing sunny days in this region further exacerbate the smog problem by inducing additional adverse photochemical reactions. During the winter, a nightly shallow inversion layer (usually at about 800 feet or 243 meters) forms between the cooled air at the ground and the warmer air above, which can trap vehicular pollutants. The days of highest Carbon Monoxide (CO) concentrations occur during the winter months.
The predominant onshore/offshore wind pattern is sometimes interrupted by so-called Santa Ana conditions, when high pressure over the Nevada-Utah region overcomes the prevailing westerly wind direction. This draws strong, steady, hot, and dry winds from the east over the mountains and out to sea. Strong Santa Ana winds tend to blow pollutants out over the ocean, producing clear days. However, at the onset or breakdown of these conditions or if the Santa Ana is weak, prevailing northwesterly winds are reestablished which send polluted air from the Los Angeles basin ashore in the SDAB. "Smog transport from the South Coast Air Basin (the metropolitan areas of Los Angeles, Orange, San Bernardino, and Riverside counties) is a key factor on more than half the days San Diego exceeds clean air standards" (San Diego Air Pollution Control District, 2010).

Pollutants

The SDAPCD is required to monitor air pollutant levels to ensure that air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the local air basin is classified as being in "attainment" or "non-attainment." San Diego County is listed as a federal non-attainment area for ozone (eight hour) and a state non-attainment area for ozone (one hour and eight-hour standards), PM_{10} and $PM_{2.5}$. As shown in Table 2, the SDAB is in attainment for the state and federal standards for nitrogen dioxide, carbon monoxide, sulfur dioxide and lead. Characteristics of ozone, carbon monoxide, nitrogen dioxide, and suspended particulates are described below.

Ozone. Ozone is produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NO_x) ROG[1]. Nitrogen oxides are formed during the combustion of fuels,

Table 2
San Diego County Attainment Status

Criteria Pollutant	Federal Designation	State Designation
Ozone (one hour)	Attainment*	Non-Attainment
Ozone (eight hour)	Moderate Non-Attainment	Non-Attainment
Carbon Monoxide	Attainment	Attainment
PM_{10}	Unclassifiable**	Non-Attainment
$PM_{2.5}$	Attainment	Non-Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility	No Federal Standard	Unclassified

** The federal 1-hour standard of 12 ppm was in effect from 1979 through June 1, 2005. The revoked standard is referenced here because it was used for such a long period and because this benchmark is addressed in State Implementation Plans (SIPs).*

*** At the time of designation, if the available data does not support a designation of attainment or non-attainment, the area is designated as unclassifiable.*

Source: San Diego Air Pollution Control District. June 2016. http://www.sandiegocounty.gov/content/sdc/apcd/en/air-quality-planning/attainment-status.html

while reactive organic compounds are formed during combustion and evaporation of organic solvents. Because ozone requires sunlight to form, it mostly occurs in concentrations considered serious between the months of April and October. Ozone is a pungent, colorless, toxic gas with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to ozone include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

Carbon Monoxide. Carbon monoxide (CO) is a local pollutant that is found in high concentrations only near the source. The major source of carbon monoxide, a colorless, odorless, poisonous gas, is automobile exhaust. Elevated CO concentrations; therefore, are usually only found near areas of high traffic volumes operating in congested conditions. Carbon monoxide health effects are related to blood hemoglobin. At high concentrations, carbon monoxide reduces the amount of oxygen in the blood, causing heart difficulties in people with chronic diseases, reduced lung capacity and impaired mental abilities.

[1] Organic compound precursors of ozone are routinely described by a number of variations of three terms: hydrocarbons (HC), organic gases (OG), and organic compounds (OC). These terms are often modified by adjectives such as total, reactive, or volatile, and result in a rather confusing array of acronyms: HC, THC (total hydrocarbons), RHC (reactive hydrocarbons), TOG (total organic gases), ROG (reactive organic gases), TOC (total organic compounds), ROC (reactive organic compounds), and VOC (volatile organic compounds). While most of these differ in some significant way from a chemical perspective, from an air quality perspective two groups are important: non-photochemically reactive in the lower atmosphere, or photochemically reactive in the lower atmosphere (HC, RHC, ROG, ROC, and VOC).

Nitrogen Dioxide. Nitrogen dioxide (NO_2) is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts rapidly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. Nitrogen dioxide is an acute irritant. A relationship between NO_2 and chronic pulmonary fibrosis may exist and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur. Nitrogen dioxide absorbs blue light and causes a reddish-brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of PM_{10} and acid rain.

Suspended Particulates. PM_{10} is particulate matter measuring no more than 10 microns in diameter, while $PM_{2.5}$ is fine particulate matter measuring no more than 2.5 microns in diameter. Suspended particulates are mostly dust particles, nitrates and sulfates. Both PM_{10} and $PM_{2.5}$ are by-products of fuel combustion and wind erosion of soil and unpaved roads and are directly emitted into the atmosphere through these processes. Suspended particulates are also created in the atmosphere through chemical reactions. The characteristics, sources, and potential health effects associated with the small particulates (those between 2.5 and 10 microns in diameter) and fine particulates ($PM_{2.5}$) can be very different. The small particulates generally come from windblown dust and dust kicked up from mobile sources. The fine particulates are generally associated with combustion processes as well as being formed in the atmosphere as a secondary pollutant through chemical reactions. Fine particulate matter is more likely to penetrate deeply into the lungs and poses a health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. More than half of the small and fine particulate matter that is inhaled into the lungs remains there. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

Lead. Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phaseout of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phaseout of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern. Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and, in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead.

Sulfates. Sulfates are the fully oxidized form of sulfur, which typically occur in combination with metals or hydrogen ions. Sulfates are produced from reactions of SO2 in the atmosphere. Sulfates can result in respiratory impairment, as well as reduced visibility.

Vinyl Chloride. Vinyl chloride is a colorless gas with a mild, sweet odor, which has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air can cause nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer.

Hydrogen Sulfide. Hydrogen sulfide is a colorless and flammable gas that has a characteristic odor of rotten eggs. Sources of hydrogen sulfide include geothermal power plants, petroleum refineries, sewers, and sewage treatment plants. Exposure to hydrogen sulfide can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations.

Visibility-Reducing Particles. Visibility-reducing particles are any particles in the air that obstruct the range of visibility. Effects of reduced visibility can include obscuring the viewshed of natural scenery, reducing airport safety, and discouraging tourism. Sources of visibility-reducing particles are the same as for PM2.5 described above.

Toxic Air Contaminants/Diesel Particulate Matter. Hazardous air pollutants, also known as TACs or air toxics, are those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. Examples of toxic air pollutants include:

1. benzene, which is found in gasoline;
2. perchloroethylene, which is emitted from some dry-cleaning facilities; and
3. methylene chloride, which is used as a solvent.

Transportation related emissions are focused on particulate matter constituents within diesel exhaust and TAC constituents that comprise a portion of total organic gas (TOG) emissions from both diesel and gasoline fueled vehicles. Diesel engine emissions are comprised of exhaust particulate matter and TOGs which are collectively defined as Diesel Particulate Matter (DPM). DPM and TOG emissions from both diesel and gasoline fueled vehicles is typically composed of carbon particles and carcinogenic substances including polycyclic aromatic (i.e., odorous) hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene. Diesel exhaust also contains gaseous pollutants, including volatile organic compounds and NO_x.

Sensitive Receptors

Land uses considered to be sensitive receptors include residential, school, childcare centers, acute care hospitals, and long-term health care facilities. Sensitive receptors are determined based upon special factors which may include the age of the users or occupants, the frequency and duration of the use or occupancy, continued exposure to hazardous substances as defined by federal and state regulations, and the user's ability to evacuate a specific site in the event of a hazardous incident. Ambient air quality standards have been established to represent the levels of air quality considered sufficient, with an adequate margin of safety, to protect public health and welfare. They are designed to protect that segment of the public most susceptible to respiratory distress, such as children; the elderly; persons engaged in strenuous work or

exercise and people with cardiovascular and chronic respiratory diseases. Recreational uses can be considered moderately sensitive to air pollution. Exercise can place a high demand on respiratory functions, which can be impaired by air pollution even though exposure periods during exercise are generally short.Residential uses are considered most sensitive to air pollution while Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time.

The closest receivers to the north is the single-family residence at 909 Seagaze Drive, across the street and approximatey 70 feet from the project site property line. A single-family residences is located at 104 South Clementine Street approximately 85 feet south of the project site property line. The northwest corner of the Oceanside High School campus is located across North Horne Street to the east of the project site. The closest classroom building is located approximately 77 feet from the eastern site boundary.

Monitored Air Quality

The SDAPCD monitors air quality conditions at locations throughout the SDAB. For this analysis, data from the Camp Pendleton monitoring station north of the site were used to characterize existing ozone and $PM_{2.5}$ conditions in the vicinity of the project site. A summary of PM_{10} data recorded at the 533 First Street El Cajon monitoring station is presented in Table 3.

Table 3
Measured Air Quality Data

Averaging Time	Unit	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
				2020	2021	2022	2020	2021	2022
Ozone (O_3) – Camp Pendleton									
Maximum 1-hour concentration	ppm	State	0.09	0.094	0.074	0.076	0	0	0
Maximum 8-hour concentration	ppm	State	0.070	0.074	0.059	0.067	3	0	0
		Federal	0.070	0.074	0.059	0.067	3	0	0
Nitrogen Dioxide (NO_2) – Camp Pendleton									
Maximum 1-hour concentration	ppm	State	0.18	53	59	50	0	0	0
		Federal	0.100	53	59	50	0	0	0
Coarse Particulate Matter (PM_{10})[a] – El Cajon – Lexington Elementary School, 533 First Street									
Maximum 24-hour concentration	$\mu g/m^3$	State	50		--	--	-	-	-
		Federal	150		_	--	-	-	-

Annual concentration	µg/m^3	State	20	--	--	--	--	--	--
Fine Particulate Matter ($PM_{2.5}$)[a] – El Cajon – Lexington Elementary School, 533 First Street									
Maximum 24-hour concentration	µg/m^3	Federal	35	38.2	30.2	26.4	2	0	0
Annual concentration	µg/m^3	State	12.0	11.6	10.4	-	0	0	-
		Federal	12.0	10.3	9.7	9.4	0	0	0

[1] – Federal O3 standard reduced from 75 ppm to 70 ppm in October 2015
*Insufficient data to determine number of exceedances
Ozone and Nitrogen Oxide data from the Camp Pendleton Monitoring Station. PM10 and PM2.5 data from 533 First Street in El Cajon.
Source: California Air Resources Board, 2020, 2021 and 2022 Air Quality Data Summaries available at: http://www.arb.ca.gov/adam/topfour/topfourdisplay.php Accessed May 1, 2024.

AIR QUALITY IMPACT ANALYSIS

Methodology and Significance Thresholds

Air quality modeling was performed in general accordance with the methodologies outlined in the SDAPCD 2016 RAQS to identify both construction and operational emissions associated with each phase and the cumulative total of all project phases at build out. All emissions were calculated using the California Emissions Estimator Model (CalEEMod) software version 2022.1 which incorporates current air emission data, planning methods and protocol approved by CARB.

Construction activities would include removal of existing asphalt and concrete located on-site; ruderal vegetation, site clearing, excavation for the subterranean portion of the parking garage, grading to create construction pads and other project improvements, construction of the buildings/utilities and related improvements as well as painting the interior and exterior building surfaces and paving driveways and parking areas. Construction activities would require the use of equipment that would generate criteria air pollutant emissions. For modeling purposes, it was assumed that all construction equipment used would be diesel-powered. Construction emissions associated with development of the proposed project were quantified by estimating the types of equipment, including the number of individual pieces of equipment, that would be used on-site during each of the construction phases as well as off-site haul trips to remove demolition debris and excavation spoils. Construction emissions are analyzed using the regional thresholds established by the SDAPCD and published under Rule 20-2. Excavation spoils are estimated to be 58,400 cubic yards. No fill import would be required.

Operational emissions include mobile source emissions, energy emissions, and area source emissions. Mobile source emissions are generated by motor vehicle trips associated with operation of the project. Emissions attributed to energy use include electricity and natural gas consumption for space and water heating. Area source emissions are generated by landscape maintenance equipment, consumer products and architectural coatings (i.e., paints). To

determine whether a regional air quality impact would occur, the increase in emissions are compared with the SDAPCD recommended regional thresholds for operational emissions.

Regional Thresholds. Based on Appendix G of the *CEQA Guidelines (2022)*, a project would have a significant air quality impact if it would:

a. *Conflict with or obstruct implementation of the applicable air quality plan;*
b. *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard;*
c. *Expose sensitive receptors to substantial pollutant concentrations;*
d. *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.*

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) indicates that, where available, the significance criteria established by the applicable air quality management district or pollution control district may be relied upon to determine whether the project would have a significant impact on air quality. As part of its air quality permitting process, SDAPCD has established thresholds in Rule 20.2 requiring the preparation of Air Quality Impact Assessments for permitted stationary sources. SDAPCD establishes quantitative emission thresholds for stationary sources. Although these trigger levels do not generally apply to mobile sources or general land development projects, for comparative purposes these levels may be used to evaluate the increased emissions that would be emitted into the SDAB from proposed land development projects. Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented below in Table 4 are exceeded.

Table 4
SDAPCD Air Emission Significance Thresholds

Construction Emissions			
Pollutant		Total Emissions (pounds per day)	
Reactive Organic Gas (ROG)		75	
Nitrogen Oxides (NOx)		250	
Carbon Monoxide (CO)		550	
Sulfur Oxides (SOx)		250	
Respirable Particulate Matter (PM_{10})		100	
Fine Particulate Matter (PM2.5)		55	
Operational Emissions			
	Total Emissions		
	Pounds per Hour	Pounds per Day	Tons per Year
Reactive Organic Gas (ROG)	--	75	13.7
Nitrogen Oxides (NOx)	25	250	40
Carbon Monoxide (CO)	100	550	100
Sulfur Oxides (SOx)	25	250	40
Respirable Particulate Matter (PM_{10})	--	100	15
Fine Particulate Matter (PM2.5)	--	55	10
Lead and Lead Compounds	--	3.2	0.6

The thresholds listed in Table 4 are screening-level thresholds used to evaluate whether proposed-project-related emissions could cause a significant impact to air quality. Emissions below the screening-level thresholds would not cause a significant impact. The emissions-based thresholds for ozone precursors (ROG and NOx) are intended to serve as the threshold for ozone. This approach is used because ozone is not emitted directly; thus, ozone concentrations associated with individual projects precursor (ROG and NOx) emissions cannot be determined through air quality models or other quantitative methods. For nonattainment pollutants, if emissions exceed the thresholds shown in Table 4, the project has the potential to result in a cumulatively considerable net increase in these pollutants; and thus, could have a significant impact on the ambient air quality.

With respect to odors, SDAPCD Rule 51 (Public Nuisance) prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person. A project that involves a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

As stated, under state law, the SDAPCD is required to prepare an AQMP for pollutants for which the SDAB is designated non-attainment. Each iteration of the SDAPCD's AQMP is an update of the previous plan and has a 20-year horizon. A project may be deemed inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding forecasts used in the development of the AQMP. Currently the SDAPCD has implemented the 2*020 Plan for Attaining the National Ambient Air Quality Standard for Ozone in San Diego County* (October 2020) and a 2004 Carbon Monoxide Plan. The AQMP incorporates local city General Plans and the San Diego Association of Governments socioeconomic forecast projections of regional population, housing and employment growth.

The proposed project involves the construction of 273 multifamily residential apartment units with 4,006 square feet of commercial use. The site is 1.5 acres in size with General Plan designation of Downtown and Zoning designation of Downtown Subdistrict 2. The intent of this designation is to provide sites for office development, interspersed with residential stand-alone and/or mixed-use development, in response to market demands. The site is also located within the Downtown Transit Oriented District (TOD) that encompasses sites within one-half mile from the Oceanside Transit Center boundaries.

The proposed project would be consistent with the existing land use and zoning designations, including its allowance for density bonus projects. Of the 273 units, a total of 28 would be designated as affordable. These units would be managed as affordable and leased to income qualifying tenants.

According to the 2021-2029 Regional Housing Needs Assessment (RHNA) 6th cycle, the City of Oceanside will need to accommodate a total of 5,443 units at varying income levels (City of Oceanside, February 2022) . Of the total, 3,457 are allocated to the moderate and above moderate-income categories. However, in the 2021-2029 Housing Element (June 2021), the City of Oceanside disclosed its ability to accommodate 4,357 of the RHNA allocation units based on the existing land use inventory. Without rezoning land to accommodate housing, the City would be in a deficit of 1,086 units. The project would provide 273 units or approximately 5% of Oceanside's housing allocation, consistent withthe 2021-2029 RHNA.

The San Diego APCD and San Diego Association of Governments are responsible for developing and implementing the clean air plans for attainment and maintenance of the ambient air quality standards in the basin—specifically, the SIP and RAQS. The federal O3 maintenance plan, which is part of the SIP, was adopted in 2012. The most recent O3 attainment plan was adopted in 2020. The SIP includes a demonstration that current strategies and tactics will maintain acceptable air quality in the basin based on the NAAQS. The RAQS was initially adopted in 1991 and is updated on a triennial basis (most recently in 2016). The RAQS outlines SDAPCD's plans and control measures designed to attain the state air quality standards for O3. The SIP and RAQS rely on information from CARB and SANDAG, including mobile and area source emissions as well as information regarding projected growth in the County and the cities in the County, to project future emissions and determine the strategies necessary for the reduction of emissions through regulatory controls.

CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends and land use plans developed by the County and the cities in the County as part of the General Plan development process. If a project proposes development that is greater than that anticipated in the local plan and SANDAG's growth projections, the project might be in conflict with the SIP and RAQS and may contribute to a potentially significant cumulative impact on air quality.

The Downtown District zoning designation is intended to support multifamily residential development; state law as well as the City's municipal code has long authorized use of density bonus. Thus, the project is consistent with City's General Plan the land use designation/zoning; and thus, is factored into SANDAG's growth projections. Furthermore, the estimated increase in population, employment and housing generated by the project was compared to SANDAG's Regional Plan population, employee population, and housing estimates for the years 2020 and 2035. The number of housing units in the City was projected to be 67,817 in 2020 and 70,395 in 2035, or an increase in 2,578 housing units over the 15-year period. Furthermore, the City's population was projected to be 177,840 residents in 2020 and 188,597 residents in 2035, or increase of 10,757 residents over the period (SANDAG 2015). The average household size is 2.8 people per dwelling unit (City of Oceanside 2013). The project would construct 273 dwelling units, which would have the potential to house approximately 764 residents, both well within the applicable growth projections.

The employee population in the City was projected to be 48,205 in 2020 and 53,283 in 2035, or increase of 10,078 employees over the period (SANDAG 2015). The residential and commercial components would employ approximately 10 persons assuming one employee per 400 square feet. Because the project is consistent with the General Plan; and thus, SANDAG's growth projections, project emissions would not conflict with the SIP and RAQS. The project would not conflict with or obstruct implementation of the AQMP. Impacts would be less than significant.

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?

Construction Emissions

Project construction would generate temporary air pollutant emissions. These impacts are associated with fugitive dust (PM_{10} and $PM_{2.5}$) and exhaust emissions from heavy construction vehicles, work crew vehicle trips in addition to ROG that would be released during the drying phase upon application of paint and other architectural coatings. Construction would generally consist of demolition (i.e., removal of the existing street pavement), site preparation (clearing/grubbing), excavation/grading, construction of the proposed buildings, architectural coating (i.e., paint) application and paving.

Emissions from the construction phase of the project were estimated using CalEEMod 2022.1. Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based primarily on CalEEMod default values. The phasing durations were provided by the applicant. For purposes of estimating project emissions, it is assumed that construction of the project would occur five days per week and commence in November 2026 and would be complete in January 2029. The duration of each phase is approximated below:

- Demolition: 2 weeks
- Site Prepartion: 2 weeks
- Grading: 12 weeks
- Building Construction: 76 weeks
- Paving: 4 weeks
- Architectural Coating: 13 weeks

Construction-worker and vendor trips estimates by construction phase were based on CalEEMod default data. Mass grading would include the entire project site. Approxiamtely 30 daily round trips would be required to remove demolition material. Approximately 58,400 cubic yards of soil export would be required during site preparation and grading. Based on the CalEEMod 2022.1 default values and grading schedule, approximately 122 daily haul trips would be required to remove the excavated material. No fill import is anticipated during and after the building construction phase. CalEEMod default daily trip calculations and trip length values were used to quantify total worker, vendor and haul trips as well as distances for all construction-related trips. The default construction equipment mix and vehicle trips used for

estimating the project-generated construction emissions were used and are provided in Appendix A. As discussed, the project would implement dust control strategies as a project design feature. To reflect implementation of proposed dust control strategies, the following was used in CalEEMod:

- Water exposed area two times per day (55% reduction in PM_{10} and $PM_{2.5}$); and
- Limit vehicle travel on unpaved roads to 10 miles per hour.

The modeling methodology conservatively provides for watering twice daily. As stated above, per APCD rules, watering during grading would occur a minimum of three times daily. Thus, the emissions Table 5 summarizes the estimated maximum daily emissions of pollutants occurring during construction.

Table 5
Estimated Maximum Daily Construction Emissions with Dust Control Measures

Construction Phase		Maximum Emissions (lbs/day)				
	ROG	NO_x	CO	SOx	PM_{10}	$PM_{2.5}$
2026 Maximum lbs/day	3.3	38.7	32.6	0.11	9.1	5.1
2027 Maximum lbs/day	3.2	36.6	32.1	0.11	7.2	3.2
2028 Maximum lbs/day	26.5	11.1	22.2	0.03	2.7	0.8
2029 Maximum lbs/day	26.6	0.9	2.7	0.001	0.4	0.1
SDAPCD Regional Thresholds	*75*	*250*	*550*	*250*	*100*	*55*
Threshold Exceeded 2022	**No**	**No**	**No**	**No**	**No**	**No**

As shown in Table 5, construction of the proposed project would not exceed the SDAPCD daily thresholds. With SDAPCD Rule 55 compliance, federal, state and local construction emission thresholds would be met. Construction emissions would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard. Impacts will be **less than significant.**

Operational Impacts

Emissions from the operational phase of the project were estimated using CalEEMod version 2022.1 for 2030. Operational year 2030 was assumed to be consistent with the anticipated stabilized occupancy of the project.

Area Sources. CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with space heating and water heating are calculated in the building energy use module of CalEEMod.

Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products. Consumer product VOC emissions are estimated in CalEEMod based on the floor area of buildings and on the default factor of pounds of VOC per building square foot per day. The CalEEMod default values for consumer products were used.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings such as paints and primers used during building maintenance. CalEEMod calculates the VOC evaporative emissions from application of surface coatings based on the VOC emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. VOC emissions were estimated based on compliance with SDAPCD Rule 67.0.1 which limits the VOC concentrations of various coatings sold and used in San Diego County. Rule 67.0.1, Table 1, lists numeous types of coatings and the allowable VOC concentrations in grams/litre (g/L).The three general coating categories are 50 grams per liter (g/L) VOC for flat coatings, 100 g/L VOC for non-flat coatings and 150 g/L VOC for non-flat high gloss coatings. Consistent with typical construction practices, it is anticipated that interior and exterior paint would not exceed non-flat coating limits, exterior paint would not exceed non-flat coating limits and a small portion of exterior paint and finishes (trim and other minor finishes) would not exceed non-flat high-gloss coatings limits. The interior and exterior coatings were estimated to have 50 g/L VOC while the traffic marking coatings were estimatedto be limited to 100 g/L VOC. The default values in CalEEMod 2022.1 rely on compliance with SDAPCD Rule 67.0.1 referenced above.

Energy Sources. Energy sources include emissions associated with building electricity and natural gas use. Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for GHGs in CalEEMod, since criteria pollutant emissions occur at the site of the power plant, which is typically off site.

City of Oceanside Development Code Section 3047, *Renewable Energy Facilities,* requires that certain types of new development, including the proposed project, install and maintain renewable energy facilities (e.g. solar photovoltaic systems). Section 3047 (A) stipulates that these system supply at least 50 percent of forecasted electricity demand. The project will install photovoltaic generating panels on the building rooftop and exterior walls to provide up to 306.7 kWh of electricity to supplement electrical demand. A total of 90% of indoor and outdoor lighting will be LED or other high-efficiency lightbulbs. Further, the project will install Energy Star, or equivalent, dishwashers, clothes washers, refrigerators, and fans; bicycle parking facilities and electric vehicle charging stations to decrease overall energy demand.

Mobile Sources. CalEEMod default data, including trip characteristics, trip lengths, variable start information and emissions factors were used for the model inputs. Project-related traffic includes the mixture of vehicles consistent with CalEEMod default vehicle fleet assumptions. Emission factors for 2030 (the first full year of project operation) were used to estimate emissions associated with full buildout of the project. Trip data used are 6.0 daily trips per multifamily unit and 40.0 trips per 1,000 square feet for the commercial/retail use. These generation rates are consistent with the Local Transportation Study prepared by CR Associates, Inc., June 2025. Based on proximity to transit, these data likely provide a conservative estimate of daily trips.

Table 6 summarizes area, energy and mobile source emissions associated with operation of the proposed project. As shown in Table 6, daily emissions would not exceed the SDAPCD thresholds for ROG, NO_X, CO, SO_X, PM_{10} or $PM_{2.5}$. Therefore, the project's air quality emissions(including impacts related to criteria pollutants, sensitive receptors and violations of air quality standards) would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard. Impacts will be less than significant.

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Construction-Related Toxic Air Contaminant Impacts

Certain construction projects can create the potential for toxic air contaminant emissions related to diesel particulate emissions associated with heavy equipment operations during construction. According to South Coast Air Quality Management District (SCAQMD) methodology, health effects from carcinogenic air toxics are usually described in terms of "individual cancer risk". A cancer risk greater than 10 cases per 1,000,000 people exposed would be considered a significant impact. The California Office of Environmental Health Hazard Assessment (OEHHA) health risk guidance states that a residential receptor should be evaluated based on a 30-year exposure period. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of toxic air contaminants over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. The construction schedule duration would be approximately 13 months; however, only a portion of the overall construction work would require the use of diesel-powered equipment. The proposed project would not result in a long-term (i.e., 30 or 70 year) exposure to a substantial source of toxic air contaminant emissions; and thus, neighboring residents would not be exposed to the related individual cancer risk. Further, existing and planned land use within the project area is focused on residential and supporting commercial uses. Thus, existing and future residents would not be exposed to neighboring development that generates TACs. Therefore, the project would not expose sensitive receptors to substantial concentrations of TACs. Impacts would be less than signficant.

Table 6
Estimated Operational Emissions

	Estimated Emissions (lbs/day)					
	ROG	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Proposed Project						
Maximum lbs/day - 2030	14.9	4.9	70.7	0.13	11.9	3.1
SDAPCD Thresholds	**75**	**250**	**550**	**250**	**100**	**55**
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**
Maximum lbs/hour	**--**	**0.2**	**2.9**	**0.005**	**--**	**--**
SDACPD Thresholds	**--**	**25**	**100**	**25**	**--**	**--**
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**
Maximum tons/year	**2.7**	**0.89**	**12.9**	**0.023**	**2.17**	**0.56**
SDAPCD Thresholds	**13.7**	**40**	**100**	**40**	**15**	**10**
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

See Appendix for CalEEMod version. 2022.1 computer model output - summer emissions shown

Carbon Monoxide Hotspots

As discussed, carbon monoxide is a colorless, odorless, poisonous gas that may be found in high concentrations near areas of high traffic volumes. CO emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. The SDAB is in attainment of state and federal CO standards; thus, CO data is no longer collected and not all monitoring stations have CO data available. The East Valley monitoring station in Escondido is the closest monitoring station to the site that collected CO data. The maximum 8-hour average CO level recorded in 2015, was 2.0 parts per million (ppm). Concentrations at that time were below the 9-ppm state and federal 8-hour standard.

Numerous factors are related to the formation of CO hotspots. The potential for CO hotspots in the SDAB is steadily decreasing because of the continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion and the already very low ambient CO concentrations. Furthermore, CO transport is extremely limited and disperses rapidly with distance from the source. Under certain extreme meteorological conditions, however, CO concentrations near a congested roadway or intersection may reach unhealthy levels.

Typically, high CO concentrations are associated with roadways or intersections operating under congested conditions. Projects contributing to adverse traffic conditions may contribute to the formation of CO hotspots. Because the City of Oceanside does not have CO hotspot guidance, the guidance recommended by the County of San Diego was applied to evaluate the potential for CO hotspots to occur as a result of the project. As indicated in the County of San

Diego Guidelines for Determining Significance and Report Format and Content Requirements Air Quality (County of San Diego 2007), a site-specific CO hotspot analysis should be performed if a proposed development would cause road intersections to operate at or below a LOS E with intersection peak-hour trips exceeding 3,000.

The proposed project was evaluated for CO hotspots under 2030 cumulative with project conditions based on projected peak hour volumes provided by CR Associates, June 2025. Of the intersections evaluated, the Mission Avenue and North Horne Street intersection would have the highest peak hour volumes. The Average Daily Traffic (ADT) would be approximately 19,854 vehicles. Approximately 10% or 1,985 vehicles would pass through the intersection during the peak hour. The intersection would operatre at LOS C in AM peak hour and LOS D in the PM peak hour. Therefore, consistent with the standards identified above, the project would not result in CO hot spots that could expose sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant.

Indoor Air Quality

CARB has stated that the control measures it has approved for reducing indoor emissions associated with the use of composite wood products, including formaldehyde, provides a level of control that protects health and safety. The first emission standards (Phase 1) went into effect in 2009 and more stringent Phase 2 standards are now in effect for all composite wood panels and finished goods sold in California. CARB regulations include provisions for no-added formaldehyde and ultra-low emitting formaldehyde-based resins, to encourage the use of these lower-emitting resins in composite wood products. Further, the project would be constructed using the most current ventilation requirements found in the Title 24 standards, including the requirement that new developments use MERV 13 or higher air filters and include mandatory compliance with the stringent CARB Phase 2 emission standards. Thus, the use of composite wood project will have no adverse impact on indoor air quality.

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

The State of California Health and Safety Code, Division 26, Part 4, Chapter 3, Section 41700, SDAPCD Rule 51, and City of Oceanside Municipal Code Section 13.16, commonly referred to as public nuisance law, prohibits emissions from any source whatsoever in such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to the public health or damage to property. Projects required to obtain permits from SDAPCD are evaluated by SDAPCD staff for potential odor nuisance, and conditions may be applied (or control equipment required) where necessary to prevent occurrence of public nuisance. SDAPCD Rule 51 also prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person. A project that involves a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors. Odor issues are subjective by the nature of odors themselves and due to the fact that their measurements are

difficult to quantify. As a result, this guideline is qualitative and will focus on the existing and potential surrounding uses and location of sensitive receptors.

The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints. Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the project. Potential odors produced during construction would be attributable to exhaust emissions, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, project construction activities would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant.

Land uses that typically are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, industrial activities, composting, refineries, landfills, dairies, and fiberglass molding facilities. The project would construct and operate a new mixed-use project with 273residential units, 4,006 square feet of commercial space, a subterrancean parking garage and related infrastructure improvements. The commercial space may accommodate a restaurant which could generate food odors. SDAPCD Rule 51 prohibits the discharge of contaminants or materials that cause or have a tendency to cause a nuisance or annoyance associated with odor. If such a use were proposed of the commercial space, compliant ventilation systems would be required to ensure compliance with SDAPCD Rule 51. As the project would not include land uses that typically result in emissions (such as those leading to odors) that adversely affect a substantial number of people, impacts would be **less than significant**.

GREENHOUSE GAS EMISSION DISCUSSION

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by both natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential

than CO_2, include fluorinated gases and sulfur hexafluoride (SF_6) (California Environmental Protection Agency [CalEPA], 2006). Different types of GHGs have varying global warming potentials (GWPs). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "carbon dioxide equivalent" (CO_2E), and is the amount of a GHG emitted multiplied by its GWP. Carbon dioxide has a GWP of one. By contrast, methane (CH_4) has a GWP of 28, meaning its global warming effect is 28 times greater than carbon dioxide on a molecule per molecule basis (IPCC, 2014).

The largest source of GHG in California is transportation, contributing 39.9 percent of the state's total GHG emissions. The industrial sector is the second largest source, contributing 21 percent of the state's GHG emissions. California emissions result in part to its geographic size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions, as compared to other states, is its relatively mild climate. In July 2017, California's state legislature passed Assembly Bill (AB) 398 to reauthorize and extend until 2030 the state's economy-wide GHG reduction program. California has established a GHG target of at least 40% below the 1990 level of emissions by 2030.

California Regulations

In 2005, former Governor Schwarzenegger issued Executive Order (EO) S-3-05, establishing statewide GHG emissions reduction targets. EO S-3-05 states that by 2020, emissions shall be reduced to 1990 levels; and by 2050, emissions shall be reduced to 80 percent of 1990 levels (CalEPA, 2006). In response to EO S-3-05, CalEPA created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the "2006 CAT Report") (CalEPA, 2006). The 2006 CAT Report recommended various strategies that the state could pursue to reduce GHG emissions. These strategies could be implemented by various state agencies to ensure that the emission reduction targets in EO S-3-05 are met and can be met with existing authority of the state agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture.

Assembly Bill 32 and CARB's Scoping Plan

To further the goals established in EO S-3-05, the Legislature passed Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. Under AB 32, CARB is responsible for and is recognized as having the expertise to carry out and develop the programs and requirements necessary to achieve the GHG emissions reduction mandate of AB 32. Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions from specified sources. This program is used to monitor and enforce compliance with established standards. CARB also is required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 authorized CARB to adopt market-

based compliance mechanisms to meet the specified requirements. Finally, CARB is responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.
In 2007, CARB approved a limit on the statewide GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 MMT CO_2E). CARB's adoption of this limit is in accordance with Health and Safety Code, Section 38550.

Further, in 2008, CARB adopted the Scoping Plan in accordance with Health and Safety Code Section 38561. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020. The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction features by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. The key elements of the Scoping Plan include the following (CARB 2008):

1. Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards;
2. Achieving a statewide renewable energy mix of 33%;
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions;
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

In the Scoping Plan (CARB 2008), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 28.5% from the otherwise projected 2020 emissions level (i.e., those emissions that would occur in 2020) absent GHG reducing laws and regulations (referred to as Business-As-Usual (BAU)). To calculate this percentage reduction, CARB assumed that all new electricity generation would be supplied by natural gas plants, no further regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at 2005 standards.

In the 2011 Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document (CARB 2011a), CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG reduction regulations. Based on the new data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7% (down from 28.5%) from the

BAU conditions. When the 2020 emissions level projection was updated to account for newly implemented regulatory measures, including Pavley I (model years 2009– 2016) and the Renewables Portfolio Standard (RPS) (12% to 20%), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16% (down from 28.5%) from the BAU conditions.

In 2014, CARB adopted the First Update to the Climate Change Scoping Plan: Building on the Framework (First Update; CARB 2014). The stated purpose of the First Update is to "highlight California's success to date in reducing its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80% below 1990 levels by 2050" (CARB 2014). The First Update found that California is on track to meet the 2020 emissions reduction mandate established by AB 32 and noted that California could reduce emissions further by 2030 to levels needed to stay on track to reduce emissions to 80% below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.

In conjunction with the First Update, CARB identified "six key focus areas comprising major components of the state's economy to evaluate and describe the larger transformative actions that will be needed to meet the state's more expansive emission reduction needs by 2050" (CARB 2014). Those six areas are (1) energy, (2) transportation (vehicles/equipment, sustainable communities, housing, fuels, and infrastructure), (3) agriculture, (4) water, (5) waste management, and (6) natural and working lands. The First Update identifies key recommended actions for each sector that will facilitate achievement of EO S-3-05's 2050 reduction goal (CARB 2014).

Based on CARB's research efforts presented in the First Update, it has a "strong sense of the mix of technologies needed to reduce emissions through 2050" (CARB 2014). Those technologies include energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies. As part of the First Update, CARB recalculated the state's 1990 emissions level using more recent GWPs identified by the IPCC. Using the recalculated 1990 emissions level (431 MMT CO_2E) and the revised 2020-emissions-level projection identified in the 2011 Final Supplement, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of approximately 15% (instead of 28.5% or 16%) from the BAU conditions (CARB 2014).

In January 2017, CARB released, *The 2017 Climate Change Scoping Plan Update (*Second Update; CARB 2017b), for public review and comment. This update proposes CARB's strategy for achieving the state's 2030 GHG target as established in Senate Bill (SB) 32 (discussed below), including continuing the Cap-and-Trade Program through 2030, and includes a new approach to reduce GHGs from refineries by 20%. The Second Update incorporates approaches to cutting short-lived climate pollutants (SLCPs) under the Short-Lived Climate Pollutant Reduction Strategy (a planning document that was adopted by CARB in March 2017), acknowledges the need for reducing emissions in agriculture, and highlights the work underway to ensure that

California's natural and working lands increasingly sequester carbon. During development of the Second Update, CARB held a number of public workshops in the Natural and Working Lands, Agriculture, Energy, and Transportation sectors to inform development of the 2030 Scoping Plan Update (CARB 2016). The Second Update has not been considered by CARB's Governing Board at the time this analysis was prepared.

Executive Order S-01-07 was enacted on January 18, 2007. The order mandates that a Low Carbon Fuel Standard ("LCFS") for transportation fuels be established for California to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020.

Adopted December 15, 2022, CARB's 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. To achieve the targets of AB 1279, the 2022 Scoping Plan relies on existing and emerging fossil fuel alternatives and clean technologies, as well as carbon capture and storage. Specifically, the 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (i.e., Climate Action Plan) consistent with CEQA Guidelines Section 15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation. Specifically, the 2022 Scoping Plan intends to rapidly move towards zero-emission transportation (i.e., electrifying cars, buses, trains, and trucks), which constitutes California's single largest source of GHGs. The regulations that impact the transportation sector are adopted and enforced by CARB on vehicle manufacturers and are outside the jurisdiction and control of local governments. The 2022 Scoping Plan accelerates development of new regulations as well as amendments to strengthen regulations and programs already in place. Included in the 2022 Scoping Plan is a set of Local Actions (2022 Scoping Plan Appendix D) focused on providing local jurisdictions with tools to reduce GHGs and assist the state in meeting the targets set forth in the 2022 Scoping Plan. The 2022 Scoping Plan also includes a section on evaluating plan-level and project-level alignment with the State's Climate Goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new residential and mixed-use development to determine consistency with the 2022 Scoping Plan. These approaches are recommendations only and are not requirements. They do not supplant lead agencies' discretion to develop their own evidence-based approaches for determining whether a project would have a potentially significant impact on GHG emissions.

Other regulations affecting state and local GHG planning and policy development are summarized as follows:

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

Senate Bill 1368
SB 1368 required the California Public Utilities Commission (CPUC) to establish a performance standard for baseload generation of GHG emissions by investor-owned utilities by February 1, 2007 and for local publicly owned utilities by June 30, 2007. These standards could not exceed the GHG emissions rate from a baseload combined-cycle, natural gas-fired plant. Furthermore, the legislation states that all electricity provided to the State, including imported electricity, must be generated by plants that meet the standards set by CPUC and California Energy Commission (CEC).

Senate Bill 97
Senate Bill 97 (SB 97) was adopted August 2007 and acknowledges that climate change is an environmental issue that requires analysis under CEQA. SB 97 directed the Governor's Office of Planning and Research (OPR), which is part of the State Natural Resources Agency, to prepare, develop, and transmit to CARB guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, by July 1, 2009. The Natural Resources Agency was required to certify and adopt those guidelines by January 1, 2010. On December 30, 2009 the Natural Resources Agency adopted amendments to the CEQA guidelines that address GHG emissions. The CEQA Guidelines Amendments changed sections of the CEQA Guidelines and incorporated GHG language throughout the Guidelines. However, no GHG emissions thresholds of significance were provided and no specific mitigation measures were identified. The GHG emission reduction amendments went into effect on March 18, 2010 and are summarized below:

1. Climate action plans and other greenhouse gas reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.

2. Local governments are encouraged to quantify the greenhouse gas emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. The section also recommends consideration of several qualitative factors that may be used in the determination of significance, such as the extent to which the given project complies with state, regional, or local GHG reduction plans and policies. OPR does not set or dictate specific thresholds of significance. Consistent with existing CEQA Guidelines, OPR encourages local governments to develop and publish their own thresholds of significance for GHG impacts assessment.

3. When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies, or recommended by experts.

4. New amendments include guidelines for determining methods to mitigate the effects of greenhouse gas emissions in Appendix F of the CEQA Guidelines.

5. OPR is clear to state that "to qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project; general compliance with a plan, by itself, is not mitigation."

6. OPR's emphasizes the advantages of analyzing GHG impacts on an institutional, programmatic level. OPR therefore approves tiering of environmental analyses and highlights some benefits of such an approach.

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

Senate Bills 1078, 107, and X1-2 and Executive Orders S-14-08 and S-21-09
Senate Bill 1078 (SB 1078) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. Senate Bill 107 (SB 107) changed the target date to 2010. Executive Order S-14-08 was signed on November 2008 and expands the State's Renewable Energy Standard to 33 percent renewable energy by 2020. Executive Order S-21-09 directed CARB to adopt regulations by July 31, 2010 to enforce S-14-08. Senate Bill X1-2 codifies the 33 percent renewable energy requirement by 2020.

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

The 2022 Title 24 standards are the currently applicable building energy efficiency standards, and became effective on January 1, 2023. The 2022 Title 24 Building Energy Efficiency Standards will further reduce energy used and associated GHG emissions compared to prior standards.

On August 11, 2021, the CEC adopted the 2022 Energy Code. In December 2021, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery

storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.

Senate Bill 375

SB 375 (2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 required CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. Regional metropolitan planning organizations are then responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan (RTP). The goal of the SCS is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies. Pursuant to California Government Code Section 65080(b)(2)(K), an SCS does not regulate the use of land; supersede the land use authority of cities and counties; or require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations. The targets adopted for SANDAG in 2010 are a 7% reduction in per-capita passenger-vehicle GHG emissions by 2020 and a 13% reduction by 2035, measured relative to 2005 GHG emissions. In 2018, CARB adopted the second round of SB 375 reduction targets, and increased SANDAG's 2020 target to a 15% reduction in per-capita passenger-vehicle GHG emissions, and the 2035 target to a 19% reduction using the same 2005 baseline.

Senate Bill X7-7

Senate Bill X7-7 (SB X7-7), enacted on November 9, 2009, mandates water conservation targets and efficiency improvements for urban and agricultural water suppliers. SB X7-7 requires the Department of Water Resources (DWR) to develop a task force and technical panel to develop alternative best management practices for the water sector. Additionally, SB X7-7 required the DWR to develop criteria for baseline uses for residential, commercial, and industrial uses for both indoor and landscaped area uses. The DWR was also required to develop targets and regulations that achieve a statewide 20 percent reduction in water usage.

Title 24 Building Energy Efficiency Standards

California's Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6) was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods.

Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. On August 11, 2021, the CEC adopted the 2022 Energy Code. In December 2021, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. Among other updates like strengthened ventilation standards for gas cooking appliances, the 2022 Energy Code includes updated standards such as new electric heat pump requirements for residential uses, schools, offices, banks, libraries, retail, and grocery stores; the promotion of electric-ready requirements for new homes including the addition of circuitry for electric appliances, battery storage panels and dedicated infrastructure to allow for the conversion from natural gas to electricity; and the expansion of solar photovoltaic and battery storage standards to additional land uses including high-rise multi-family residences, hotels and motels, tenant spaces, offices (including medical offices and clinics), retail and grocery stores, restaurants, schools, and civic uses (including theaters auditoriums, and convention centers). Newly constructed commercial buildings would also be required to have a solar photovoltaic (PV) array and an energy storage system (ESS) installed. Projects whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.

California Green Building Standards

Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every few years by the Building Standards Commission and the California Energy Commission (CEC) (and revised if necessary) (California Public Resources Code, Section 25402(b)(1)). The regulations receive input from members of industry, as well as the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (California Public Resources Code, Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility (California Public Resources Code, Section 25402(d)) and cost effectiveness (California Public Resources Code, Sections 25402(b)(2) and (b)(3)). These standards are updated to consider and incorporate new energy efficient technologies and construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2019 Title 24 building energy efficiency standards and became effective on January 1, 2020 and addressed lighting, heating, cooling, ventilation, and water heating stamdards. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards and strengthens ventilation standards.

Title 24 California Green Building Standards Code

The California Green Building Standards Code (CCR Title 24, Part 11 code) commonly referred to as the CALGreen Code, is a statewide mandatory construction code developed and adopted

by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics: planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. The CALGreen Code also provides voluntary measures (CALGreen Tier 1 and Tier 2) that local governments may adopt which encourage or require additional measures in the five green building topics. CALGreen's Tier 1 standards call for a 15% improvement in energy requirements, stricter water conservation, 65% diversion of construction and demolition waste, 10% recycled content in building materials, 20% permeable paving, 20% cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30% improvement in energy requirements, stricter water conservation, 75% diversion of construction and demolition waste, 15% recycled content in building materials, 30% permeable paving, 25% cement reduction, and cool/solar-reflective roofs.

Title 20

Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must be certified through the CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing for each type of appliance covered under the regulations and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

Executive Order B-30-15

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing statewide GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing statewide GHG emissions to 80% below 1990 levels by 2050 as set forth in EO S-3-05. To facilitate achievement of this goal, EO B-30-15 calls for an update to CARB's Scoping Plan to express the 2030 target in terms of MMT CO2E. EO B-30-15 also calls for state agencies to continue to develop and implement GHG

emission reduction programs in support of the reduction targets. EO B-30-15 does not require local agencies to take any action to meet the new interim GHG reduction target.

Senate Bill 32 and Assembly Bill 197

SB 32 and AB 197 (enacted in 2016) are companion bills that set new statewide GHG reduction targets, make changes to CARB's membership, increase legislative oversight of CARB's climate change–based activities, and expand dissemination of GHG and other air quality–related emissions data to enhance transparency and accountability. More specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 added two members of the Legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

SB 350— Clean Energy and Pollution Reduction Act of 2015

In October 2015, the legislature approved and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Provisions for a 50 percent reduction in the use of petroleum statewide were removed from the Bill because of opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

1. Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027.

2. Double the energy efficiency in existing buildings by 2030. This target will be achieved through the CPUC, the CEC, and local publicly-owned utilities.

3. Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

SB 100

On September 10, 2018, Governor Brown signed SB 100, which raises California's RPS requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100

percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Executive Order B-55-18
On September 10, 2018, Governor Brown signed Executive Order B-55-2018 which established a new statewide goal to achieve carbon neutrality as soon as possible and no later than 2045. The executive order also states that California will achieve and maintain net negative emissions thereafter.

AB 2127
AB 2127 promotes better planning for EV infrastructure build-out across all vehicle classes. AB 2127 would help the state meet the goal of 5 million zero-emission vehicles (ZEV) on the road by 2030.

Local Regulations and CEQA Requirements
Pursuant to the requirements of SB 97, the Resources Agency has adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted CEQA Guidelines provide general regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, but contain no suggested thresholds of significance for GHG emissions. Instead, lead agencies are given the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. The general approach to developing a Threshold of Significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move the state towards climate stabilization. If a project would generate GHG emissions above the threshold level, its contribution to cumulative impacts would be considered significant.

The California Supreme Court addressed the issue of GHG emissions and the evaluation of potential impacts in CEQA documents, in the Center for Biological Diversity v. California Department of Fish and Wildlife and Newhall Land and Farming case, (2015) 224 Cal.App.4th 1105 (CBD vs. CDFW), also known as the "Newhall Ranch" case. The justices examined one of the most common approaches to GHG analyses for development projects which was evaluating the efficiency of a project's emissions reduction in the context of the AB 32's 2020 reduction goal, as presented in the statewide CARB Scoping Plan, using a comparison to an unregulated, "business as usual (BAU)" emissions scenario. As discussed in the Newhall Ranch decision, determining consistency with local GHG reduction plans or Climate Action Plans that qualify under Section 15183.5 of the CEQA Guidelines may be the most effective strategy for local governments to assess the significance of GHG emissions from proposed land use developments. Qualified CAPs also provide a workable option for addressing post-2020 GHG emissions and resolving issues that arise out of project-level GHG analyses raised in the Court's decision.

City of Oceanside Climate Action Plan

The City has held public workshops on the City's General Plan Update, which included the development and adoption of a Climate Action Plan (CAP) and the Energy and Climate Action Element (E-CAP). The E-CAP proactively supports statewide efforts to cut GHG emissions by expanding local renewable energy generation, reducing energy use, promoting recycling and reuse, facilitating active transportation, and encouraging other sustainable practices. The E-CAP builds upon a variety of City projects that promote energy efficiency, increased renewable energy use, water conservation, and solid waste reduction. These include the Oceanside Boulevard Vision Statement, which encourages the restoration of Loma Alta Creek in conjunction with a transit-oriented mixed-use development; the Coast Highway Vision and Strategic Plan, which promotes environmentally and economically sustainable infill and redevelopment within the North Coast Highway corridor; the Water Conservation Master Plan; the Zero Waste Plan; and the Energy Roadmap.

As part of this effort to ensure a sustainable future, the City prepared a GHG emissions inventory and a CAP, both of which inform the E-CAP. The City's Final CAP was adopted on May 8, 2019. Subsequent to adoption of the Final CAP, the City developed and approved a CAP Consistency Checklist. Thus, the City has established efficiency metric thresholds, which projects are to use to evaluate impacts from GHG emissions to assist the City with meeting state reduction targets for 2020 and 2030.

California State laws governing GHG emissions are written to conform to both the Global Warming Solutions Act of 2006 (AB 32) and Senate Bill 32 (SB 32). These laws are intended to reduce GHG emissions within the state to goals set forth within these laws. The current State goals are to reduce GHG emissions by 40 percent below 1990 levels by 2030. To demonstrate local compliance with measures intended to meet statewide goals, the City of Oceanside has adopted a screening threshold of 900 metric tons of GHG's per year or the utilization of an efficiency/service population (SP) threshold. In cases where projects would exceed the 900 metric ton annual standard, projects are required to meet an efficiency metric threshold of 4.0 MT CO2E per service population (MT CO2E/SP) per year for projects that will be implemented prior to year 2020 and an efficiency metric threshold of 3.5 MT CO2E/SP for projects that will not be implemented prior to 2020. Projects that meet these thresholds would be considered consistent with the City's CAP.

CLIMATE CHANGE IMPACT ANALYSIS

Thresholds of Significance

Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions in March 2010. These guidelines are used in evaluating the cumulative significance of GHG emissions from the proposed project. According to the adopted CEQA Guidelines, impacts related to GHG emissions from the proposed project would be significant if the project would:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and/or

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The vast majority of individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence to climate change; therefore, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15355).

For future projects, the significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds, or consistency with a regional GHG reduction plan (such as a Climate Action Plan). The proposed project is evaluated herein based on use of a screening threshold of 900 MT CO2e annually or CAP's 3.5 MT CO2e/service population as referenced above.

Methodology

GHG emissions associated with construction and operation of the proposed project and existing development have been estimated using California Emissions Estimator Model (CalEEMod) version 2022.1.

Construction Emissions

Construction of the proposed project would generate temporary GHG emissions primarily associated with the operation of construction equipment, worker trips and truck trips required for hauling excavation spoils, materials and equipment. Site preparation and grading typically generate the greatest emission quantities because the use of heavy equipment is greatest during this phase of construction. Emissions associated with the construction period were estimated based on the projected maximum amount of equipment that would be used on-site at one time. Air districts such as the SDAPCD have recommended amortizing construction-related emissions over a 30-year period to calculate annual emissions. Complete CalEEMod results and assumptions can be viewed in the Appendix.

Operational Emissions

Default values used in CalEEMod version 2022.1 are based on the CEC sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies. CalEEMod provides operational emissions of CO_2, N_2O and CH_4. This methodology has been subjected to peer review by numerous public and private stakeholders, and in particular by the CEC; and therefore, is considered reasonable and reliable for use in GHG impact analysis pursuant to CEQA. It is also recommended by CAPCOA (January 2008).

Emissions associated with area sources (i.e., consumer products, landscape maintenance, and architectural coating) were calculated in CalEEMod based on standard emission rates from CARB, USEPA, and district supplied emission factor values (CalEEMod User Guide, 2022). Emissions from waste generation were also calculated in CalEEMod and are based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic content of waste (CalEEMod User Guide, April 2022). Waste disposal rates by land use and overall composition of municipal solid waste in California was primarily based on data provided by the California Department of Resources Recycling and Recovery (CalRecycle).

Emissions from water and wastewater usage calculated in CalEEMod were based on the default electricity intensity from the CEC's 2006 Refining Estimates of Water-Related Energy Use in California using the average values for Northern and Southern California. Emissions from mobile sources were quantified based on trip generation rates in the Local Transportation Analysis (June 2025).

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

Construction Emissions

Construction activity analysis is based on the anticipated construction period of approximately 28 months beginning in November 2026 and concluding in January 2029. Based on CalEEMod results, construction activity for the project would generate an estimated 62 metric tons of carbon dioxide equivalent (MT CO_2E) in 2026; 891 MT CO_2E in 2027; 545 MT CO_2E and 5 MT CO_2E in 2029, as shown in Table 7. Amortized over a 30-year period (the assumed life of the project), construction of the proposed project would generate 50 metric tons of CO_2E per year.

Table 7
Estimated Construction Related Greenhouse Gas Emissions

Year	Annual Emissions (metric tons CO_2E)
2026	62
2027	891
2028	545
2029	5
Total	**1,503**
Amortized over 30 years	**50**

See Appendix for CalEEMod software program output

Operational Indirect and Stationary Direct Emissions

Operational emissions relate to energy use, solid waste, water use, and transportation. Each source is discussed below and includes the emissions associated with existing development and the anticipated emissions that would result from the proposed project.

Energy Use. CalEEMod default values for electricity use and natural gas consumption for each land use type were applied for the proposed land use designation. The energy use from residential and commercial land uses is calculated in CalEEMod based on the Commercial End-Use Survey. Energy use in buildings (both natural gas and electricity) is divided by CalEEMod into end-use categories subject to Title 24 requirements (end uses associated with the building envelope, such as the HVAC system, water heating system, and integrated lighting) and those not subject to Title 24 requirements (such as appliances, electronics, and miscellaneous"plug-in" uses).

Operational GHG emissions from energy sources include natural gas combustion for appliances and space and water heating. The current Title 24, Part 6 standards, referred to as the 2022 Title 24 Building Energy Efficiency Standards, became effective on January 1, 2023. The current version of CalEEMod calculates electricity and natural gas emissions based on consumption estimates and Title 24 2019 Building Energy Efficiency Standards (CalEEMod Users Guide, 2022). CalEEMod default energy intensity factors (CO2, CH4, and N2O mass emissions per kilowatt hour) for SDG&E were based on the value for SDG&E's energy mix in 2021.

Without operation of a photovoltaic system, a total of 387 MT CO_2E would need to be generated to meet the project's electrical demand. As shown in Table 8, with the photovoltaic system, the overall emissions associated with electrical energy use at the project site would be approximately 305 metric tons of CO_2E per year. An additional 104 MT CO_2E would be attributable to natural gas.

Water Use Emissions**.** Based on the amount of electricity generated to supply and convey this amount of water, as shown in Table 8, the project would generate approximately 25 metric tons of CO_2E per year. Emissions related to water consumption would be reduced by 20% per Senate Bill X7-7, by implementing measures that include the installation of low flow plumbing fixtures (i.e., faucets, toilets, show heads) and water efficient irrigation systems.

Solid Waste Emissions. Implementation of a municipal recycling program that would achieve a 75% diversion rate statewide is required for residential uses per the California Integrated Waste Management Act of 1989 (AB 939). The CalEEMod results indicate that the project would result in approximately 16 metric tons of CO_2E per year associated with solid waste disposed within landfills provided 75% of solid waste is recycled (Table 9).

Transportation Emissions. Mobile source GHG emissions were estimated using the trip generation rates used in the Local Transportation Study (CR Associates, Inc., June 2025). Further, consistent with the project description and applicable requirements, the analysis considered that electrical vehicle charging and bicycle parking would be provided on-site. Table

Table 8
Estimated Annual Energy-Related Greenhouse Gas Emissions

Emission Source	Annual Emissions (CO_2E)
Proposed Project	
Electricity	305 metric tons
Natural Gas	104 metric tons
Total	**409 metric tons**

See Appendix for CalEEMod software program output.

Table 9
Estimated Annual
Solid Waste and Water Use Greenhouse Gas Emissions

Emission Source	Annual Emissions (CO_2E)
Water	25 metric tons
Solid Waste	16 metric tons
Total Water and Solid Waste	**41 metric tons**

See Appendix for CalEEMod software program output.

10 shows the estimated mobile emissions of GHGs for the project based on the estimated annual VMT of 5,816,417 as estimated by CalEEMod 2022.1 (see Appendix A) As shown in Table 10, the project would generate approximately 1,911 metric tons of CO_2E associated with new vehicle trips.

Combined Construction, Stationary and Mobile Source Emissions

Table 11 combines the net new construction, operational, and mobile GHG emissions associated with the proposed project. As discussed above, temporary emissions associated with construction activity (approximately 50 metric tons CO_2E) are amortized over 30 years (the anticipated life of the project).

Table 10
Estimated Annual Mobile Emissions of Greenhouse Gases

Emission Source	Annual Emissions (CO_2E)
Proposed Project	
Mobile Emissions (CO_2 & CH_4)	1,911 metric tons
Total	**1,911 metric tons**

See Appendix for CalEEMod software program output.

Table 11
Combined Annual Greenhouse Gas Emissions

Emission Source	Annual Emissions (CO_2E)
Construction	50 metric tons
Operational	
Energy	409 metric tons
Solid Waste	16 metric tons
Water	25 metric tons
Area Source	5 metic tons
Mobile	1,911 metric tons
Total	**2,416 metric tons**

See Appendix for CalEEMod software program output.

For the proposed project, the combined annual emissions would total approximately 2,416 metric tons per year in CO_2E. The proposed project is evaluated based on the threshold of 900 MT CO_2E annually. Project-related annual GHG emissions would exceed the 900 metric ton screening threshold; thus, emissions were compared to the SP threshold addressed above. The project is expected to house up to 764 residents based on 2.8 residents per household as stated above. The total number of employees anticipated to work at the project site is 10. The total number of residents and employees comprisng the Service Population is 774. The total GHG emissions (2,416 MT) divided by 774 would equal 3.12 MT CO2e per person. This would be less than 3.5, the SP threshold of significance that the City of Oceanside has established for projects developed after 2020. Thus, the project will not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Construction and operational project impacts from GHG emissions would be less than significant.

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

As referenced, specific goals and actions included in the City of Oceanside CAPand Title 24 that pertain to the proposed project include those addressing energy and water use reduction, promotion of green building measures, waste reduction, and reduction in vehicle miles traveled. The proposed project would also be required to implement all mandatory green building measures for new residential and commercial development under the CALGreen Code. This would require the project be designed to reduce water consumption, increase building system efficiencies, divert construction waste from landfills, and install low pollutant emitting finish materials. Implementation of these building and appliance standards would result in water, energy, and construction waste reductions for the proposed project. These requirements are included in the CAP Checklist prepared by the applicant to demonstrate project consistency with applicable elements of the CAP.

Consistency with EO S-3-05 and SB 32

EO S-3-05. This EO establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050.

SB 32. This bill establishes a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, shall ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by December 31, 2030.

The City prepared a GHG emissions inventory included in the above referenced CAP. The City's Final CAP was adopted on May 8, 2019. The CAP demonstrates that, with implementation of applicable General Plan objectives and policies, coupled with state and federal actions and execution of CAP measures and actions, the City will reduce GHG emissions consistent with state goals established by Senate Bill 32 and maintain a trajectory to meet its proportional share of the 2050 state target identified in Executive Order S-3-05. The project GHG emissions would not exceed the calculated efficiency metric threshold of 3.5 MT CO_2e/SP/year for a project constructed after 2020 established by the City for purposes of determining whether projects would conflict with applicable State goals and policies regarding GHG reductions, include SB 32 and Executive Order S-3-05,

CARB has indicated that statewide, California is on track to achieving both the 2030 and 2050 goals. This is confirmed in the 2017 Scoping Plan, which states that the Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while identifying new, technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction targets. Table 12 summarizes the Project's consistency with applicable action elements of the 2017 Scoping Plan.

As stated, the project would not generate enough GHG emissions to cumulatively contribute to global climate change. Measures implemented by the project to reduce overall GHG emissions would also contribute to GHG statewide reduction goals. Thus, the project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases and impacts would be less than significant.

Table 12
2017 Scoping Plan Consistency Summary

ACTION	RESPONSIBLE PARTIES	CONFLICT?
Implement SB 350 by 2030		
Increase the Renewables Portfolio Standard to 50% of retail sales by 2030 and ensure grid reliability.	California Public Utility Commission (CPUC), California Energy Commission (CEC) and	No Conflict. The Project would use energy from San Diego Gas and Electric (SDG&E). SDG&E has committed to diversify their portfolio of energy sources by

ACTION	RESPONSIBLE PARTIES	CONFLICT?
	California Air Resources Board (CARB)	increasing energy from wind and solar sources. The Project would not interfere with or obstruct SDG&E's energy source diversification efforts.
Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.		No Conflict. The Project would be constructed in compliance with current CBC requirements including the 2022 Building and Energy Efficiency Standards and the 2022 California Green Building Standard requirements.
Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in Integrated Resource Planning (IRP) to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly-owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRPs.		
Implement Mobile Source Strategy (Cleaner Technology and Fuels)		
At least 1.5 million zero emission and plugin hybrid light-duty EVs by 2025.	CARB, California State Transportation Agency (CalSTA), Strategic Growth Council (SGC), California Department of Transportation (Caltrans), CEC, Office of Planning and Research (OPR), Local Agencies	No Conflict. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty EV 2025 targets. As this is a CARB enforced standard, vehicles that access the Project must comply with the standards as applicable; and thus, would comply with the strategy. Further, the project would provide EV and/or EV ready spaces as required by the City.
At least 4.2 million zero emission and plugin hybrid light-duty EVs by 2030.		No Conflict. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty EV 2030 targets.
Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.	CARB, California State Transportation Agency (CalSTA), Strategic Growth Council (SGC), California Department of Transportation (Caltrans), CEC, Office of Planning and	No Conflict. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.

ACTION	RESPONSIBLE PARTIES	CONFLICT?
Medium- and Heavy-Duty GHG Phase 2.	Research (OPR), Local Agencies	No Conflict. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to implement Medium- and Heavy-Duty GHG Phase 2.
Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20% of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100% of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NOX standard.		Not Applicable. This measure is not related to the project scope.
Last Mile Delivery: New regulation that would result in the use of low NOX or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5% of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10% in 2025 and remaining flat through 2030.		No Conflict. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to improve last mile delivery emissions.
Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document "Potential VMT Reduction Strategies for Discussion."		No Conflict. As noted in the VMT analysis, the project is located in a low-VMT generating area (85% of regional average) as identified on the most recent SANDAG SB 743 Screening map. The project site proximal to bus transit stops and located less that 0.5 miles from the Oceanside Transit Station. Proximity to transit services would reduce daily vehicle trips. Further, on-site bicycle parking and EV charging stations would be provided to support use of alternative transportation modes and use of zero emission electric vehicles.
Increase stringency of SB 375 Sustainable Communities Strategy (2035 targets).	CARB	No Conflict. The project would not exceed the City's GHG emission thresholds or otherwise conflict with GHG reduction efforts.

ACTION	RESPONSIBLE PARTIES	CONFLICT?
Harmonize project performance with emissions reductions and increase competitiveness of transit and active transportation modes (e.g., via guideline documents, funding programs, project selection, etc.).	CalSTA, SGC, OPR, CARB, Governor's Office of Business and Economic Development (GOBiz), California Infrastructure and Economic Development Bank (IBank), Department of Finance (DOF), California Transportation Commission (CTC), Caltrans	No Conflict. The project would not conflict with use of adjacent streets by pedestrians or bicycles. Further, transit service is provided by the North County Transit District (BREEZE) Routes 303 and 313. The westbound stops is located along Mission Avenue in front of the site. The eastbound stop is located one block to the east. The Oceanside Transportation Center is located less than 0.5 miles from the site.
By 2019, develop pricing policies to support low-GHG transportation (e.g., low emission vehicle zones for heavy duty, road user, parking pricing, transit discounts).	CalSTA, Caltrans, California Transportation Commission (CTC), OPR, SGC, CARB	Not Applicable. This measure is not related to the project scope.
Implement California Sustainable Freight Action Plan		
Improve freight system efficiency.	CalSTA, CalEPA, California Natural Resource Agency (CNRA), CARB, Caltrans, CEC, GO-Biz	No Conflict. This measure would apply to all trucks accessing the project site. It is presumed that these vehicles would primarily be delivery vans operated as part of the statewide goods movement sector. Access to the Project site would be provided from North Horne Street and North Clementine Street.
Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near zero emission freight vehicles and equipment powered by renewable energy by 2030.		Not applicable. This measure is unrelated to the project scope.
Adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.	CARB	No Conflict. When adopted, this measure would apply to all fuel purchased for use in vehicles accessing the project site. The Project would not obstruct or interfere with agency efforts to adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.
Implement the Short-Lived Climate Pollutant Strategy (SLPS) by 2030		
40% reduction in methane and hydrofluorocarbon emissions below 2013 levels.	CARB, CalRecycle, California Department of Food and Agriculture (CDFA), California State Water Resource Control	No Conflict. The Project would be required to comply with this measure and reduce any Project-source SLPS emissions accordingly. The Project would not

ACTION	RESPONSIBLE PARTIES	CONFLICT?
	Board (SWRCB), Local Air Districts	obstruct or interfere with agency efforts to reduce SLPS emissions.
Implement the post-2020 Cap-and-Trade Program with declining annual caps.	CARB	No Conflict. The Project would be required to comply with applicable Cap-and-Trade Program provisions. The Project would not obstruct or interfere agency efforts to implement the post-2020 Cap-and-Trade Program.
By 2018, develop Integrated Natural and Working Lands Implementation Plan to secure California's land base as a net carbon sink:		
Protect land from conversion through conservation easements and other incentives.	CNRA, Departments Within CDFA, CalEPA, CARB	Not applicable. The site is not a property identified by federal, state, or local law for conservation.
Increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity.		Not applicable. The entire site is planned for development.
Utilize wood and agricultural products to increase the amount of carbon stored in the natural and built environments.		No Conflict. To the extent appropriate for the proposed mixed-use buildings, wood products would be used in construction, including roof structure. Additionally, the Project includes landscaping appropriate for an urban location.
Establish scenario projections to serve as the foundation for the Implementation Plan.		Not applicable. This measure is unrelated to the project scope.
Implement Forest Carbon Plan.	CNRA, California Department of Forestry and Fire Protection (CAL FIRE), CalEPA and Departments Within	Not applicable. This measure is unrelated to the project scope.
Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.	State Agencies & Local Agencies	Not applicable. This measure is specific to state and local governments and cannot be implemented by the project. The project will be constructed and operated in a manner to that will reduce GHG consumption consistent with state and local policies and regulations.

San Diego Association of Governments: San Diego Forward

Regarding consistency with SANDAG's Regional Plan (Regional Plan), the project would not conflict with the policy objectives of the Regional Plan and SB 375. Table 13 illustrates that the

project does not conflict with applicable goals and policies of San Diego Forward: The Regional Plan (SANDAG 2021). As shown in Table 13, the project is consistent with applicable Policy Objectives and Strategies from the San Diego Forward – the 2021 Regional Plan.

Table 13
San Diego Forward: The Regional Plan Analysis

Category	Policy Objective or Strategy	Conflict Analysis
The Regional Plan –Implementation Actions		
Land Use and Habitat	The 2021 Regional Plan vision for land use focuses on development and growth in Mobility Hub areas to preserve the region's habitat and open space while supporting transportation investments and reducing vehicle miles traveled (VMT).	No Conflict. The project would be consistent with planned land use for the site and would not adversely impact habitat. Further, the project site is within ½ mile of the North County Transit District (NCTD) Bus Routes 303 and 313 and within ½ miles from the Oceanside Transportation Center. The project is proposed within a VMT efficient area as determined by City of Oceanside guidelines (approved August 2020). Further, the site is located in a low-VMT generating area (85% of regional average) as identified on the most recent SANDAG SB 743 Screening map.
Housing	The 2021 Regional Plan addresses the housing crisis through Mobility Hubs, bringing locations where people live and work closer together and providing more housing options for more San Diegans through increased density.	No Conflict. The project would provide affordable and market rate housing within ½ mile of the Oceanside Transportation Center and NCTD and BREEZE bus routes 303 and 313.The project would utilitze density bonus benefits to increase the supply of affordable and market rate units per the City of Oceanside General Plan.
Climate Action Planning	To help reach regional and state greenhouse gas (GHG) emissions–reduction targets, the 2021 Regional Plan focuses heavily on the conversion to clean transportation and a shift from personal vehicle dependency through the 5 Big Moves.	No Conflict. The project would not impact regional initiatives to reduce GHG emissions. The project would be consistent with the City of Oceanside CAP and Service Population threshold for GHG emissions. The project's placement of 273 dwelling units and 4,006 square feet of commercial space in proximity to the NCTD transit resources is consistent with the 2021 Regional Plan's efforts to shift from personal vehicle dependency.
Climate Adaptation and Resilience	The 2021 Regional Plan aims to better prepare San Diego communities and habitats for climate change impacts by considering evacuation and rapid mobility needs in our transit corridors, evaluating and considering climate vulnerabilities to the region's transportation infrastructure, and using natural lands and conservation to absorb	No Conflict. The project would not impact regional efforts to implement actions related to climate adaptation. Further, the development would occur in an urban setting that has been identified by the City's General Plan and zoning as appropriate for development and is on a previously disturbed portion of the property outside the hardline preserve areas of the draft Habitat Conservation Plan. Thus, consistent with the 2021 Regional Plan, the project would not

	and protect against climate change impacts.	impact the utilization of natural lands to absorb and protect against climate change impacts.
Electric Vehicles	SANDAG aims to incentivize and encourage the incorporation of all types of EVs into Flexible Fleets, Transit Leap, and goods movement and to support funding programs that increase the number of EVs and charging stations throughout the region and within Mobility Hubs and as part of the Complete Corridor strategy	No Conflict. The project would provide EV charging stations on-site.
Parking and Curb Management	The 2021 Regional Plan addresses curb management by proposing strategies to help balance competing and changing travel needs at the curb while remaining flexible to resident, employee, business, and visitor needs.	Not Applicable. The project would provide on-site parking and make all frontage improvements required by the City to ensure travel needs at the curb are met and off-site connectivity is maintained.
Transportation Demand Management	SANDAG will continue to administer and monitor the iCommute program by providing regional rideshare, employer outreach, and bike education and secure parking services to help reduce commute-related traffic congestion and vehicle miles traveled.	Not Applicable. The project would not affect implementation of SANDAG's ongoing TDM programs.
Vision Zero	Vision Zero is a national campaign to eliminate all traffic-related deaths and serious injuries by focusing on policies and the redesign of streets to create a transportation system that is safe for everyone.	Not Applicable. The project would not affect SANDAG's initiative to redesign streets and modify the transportation system.
Fix It First	The Fix It First strategy aims to repair existing roads and create a system for sustained maintenance in the future, creating a safe and efficient transportation network for all users.	No Conflict. The project would not affect SANDAG's goal related to the fix it first program. The Local Transportation Study (August 2024) determined the project will not generate the need for additional circulation improvements.
Transportation System Management and Operations	TSMO includes the establishment of institutional and governance actions to help advance and facilitate cross-agency collaboration to ensure existing and proposed transportation systems are not operated or	Not Applicable. The project would not affect SANDAGs ability to create and manage a TSMO program.

	managed as independent systems but as a multimodal transportation system.	
Value Pricing and User Fees	The 2021 Regional Plan explores a network of Managed Lanes, a mileage-based road usage charge, a fee on the fares charged for rides provided by transportation network companies, and further subsidization of transit fares.	Not Applicable. The project would not affect SANDAGs ability to create and manage a value pricing and user fee program.
Sustainable Communities Strategy (SCS) – Strategies Related to Reimagined Transportation System		
Complete Corridors	Focuses on regional transportation system including managed lanes, rural corridors, regional arterial network and other improvements.	Not applicable. The project would have no affect on the regional transportation system or SANDAGs efforts to improve the system.
Transit Leap	Provide new and expanded transit services including commuter rail, light rail, high speed rail, local buses and micro-transit.	Not applicable. The project would have no affect on the provision of regional transit services. The project would promote transit use as the site is adjacent to NCTD Bus Routes 303 and 313 and less than ½ mile from the Oceanside Transportation Center.
Mobility Hubs	Invest in a transportation mobility network that focus on micro-mobility, rideshare and micro-transit and other features that promote the development of mobility hubs.	Not Applicable. The project would not impair SANDAG's ability to invest in the development of mobility hubs.
Next OS	Next OS is the digital network that maximizes the efficiency and effectiveness of the other Big Moves—Complete Corridors, Transit Leap, Mobility Hubs, and Flexible Fleets—to make the entire transportation system work at its peak potential.	Not Applicable. The project would not impair SANDAG's ability to develop and/or expand the Next OS infrastructure.
Active Transportation	This strategy would develop a network to make critical connections along Complete Corridors and other streets, providing people with safe and convenient ways to connect to and from Transit Leap services and many other destinations within and between Mobility Hubs.	Not Applicable. The project would not impair the ability of SANDAG to implement the active transportation system.

Climate Strategies	This strategy focuses on measures to mitigate climate change and adapt to inevitable impacts will make our region more resilient. Resilience is defined as "the ability to prepare for changing conditions and withstand, respond to, and recover rapidly from disruptions.	No Conflict. As disclosed throughout this report, the project would not impact regional efforts to implement actions related to climate adaptation.
Innovative Demand and System Management	Innovative demand and system management strategies are programs that encourage and support a choice of alternatives to driving alone. These alternatives include working remotely, carpooling, vanpooling, and choosing transit or active transportation.	Not Applicable. The project would not impair the ability of SANDAG to implement an innovative demand and system management program. However, the project would generally encourage the choice of alternatives to driving alone as it is within ½ mile of the NCTD Bus Routes 03 and 13 and the Oceanside Transportation Center.

Source: SANDAG 2021.

2022 Scoping Plan Consistency

CARB's 2022 Scoping Plan sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. The 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (i.e., Climate Action Plan) consistent with CEQA Guidelines Section 15183.5. Statewide strategies to reduce GHG emissions in the latest 2022 Scoping Plan include implementing SB 100, which would achieve 100 percent clean electricity by 2045; achieving 100 percent zero emission vehicle sales in 2035 through Advanced Clean Cars II; and implementing the Advanced Clean Fleets regulation to deploy ZEV buses and trucks. Additional transportation policies include the Off-Road Zero Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, In-use Off-Road Diesel Fueled Fleets Regulation, Clean Off-Road Fleet Recognition Program, and Amendments to the In-use Off-Road Diesel-Fueled Fleets Regulation.

The 2022 Scoping Plan would continue to implement SB 375. GHGs would be further reduced through the Cap-and-Trade Program carbon pricing and SB 905. SB 905 requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate carbon dioxide removal projects and technology. As indicated above, GHG reductions are also achieved as a result of State of California energy and water efficiency requirements for new residential development. These efficiency improvements correspond to reductions in secondary GHG emissions. For example, in California, most of the electricity that powers homes

is derived from natural gas combustion. Therefore, energy saving measures, such as Title 24, reduces GHG emissions from the power generation facilities by reducing load demand. The 2022 Scoping Plan Appendix D provides local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. The 2022 Scoping Plan Appendix D focuses on Residential and Mixed-Use Projects. The 2022 Scoping Plan Appendix D lists potential actions that support the State's climate goals. However, the 2022 Scoping Plan notes that the applicability and performance of the actions may vary across the regions. The document is organized into two categories (A) examples of plan-level GHG reduction actions that could be implemented by local governments and (B) examples of on-site project design features, mitigation measures, that could be required of individual projects under CEQA, if feasible, when the local jurisdiction is the lead agency. The Project would include a number of the Standard Conditions and mitigation measures for construction and operation. For example, the 2022 Scoping Plan's construction actions include enforcing idling time restrictions on construction vehicles and requiring construction vehicles to operate highest tier engines commercially available. The Project would include a majority of the feasible operational mitigation measures listed in the 2022 Scoping Plan Appendix D as design features. Some of the recommended operational measures would include providing bicycle parking, creating on- and off-site safety improvements for bike, pedestrian, and transit connections, requiring solar panels, drought-tolerant landscaping, and energy conserving appliances. As discussed above, the Project would be consistent with all applicable plan goals and applicable regulatory programs designed to reduce GHG emissions generated by land use projects. The Project would be subject to compliance with all building codes in effect at the time of construction, which include energy conservation measures mandated by California Building Standards Code Title 24 – Energy Efficiency Standards. Because Title 24 standards require energy conservation features in new construction (e.g., high- efficiency lighting, high-efficiency heating, ventilating, and air-conditioning (HVAC) systems, thermal insulation, double-glazed windows, water conserving plumbing fixtures), they indirectly regulate and reduce GHG emissions. California's Building Energy Efficiency Standards are updated on an approximately three-year cycle. As shown above, the majority of the Project's emissions are from energy and mobile sources, which would be further reduced by the 2022 Scoping Plan actions described above. The City has no control over vehicle emissions; however, these emissions would decline in the future because of Statewide measures as well as cleaner technology and fleet turnover. Many State plans and policies would contribute to a reduction in the Project's mobile source emissions, including the following:

CARB's Advanced Clean Truck Regulation: Adopted in June 2020, CARB's Advanced Clean Truck Regulation requires truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8.

Executive Order N-79-20: Executive Order N-79-20 establishes the goal for all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, to be zero-emission by 2035 and all medium and heavy-duty vehicles to be zero-

emission by 2045. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing volumes" of new ZEVs "towards the target of 100 percent."

CARB's Mobile Source Strategy: CARB's Mobile Source Strategy takes an integrated planning approach to identify the level of transition to cleaner mobile source technologies needed to achieve all of California's targets by increasing the adoption of ZEV buses and trucks.

CARB's Sustainable Freight Action Plan: The Sustainable Freight Action Plan which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks. This Plan applies to all trucks accessing the Project site and may include existing trucks or new trucks that are part of the Statewide goods movement sector.

CARB's Emissions Reduction Plan for Ports and Goods Movement: CARB's Emissions Reduction Plan for Ports and Goods Movement identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories. While these measures are not directly applicable to the Project, any commercial activity associated with goods movement would be required to comply with these measures as adopted.

The Project would not obstruct or interfere with efforts to increase ZEVs or State efforts to improve system efficiency. Compliance with applicable State standards (e.g., continuation of the Cap-and-Trade regulation; CARB's Mobile Source Strategy, Sustainable Freight Action Plan, and Advanced Clean Truck Regulation; Executive Order N-79-20; SB 100/renewable electricity portfolio improvements that require 60 percent renewable electricity by 2030 and 100 percent renewable by 2045, etc.) would ensure consistency with State and regional GHG reduction planning efforts, including the 2022 Scoping Plan. It is also noted that the Project would not convert any Natural and Working Lands (NWL) and/or decrease the State's urban forest carbon stock, which are areas of emphasis in the 2022 Scoping Plan.

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that Project operations would benefit from applicable measures enacted to meet State GHG reduction goals. The Project would not impede the State's progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan. Thus, impacts related to consistency with the 2022 Scoping Plan would be less than significant. The Project would not conflict with the applicable plans and regulatory programs that are discussed above; and therefore, with respect to this particular threshold, the Project does not have a significant impact.

Consistency Analysis with City of Oceanside General Plan

The project also would be consistent with the goals set forth in the City's General Plan Environmental Resource Management Element, Land Use Element, and Circulation Element that are designed to reduce the emissions of GHGs, reduce energy use in buildings and infrastructure, and promote the use of renewable energy sources, conservation, and other methods of efficiency. Table 14 outlines the project's consistency with applicable General Plan goals. As shown in Table 14, the project would not conflict with applicable and goals and policies of the City's General Plan to the extent feasible.

Table 14
City of Oceanside General Plan – Project Conflict Analysis

Goal	Conflict Analysis
Environmental Resource Management Element[a]	
Air Quality. Cooperate with County, State, and federal agencies in continuing programs of air quality improvement.	No Conflict. The project would not impair the City's ability to work with the County, state, and other local agencies.
Land Use Element	
Air Quality. The City shall cooperate with the San Diego County Air Pollution Control Board, and participate in the Regional Air Control Strategy (RAQS).	No Conflict. The project would not impair the City's ability to work with the SDAPCD Board or RAQS.
Bicycle Facilities. Policy A: Development shall provide Class II Bikeways (Bike Lanes) on all secondary, major, and prime arterials.	No Conflict. The implementation of street improvements by the project would serve as new linkages to the City's existing bicycle and pedestrian network and implement recommendations identified in the City of Oceanside 2017 Bicycle Master Plan. The street segments proximal to the site have Class 3 bike sharrow markings except on westbound Mission Avenue, eastbound Seagaze Drive and northbound North Horne Street. North Clementine Street is not marked with a sharrow; however, bicycle access is provided on the western-most lane. No off-site bike marking improvements are proposed or required of the project.
Bicycle Facilities. Policy D: The use of land shall integrate the Bicycle Circulation System with auto, pedestrian, and transit systems: 1. Development shall provide short-term bicycle parking and long-term bicycle storage facilities such as bicycle racks, pedestal posts, and rental bicycle lockers. 2. Development shall provide safe and convenient bicycle access to high activity land uses, such as schools, parks, shopping, employment, and entertainment centers.	No Conflict. The project would install bicycle parking facilities with the parking garage. This would facilitate the use of bicycles to access downtown Oceanside and related commercial development to the west.

Pedestrian. Policy A: The construction of five (5) foot wide sidewalks adjacent to the curb shall be required in all new developments and street improvements.	No Conflict. All existing sidewalks meet City of Oceanside 5-foot width standards.The project would reconstruct existing sidewalk segments impacted by constructing the main entrance from North Horne Street. There are no missing sidewalk segments that would require construction along Mission Avenue, North Horne Street, North Clementine Street or Seagaze Drive.
Transit System. Policy A: The City shall coordinate and encourage the existing bus system to serve newly developed areas.	No Conflict. NCTD Bus Routes 303 and 313 are adjacent to the site along Mission Avenue and North Horne Street. The Oceanside Transportation Center is less than ½ mile from the project access. On Mission Avenue, the closest bus stops from the project site are located both east and west of North Horne Street (Route 303) and along N Horne Street and Seagaze Drive, both east and west of Mission Avenue (Route 313).
Energy. Policy A. The City shall encourage the design, installation, and use of passive and active solar collection systems.	No Conflict. Solar generating systems would be installed on the building rooftop and walls to offset electrical energy demand.
Energy. Policy B. The City shall encourage the use of energy efficient design, structures, materials, and equipment in all land developments or uses.	No Conflict. The project would incorporate integrated energy efficiency measures such as energy-efficient appliances to meet or exceed Title 24 requirements.
Circulation Element	
Policy 2.5. The City will strive to incorporate complete streets throughout Oceanside.	Not applicable. The project would not impair the City's ability to incorporate complete streets throughout the City.
Pedestrian Facilities. Support walking as a primary means of transportation.	No Conflict. . The project would not impair the City's ability to support walkability throughout the City. Existing pedestrian infrastructure along would not be affected by the project. As stated, NCTD Bus Routes 03 and 13 are adjacent to the site. The Oceanside Transportation Center is ess than ½ mile from the project access.
Intelligent Transportation System Technologies. Improve air quality and reduce greenhouse gas emissions through traffic signal optimization and the use of advanced signal control technologies.	Not applicable. The project would not impair the City's ability to optimize traffic signals or use advanced signal control technologies.
Transportation Demand Management. The City shall look for opportunities to incorporate Transportation Demand Management (TDM) programs into their Energy Roadmap that contributes to state and regional goals for saving energy and reducing greenhouse gas emissions.	Not applicable. The project would not impair the City's ability to incorporate TDM strategies into their Energy Roadmap.

Applicable Oceanside Development Code Regulations

City of Oceanside Development Code Section 3047, *Renewable Energy Facilities,* requires certain types of new development, including the proposed project, to install and maintain renewable

energy facilities (e.g. solar photovoltaic systems) to reduce emissions associated with the generation of electricity. Section 3047(A) stipulates that these systems supply at least 50 percent of forecasted electricity demand. In this case, the photovoltaic system would be designed to provide 306,700 kWh annually which is approximately 27 percent of the total annual demand (e.g., 1,138,634 kWh). However, as stated in City of Oceanside Development Code Section 3047, *Renewable Energy Facilities,* in the event that installing a renewable energy facility is not feasible, applicants can purchase an energy portfolio comprising at least 75% renewable, emissions-free energy. To achieve code compliance given the projections, the applicant will purchase an energy portfolio (such as the one available through the Clean Energy Alliance) that ensures at least 50% of the project's total energy demand will be met from renewable sources. Total GHG emissions reported herein are conservatrviely based on the electrical energy demand reduced solely by the generated on-site renewable sources.

As required by Section 3048, the proposed project will provide preferential parking and charging facilities for electric vehicles EVs. The project would provide 30 EV charging spaces. One additional charging space would be unassigned for leasing guests. A total of 132 spaces would be EV ready with low-power receptacles.

Consistent with Section 3049 (Urban Forestry), the project will provide a minimum canopy tree area of 12% and a minimum permeable surface area of 22%.

Conclusion

As stated herein, the project is new construction of 273 multifamily apartment units in one new building with surface and subterranean parking. The proposed apartment building would contain 273 units and 4,006 square feet of commercial space in eight levels with 328 parking spaces in a four-level parking garage under the building. An additional five parallel parking spaces would be provided along the frontage for the commercial space.

Would the project conflict with or obstruct implementation of the applicable air quality plan?

The project is consistent with the Downtown Subdistrict 2 zoning designation and is anticipated in the local plans and SANDAG's population and employment growth projections. Thus, the project would be within SANDAG's population growth forecast and would not conflict with the SIP and RAQS.

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

Project construction and operational emissions would not exceed the SDAPCD thresholds. Thus, the project would not result in a cumulatively considerable net

increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.

Would the project expose sensitive receptors to substantial pollutant concentrations?
The project would not cause or contribute to CO hot spots or otherwise expose receptors to substantial pollutant concentrations during construction or operations.

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

The project would provide 273 residential units, 4,006 square feet of commercial/retail space, associated parking and related infrastructure improvements. These uses would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

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

The proposed project would generate annual GHG emissions; however, the emissions would not exceed the SP threshold of 3.5 MT CO2e each year.

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

The project would not conflict with the City of Oceanside Climate Action Plan, 2017 and 2022 CARB Scoping Plans, the City of Oceanside General Plan and the SANDAG Regional Plan; San Diego Forward. Further, the project would comply with applicable development code regulations pertaining to renewable energy, EV spaces and charging facilities as well as the Urban Forestry.

Impacts related to air quality and greenhouse gas emissions would be less than significant based on information presented herein and in the project materials.

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Appendix A

CalEEMod Air Quality and Greenhouse Gas Emissions Model Results –

901 Mission Avenue Mixed Use Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	901 Mission Avenue Mixed Use
Construction Start Date	11/29/2027
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.90
Precipitation (days)	20.6
Location	33.19753464207251, -117.37584193079988
County	San Diego
City	Oceanside
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6231
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.29

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
Apartments Mid Rise	273	Dwelling Unit	7.18	262,080	1,000	—	762	—

Strip Mall	4.01	1000sqft	0.09	4,006	200	—	—	—
Enclosed Parking with Elevator	328	Space	2.95	131,200	100	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Transportation	T-4	Integrate A ordable and Below Market Rate Housing
Transportation	T-14*	Provide Electric Vehicle Charging Infrastructure
Energy	E-10-B	Establish Onsite Renewable Energy Systems: Solar Power
Water	W-7	Adopt a Water Conservation Strategy
Waste	S-1/S-2	Implement Waste Reduction Plan

* 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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.97	11.6	24.0	0.03	0.35	2.47	2.82	0.33	0.59	0.92	—	5,943	5,943	0.25	0.28	10.2	6,042
Mit.	1.97	11.6	24.0	0.03	0.35	2.47	2.82	0.33	0.59	0.92	—	5,943	5,943	0.25	0.28	10.2	6,042
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	26.6	38.7	32.6	0.12	1.28	7.81	9.06	1.14	3.97	5.12	—	15,335	15,335	0.70	1.44	0.48	15,781

Mit.	26.6	38.7	32.6	0.12	1.28	7.81	9.06	1.14	3.97	5.12	—	15,335	15,335	0.70	1.44	0.48	15,781
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.44	11.6	16.5	0.03	0.36	2.15	2.51	0.33	0.61	0.94	—	5,266	5,266	0.24	0.35	3.37	5,380
Mit.	4.44	11.6	16.5	0.03	0.36	2.15	2.51	0.33	0.61	0.94	—	5,266	5,266	0.24	0.35	3.37	5,380
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.81	2.11	3.01	0.01	0.07	0.39	0.46	0.06	0.11	0.17	—	872	872	0.04	0.06	0.56	891
Mit.	0.81	2.11	3.01	0.01	0.07	0.39	0.46	0.06	0.11	0.17	—	872	872	0.04	0.06	0.56	891
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.97	11.6	24.0	0.03	0.35	2.47	2.82	0.33	0.59	0.92	—	5,943	5,943	0.25	0.28	10.2	6,042
2028	1.90	11.0	23.4	0.03	0.32	2.47	2.79	0.29	0.59	0.89	—	5,871	5,871	0.18	0.28	9.24	5,967
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.30	38.7	32.6	0.12	1.28	7.81	9.06	1.14	3.97	5.12	—	15,335	15,335	0.70	1.44	0.48	15,781
2027	3.19	36.6	32.2	0.12	1.20	6.03	7.23	1.07	2.08	3.15	—	15,129	15,129	0.70	1.38	0.44	15,560
2028	26.6	11.2	22.2	0.03	0.32	2.47	2.79	0.29	0.59	0.89	—	5,746	5,746	0.19	0.28	0.24	5,833
2029	26.6	0.92	2.73	< 0.005	0.01	0.43	0.44	0.01	0.10	0.11	—	555	555	0.01	0.02	0.03	561

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.18	1.68	1.60	< 0.005	0.07	0.27	0.34	0.06	0.13	0.19	—	373	373	0.02	0.01	0.08	377
2027	1.47	11.6	16.5	0.03	0.36	2.15	2.51	0.33	0.61	0.94	—	5,266	5,266	0.24	0.35	3.37	5,380
2028	4.44	6.44	12.9	0.02	0.19	1.36	1.55	0.17	0.33	0.50	—	3,242	3,242	0.11	0.15	2.22	3,291
2029	1.35	0.05	0.14	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	28.4	28.4	< 0.005	< 0.005	0.03	28.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.03	0.31	0.29	< 0.005	0.01	0.05	0.06	0.01	0.02	0.03	—	61.7	61.7	< 0.005	< 0.005	0.01	62.5
2027	0.27	2.11	3.01	0.01	0.07	0.39	0.46	0.06	0.11	0.17	—	872	872	0.04	0.06	0.56	891
2028	0.81	1.18	2.35	< 0.005	0.03	0.25	0.28	0.03	0.06	0.09	—	537	537	0.02	0.02	0.37	545
2029	0.25	0.01	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.71	4.71	< 0.005	< 0.005	< 0.005	4.76

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.97	11.6	24.0	0.03	0.35	2.47	2.82	0.33	0.59	0.92	—	5,943	5,943	0.25	0.28	10.2	6,042
2028	1.90	11.0	23.4	0.03	0.32	2.47	2.79	0.29	0.59	0.89	—	5,871	5,871	0.18	0.28	9.24	5,967
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.30	38.7	32.6	0.12	1.28	7.81	9.06	1.14	3.97	5.12	—	15,335	15,335	0.70	1.44	0.48	15,781
2027	3.19	36.6	32.2	0.12	1.20	6.03	7.23	1.07	2.08	3.15	—	15,129	15,129	0.70	1.38	0.44	15,560
2028	26.6	11.2	22.2	0.03	0.32	2.47	2.79	0.29	0.59	0.89	—	5,746	5,746	0.19	0.28	0.24	5,833
2029	26.6	0.92	2.73	< 0.005	0.01	0.43	0.44	0.01	0.10	0.11	—	555	555	0.01	0.02	0.03	561
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.18	1.68	1.60	< 0.005	0.07	0.27	0.34	0.06	0.13	0.19	—	373	373	0.02	0.01	0.08	377

2027	1.47	11.6	16.5	0.03	0.36	2.15	2.51	0.33	0.61	0.94	—	5,266	5,266	0.24	0.35	3.37	5,380
2028	4.44	6.44	12.9	0.02	0.19	1.36	1.55	0.17	0.33	0.50	—	3,242	3,242	0.11	0.15	2.22	3,291
2029	1.35	0.05	0.14	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	28.4	28.4	< 0.005	< 0.005	0.03	28.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.03	0.31	0.29	< 0.005	0.01	0.05	0.06	0.01	0.02	0.03	—	61.7	61.7	< 0.005	< 0.005	0.01	62.5
2027	0.27	2.11	3.01	0.01	0.07	0.39	0.46	0.06	0.11	0.17	—	872	872	0.04	0.06	0.56	891
2028	0.81	1.18	2.35	< 0.005	0.03	0.25	0.28	0.03	0.06	0.09	—	537	537	0.02	0.02	0.37	545
2029	0.25	0.01	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.71	4.71	< 0.005	< 0.005	< 0.005	4.76

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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.9	4.93	70.8	0.13	0.14	12.2	12.3	0.13	3.08	3.22	130	16,265	16,395	13.8	0.53	30.8	16,930
Mit.	14.8	4.82	69.5	0.13	0.14	11.8	12.0	0.13	3.00	3.13	42.9	15,406	15,449	5.03	0.51	30.0	15,756
% Reduced	1%	2%	2%	3%	2%	3%	3%	2%	3%	3%	67%	5%	6%	64%	5%	2%	7%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.5	5.15	46.1	0.13	0.13	12.2	12.3	0.12	3.08	3.20	130	15,614	15,744	13.8	0.56	2.65	16,259
Mit.	12.4	5.03	45.0	0.12	0.12	11.8	12.0	0.12	3.00	3.12	42.9	14,770	14,813	5.06	0.53	2.63	15,101
% Reduced	1%	2%	3%	3%	2%	3%	3%	2%	3%	3%	67%	5%	6%	63%	5%	1%	7%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.1	4.84	53.3	0.12	0.13	11.1	11.2	0.12	2.82	2.94	130	14,792	14,922	13.8	0.52	13.4	15,434
Mit.	13.0	4.73	52.2	0.12	0.13	10.8	10.9	0.12	2.74	2.86	42.9	13,969	14,012	5.01	0.49	13.1	14,298

% Reduced	1%	2%	2%	3%	2%	3%	3%	2%	3%	3%	67%	6%	6%	64%	5%	2%	7%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.39	0.88	9.73	0.02	0.02	2.03	2.05	0.02	0.51	0.54	21.5	2,449	2,470	2.28	0.09	2.23	2,555
Mit.	2.37	0.86	9.53	0.02	0.02	1.97	2.00	0.02	0.50	0.52	7.11	2,313	2,320	0.83	0.08	2.18	2,367
% Reduced	1%	2%	2%	3%	2%	3%	3%	2%	3%	3%	67%	6%	6%	64%	5%	2%	7%

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.44	4.24	49.1	0.13	0.09	12.2	12.2	0.08	3.08	3.16	—	13,134	13,134	0.55	0.47	28.9	13,316
Area	8.48	0.19	21.4	< 0.005	0.02	—	0.02	0.01	—	0.01	—	65.6	65.6	< 0.005	< 0.005	—	65.8
Energy	0.03	0.49	0.21	< 0.005	0.04	—	0.04	0.04	—	0.04	—	2,957	2,957	0.19	0.02	—	2,967
Water	—	—	—	—	—	—	—	—	—	—	18.9	109	128	1.95	0.05	—	190
Waste	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	389
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.90	1.90
Total	14.9	4.93	70.8	0.13	0.14	12.2	12.3	0.13	3.08	3.22	130	16,265	16,395	13.8	0.53	30.8	16,930
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.33	4.66	45.9	0.12	0.09	12.2	12.2	0.08	3.08	3.16	—	12,548	12,548	0.58	0.50	0.75	12,711
Area	6.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.03	0.49	0.21	< 0.005	0.04	—	0.04	0.04	—	0.04	—	2,957	2,957	0.19	0.02	—	2,967
Water	—	—	—	—	—	—	—	—	—	—	18.9	109	128	1.95	0.05	—	190
Waste	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	389
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.90	1.90

Total	12.5	5.15	46.1	0.13	0.13	12.2	12.3	0.12	3.08	3.20	130	15,614	15,744	13.8	0.56	2.65	16,259
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.78	4.26	42.6	0.11	0.08	11.1	11.2	0.07	2.82	2.89	—	11,693	11,693	0.53	0.45	11.5	11,854
Area	7.31	0.10	10.6	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.3	32.3	< 0.005	< 0.005	—	32.5
Energy	0.03	0.49	0.21	< 0.005	0.04	—	0.04	0.04	—	0.04	—	2,957	2,957	0.19	0.02	—	2,967
Water	—	—	—	—	—	—	—	—	—	—	18.9	109	128	1.95	0.05	—	190
Waste	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	389
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.90	1.90
Total	13.1	4.84	53.3	0.12	0.13	11.1	11.2	0.12	2.82	2.94	130	14,792	14,922	13.8	0.52	13.4	15,434
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.06	0.78	7.77	0.02	0.01	2.03	2.04	0.01	0.51	0.53	—	1,936	1,936	0.09	0.08	1.91	1,963
Area	1.33	0.02	1.93	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.36	5.36	< 0.005	< 0.005	—	5.37
Energy	0.01	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	490	490	0.03	< 0.005	—	491
Water	—	—	—	—	—	—	—	—	—	—	3.14	18.0	21.2	0.32	0.01	—	31.5
Waste	—	—	—	—	—	—	—	—	—	—	18.4	0.00	18.4	1.84	0.00	—	64.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31
Total	2.39	0.88	9.73	0.02	0.02	2.03	2.05	0.02	0.51	0.54	21.5	2,449	2,470	2.28	0.09	2.23	2,555

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.27	4.13	47.9	0.13	0.08	11.8	11.9	0.08	3.00	3.08	—	12,791	12,791	0.53	0.46	28.1	12,969
Area	8.48	0.19	21.4	< 0.005	0.02	—	0.02	0.01	—	0.01	—	65.6	65.6	< 0.005	< 0.005	—	65.8
Energy	0.03	0.49	0.21	< 0.005	0.04	—	0.04	0.04	—	0.04	—	2,462	2,462	0.16	0.01	—	2,470
Water	—	—	—	—	—	—	—	—	—	—	15.2	87.0	102	1.56	0.04	—	152

Waste	—	—	—	—	—	—	—	—	—	—	27.8	0.00	27.8	2.78	0.00	—	97.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.90	1.90
Total	14.8	4.82	69.5	0.13	0.14	11.8	12.0	0.13	3.00	3.13	42.9	15,406	15,449	5.03	0.51	30.0	15,756
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.16	4.54	44.7	0.12	0.08	11.8	11.9	0.08	3.00	3.08	—	12,221	12,221	0.56	0.48	0.73	12,380
Area	6.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.03	0.49	0.21	< 0.005	0.04	—	0.04	0.04	—	0.04	—	2,462	2,462	0.16	0.01	—	2,470
Water	—	—	—	—	—	—	—	—	—	—	15.2	87.0	102	1.56	0.04	—	152
Waste	—	—	—	—	—	—	—	—	—	—	27.8	0.00	27.8	2.78	0.00	—	97.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.90	1.90
Total	12.4	5.03	45.0	0.12	0.12	11.8	12.0	0.12	3.00	3.12	42.9	14,770	14,813	5.06	0.53	2.63	15,101
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.63	4.14	41.5	0.11	0.08	10.8	10.9	0.07	2.74	2.81	—	11,387	11,387	0.51	0.44	11.2	11,543
Area	7.31	0.10	10.6	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.3	32.3	< 0.005	< 0.005	—	32.5
Energy	0.03	0.49	0.21	< 0.005	0.04	—	0.04	0.04	—	0.04	—	2,462	2,462	0.16	0.01	—	2,470
Water	—	—	—	—	—	—	—	—	—	—	15.2	87.0	102	1.56	0.04	—	152
Waste	—	—	—	—	—	—	—	—	—	—	27.8	0.00	27.8	2.78	0.00	—	97.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.90	1.90
Total	13.0	4.73	52.2	0.12	0.13	10.8	10.9	0.12	2.74	2.86	42.9	13,969	14,012	5.01	0.49	13.1	14,298
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.03	0.76	7.56	0.02	0.01	1.97	1.99	0.01	0.50	0.51	—	1,885	1,885	0.08	0.07	1.86	1,911
Area	1.33	0.02	1.93	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.36	5.36	< 0.005	< 0.005	—	5.37
Energy	0.01	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	408	408	0.03	< 0.005	—	409
Water	—	—	—	—	—	—	—	—	—	—	2.51	14.4	16.9	0.26	0.01	—	25.2
Waste	—	—	—	—	—	—	—	—	—	—	4.60	0.00	4.60	0.46	0.00	—	16.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31

Total	2.37	0.86	9.53	0.02	0.02	1.97	2.00	0.02	0.50	0.52	7.11	2,313	2,320	0.83	0.08	2.18	2,367

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

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

Location	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	2.29	20.7	19.0	0.03	0.84	—	0.84	0.78	—	0.78	—	3,427	3,427	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	0.16	0.16	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.57	0.52	< 0.005	0.02	—	0.02	0.02	—	0.02	—	93.9	93.9	< 0.005	< 0.005	—	94.2
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.5	15.5	< 0.005	< 0.005	—	15.6
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.57	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	132	132	0.01	0.01	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
Hauling	< 0.005	0.27	0.10	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	204	204	0.01	0.03	0.01	214
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.64	3.64	< 0.005	< 0.005	0.01	3.69
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
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.59	5.59	< 0.005	< 0.005	0.01	5.87
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.60	0.60	< 0.005	< 0.005	< 0.005	0.61
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
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.97

3.2. Demolition (2026) - Mitigated

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

Location	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	2.29	20.7	19.0	0.03	0.84	—	0.84	0.78	—	0.78	—	3,427	3,427	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	0.16	0.16	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.57	0.52	< 0.005	0.02	—	0.02	0.02	—	0.02	—	93.9	93.9	< 0.005	< 0.005	—	94.2
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.5	15.5	< 0.005	< 0.005	—	15.6
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.57	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	132	132	0.01	0.01	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
Hauling	< 0.005	0.27	0.10	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	204	204	0.01	0.03	0.01	214
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.64	3.64	< 0.005	< 0.005	0.01	3.69

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
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.59	5.59	< 0.005	< 0.005	0.01	5.87
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.60	0.60	< 0.005	< 0.005	< 0.005	0.61
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
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.97

3.3. Site Preparation (2026) - Unmitigated

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

Location	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	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.80	0.79	< 0.005	0.03	—	0.03	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	0.21	0.21	—	0.11	0.11	—	—	—	—	—	—	—

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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	0.04	0.04	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.67	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	154	154	0.01	0.01	0.01	156
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.25	4.25	< 0.005	< 0.005	0.01	4.31
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.70	0.70	< 0.005	< 0.005	< 0.005	0.71
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
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

3.4. Site Preparation (2026) - Mitigated

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

Location	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	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.80	0.79	< 0.005	0.03	—	0.03	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	0.21	0.21	—	0.11	0.11	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	0.04	0.04	—	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

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.67	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	154	154	0.01	0.01	0.01	156
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.25	4.25	< 0.005	< 0.005	0.01	4.31
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.70	0.70	< 0.005	< 0.005	< 0.005	0.71
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
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

3.5. Grading (2026) - Unmitigated

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

Location	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	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621

Dust From Material Movement	—	—	—	—	—	3.60	3.60	—	1.43	1.43	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.21	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.7	51.7	< 0.005	< 0.005	—	51.8
Dust From Material Movement	—	—	—	—	—	0.03	0.03	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.55	8.55	< 0.005	< 0.005	—	8.58
Dust From Material Movement	—	—	—	—	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.76	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	176	176	0.01	0.01	0.02	178
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
Hauling	0.18	11.4	4.28	0.06	0.16	2.26	2.42	0.11	0.62	0.72	—	8,561	8,561	0.43	1.38	0.46	8,982

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.39	1.39	< 0.005	< 0.005	< 0.005	1.41
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
Hauling	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	67.0	67.0	< 0.005	0.01	0.06	70.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.23
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
Hauling	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.1	11.1	< 0.005	< 0.005	0.01	11.6

3.6. Grading (2026) - Mitigated

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

Location	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	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	3.60	3.60	—	1.43	1.43	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.21	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.7	51.7	< 0.005	< 0.005	—	51.8

Dust From Material Movement	—	—	—	—	—	0.03	0.03	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.55	8.55	< 0.005	< 0.005	—	8.58
Dust From Material Movement	—	—	—	—	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.76	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	176	176	0.01	0.01	0.02	178
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
Hauling	0.18	11.4	4.28	0.06	0.16	2.26	2.42	0.11	0.62	0.72	—	8,561	8,561	0.43	1.38	0.46	8,982
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.39	1.39	< 0.005	< 0.005	< 0.005	1.41
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
Hauling	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	67.0	67.0	< 0.005	0.01	0.06	70.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.23
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
Hauling	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.1	11.1	< 0.005	< 0.005	0.01	11.6

3.7. Grading (2027) - Unmitigated

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

Location	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	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	3.60	3.60	—	1.43	1.43	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	3.90	4.16	0.01	0.16	—	0.16	0.15	—	0.15	—	1,007	1,007	0.04	0.01	—	1,011
Dust From Material Movement	—	—	—	—	—	0.55	0.55	—	0.22	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.71	0.76	< 0.005	0.03	—	0.03	0.03	—	0.03	—	167	167	0.01	< 0.005	—	167
Dust From Material Movement	—	—	—	—	—	0.10	0.10	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.72	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	173	173	0.01	0.01	0.02	175
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
Hauling	0.18	11.0	4.17	0.06	0.16	2.26	2.42	0.11	0.62	0.72	—	8,359	8,359	0.43	1.32	0.43	8,764
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.6	26.6	< 0.005	< 0.005	0.04	27.0
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
Hauling	0.03	1.68	0.63	0.01	0.02	0.34	0.37	0.02	0.09	0.11	—	1,276	1,276	0.07	0.20	1.09	1,338
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.40	4.40	< 0.005	< 0.005	0.01	4.46
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
Hauling	0.01	0.31	0.12	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	211	211	0.01	0.03	0.18	222

3.8. Grading (2027) - Mitigated

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

Location	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	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	3.60	3.60	—	1.43	1.43	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	3.90	4.16	0.01	0.16	—	0.16	0.15	—	0.15	—	1,007	1,007	0.04	0.01	—	1,011
Dust From Material Movement	—	—	—	—	—	0.55	0.55	—	0.22	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.71	0.76	< 0.005	0.03	—	0.03	0.03	—	0.03	—	167	167	0.01	< 0.005	—	167
Dust From Material Movement	—	—	—	—	—	0.10	0.10	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.72	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	173	173	0.01	0.01	0.02	175
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

Hauling	0.18	11.0	4.17	0.06	0.16	2.26	2.42	0.11	0.62	0.72	—	8,359	8,359	0.43	1.32	0.43	8,764
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.6	26.6	< 0.005	< 0.005	0.04	27.0
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
Hauling	0.03	1.68	0.63	0.01	0.02	0.34	0.37	0.02	0.09	0.11	—	1,276	1,276	0.07	0.20	1.09	1,338
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.40	4.40	< 0.005	< 0.005	0.01	4.46
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
Hauling	0.01	0.31	0.12	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	211	211	0.01	0.03	0.18	222

3.9. Building Construction (2027) - Unmitigated

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

Location	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	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.52	4.76	6.56	0.01	0.17	—	0.17	0.16	—	0.16	—	1,215	1,215	0.05	0.01	—	1,219
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.87	1.20	< 0.005	0.03	—	0.03	0.03	—	0.03	—	201	201	0.01	< 0.005	—	202
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.89	0.62	10.4	0.00	0.00	2.14	2.14	0.00	0.50	0.50	—	2,311	2,311	0.11	0.08	7.49	2,346
Vendor	0.04	1.56	0.74	0.01	0.02	0.33	0.35	0.02	0.09	0.11	—	1,234	1,234	0.05	0.17	2.75	1,290
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.87	0.78	9.11	0.00	0.00	2.14	2.14	0.00	0.50	0.50	—	2,183	2,183	0.12	0.09	0.19	2,213
Vendor	0.04	1.61	0.75	0.01	0.02	0.33	0.35	0.02	0.09	0.11	—	1,235	1,235	0.05	0.17	0.07	1,288
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.39	4.67	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,116	1,116	0.06	0.04	1.64	1,132
Vendor	0.02	0.81	0.38	< 0.005	0.01	0.16	0.17	0.01	0.05	0.05	—	626	626	0.02	0.09	0.60	653
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.85	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	185	185	0.01	0.01	0.27	187
Vendor	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	104	104	< 0.005	0.01	0.10	108
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

3.10. Building Construction (2027) - Mitigated

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

Location	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	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	4.76	6.56	0.01	0.17	—	0.17	0.16	—	0.16	—	1,215	1,215	0.05	0.01	—	1,219
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.87	1.20	< 0.005	0.03	—	0.03	0.03	—	0.03	—	201	201	0.01	< 0.005	—	202
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.89	0.62	10.4	0.00	0.00	2.14	2.14	0.00	0.50	0.50	—	2,311	2,311	0.11	0.08	7.49	2,346
Vendor	0.04	1.56	0.74	0.01	0.02	0.33	0.35	0.02	0.09	0.11	—	1,234	1,234	0.05	0.17	2.75	1,290
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.87	0.78	9.11	0.00	0.00	2.14	2.14	0.00	0.50	0.50	—	2,183	2,183	0.12	0.09	0.19	2,213
Vendor	0.04	1.61	0.75	0.01	0.02	0.33	0.35	0.02	0.09	0.11	—	1,235	1,235	0.05	0.17	0.07	1,288
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.39	4.67	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,116	1,116	0.06	0.04	1.64	1,132
Vendor	0.02	0.81	0.38	< 0.005	0.01	0.16	0.17	0.01	0.05	0.05	—	626	626	0.02	0.09	0.60	653
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.85	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	185	185	0.01	0.01	0.27	187
Vendor	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	104	104	< 0.005	0.01	0.10	108
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

3.11. Building Construction (2028) - Unmitigated

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

Location	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	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	4.77	6.91	0.01	0.16	—	0.16	0.15	—	0.15	—	1,281	1,281	0.05	0.01	—	1,285
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.87	1.26	< 0.005	0.03	—	0.03	0.03	—	0.03	—	212	212	0.01	< 0.005	—	213
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.86	0.62	9.81	0.00	0.00	2.14	2.14	0.00	0.50	0.50	—	2,270	2,270	0.04	0.08	6.79	2,303
Vendor	0.04	1.48	0.70	0.01	0.02	0.33	0.35	0.02	0.09	0.11	—	1,203	1,203	0.05	0.17	2.46	1,259
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.85	0.71	8.58	0.00	0.00	2.14	2.14	0.00	0.50	0.50	—	2,144	2,144	0.04	0.08	0.18	2,170
Vendor	0.04	1.54	0.73	0.01	0.02	0.33	0.35	0.02	0.09	0.11	—	1,204	1,204	0.05	0.17	0.06	1,257
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.37	4.65	0.00	0.00	1.13	1.13	0.00	0.26	0.26	—	1,156	1,156	0.02	0.04	1.57	1,171

Vendor	0.02	0.81	0.38	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	643	643	0.02	0.09	0.57	672
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.85	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	191	191	< 0.005	0.01	0.26	194
Vendor	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	106	106	< 0.005	0.02	0.09	111
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

3.12. Building Construction (2028) - Mitigated

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

Location	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	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	4.77	6.91	0.01	0.16	—	0.16	0.15	—	0.15	—	1,281	1,281	0.05	0.01	—	1,285
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.10	0.87	1.26	< 0.005	0.03	—	0.03	0.03	—	0.03	—	212	212	0.01	< 0.005	—	213
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.86	0.62	9.81	0.00	0.00	2.14	2.14	0.00	0.50	0.50	—	2,270	2,270	0.04	0.08	6.79	2,303
Vendor	0.04	1.48	0.70	0.01	0.02	0.33	0.35	0.02	0.09	0.11	—	1,203	1,203	0.05	0.17	2.46	1,259
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.85	0.71	8.58	0.00	0.00	2.14	2.14	0.00	0.50	0.50	—	2,144	2,144	0.04	0.08	0.18	2,170
Vendor	0.04	1.54	0.73	0.01	0.02	0.33	0.35	0.02	0.09	0.11	—	1,204	1,204	0.05	0.17	0.06	1,257
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.37	4.65	0.00	0.00	1.13	1.13	0.00	0.26	0.26	—	1,156	1,156	0.02	0.04	1.57	1,171
Vendor	0.02	0.81	0.38	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	643	643	0.02	0.09	0.57	672
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.85	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	191	191	< 0.005	0.01	0.26	194
Vendor	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	106	106	< 0.005	0.02	0.09	111
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

3.13. Paving (2028) - Unmitigated

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

Location	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	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.36	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	< 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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.58	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	< 0.005	< 0.005	0.40	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
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.01	129
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.03	7.03	< 0.005	< 0.005	0.01	7.12
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.16	1.16	< 0.005	< 0.005	< 0.005	1.18
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
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

3.14. Paving (2028) - Mitigated

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

Location	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	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.36	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	< 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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.58	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	< 0.005	< 0.005	0.40	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
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.01	129
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

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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.03	7.03	< 0.005	< 0.005	0.01	7.12
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.16	1.16	< 0.005	< 0.005	< 0.005	1.18
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
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

3.15. Architectural Coating (2028) - Unmitigated

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

Location	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	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	26.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.0	17.0	< 0.005	< 0.005	—	17.0

Architect Coatings	3.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.81	2.81	< 0.005	< 0.005	—	2.82
Architectural Coatings	0.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.14	1.72	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	429	429	0.01	0.02	0.04	434
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.22	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	55.0	55.0	< 0.005	< 0.005	0.07	55.8
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.11	9.11	< 0.005	< 0.005	0.01	9.23
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
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

3.16. Architectural Coating (2028) - Mitigated

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

Location	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	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	26.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.0	17.0	< 0.005	< 0.005	—	17.0
Architectural Coatings	3.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.81	2.81	< 0.005	< 0.005	—	2.82
Architectural Coatings	0.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.14	1.72	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	429	429	0.01	0.02	0.04	434
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.22	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	55.0	55.0	< 0.005	< 0.005	0.07	55.8
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.11	9.11	< 0.005	< 0.005	0.01	9.23
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
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

3.17. Architectural Coating (2029) - Unmitigated

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

Location	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	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134

Architect Coatings	26.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.79	6.79	< 0.005	< 0.005	—	6.82
Architectural Coatings	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.12	1.12	< 0.005	< 0.005	—	1.13
Architectural Coatings	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.13	1.61	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	422	422	0.01	0.02	0.03	427
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.6	21.6	< 0.005	< 0.005	0.03	21.9

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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.58	3.58	< 0.005	< 0.005	< 0.005	3.63
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
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

3.18. Architectural Coating (2029) - Mitigated

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

Location	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	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	26.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.79	6.79	< 0.005	< 0.005	—	6.82
Architectural Coatings	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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.12	1.12	< 0.005	< 0.005	—	1.13
Architectural Coatings	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.13	1.61	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	422	422	0.01	0.02	0.03	427
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.6	21.6	< 0.005	< 0.005	0.03	21.9
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.58	3.58	< 0.005	< 0.005	< 0.005	3.63
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
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

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	5.85	3.87	44.8	0.12	0.08	11.1	11.2	0.07	2.81	2.89	—	11,981	11,981	0.50	0.43	26.4	12,148
Strip Mall	0.59	0.38	4.35	0.01	0.01	1.07	1.07	0.01	0.27	0.28	—	1,152	1,152	0.05	0.04	2.53	1,169
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.44	4.24	49.1	0.13	0.09	12.2	12.2	0.08	3.08	3.16	—	13,134	13,134	0.55	0.47	28.9	13,316
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	5.75	4.25	41.9	0.11	0.08	11.1	11.2	0.07	2.81	2.89	—	11,447	11,447	0.53	0.45	0.68	11,596
Strip Mall	0.58	0.41	4.09	0.01	0.01	1.07	1.07	0.01	0.27	0.28	—	1,101	1,101	0.05	0.04	0.07	1,116
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.33	4.66	45.9	0.12	0.09	12.2	12.2	0.08	3.08	3.16	—	12,548	12,548	0.58	0.50	0.75	12,711
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.96	0.71	7.10	0.02	0.01	1.85	1.87	0.01	0.47	0.48	—	1,772	1,772	0.08	0.07	1.75	1,797

Strip Mall	0.09	0.07	0.67	< 0.005	< 0.005	0.17	0.17	< 0.005	0.04	0.04	—	164	164	0.01	0.01	0.16	166
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.06	0.78	7.77	0.02	0.01	2.03	2.04	0.01	0.51	0.53	—	1,936	1,936	0.09	0.08	1.91	1,963

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	5.68	3.76	43.5	0.11	0.08	10.8	10.9	0.07	2.73	2.80	—	11,639	11,639	0.48	0.41	25.6	11,800
Strip Mall	0.59	0.38	4.35	0.01	0.01	1.07	1.07	0.01	0.27	0.28	—	1,152	1,152	0.05	0.04	2.53	1,169
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.27	4.13	47.9	0.13	0.08	11.8	11.9	0.08	3.00	3.08	—	12,791	12,791	0.53	0.46	28.1	12,969
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	5.58	4.13	40.7	0.11	0.08	10.8	10.9	0.07	2.73	2.80	—	11,120	11,120	0.51	0.44	0.66	11,264
Strip Mall	0.58	0.41	4.09	0.01	0.01	1.07	1.07	0.01	0.27	0.28	—	1,101	1,101	0.05	0.04	0.07	1,116

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.16	4.54	44.7	0.12	0.08	11.8	11.9	0.08	3.00	3.08	—	12,221	12,221	0.56	0.48	0.73	12,380
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.93	0.69	6.90	0.02	0.01	1.80	1.81	0.01	0.46	0.47	—	1,722	1,722	0.08	0.07	1.70	1,745
Strip Mall	0.09	0.07	0.67	< 0.005	< 0.005	0.17	0.17	< 0.005	0.04	0.04	—	164	164	0.01	0.01	0.16	166
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.03	0.76	7.56	0.02	0.01	1.97	1.99	0.01	0.50	0.51	—	1,885	1,885	0.08	0.07	1.86	1,911

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1,494	1,494	0.08	0.01	—	1,499
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	57.0	57.0	< 0.005	< 0.005	—	57.2
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	782	782	0.04	0.01	—	784

Total	—	—	—	—	—	—	—	—	—	—	—	2,332	2,332	0.13	0.02	—	2,340
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1,494	1,494	0.08	0.01	—	1,499
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	57.0	57.0	< 0.005	< 0.005	—	57.2
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	782	782	0.04	0.01	—	784
Total	—	—	—	—	—	—	—	—	—	—	—	2,332	2,332	0.13	0.02	—	2,340
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	247	247	0.01	< 0.005	—	248
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	9.43	9.43	< 0.005	< 0.005	—	9.47
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	129	129	0.01	< 0.005	—	130
Total	—	—	—	—	—	—	—	—	—	—	—	386	386	0.02	< 0.005	—	387

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

Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	999	999	0.06	0.01	—	1,002
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	57.0	57.0	< 0.005	< 0.005	—	57.2
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	782	782	0.04	0.01	—	784
Total	—	—	—	—	—	—	—	—	—	—	—	1,837	1,837	0.10	0.01	—	1,844
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	999	999	0.06	0.01	—	1,002
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	57.0	57.0	< 0.005	< 0.005	—	57.2
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	782	782	0.04	0.01	—	784
Total	—	—	—	—	—	—	—	—	—	—	—	1,837	1,837	0.10	0.01	—	1,844
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	165	165	0.01	< 0.005	—	166
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	9.43	9.43	< 0.005	< 0.005	—	9.47
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	129	129	0.01	< 0.005	—	130
Total	—	—	—	—	—	—	—	—	—	—	—	304	304	0.02	< 0.005	—	305

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.03	0.49	0.21	< 0.005	0.04	—	0.04	0.04	—	0.04	—	619	619	0.05	< 0.005	—	621
Strip Mall	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.56	5.56	< 0.005	< 0.005	—	5.57
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.49	0.21	< 0.005	0.04	—	0.04	0.04	—	0.04	—	625	625	0.06	< 0.005	—	627
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.03	0.49	0.21	< 0.005	0.04	—	0.04	0.04	—	0.04	—	619	619	0.05	< 0.005	—	621
Strip Mall	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.56	5.56	< 0.005	< 0.005	—	5.57
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.49	0.21	< 0.005	0.04	—	0.04	0.04	—	0.04	—	625	625	0.06	< 0.005	—	627
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.01	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	103	103	0.01	< 0.005	—	103

Strip Mall	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.92	0.92	< 0.005	< 0.005	—	0.92
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	103	103	0.01	< 0.005	—	104

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.03	0.49	0.21	< 0.005	0.04	—	0.04	0.04	—	0.04	—	619	619	0.05	< 0.005	—	621
Strip Mall	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.56	5.56	< 0.005	< 0.005	—	5.57
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.49	0.21	< 0.005	0.04	—	0.04	0.04	—	0.04	—	625	625	0.06	< 0.005	—	627
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.03	0.49	0.21	< 0.005	0.04	—	0.04	0.04	—	0.04	—	619	619	0.05	< 0.005	—	621
Strip Mall	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.56	5.56	< 0.005	< 0.005	—	5.57

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.49	0.21	< 0.005	0.04	—	0.04	0.04	—	0.04	—	625	625	0.06	< 0.005	—	627
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.01	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	103	103	0.01	< 0.005	—	103
Strip Mall	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.92	0.92	< 0.005	< 0.005	—	0.92
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	103	103	0.01	< 0.005	—	104

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.31	0.19	21.4	< 0.005	0.02	—	0.02	0.01	—	0.01	—	65.6	65.6	< 0.005	< 0.005	—	65.8

Total	8.48	0.19	21.4	< 0.005	0.02	—	0.02	0.01	—	0.01	—	65.6	65.6	< 0.005	< 0.005	—	65.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	6.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.21	0.02	1.93	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.36	5.36	< 0.005	< 0.005	—	5.37
Total	1.33	0.02	1.93	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.36	5.36	< 0.005	< 0.005	—	5.37

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.31	0.19	21.4	< 0.005	0.02	—	0.02	0.01	—	0.01	—	65.6	65.6	< 0.005	< 0.005	—	65.8
Total	8.48	0.19	21.4	< 0.005	0.02	—	0.02	0.01	—	0.01	—	65.6	65.6	< 0.005	< 0.005	—	65.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	6.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.21	0.02	1.93	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.36	5.36	< 0.005	< 0.005	—	5.37
Total	1.33	0.02	1.93	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.36	5.36	< 0.005	< 0.005	—	5.37

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	18.4	106	124	1.89	0.05	—	185
Strip Mall	—	—	—	—	—	—	—	—	—	—	0.57	3.29	3.85	0.06	< 0.005	—	5.74
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
Total	—	—	—	—	—	—	—	—	—	—	18.9	109	128	1.95	0.05	—	190
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	18.4	106	124	1.89	0.05	—	185
Strip Mall	—	—	—	—	—	—	—	—	—	—	0.57	3.29	3.85	0.06	< 0.005	—	5.74
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
Total	—	—	—	—	—	—	—	—	—	—	18.9	109	128	1.95	0.05	—	190
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	3.04	17.5	20.5	0.31	0.01	—	30.6
Strip Mall	—	—	—	—	—	—	—	—	—	—	0.09	0.54	0.64	0.01	< 0.005	—	0.95

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	3.14	18.0	21.2	0.32	0.01	—	31.5

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	14.7	84.4	99.1	1.51	0.04	—	148
Strip Mall	—	—	—	—	—	—	—	—	—	—	0.45	2.63	3.08	0.05	< 0.005	—	4.59
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
Total	—	—	—	—	—	—	—	—	—	—	15.2	87.0	102	1.56	0.04	—	152
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	14.7	84.4	99.1	1.51	0.04	—	148
Strip Mall	—	—	—	—	—	—	—	—	—	—	0.45	2.63	3.08	0.05	< 0.005	—	4.59
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
Total	—	—	—	—	—	—	—	—	—	—	15.2	87.0	102	1.56	0.04	—	152

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	2.43	14.0	16.4	0.25	0.01	—	24.5
Strip Mall	—	—	—	—	—	—	—	—	—	—	0.08	0.44	0.51	0.01	< 0.005	—	0.76
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	2.51	14.4	16.9	0.26	0.01	—	25.2

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	109	0.00	109	10.9	0.00	—	381
Strip Mall	—	—	—	—	—	—	—	—	—	—	2.27	0.00	2.27	0.23	0.00	—	7.93
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	389
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	—	—	—	—	—	—	—	—	—	—	109	0.00	109	10.9	0.00	—	381
Strip Mall	—	—	—	—	—	—	—	—	—	—	2.27	0.00	2.27	0.23	0.00	—	7.93
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	389
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	18.0	0.00	18.0	1.80	0.00	—	63.0
Strip Mall	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	0.00	—	1.31
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	18.4	0.00	18.4	1.84	0.00	—	64.4

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	27.2	0.00	27.2	2.72	0.00	—	95.2
Strip Mall	—	—	—	—	—	—	—	—	—	—	0.57	0.00	0.57	0.06	0.00	—	1.98

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	27.8	0.00	27.8	2.78	0.00	—	97.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	27.2	0.00	27.2	2.72	0.00	—	95.2
Strip Mall	—	—	—	—	—	—	—	—	—	—	0.57	0.00	0.57	0.06	0.00	—	1.98
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	27.8	0.00	27.8	2.78	0.00	—	97.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	4.51	0.00	4.51	0.45	0.00	—	15.8
Strip Mall	—	—	—	—	—	—	—	—	—	—	0.09	0.00	0.09	0.01	0.00	—	0.33
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	4.60	0.00	4.60	0.46	0.00	—	16.1

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.90	1.90
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.90	1.90
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.90	1.90
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.90	1.90
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31

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	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	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	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	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	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	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	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	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	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	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	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	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	11/30/2026	12/11/2026	5.00	10.0	—
Site Preparation	Site Preparation	12/14/2026	12/25/2026	5.00	10.0	—
Grading	Grading	12/28/2026	3/19/2027	5.00	60.0	—
Building Construction	Building Construction	4/17/2027	9/29/2028	5.00	380	—
Paving	Paving	9/30/2028	10/27/2028	5.00	20.0	—
Architectural Coating	Architectural Coating	10/28/2028	1/26/2029	5.00	65.0	—

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	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40

Site Preparation	Tractors/Loaders/Back	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
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	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
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	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
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	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	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	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
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	15.0	12.0	LDA,LDT1,LDT2
Demolition	Vendor	—	7.63	HHDT,MHDT
Demolition	Hauling	2.90	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	12.0	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.63	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT

Grading	—	—	—	—
Grading	Worker	20.0	12.0	LDA,LDT1,LDT2
Grading	Vendor	—	7.63	HHDT,MHDT
Grading	Hauling	122	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	253	12.0	LDA,LDT1,LDT2
Building Construction	Vendor	51.3	7.63	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	12.0	LDA,LDT1,LDT2
Paving	Vendor	—	7.63	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	50.6	12.0	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.63	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	15.0	12.0	LDA,LDT1,LDT2
Demolition	Vendor	—	7.63	HHDT,MHDT
Demolition	Hauling	2.90	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT

Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	12.0	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.63	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	12.0	LDA,LDT1,LDT2
Grading	Vendor	—	7.63	HHDT,MHDT
Grading	Hauling	122	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	253	12.0	LDA,LDT1,LDT2
Building Construction	Vendor	51.3	7.63	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	12.0	LDA,LDT1,LDT2
Paving	Vendor	—	7.63	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	50.6	12.0	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.63	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	530,712	176,904	11,796	2,646	7,715

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	2,500	—
Site Preparation	—	—	15.0	0.00	—
Grading	—	58,400	90.0	0.00	—
Paving	0.00	0.00	0.00	0.00	2.95

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%
Strip Mall	0.00	0%
Enclosed Parking with Elevator	2.95	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	589	0.03	< 0.005
2027	0.00	589	0.03	< 0.005
2028	0.00	589	0.03	< 0.005
2029	0.00	589	0.03	< 0.005

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
Apartments Mid Rise	1,638	1,340	1,117	555,165	15,712	12,858	10,710	5,325,216
Strip Mall	160	168	81.8	54,826	1,436	1,509	733	491,201
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	1,591	1,302	1,085	539,287	15,263	12,490	10,404	5,172,915
Strip Mall	160	168	81.8	54,826	1,436	1,509	733	491,201
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

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)
530712	176,904	11,796	2,646	7,715

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

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)
Apartments Mid Rise	925,707	589	0.0330	0.0040	1,932,413
Strip Mall	35,311	589	0.0330	0.0040	17,336
Enclosed Parking with Elevator	484,316	589	0.0330	0.0040	0.00

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)
Apartments Mid Rise	619,007	589	0.0330	0.0040	1,932,413
Strip Mall	35,311	589	0.0330	0.0040	17,336
Enclosed Parking with Elevator	484,316	589	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	9,591,329	18,265
Strip Mall	296,735	2,989
Enclosed Parking with Elevator	0.00	1,494

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	7,673,064	14,612
Strip Mall	237,388	2,391
Enclosed Parking with Elevator	0.00	1,196

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	202	—
Strip Mall	4.21	—

Enclosed Parking with Elevator	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	50.5	—
Strip Mall	1.05	—
Enclosed Parking with Elevator	0.00	—

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
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
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	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
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
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	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)

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	7.71	annual days of extreme heat
Extreme Precipitation	2.95	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	21.9	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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	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	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	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	N/A	N/A	N/A	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 include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

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	29.9

AQ-PM	49.8
AQ-DPM	90.7
Drinking Water	54.3
Lead Risk Housing	49.8
Pesticides	0.00
Toxic Releases	15.6
Traffic	72.5
Effect Indicators	—
CleanUp Sites	42.6
Groundwater	70.3
Haz Waste Facilities/Generators	7.35
Impaired Water Bodies	83.0
Solid Waste	35.7
Sensitive Population	—
Asthma	31.1
Cardio-vascular	49.3
Low Birth Weights	15.0
Socioeconomic Factor Indicators	—
Education	52.3
Housing	50.3
Linguistic	44.4
Poverty	68.6
Unemployment	70.9

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	38.58591043
Employed	52.13653279
Median HI	29.38534582
Education	—
Bachelor's or higher	59.05299628
High school enrollment	0.115488259
Preschool enrollment	95.7141024
Transportation	—
Auto Access	17.29757475
Active commuting	80.14885153
Social	—
2-parent households	0.731425638
Voting	47.61965867
Neighborhood	—
Alcohol availability	4.516874118
Park access	81.35506224
Retail density	80.05902733
Supermarket access	87.25779546
Tree canopy	10.61208777
Housing	—
Homeownership	10.18863082
Housing habitability	56.62774285
Low-inc homeowner severe housing cost burden	79.66123444
Low-inc renter severe housing cost burden	80.16168356
Uncrowded housing	60.05389452
Health Outcomes	—
Insured adults	54.27948159
Arthritis	20.2

Asthma ER Admissions	38.3
High Blood Pressure	40.5
Cancer (excluding skin)	36.4
Asthma	23.6
Coronary Heart Disease	19.3
Chronic Obstructive Pulmonary Disease	12.3
Diagnosed Diabetes	34.4
Life Expectancy at Birth	26.1
Cognitively Disabled	21.0
Physically Disabled	21.0
Heart Attack ER Admissions	36.2
Mental Health Not Good	28.5
Chronic Kidney Disease	27.1
Obesity	39.2
Pedestrian Injuries	98.6
Physical Health Not Good	32.6
Stroke	22.5
Health Risk Behaviors	—
Binge Drinking	32.5
Current Smoker	28.0
No Leisure Time for Physical Activity	38.1
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	79.9
Children	56.6
Elderly	27.8
English Speaking	67.4
Foreign-born	16.0

Outdoor Workers	33.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	9.9
Traffic Density	92.4
Traffic Access	71.0
Other Indices	—
Hardship	44.7
Other Decision Support	—
2016 Voting	55.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	51.0
Healthy Places Index Score for Project Location (b)	14.0
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 architectural coating phase was overlapped with building construction to approximate actual construction scheduling.
Operations: Vehicle Data	Weekday trip generation rates adjusted to match trip generation memo (CR Associates, July 2024)
Operations: Hearths	Assumes no fireplaces/wood stoves would be constructed/installed
Construction: Dust From Material Movement	Grading plan shows 58,400 cy of export.