Appendix C

Greenhouse Gas Emissions Technical Report

Greenhouse Gas Emissions Technical Report

B-2 Hotel Project

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
ACC	Advanced Clean Cars Program
ACR	American Carbon Registry
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFC	chlorofluorocarbon
CH_4	methane
City	City of Garden Grove
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CTR	Commute Trip Reduction
EO	Executive Order
EPA	U.S. Environmental Protection Agency
EV	electric vehicle
FR	Federal Register
GHG	greenhouse gas
GWP	global warming potential
HFC	hydrofluorocarbon
IPCC	Intergovernmental Panel on Climate Change
IRA	Inflation Reduction Act
LCFS	Low Carbon Fuel Standard
MM	Mitigation Measure
MMT	million metric ton
MPO	metropolitan planning organization
MT	metric ton
N_2O	nitrous oxide
NF_3	nitrogen trifluoride
NHTSA	National Highway Traffic Safety Administration
O_3	ozone
PDF	Project Design Feature
PFC	perfluorocarbon
Project	B-2 Hotel Project
RTP	Regional Transportation Plan
SAFE	Safer Affordable Fuel-Efficient

Acronym/Abbreviation	Definition
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SF_6	sulfur hexafluoride
SLCP	short-lived climate pollutant
SOV	Single-occupancy vehicle
TDM	transportation demand management
VMT	vehicle miles traveled
ZEV	zero emission vehicle

Executive Summary

The purpose of this technical report is to assess the potential greenhouse gas (GHG) emissions impacts associated with implementation of the proposed B-2 Hotel Project (Project) in the City of Garden Grove (City). This assessment uses the significance thresholds in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 California Code of Regulations 15000 et seq.). This report is intended to support the supplemental environmental impact report prepared for the Project consistent with the stipulated Writ of Mandate ("Writ") entered on February 13, 2024 with respect to *Perez et al. v. City of Garden Grove et al.,* OSC Case No. 30-2022-01281816-CU-WM-CC).

Project Overview

The proposed Project involves construction of a full-service high-rise (maximum height of 350 feet) hotel with hotel program entertainment/pool deck (height of approximately 61 feet) on a 3.72-acre site. The proposed hotel would include 500 guest suites with balconies and guest amenities/services such as a themed pool experience with lazy river, a theater, a ballroom, meeting rooms, food and beverage spaces, themed amenities, an arcade. and a spa and fitness center. The proposed Project would also include a five-level (approximately 61 feet) parking garage (four levels above grade and one level below grade) with a total of 528 spaces inclusive of spaces available for valet parking.

The Project site is on approximately 3.72 acres of land at the northwest corner of Harbor Boulevard and Twintree Avenue in the City of Garden Grove, along the west and east sides of, and on, Thackery Drive in the City of Garden Grove. The Project site is within a fully developed and urbanized area. Regional access to the Project site is provided by State Route 22 and Interstate 5, as shown in Figure 1, Project Location. Local access to the Project site is currently provided via Harbor Boulevard and Twintree Avenue. The Project site is located within the South Coast Air Basin and is under the jurisdiction of South Coast Air Quality Management District.

Greenhouse Gas Emissions

Global climate change has been deemed a cumulative impact under CEQA. A project contributes to this cumulative impact through its incremental contribution of emissions combined with the cumulative increase of all other sources of GHG emissions. GHGs are gases that absorb infrared radiation in the atmosphere. Principal GHGs regulated under state and federal law and regulations include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). GHG emissions are measured in metric tons (MT) of CO_2 equivalent (CO_2e), which account for weighted global warming potential factors for CH_4 and N_2O.

Project-Generated Construction and Operational Greenhouse Gas Emission

Construction of the Project would result in GHG emissions primarily associated with the use of off-road construction equipment, on-road trucks, and worker vehicles. Operation of the Project would generate GHG emissions from mobile sources (vehicular traffic), area sources (landscape maintenance equipment operation), energy use (natural gas combustion and utility generation of electricity consumed by the Project), water supply, treatment, and wastewater distribution and treatment, solid waste disposal, refrigerants, and stationary sources. The Project would result in approximately 3,609 MT CO_2e of construction GHG emissions without mitigation or 120 MT CO_2e when amortized over 30 years and 3,362 MT CO_2e of construction GHG emissions with mitigation or 112 MT CO_2e when amortized over 30 years.

The Project would result in approximately 8,124 MT CO_2e per year of operational emissions without mitigation (including amortized construction emissions) and 7,520.09 MT CO_2e per year of operational emissions with the implementation of mitigation measures other than the purchase of carbon offsets (including amortized construction emissions). This total would exceed the applicable South Coast Air Quality Management District threshold of 1,400 MT CO_2e per year for commercial projects. As a mitigation measure, the Project would purchase a total of 183,632.90 CO_2e of carbon offsets through the voluntary market to reduce emissions below the threshold of 1,400 MT CO_2e annually for the life of the Project (30 years); however, given the uncertainties associated with the feasibility and effectiveness of carbon offsets, the Project's GHG impact would remain **significant and unavoidable**.

Potential to Conflict with Applicable Greenhouse Gas Reduction Plans

Potential to Conflict with the Southern California Association of Governments' 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy

The Project would potentially conflict with the Southern California Association of Governments 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy resulting in a potentially significant impact. To address potential conflicts, the Project would implement MM-GHG-1 through MM-GHG-14 to support the Regional Transportation Plans/Sustainable Communities Strategies focused on sustainability, air quality, and clean transportation. The impact would be **less than significant with mitigation**.

Potential to Conflict with the California Air Resources Board's 2022 Scoping Plan

The Project would potentially conflict with the 2022 Scoping Plan and therefore, the 2045 GHG reduction target; resulting in a potentially significant impact. The Project would implement MM-TRA-1, MM-TRA-2, and MM-GHG-4 to address potential conflicts with actions focused on VMT reduction and the transition to zero emission vehicles. With the implementation of these measures the Project would not conflict with the 2022 Scoping Plan or the 2045 GHG reduction target; the impact would be **less than significant with mitigation**. Furthermore, implementation of MM-GHG-1 through MM-GHG-14 would enhance the Project's sustainability and alignment with the Scoping Plan.

Potential to Conflict with the City of Garden Grove's General Plan

The Project is consistent with the General Plan land use designation and is located on a previously developed infill site within a transportation priority area. However, without mitigation measures, the Project would initially potentially conflict with some of the City's General Plan goals and policies adopted for the purpose of reducing GHG emissions; the impact is potentially significant. The Project would implement MM-TRA-1, MM-TRA-2, MM-GHG-3, MM-GHG-4, MM-GHG-5, and MM-GHG-7 through MM-GHG-12 that would resolve potential conflicts such that impacts would be **less than significant with mitigation**.

Summary of Findings

The results of this report are summarized in Table ES-1, below, based on the significance criteria in the impact analyses in Section 2.4, Impact Analysis, and consistent with Appendix G of the CEQA Guidelines.

Table ES-1. Summary of Impact Determinations

Analysis	Report Section	Checklist Question	Significance Determinations	
			Unmitigated	Mitigated
Greenhouse Gas Emissions				
Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	2.4.1	GHG-1	Potentially Significant Impact	Significant and Unavoidable
Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	2.4.2	GHG-2	Potentially Significant Impact	Less than Significant Impact

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1 Introduction and Project Description

1.1 Report Purpose and Scope

The purpose of this technical report is to assess the potential greenhouse gas (GHG) emissions impacts associated with implementation of the proposed B-2 Hotel (Project). This assessment uses the significance thresholds in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 California Code of Regulations [CCR] 15000 et seq.). The evaluation is based on the significance thresholds recommended by the South Coast Air Quality Management District (SCAQMD).

This introductory section provides a description of the Project and the Project location. Section 2, Greenhouse Gas Emissions, describes the environmental setting, regulatory setting, existing climate change conditions, and thresholds of significance and analysis methodology, and presents a GHG emissions impact analysis per Appendix G of the CEQA Guidelines. Section 3, References, includes a list of the references cited. Section 4, Preparers, includes a list of those who prepared this technical report.

1.2 Project Location

The Project site is located at the northwest corner of Harbor Boulevard and Twintree Avenue in the City of Garden Grove, along the west and east sides of, and on, Thackery Drive (Figure 1, Project Location). Regional access to the Project site is provided by State Route 22 and Interstate 5. Local access to the Project site is currently provided via Harbor Boulevard and Twintree Avenue. The Project site is located within the South Coast Air Basin and is under the jurisdiction of SCAQMD.

1.3 Existing Site Conditions

The existing Project site encompasses 3.72 acres of a previously disturbed site where the north/northeastern parcels of the Project site are paved and used for excess parking for the adjacent Sheraton Hotel, whereas the remaining parcels are dirt pads with limited vegetation and are vacant. The westerly portion of the former Thackery Drive road bed is still paved. The Project site is fenced and not accessible to the public. Demolition of the Project site's prior residential and commercial structures occurred between 2004 and 2013.

The Project site has a General Plan land use designation of International West Mixed Use. The International West Mixed Use designation allows for a mix of uses, including resort, entertainment, and hotel, that are appropriate for a major entertainment and tourism destination. The Project site is zoned as Planned Unit Development (PUD-141-01) and Single-Family Residential Zone (R-1-7). Approximately two-thirds of the Project site is zoned PUD-141-01 and the western approximately one-third of the Project site is zoned R-1.

The Project site is located within a fully developed and urbanized area.

1.4 Project Description

The proposed Project involves construction of a full-service high-rise (maximum height of 350 feet) resort hotel with hotel program entertainment/pool deck (height of approximately 61 feet) on a 3.72-acre site. The proposed hotel

would include 500 guest suites with balconies and guest amenities/services such as a themed pool experience with lazy river; theater; a ballroom; meeting rooms; food and beverage spaces, themed amenities and shops, an arcade; and a spa and fitness center. The proposed Project would also include a five-level (approximately 61 feet) parking garage (four levels above grade and one level below grade) with a total of 528 spaces inclusive of spaces available for valet parking. See Figure 2, Site Plan.

1.4.1 Project Design Features Previously Approved

The following summarizes the previously approved GHG-related Project Design Features (PDFs). It should be noted that all the following PDFs are qualitative/supporting measures. Therefore, for purposes of quantifying the Project's GHG emissions, no GHG reductions were taken based on the implementation of these measures.

1.4.1.1 Construction

PDF-4 Construction equipment should be maintained in proper tune.

Qualitative/supporting – Maintaining heavy-duty off-road construction equipment in proper tune reduces GHG emissions. When engines are well-maintained—through regular servicing, timely replacement of filters, proper lubrication, and calibration—they operate more efficiently, burn fuel more completely, and emit fewer pollutants. There is no way to quantify these reductions in CalEEMod. Potential GHG emissions reductions are not estimated.

PDF-5 All construction vehicles should be prohibited from excessive idling. Excessive idling is defined as 5 minutes or longer.

Qualitative/supporting – Reduction in idling time helps to reduce fuel consumption and thus GHG emissions. There is no way to quantify these reductions in CalEEMod. Potential GHG emissions reductions are not estimated.

PDF-8 For construction activities other than those addressed by MM-GHG-1 and MM-GHG-2, establish an electricity supply to the construction site and use electric powered equipment instead of diesel-powered equipment or generators, where feasible.

Qualitative – Results in a reduction of diesel and gasoline use and thus GHG emissions. Conservatively, given the uncertainty in predicting the amount of reduction and the mix of electric powered equipment and phase of construction, it is too speculative to take GHG emission reductions from this PDF.

PDF-10 Use haul trucks with on-road engines instead of off-road engines for on-site hauling.

Qualitative/supporting – On-road trucks are subject to more stringent emissions regulations such as Environmental Protection Agency (EPA) highway standards and California Air Resources Board (CARB) emission standards compared to off-road equipment. On-road trucks are also typically designed for better fuel economy resulting in fewer GHG emissions. There is no way to quantify these reductions in CalEEMod. Potential GHG emissions reductions are not estimated.

1.4.1.2 Operations

PDF-11 The Project will comply with the mandatory requirements of the latest California Building Standards Code, Title 24, Part 6 (Energy Code) and Part 11 (California Green Building Standards Code [CALGreen]), including the provisions for bicycle parking, electric vehicle charging stations, energy efficiency, material conservation, and water/waste reduction.

Qualitative/supporting – Complying with Title 24 Building Energy Efficiency Standards reduces GHG emissions by improving energy efficiency in non-residential buildings. Title 24 includes mandatory and voluntary green building measures that promote sustainable construction practices, reduce water usage, and support the integration of renewable energy systems like solar photovoltaics. These standards help decrease reliance on fossil fuels, thereby lowering emissions from power generation and building operations. Project compliance with current standards would generate GHG emission reductions compared to the CalEEMod GHG estimates disclosed in this technical report. CalEEMod provides conservative energy use estimates because its calculations are based on the 2019 consumption estimates from the California Energy Commission's' 2018–2030 Uncalibrated Commercial Sector Forecast and is based on default assumptions for building energy use, occupancy, and equipment efficiency, which does not reflect the most recent Title 24 energy efficiency standards. It would be speculative to estimate potential reductions with future standards in place at the time of building permit issuance for construction, when the current Title 24 standards would apply to building operations. Proof of compliance with Title 24 standards is required prior to issuance of certificate of occupancy. Potential GHG reductions are not estimated.

PDF-12 Install signage at loading docks requiring trucks to limit engine idling times to 5 minutes or less.

Qualitative/supporting – The California Air Resources Board (CARB) has an Airborne Toxic Control Measure to limit diesel-fueled commercial motor vehicle idling, primarily to reduce public exposure to diesel exhaust. This Airborne Toxic Control Measure, outlined in 13 CCR Section 2485, restricts idling of diesel-fueled commercial vehicles (greater than 10,000 lbs) to a maximum of 5 consecutive minutes at any location. Limiting engine idling would reduce fuel combustion and thus reduce GHG emissions. There is no available method to estimate potential GHG emission reductions in CalEEMod attributable to the limit on idling time. This is a qualitative measure in CalEEMod, thus potential GHG emissions reductions are not estimated.

PDF-21 Engine idling time for all delivery vehicles and trucks must be limited to 5 minutes or less. Signage should be posted in the designated loading areas reflecting the idling restrictions.

Qualitative/supporting – This measure is intended to apply to all delivery vehicles and trucks accessing the site, regardless of potential vehicle weight that would be subject to CARB's Airborne Toxic Control Measure for idling. Limiting engine idling would reduce fuel combustion and thus reduce GHG emissions. There is no available method to estimate potential GHG emission reductions in CalEEMod attributable to the limit on idling time. This is a qualitative measure in CalEEMod, thus potential GHG emissions reductions are not estimated.

1.4.2 New Project Design Features

PDF-27 Sustainable Building Materials. The Project will prioritize low-impact, sustainably sourced, and recyclable materials across construction and interior finishes, including low-VOC paints, Forest Stewardship Council-certified wood, and recycled-content flooring. The Project is also implementing vendor standards that require environmental product declarations and third-party certifications to verify material sustainability. Materials shall be selected not only for their initial environmental footprint but also for durability and long-term performance, reducing the need for frequent replacement and associated waste.

Qualitative/supporting – Sustainable building materials play a crucial role in reducing GHG emissions by addressing both embodied and operational carbon impacts in the construction sector. Embodied carbon refers to emissions from the extraction, manufacturing, and transportation of materials, while operational carbon stems from a building's energy use over time. It is too speculative to claim GHG reductions for sustainable building design measures because actual emissions reductions depend on uncertain factors like material sourcing, construction practices, and long-term building performance. Without verified, project-specific data, such claims lack the certainty needed for credible crediting. Accordingly, this measure is qualitative and potential GHG emissions reductions are not estimated.

2 Greenhouse Gas Emissions

2.1 Environmental Setting

2.1.1 Climate Change Overview

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period (i.e., decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (EPA 2023a).

The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process as follows: short-wave radiation emitted by the Sun is absorbed by the Earth, the Earth emits a portion of this energy in the form of long-wave radiation, and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on the Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales and that, in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. Recent climate changes, in particular the warming observed over the past century, however, cannot be explained by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of that warming since the mid-twentieth century and is the most significant driver of observed climate change (IPCC 2013; EPA 2023a). Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system (IPCC 2013). The atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily from fossil fuel emissions and secondarily from emissions associated with land use changes (IPCC 2013). Continued emissions of GHGs will cause further warming and changes in all components of the climate system, which is discussed further in Section 2.1.5, Potential Effects of Climate Change.

2.1.2 Greenhouse Gases

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code, Section 38505(g), for purposes of administering many of the state's primary GHG emission reduction programs, GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). (See also CEQA Guidelines, Section 15364.5.) Some GHGs, such as CO_2, CH_4, and N_2O, occur naturally and are emitted into the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Manufactured GHGs, which have a much greater heat

absorption potential than CO_2, include fluorinated gases, such as HFCs, PFCs, and SF_6, which are associated with certain industrial products and processes. The following paragraphs provide a summary of the most common GHGs and their sources.[1]

Carbon Dioxide. CO_2 is a naturally occurring gas and a by-product of human activities and is the principal anthropogenic (i.e., caused by human activity) GHG that affects the Earth's radiative balance. Natural sources of CO_2 include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO_2 are the combustion of fuels such as coal, oil, natural gas, and wood and changes in land use.

Methane. CH_4 is produced through both natural and human activities. CH_4 is a flammable gas and is the main component of natural gas. CH_4 is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide. N_2O is produced through natural and human activities, mainly through agricultural activities and natural biological processes, although fuel burning and other processes also create N_2O. Sources of N_2O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric acid production, nylon production, and fossil fuel-fired power plants), vehicle emissions, and using N_2O as a propellant (e.g., rockets, racecars, and aerosol sprays).

Fluorinated Gases. Fluorinated gases (also referred to as F-gases) are synthetic powerful GHGs emitted from many industrial processes. Fluorinated gases are commonly used as substitutes for stratospheric ozone (O_3)-depleting substances (e.g., chlorofluorocarbons [CFCs], hydrochlorofluorocarbons, and halons). The most prevalent fluorinated gases include the following:

- **Hydrofluorocarbons:** HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals used as alternatives to O_3-depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are used in manufacturing.
- **Perfluorocarbons:** PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced as alternatives, with HFCs, to the O_3-depleting substances. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Since PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.
- **Sulfur Hexafluoride:** SF_6 is a colorless gas soluble in alcohol and ether and slightly soluble in water. SF_6 is used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.
- **Nitrogen Trifluoride:** NF_3 is used in the manufacture of a variety of electronics, including semiconductors and flat panel displays.

[1] The descriptions of GHGs are summarized from the Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report (IPCC 1995), IPCC Fourth Assessment Report (2007), CARB's "GHG Inventory Glossary" (CARB 2025a), and EPA's "Glossary of Climate Change Terms" (EPA 2024a).

Chlorofluorocarbons. CFCs are synthetic chemicals that have been used as cleaning solvents, refrigerants, and aerosol propellants. CFCs are chemically unreactive in the lower atmosphere (troposphere) and the production of CFCs was prohibited in 1987 due to the chemical destruction of stratospheric O_3.

Hydrochlorofluorocarbons. Hydrochlorofluorocarbons are a large group of compounds, whose structure is very close to that of CFCs—containing hydrogen, fluorine, chlorine, and carbon atoms—but including one or more hydrogen atoms. Like HFCs, hydrochlorofluorocarbons are used in refrigerants and propellants. Hydrochlorofluorocarbons were also used in place of CFCs for some applications; however, their use in general is being phased out.

Black Carbon. Black carbon is a component of fine particulate matter, which has been identified as a leading environmental risk factor for premature death. It is produced from the incomplete combustion of fossil fuels and biomass burning, particularly from older diesel engines and forest fires. Black carbon warms the atmosphere by absorbing solar radiation, influences cloud formation, and darkens the surface of snow and ice, which accelerates heat absorption and melting. Black carbon is a short-lived species that varies spatially, which makes it difficult to quantify the global warming potential (GWP). Diesel particulate matter emissions are a major source of black carbon and are toxic air contaminants that have been regulated and controlled in California for several decades to protect public health. In relation to declining diesel particulate matter from the CARB regulations pertaining to diesel engines, diesel fuels, and burning activities, CARB estimates that annual black carbon emissions in California have reduced by 70% between 1990 and 2010, with 95% control expected by 2020 (CARB 2014).

Water Vapor. The primary source of water vapor is evaporation from the ocean, with additional vapor generated by sublimation (change from solid to gas) from ice and snow, evaporation from other water bodies, and transpiration from plant leaves. Water vapor is the most important, abundant, and variable GHG in the atmosphere and maintains a climate necessary for life.

Ozone. Tropospheric O_3, which is created by photochemical reactions involving gases from both natural sources and human activities, acts as a GHG. Stratospheric O_3, which is created by the interaction between solar ultraviolet radiation and molecular oxygen (O_2), plays a decisive role in the stratospheric radiative balance. Depletion of stratospheric O_3, due to chemical reactions that may be enhanced by climate change, results in an increased ground-level flux of ultraviolet-B radiation.

Aerosols. Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

2.1.3 Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2023b). The Intergovernmental Panel on Climate Change (IPCC) developed the GWP concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons (MT) of CO_2 equivalent (CO_2e).

The current version of the California Emissions Estimator Model (CalEEMod) (version 2022.1.1.29) assumes that the GWP for CH_4 is 25 (so emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the IPCC Fourth Assessment Report (IPCC 2007). The GWP values identified in CalEEMod were applied to the Project.

2.1.4 Sources of Greenhouse Gas Emissions

A GHG emissions inventory is a snapshot of the GHG emissions within a geographic boundary during a given period. Per the EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2022, total United States GHG emissions were approximately 6,343 million metric tons (MMT) CO_2e in 2022 (EPA 2024b). Total U.S. emissions have decreased by 3% from 1990 to 2022, down from a high of 15.2% above 1990 levels in 2007. Emissions increased from 2021 to 2022 by 0.2% (14.4 MMT CO_2e). Net emissions (i.e., including sinks) were 5,489.0 MMT CO_2e in 2022. Overall, net emissions increased 1.3% from 2021 to 2022 and decreased 16.7% from 2005 levels. Between 2021 and 2022, the increase in total GHG emissions was driven largely by an increase in CO_2 emissions from fossil fuel combustion due to economic activity rebounding after the height of the COVID-19 pandemic. The CO_2 emissions from fossil fuel combustion increased by 1% from 2021 to 2022 and were 1.1% below 1990 emissions levels. Natural gas use increased by 5.2% (84.8 MMT CO_2e) between 2021 and 2022 while CO_2 emissions from coal consumption decreased by 6.1% (58.6 MMT CO_2e). The increase in natural gas consumption was seen across all U.S. territories while the decrease in coal was due to reduced use in the electric power sector. Emissions from petroleum use increased by 0.9% (19.0 MMT CO_2e) from 2021 to 2022. Carbon sequestration from the Land Use, Land Use Change, and Forestry sector offset 14.5% (67.6 MMT CO_2e) of total emissions in 2022.

According to California's 2000–2022 GHG emissions inventory (2024 edition), California emitted approximately 371.1 MMT CO_2e in 2022, including emissions resulting from out-of-state electrical generation (CARB 2024). The sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high GWP substances, and recycling and waste. As shown, as of 2022, transportation represents 37.7% of the total percentage of annual GHG emissions in California. Table 2-1 presents California GHG emission source categories and their relative contributions to the emissions inventory in 2022.

Table 2-1. Greenhouse Gas Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)[a]	Percent of Total[a]
Transportation	139.9	37.69%
Industrial	72.7	19.59%
Electric power	59.8	16.11%
Commercial and residential	39.5	10.64%
Agriculture	29.8	8.03%
High global-warming potential substances	21.3	5.74%
Recycling and waste	8.2	2.21%
Total	**371.1**	**100%**

Source: CARB 2024.
Notes: GHG = greenhouse gas; MMT CO_2e = million metric tons of carbon dioxide equivalent.
Emissions reflect the 2022 California GHG inventory by Scoping Plan Category (CARB 2022).
[a] Percentage of total and annual GHG emissions have been rounded, and total may not sum due to rounding.

The most recent GHG emissions data by sector for the Southern California Association of Governments (SCAG) region is from 2012 for base year 2008 (SCAG 2012). Total SCAG region emissions in 2008 were 230.7 MMT CO_2e. The principal sources of SCAG's GHG emissions are transportation; electricity consumption, and residential, commercial, and industrial fuel use accounting for 40%, 25%, and 16% of SCAG's gross GHG emissions in 2008, respectively (SCAG 2012).

2.1.5 Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 IPCC Synthesis Report (IPCC 2014) indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, rising sea levels, and ocean acidification (IPCC 2014).

In California, climate change impacts have the potential to affect sea-level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, frequency of severe weather events, and electricity demand and supply. The primary effect of global climate change has been a rise in average global tropospheric temperature. Global surface temperature in the first 2 decades of the twenty-first century (2001–2020) was 0.99 [0.84 to 1.10]°C higher than 1850–1900 (IPCC 2023). Global surface temperature has increased faster since 1970 than in any other 50-year period over at least the last 2,000 years (IPCC 2023). Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. Human activities, principally through emissions of GHGs, have unequivocally caused global warming, with global surface temperature reaching 1.1°C above 1850–1900 in 2011–2020 (IPCC 2023).

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The Office of Environmental Health Hazard Assessment identified various indicators of climate change in California, which are scientifically based measurements that track trends in various aspects of climate change. Many indicators reveal discernible evidence that climate change is occurring in California and is having significant, measurable impacts in the state. Changes in the state's climate have been observed including an increase in annual average air temperature, more frequent extreme heat events, more extreme drought, a decline in winter chill, an increase in cooling degree days and a decrease in heating degree days, and an increase in variability of statewide precipitation (OEHHA 2022).

Warming temperatures and changing precipitation patterns have altered California's physical systems—the ocean, lakes, rivers, and snowpack—upon which the state depends. Winter snowpack and spring snowmelt runoff from the Sierra Nevada and southern Cascade Mountains provide approximately one-third of the state's annual water supply. Impacts of climate on physical systems have been observed such as high variability of snow-water content (i.e., amount of water stored in snowpack), decrease in spring snowmelt runoff, glacier change (loss in area), rise in sea levels, increase in average lake water temperature and coastal ocean temperature, and a decrease in dissolved oxygen in coastal waters (OEHHA 2022).

Impacts of climate change on biological systems, including humans, wildlife, and vegetation, have also been observed including climate change impacts on terrestrial, marine, and freshwater ecosystems. As with global observations, species responses include those consistent with warming: elevational or latitudinal shifts in range, changes in the timing of key plant and animal life cycle events, and changes in the abundance of species and in community composition. Humans are better able to adapt to a changing climate than plants and animals in natural

ecosystems. Nevertheless, climate change poses a threat to public health as warming temperatures and changes in precipitation can affect vector-borne pathogen transmission and disease patterns in California as well as the variability of heat-related deaths and illnesses. In addition, since 1950, the area burned by wildfires each year has been increasing.

The California Natural Resources Agency (CNRA) has released four California Climate Change Assessments (in 2006, 2009, 2012, and 2018), which have addressed the following: acceleration of warming across the state, more intense and frequent heat waves, greater riverine flows, accelerating sea level rise, more intense and frequent drought, more severe and frequent wildfires, more severe storms and extreme weather events, shrinking snowpack and less overall precipitation, ocean acidification, hypoxia,[2] and warming. To address local and regional governments' need for information to support action in their communities, the Fourth Assessment (CNRA 2018) includes reports for nine regions of the state, including the Los Angeles Region, which includes the Orange County where the Project is located. Key projected climate changes for the Los Angeles Region include the following (CNRA 2018):

- Continued future warming over the Los Angeles Region. Across the region, average maximum temperatures are projected to increase around 4°F to 5°F by the mid-century, and 5°F to 8°F by the late century.
- Extreme temperatures are also expected to increase. The hottest day of the year may be up to 10°F warmer for many locations across the Los Angeles Region by the late century under certain model scenarios. The number of extremely hot days is also expected to increase across the region.
- Despite small changes in average precipitation, dry and wet extremes are both expected to increase. By the late twenty-first century, the wettest day of the year is expected to increase across most of the Los Angeles Region, with some locations experiencing 25% to 30% increases under certain model scenarios. Increased frequency and severity of atmospheric river events are also projected to occur for this region.
- Sea levels are projected to continue to rise in the future, but there is a large range based on emissions scenario and uncertainty in feedbacks in the climate system. Roughly 1 foot to 2 feet of sea level rise is projected by the mid-century, and the most extreme projections lead to 8 feet to 10 feet of sea level rise by the end of the century.
- Projections indicate that the number of wildfires may increase over southern California, but there remains uncertainty in quantifying future changes of burned area over the Los Angeles region.

2.2 Regulatory Setting

2.2.1 International Regulations

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

[2] Hypoxia is the state in which oxygen is not available in sufficient amounts at the tissue level to maintain adequate homeostasis.

On March 21, 1994, the United States joined a number of countries around the world in signing the United Nations Framework Convention on Climate Change. Under the Convention, governments agreed to gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of global climate change.

2.2.2 Federal Regulations

Recent Federal Actions

President Trump's recent executive orders (EOs) aimed at rolling back federal regulations related to climate change, vehicle fuel standards, and renewable energy do not impact California's current modeling encompassed in CalEEMod. CalEEMod's mobile source emissions are based on California's EMFAC model, which was approved by the EPA in November 2022. The EMFAC model incorporates California-specific regulations such as Advanced Clean Cars and Advanced Clean Trucks. The state's robust climate policies, including its cap-and-trade program and current vehicle emissions standards, remain in effect and continue to guide local environmental assessments and modeling efforts. It should be noted that the federal actions are the subject of ongoing litigation and the final effect on regulations are still to be determined. Consequently, it would be speculative to assume how, if at all, the recent federal actions would alter the methodologies or outcomes of impact analyses contained herein. The changes to federal regulations and federal actions are provided for disclosure purposes only.

Massachusetts v. U.S. Environmental Protection Agency

In Massachusetts v. EPA (April 2007), the U.S. Supreme Court ruled that CO_2 was a pollutant and directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA administrator is required to follow the language of Section 202(a) of the Clean Air Act. On December 7, 2009, the administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The elevated concentrations of GHGs—CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the "endangerment finding."
- **Cause or Contribute Finding:** The combined emissions of GHGs—CO_2, CH_4, N_2O, and hydrofluorocarbons—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Notably, President Trump's EO 14154 issued on January 10, 2025, called for EPA to reconsider the legality and applicability of the 2009 Endangerment Finding for Greenhouse Gases.

The EPA issued a proposed rule on July 29, 2025 that seeks to rescind the 2009 Endangerment Finding and eliminate all GHG emission standards for vehicles by arguing that the Clean Air Act does not authorize regulation of emissions for climate purposes. The EPA also claims that the original finding was based on flawed science and that

regulating GHGs imposes excessive costs without clear statutory support. A related Department of Energy report supports this shift by questioning CO_2's classification as a pollutant, downplaying its climate impacts, and emphasizing economic and scientific uncertainties around aggressive mitigation strategies.

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (Public Law 110-140), among other key measures, would do the following in aiding the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020, and direct National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy-efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

President Trump's EO 14154 may also impact the Energy Independence and Security Act. This order declared a national energy emergency and directed federal agencies to expedite the permitting and production of domestic energy resources. This emphasis on increasing fossil fuel production and reducing regulatory barriers may undermine the Energy Independence and Security Act's objectives of enhancing energy efficiency and promoting renewable energy sources.

Federal Vehicle Standards

In 2007, in response to the Massachusetts v. EPA decision, the Bush Administration issued EO 13432 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011; and, in 2010, the EPA and the NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012 through 2016 (75 Federal Register [FR] 25324–25728).

In 2010, President Obama issued a memorandum directing the Department of Transportation, the Department of Energy, the EPA, and the NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and the NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017 through 2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017 through 2021 (77 FR 62624-63200). On January 12, 2017, the EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks.

In 2011, in addition to the regulations applicable to cars and light-duty trucks described above, the EPA and the NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014 through 2018. The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6% to 23% over the 2010 baselines (76 FR 57106–57513).

In August 2016, the EPA and the NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all sizes of buses and work trucks. The final standards are expected to lower CO_2 emissions by approximately 1.1 billion MT and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

On April 2, 2018, the EPA, under administrator Scott Pruitt, reconsidered the final determination for light-duty vehicles and withdrew its previous 2017 determination, stating that the current standards may be too stringent and therefore should be revised as appropriate (83 FR 16077–16087).

In August 2018, the EPA and the NHTSA proposed to amend certain fuel economy and GHG standards for passenger cars and light trucks and to establish new standards for model years 2021 through 2026. Compared to maintaining the post-2020 standards then in place, the 2018 proposal would increase U.S. fuel consumption by about half a million barrels per day (2% to 3% of total daily consumption, according to the Energy Information Administration) and impact the global climate by 3/1000th of 1°C by 2100 (EPA and NHTSA 2018).

In 2019, the EPA and the NHTSA published the Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program (SAFE-1) (84 FR 51310), which revoked California's authority to set its own GHG emissions standards and set zero-emission vehicle (ZEV) mandates in California. In March 2020, Part Two was issued, which set CO_2 emissions standards and Corporate Average Fuel Economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026.

In response to EO 13990, on December 21, 2021, the NHTSA finalized the Corporate Average Fuel Economy Preemption rule to withdraw its portions of the Part One Rule. The final rule concluded that the Part One Rule overstepped the agency's legal authority and established overly broad prohibitions that did not account for a variety of important state and local interests.

In March 2022, the NHTSA established new fuel economy standards that would require an industry-wide fleet average of approximately 49 miles per gallon for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8% annually for model years 2024 and 2025, and 10% annually for model year 2026.

On March 20, 2024, EPA released a final tailpipe emissions rule that sets new, more stringent emissions standards for GHG and criteria pollutants for light-duty and medium-duty vehicles for model years 2027 through 2032 under its Clean Air Act Section 202(a) authority.

On March 12, 2025, in response to President Trump's EO 14154, EPA stated that it would reconsider its 2024 rules that would cut passenger vehicle fleetwide tailpipe emissions by nearly 50% by 2032 compared with 2027 projected levels. The EPA said it is also reconsidering a 2022 regulation that aims to cut smog- and soot-forming emissions from heavy-duty trucks, saying the rule makes trucks more expensive.

In January 2025, President Trump's Transportation Secretary moved to rescind fuel economy standards issued under President Biden that aimed to reduce fuel use for cars and trucks. He has also frozen funding to states for electric vehicle (EV) charging. The NHTSA in June 2024 said it would hike Corporate Average Fuel Economy requirements to about 50.4 miles per gallon (4.67 liters per 100 kilometers) by 2031 from 39.1 miles per gallon currently for light-duty vehicles. NHTSA said in June 2024 the rule for passenger cars and trucks would reduce gasoline consumption by 64 billion gallons through 2050 and cut emissions by 659 MMT.

President Trump's Transportation Secretary also directed NHTSA to reconsider rules for heavy-duty pickup trucks and vans through 2035.

On May 22, 2025, Congress passed three Congressional Review Act resolutions to nullify California's Clean Air Act preemption waivers, which had allowed the state to enforce stricter vehicle emissions standards than federal rules. These resolutions target key California programs such as Advanced Clean Trucks (increasing percentages of zero-emission truck sales), Zero Emission Airport Shuttles, Zero-Emission Power Train Certification, Advanced Clean Cars II (required all new passenger cars, trucks and SUVs sold in California to be zero-emission by 2035), and all Low NOx Omnibus Regulation (establishing more stringent emissions standards for heavy-duty vehicles). Litigation challenging those resolutions is ongoing.

The Inflation Reduction Act of 2022

The Inflation Reduction Act (IRA) was signed into law by President Biden in August 2022. The Act includes specific investment in energy and climate reform and is projected to reduce GHG emissions within the United States by 40% as compared to 2005 levels by 2030. The Act allocates funds to boost renewable energy infrastructure (e.g., solar panels and wind turbines), includes tax credits for the purchase of EVs, and includes measures that will make homes more energy efficient.

The IRA authorized the EPA to implement the Greenhouse Gas Reduction Fund program, a $27 billion investment to mobilize financing and private capital to combat the climate crisis and ensure American economic competitiveness. Among other things, the IRA applies to GHGs in three specific areas: (1) California's ability to regulate GHG emissions from vehicles; (2) the EPA's authority to regulate CH_4 emissions from oil and gas facilities; and (3) the EPA's authority to regulate GHG emissions from power plants. President Trump's EOs have ordered a pause on the disbursement of some funds from the IRA, as has recent legislation signed into law, but the extent of the limits remain uncertain pending resolution of court challenges and further actions by the administration.

One Big Beautiful Bill Act

The One Big Beautiful Bill Act, signed into law on July 4, 2025, represents a significant change to U.S. climate and clean energy policy. Key revisions include:

- Phase-Out of Clean Energy Tax Credits: The bill eliminates the clean electricity production (45Y) and investment (48E) tax credits for solar and wind by 2027. After that, only hydropower, geothermal, and nuclear projects remain eligible, with credits gradually reduced to zero by 2036.
- Regulatory Rollbacks: It introduces expedited environmental reviews under NEPA through a new opt-in fee system.
- Rescission of IRA Climate Funds: The bill rescinds billions in unspent Inflation Reduction Act funds, including those earmarked for coastal resilience, marine sanctuaries, and climate research.

- Executive Order Enforcement: A follow-up executive order directs the Treasury to tighten eligibility rules for remaining clean energy credits and restrict the use of safe harbor provisions.

Overall, the One Big Beautiful Bill Act significantly curtails federal support for renewable energy and climate resilience.

2.2.3 State Regulations

The statewide GHG emissions regulatory framework is summarized in this subsection by category: state climate change targets, building energy, renewable energy and energy procurement, mobile sources, water, solid waste, and other state actions. The following text describes EOs, Assembly Bills (ABs), Senate Bills (SBs), and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues.

2.2.3.1 State Climate Change Targets

The state has taken several actions to address climate change. These actions are summarized below, and include EOs, legislation, and CARB plans and requirements.

Executive Order S-3-05

EO S-3-05 (June 2005) identified GHG emissions reduction targets and laid out responsibilities among the state agencies for implementing the EO and for reporting on progress toward the targets. This EO identified the following targets:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80% below 1990 levels.

EO S-3-05 also directed the California Environmental Protection Agency to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry.

Assembly Bill 32

In furtherance of the goals identified in EO S-3-05, the Legislature enacted AB 32, the California Global Warming Solutions Act of 2006 (California Health and Safety Code Sections 38500–38599). AB 32 provided initial direction on creating a comprehensive multiyear program to limit California's GHG emissions at 1990 levels by 2020, and initiate the transformations required to achieve the state's long-range climate objectives.

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 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 GHG emissions to 80% below 1990 levels by 2050, as set forth in S-3-05. To facilitate achieving this goal, EO B-30-15 called for CARB to update the Climate Change Scoping Plan (Scoping Plan) to express the 2030 target in terms of MMT CO_2e.

The EO also called for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets.

Senate Bill 32 and Assembly Bill 197

SB 32 and AB 197 (enacted in 2016) are companion bills. 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, to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to the Board 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.

Executive Order B-55-18

EO B-55-18 (September 2018) identified a policy for the state to achieve carbon neutrality as soon as possible (no later than 2045) and achieve and maintain net negative emissions thereafter. The goal is in addition to the existing statewide targets of reducing the state's GHG emissions. CARB will work with relevant state agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

Assembly Bill 1279

The Legislature enacted AB 1279, the California Climate Crisis Act, in September 2022. The bill declares the policy of the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter. Additionally, the bill requires that by 2045, statewide anthropogenic GHG emissions be reduced to at least 85% below 1990 levels.

California Air Resources Board's Climate Change Scoping Plan

One specific requirement of AB 32 is for CARB to prepare a scoping plan to help achieve the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (California Health and Safety Code Section 38561[a]), and to update the plan at least once every 5 years. In 2008, CARB approved the first scoping plan: The Climate Change Proposed Scoping Plan: A Framework for Change (Scoping Plan) (CARB 2008). The Scoping Plan included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the state's long-range climate objectives.

In 2014, CARB approved the first update to the Scoping Plan. The First Update to the Climate Change Scoping Plan: Building on the Framework (2014 Scoping Plan Update) defined the state's GHG emission reduction priorities for the next 5 years and laid the groundwork to start the transition to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012 (CARB 2014). The 2014 Scoping Plan Update concluded that California was on track to meet the 2020 target, but recommended that a 2030 mid-term GHG reduction target be established to ensure a continuum of action to reduce emissions. The 2014 Scoping Plan Update recommended a mix of technologies in key economic sectors to reduce emissions through 2050 including 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.

In December 2017, CARB released the 2017 Climate Change Scoping Plan Update (2017 Scoping Plan Update) for public review and comment (CARB 2017a). The 2017 Scoping Plan Update builds on the successful framework established in the initial Scoping Plan and 2014 Scoping Plan Update, while identifying new technologically feasible and cost-effective strategies that will serve as the framework to achieve the 2030 GHG target and define the state's climate change priorities to 2030 and beyond. The strategies' known commitments include implementing renewable energy and energy efficiency (including the mandates of SB 350), increased stringency of the Low Carbon Fuel Standard (LCFS), measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant (SLCP) Plan, and increased stringency of SB 375 targets. To fill the gap in additional reductions needed to achieve the 2030 target, the 2017 Scoping Plan Update recommends continuing the Cap-and-Trade Program and a measure to reduce GHGs from refineries by 20%.

CARB adopted the 2022 Scoping Plan Update in December 2022. The 2022 CARB Scoping Plan Update outlines the state's plan to reach carbon neutrality by 2045 or earlier, while also assessing the progress the state is making toward achieving GHG reduction goals by 2030. Per the Legislative Analyst's Office, the 2022 CARB Scoping Plan identifies a more aggressive 2030 GHG goal. As it relates to the 2030 goal, perhaps the most significant change in the 2022 plan (as compared to previous Scoping Plans) is that it identifies a new GHG target of 48% below the 1990 level, compared to the current statutory goal of 40% below. Current law requires the state to reduce GHG emissions by at least 40% below the 1990 level by 2030 but does not specify an alternative goal. The 2022 Scoping Plan identified a higher GHG target of 48% below 1990 levels by 2030 to put the state on a path to meeting the newly established 2045 goal, consistent with the overall path to 2045 carbon neutrality. The carbon neutrality goal requires CARB to expand proposed actions from only the reduction of anthropogenic sources of GHG emissions to also include those that capture and store carbon (e.g., through natural and working lands, or mechanical technologies). The carbon reduction programs build on and accelerate those currently in place, including moving to 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 (CARB 2022).

The 2022 CARB Scoping Plan Update also emphasizes that there is no realistic path to carbon neutrality without carbon removal and sequestration, and to achieve the state's carbon neutrality goal, carbon reduction programs must be supplemented by strategies to remove and sequester carbon. Strategies for carbon removal and sequestration include carbon capture and storage from anthropogenic point sources, where CO_2 is captured as it leaves a facility's smokestack and is injected into geologic formations or used in industrial materials (e.g., concrete); and CO_2 removal from ambient air, through mechanical (e.g., direct air capture with sequestration) or nature-based (e.g., management of natural and working lands) applications.

The Appendix D of the 2022 CARB Scoping Plan Update details "Local Actions." The Appendix D, Local Actions, includes recommendations to build momentum for local government actions that align with the state's climate goals, with a focus on local GHG reduction strategies (commonly referred to as climate action planning) and approval of new land use development projects, including through environmental review under CEQA. The recommendations provided in Appendix D of the 2022 CARB Scoping Plan are non-binding (i.e., not regulatory) and should not be interpreted as a directive to local governments, but rather as evidence-based analytical tools to assist local governments with their role as essential partners in achieving California's climate goals.

Appendix D of the 2022 CARB Scoping Plan outlines three priority GHG reduction strategies focused on transportation electrification, vehicle miles traveled (VMT) reduction, and building decarbonization. Appendix D of the 2022 CARB Scoping Plan recognizes consistency with a CEQA-qualified GHG reduction plan such as a climate action plan as a first option for evaluating potential GHG emission impacts under CEQA. Absent a qualified GHG reduction plan, Appendix D of the 2022 CARB Scoping Plan identifies other options for lead agencies to consider including reliance on air district-recommended thresholds.

Senate Bill 605 and Senate Bill 1383

SB 605 (2014) requires CARB to complete a comprehensive strategy to reduce emissions of SLCPs in the state (California Health and Safety Code Section 39730) and SB 1383 (2016) requires CARB to approve and implement that strategy by January 1, 2018 (California Public Resources Code Sections 42652–43654). SB 1383 also establishes specific targets for the reduction of SLCPs (40% below 2013 levels by 2030 for CH_4 and HFCs, and 50% below 2013 levels by 2030 for anthropogenic black carbon) and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, and as mentioned above, CARB adopted its SLCP Reduction Strategy in March 2017 (CARB 2017b). The SLCP Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, CH_4, and fluorinated gases (CARB 2017b).

Assembly Bill 1757

AB 1757 (September 2022) requires the CNRA to determine a range of targets for natural carbon sequestration, and for nature-based climate solutions that reduce GHG emissions for future years 2030, 2038, and 2045. The CNRA along with CARB, California Environmental Protection Agency, California Department of Food and Agriculture (CDFA), and more than 40 State agency partners established nature-based solutions targets for 2030, 2038, and 2045. These targets were established to support the state's goals to achieve carbon neutrality and foster climate adaptation and resilience.

2.2.3.2 Building Energy

California Code of Regulations, Title 24, Part 6

The California Building Standards Code 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 established Building Energy Efficiency Standards that are designed to ensure that new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every 3 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, to "reduce the 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 Section 25402[b][2–3]). 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 2025 Title 24 building energy efficiency standards were adopted in September 2024 and will become effective January 1, 2026. The 2025 building energy code focuses on key areas:

- Encouraging inherently efficient electric heat pump technology for space and water heating in newly constructed single-family, multifamily, and select nonresidential building types.
- Replacing end-of-life rooftop heating, ventilation, and air-conditioning (HVAC) units of a certain size with high efficiency systems including heat pumps, for existing retail, existing schools, and existing offices and libraries.
- Establishing electric-ready requirements for commercial kitchens and some multifamily buildings, so owners can more easily switch to cleaner electric cooking and water heating, when ready.
- Updating solar and storage standards for assembly buildings, including religious worship, sport, and recreation buildings to make clean energy available for on-site use while minimizing exports to the electrical grid.
- Strengthening ventilation standards to improve indoor air quality in multifamily buildings.

California Code of Regulations,

Title 24, Part 11

In addition to CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR Part 11), which is commonly referred to as California Green Building Standards (CALGreen), establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The 2022 CALGreen standards are the current applicable standards. For nonresidential projects, some of the key mandatory CALGreen 2022 standards involve requirements related to bicycle parking, designated parking for clean air vehicles, EV charging stations for passenger vehicles, medium heavy duty and heavy-duty trucks, shade trees, water conserving plumbing fixtures and fittings, outdoor potable water use in landscaped areas, recycled water supply systems, construction waste management, excavated soil and land clearing debris, and commissioning (24 CCR Part 11).

The CEC formally adopted the 2025 Title 24 Energy Code on September 11, 2024, which was then approved by the California Building Standards Commission on December 17, 2024, making its effective date January 1, 2026. Buildings whose permit applications are applied for on or after January 1, 2026, must comply with the 2025 Energy Code. The 2025 Energy Code updates for nonresidential buildings introduces several key changes aimed at improving energy efficiency and supporting the state's climate goals. These include enhanced mechanical system standards, such as updated requirements for HVAC and heat pump water heaters, and stronger building envelope performance to reduce energy loss. Electrical systems now require more advanced lighting controls and expanded testing protocols. The code also adds readiness provisions for solar and battery storage installations and includes laboratories under its scope for energy-intensive processes. Compliance tools and manuals have been revised to reflect new modeling rules, and the updates continue to align with CALGreen standards for sustainability, including water efficiency and indoor air quality.

California Code of Regulations, Title 20

Title 20 of the CCR requires manufacturers of appliances to meet state and federal standards for energy and water efficiency (20 CCR 1401–1410). CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the 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 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.

Senate Bill 1

SB 1 (2006) established a $3 billion rebate program to support the goal of the state to install rooftop solar energy systems with a generation capacity of 3,000 megawatts through 2016. SB 1 added sections to the California Public Resources Code, including Chapter 8.8 (California Solar Initiative), that require building projects applying for ratepayer-funded incentives for photovoltaic systems to meet minimum energy efficiency levels and performance requirements (California Public Resources Code Sections 25780–25784). Section 25780 established that it is a goal of the state to establish a self-sufficient solar industry. The goals included establishing solar energy systems as a viable mainstream option for both homes and businesses within 10 years of adoption and placing solar energy systems on 50% of new homes within 13 years of adoption. SB 1, also termed "Go Solar California," was previously titled "Million Solar Roofs."

Assembly Bill 1470

This bill established the Solar Water Heating and Efficiency Act of 2007 (California Public Utilities Code Sections 2851–2869). The bill makes findings and declarations of the Legislature relating to the promotion of solar water heating systems and other technologies that reduce natural gas demand.

Assembly Bill 1109

Enacted in 2007, AB 1109 required CEC to adopt minimum energy efficiency standards for general-purpose lighting to reduce electricity consumption by 50% for indoor residential lighting and by 25% for indoor commercial lighting (California Public Resources Code Section 25402.5.4).

2.2.3.3 Renewable Energy and Energy Procurement

Senate Bill 1078, Senate Bill 1368, Executive Order S-14-08, Executive Order S-21-09 and Senate Bill X1-2, and Senate Bill 1020

SB 1078 (2002) (California Public Utilities Code Section 399.11 et seq.) established the Renewables Portfolio Standard program, which required an annual increase in renewable generation by the utilities equivalent to at least

1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010 (see SB 107, EO S-14-08, and EO S-21-09).

SB 1368 (2006), required CEC to develop and adopt regulations for GHG emission performance standards for the long-term procurement of electricity by local publicly owned utilities (California Public Utilities Code Section 8340–8341). These standards must be consistent with the standards adopted by the California Public Utilities Commission.

EO S-14-08 (2008) focused on the contribution of renewable energy sources to meet the electrical needs of California while reducing the GHG emissions from the electrical sector. This EO required that all retail suppliers of electricity in California serve 33% of their load with renewable energy by 2020. Furthermore, the EO directed state agencies to take appropriate actions to facilitate reaching this target. CNRA, in collaboration with CEC and the California Department of Fish and Wildlife, was directed to lead this effort.

EO S-21-09 (2009) directed CARB to adopt a regulation consistent with the goal of EO S-14-08 by July 31, 2010. CARB was further directed to work with the California Public Utilities Commission and CEC to ensure that the regulation builds upon the Renewables Portfolio Standard program and was applicable to investor-owned utilities, publicly owned utilities, direct access providers, and community choice providers. Under this order, CARB was to give the highest priority to those renewable resources that provide the greatest environmental benefits with the least environmental costs and impacts on public health, and those that can be developed the most quickly in support of reliable, efficient, cost-effective electricity system operations. On September 23, 2010, CARB initially approved regulations to implement a Renewable Electricity Standard; however, this regulation was not finalized because of subsequent legislation (SB X1-2) signed by Governor Brown in April 2011.

SB X1-2 (April 2011) expanded Renewables Portfolio Standard by establishing a renewable energy target of 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation (30 megawatts or less), digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. SB X1-2 applies to all electricity retailers in the state, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All these entities must meet the renewable energy goals listed above.

SB 350 (2015) further expanded the Renewables Portfolio Standard program by establishing a goal of 50% of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 included the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the California Public Utilities Commission, in consultation with CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal.

SB 100 (2018) increased the standards set forth in SB 350, establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024; 52% by December 31, 2027; and 60% by December 31, 2030, be secured from qualifying renewable energy sources. SB 100 states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity resources do not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling.

SB 1020 (September 2022) revises the standards from SB 100, requiring the following percentage of retail sales of electricity to California end-use customers to come from eligible renewable energy resources and zero-carbon resources: 90% by December 31, 2035; 95% by December 31, 2040; and 100% by December 31, 2045.

2.2.3.4 Mobile Sources

State Vehicle Standards (Assembly Bill 1493 and Executive Order B-16-12)

AB 1493 (July 2002) was enacted in response to the transportation sector accounting for a large share of California's CO_2 emissions. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by CARB to be vehicles that are primarily used for noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. EO B-16-12 (March 2012) required that state entities under the governor's direction and control support and facilitate the rapid commercialization of ZEVs. It ordered CARB, CEC, the California Public Utilities Commission, and other relevant agencies to work with the Plug-In Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve benchmark goals by 2015, 2020, and 2025. On a statewide basis, EO B-16-12 identified a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050. This directive did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare.

Implementation of these standards and fleet turnover (replacement of older vehicles with newer ones) will gradually reduce emissions from the Project's motor vehicles.

California's ability to establish its own vehicle standards has recently been called into question, as explained in Section 2.2.2, Federal Regulations. However, CalEEMod is based on CARB's EMFAC2021 approved by EPA in November 2022 and does not incorporate emission factors for vehicle standards that were affected by recent federal actions, particularly as the analysis uses a 2028 operational date.

Executive Order S-1-07

EO S-1-07 (January 2007, implementing regulation adopted in April 2009) sets a declining LCFS for GHG emissions measured in CO_2e grams per unit of fuel energy sold in California. The target of the LCFS is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020 (17 CCR 95480 et seq.). The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel—including extraction/feedstock production, processing, transportation, and final consumption—per unit of energy delivered. CARB approved amendments to the LCFS in December 2011, implemented on January 1, 2013. In September 2015, the Board re-adopted the LCFS, effective January 1, 2016, to address procedural issues. In 2018, further amendments were made to strengthen carbon intensity benchmarks through 2030, align with SB 32's GHG reduction targets, and add new crediting opportunities for zero-emission vehicles, alternative jet fuel, carbon capture and sequestration, and advanced decarbonization technologies. As of 2022, GHG emissions were cut by 20% since 2000, with the biggest drop coming from transportation (CARB 2025b).

Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008 (SB 375) was enacted to support California's climate goals by reducing GHG emissions through coordinated transportation, land use, and housing planning. The

law focuses on creating more sustainable communities by addressing emissions from passenger vehicles, a major source of GHGs in the state.

Under SB 375, CARB is responsible for setting regional GHG reduction targets for the automobile and light-truck sector. These targets were first established in 2010 for the years 2020 and 2035 and are reviewed and updated every 8 years. Each of California's 18 Metropolitan Planning Organizations (MPOs) must develop a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan (RTP) to demonstrate how their region will meet these targets through integrated land use, housing, and transportation strategies.

If an MPO determines that its SCS will not meet the required targets, it must instead prepare an Alternative Planning Strategy that outlines how the targets could be achieved through different development patterns, infrastructure investments, or transportation policies. While the Alternative Planning Strategy is not part of the RTP, it serves as a backup plan to ensure compliance with CARB's targets. CARB must review and accept the MPO's determination that the SCS or Alternative Planning Strategy, if implemented, would meet the regional targets.

Although the SCS plays a central role in regional planning, it does not override local land use authority. It does not regulate land use, supersede city or county authority, or require consistency with local general plans. However, SB 375 integrates the SCS into both the federally required metropolitan transportation planning process and the state-mandated housing element process, making regional and local agencies responsible for its development.

To encourage implementation, SB 375 provides incentives for local governments and developers. Projects that align with an approved SCS or Alternative Planning Strategy may qualify for streamlined environmental review under CEQA, reducing regulatory barriers for sustainable residential and mixed-use developments.

Advanced Clean Cars Program and Zero-Emissions Vehicle Program

The Advanced Clean Cars (ACC) I program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package of regulations: the Low-Emission Vehicle regulation for criteria air pollutant and GHG emissions and a technology forcing regulation for ZEVs that contributes to both types of emission reductions (CARB 2025c). The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75% less smog-forming pollution than the average new car sold in 2015. The ZEV program will act as the focused technology of the ACC I program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid EVs in the 2018 to 2025 model years.

The ACC II program, which was adopted in August 2022, established the next set of Low-Emission Vehicle and ZEV requirements for model years after 2025 to contribute to meeting federal ambient air quality O_3 standards and California's carbon neutrality standards (CARB 2025c). The main objectives of ACC II are as follows:

- Maximize criteria and GHG emission reductions through increased stringency and real-world reductions.
- Accelerate the transition to ZEVs through both increased stringency of requirements and associated actions to support wide-scale adoption and use.

The ACC II rulemaking package also considers technological feasibility, environmental impacts, equity, economic impacts, and consumer impacts.

As described in Section 2.2.2, Federal Regulations, President Trump's EOs and congressional actions could impact California's ability to implement the ACC II. For purposes of the analysis of the Project, given the various legal challenges that exist, it would be speculative to assume a regulatory scheme different from what is utilized by CalEEMod as of the date of the Notice of Preparation.

Executive Order N-79-20

EO N-79-20 (September 2020) requires CARB to develop regulations as follows: (1) Passenger vehicle and truck regulations requiring increasing volumes of new ZEVs sold in the state towards the target of 100% of in-state sales by 2035; (2) medium- and heavy-duty vehicle regulations requiring increasing volumes of new zero-emission trucks and buses sold and operated in the state towards the target of 100% of the fleet transitioning to ZEVs by 2045 everywhere feasible and for all drayage trucks to be zero emission by 2035; and (3) strategies, in coordination with other state agencies, the EPA, and local air districts, to achieve 100% zero emissions from off-road vehicles and equipment operations in the state by 2035. EO N-79-20 called for the development of a ZEV Market Development Strategy, which was released February 2021, to be updated every 3 years, that ensures coordination and implementation of the EO and outlines actions to support new and used ZEV markets. In addition, the EO specifies identification of near-term actions, and investment strategies, to improve clean transportation, sustainable freight, and transit options; and calls for development of strategies, recommendations, and actions by July 15, 2021, to manage and expedite the responsible closure and remediation of former oil extraction sites as the state transitions to a carbon-neutral economy.

Advanced Clean Trucks Regulation

The Advanced Clean Trucks Regulation was also approved by CARB in 2020. The purpose of the Advanced Clean Trucks Regulation is to accelerate the market for ZEVs in the medium- and heavy-duty truck sector and to reduce air pollutant emissions generated from on-road mobile sources (CARB 2025d). The regulation has two components, (1) a manufacturer sales requirement and (2) a reporting requirement:

- Zero-emission truck sales: Manufacturers who certify Class 2b–8 chassis or complete vehicles with combustion engines will be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b–3 truck sales, 75% of Class 4–8 straight truck sales, and 40% of truck tractor sales.
- Company and fleet reporting: Large employers including retailers, manufacturers, brokers, and others will be required to report information about shipments and shuttle services. Fleet owners with 50 or more trucks will be required to report about their existing fleet operations. This information will help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

As described in Section 2.2.2, Federal Regulations, President Trump's EO and congressional actions have impacted California's ability to implement the Advanced Clean Truck measures to require increased zero-emission truck vehicle percentages and lower NO_x emissions. For purposes of the analysis of the Project, given the various legal challenges that exist, it would be speculative to assume a regulatory scheme different from what is utilized by CalEEMod as of the date of the Notice of Preparation. The current CalEEMod includes updated methodologies and emissions factors that account for current state-level regulations and fleet turnover trends. While federal actions may affect long-term projections, near-term assumptions are still grounded in California's regulatory environment.

2.2.3.5 Water

Senate Bill X7-7

SB X7-7, or the Water Conservation Act of 2009, required that all water suppliers increase their water use efficiency with an overall goal of reducing per capita urban water use by 20% by December 31, 2020. Each urban water supplier was required to develop water use targets to meet this goal. This target was largely met, with many suppliers achieving or exceeding their individual goals.

Following 2020, California has continued to build on SB X7-7's foundation. In 2024, the state adopted new regulations under the "Making Conservation a California Way of Life" initiative, which implements AB 1668 and SB 606. These regulations, effective January 1, 2025, establish customized water efficiency standards for each urban retail water supplier based on local conditions. The new framework aims to reduce urban water use by an additional 400,000 acre-feet by 2030, supporting long-term water resilience in the face of climate change.

Executive Order B-29-15

In response to the ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources has modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Executive Order N-10-21

In response to a state of emergency due to severe drought conditions, EO N-10-21 (July 2021) called on all Californians to voluntarily reduce their water use by 15% from their 2020 levels. Actions suggested in EO N-10-21 include reducing landscape irrigation, running dishwashers and washing machines only when full, finding and fixing leaks, installing water-efficient showerheads, taking shorter showers, using a shut-off nozzle on hoses, and taking cars to commercial car washes that use recycled water. California EO N-10-21, issued in July 2021, directed state agencies to develop a water resilience portfolio to adapt to climate change and ensure long-term water security. As of 2025, this EO has not been officially rescinded or replaced, but it has been superseded in practice by newer legislation and executive actions that build upon its goals. In particular, the state has advanced its water conservation and climate resilience strategies through the implementation of AB 1668 and SB 606.

Executive Order N-7-22

EO N-7-22 was issued by Governor Gavin Newsom in response to California's ongoing and severe drought conditions. EO N-7-22 was built upon previous drought emergency proclamations and aimed to strengthen water conservation and groundwater management across the state. Key provisions included enhanced groundwater well permitting oversight, water use reduction, emergency water supplies to communities facing critical shortages, environmental protections for fish and wildlife habitats, and temporary suspension of regulations that could delay critical water conservation or emergency supply efforts.

2.2.3.6 Solid Waste

Assembly Bill 939, Assembly Bill 341, Assembly Bill 1826, and Senate Bill 1383

In 1989, AB 939, known as the Integrated Waste Management Act (California Public Resources Code Section 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board (replaced in 2010 by the California Department of Resources Recycling and Recovery, or CalRecycle), which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by the year 2000. By the early 2000s, most jurisdictions had achieved the 50% diversion target. The law was later amended to require jurisdictions to maintain the 50% diversion rate annually, not just as a one-time goal. In 2010, the California Integrated Waste Management Board was replaced by CalRecycle, which continues to oversee compliance and reporting. A review of CalRecycle data for the most recent data available in 2023 for the City shows that the 50% diversion rate equivalent in pounds per person per day has been achieved.

AB 341 (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required CalRecycle to develop strategies to achieve the state's policy goal. CalRecycle has conducted multiple workshops and published documents that identify priority strategies that it believes would assist the state in reaching the 75% goal by 2020. California is currently not meeting the waste reduction target established by AB 341. However, the state remains committed to this goal (CalRecycle 2024). While the 75% target was a statewide goal and not a mandatory diversion rate for each jurisdiction, AB 341 did require certain businesses and multi-family dwellings to implement recycling programs.

AB 1826 (Chapter 727, Statutes of 2014, effective 2016) requires businesses to recycle their organic waste (i.e., food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste) depending on the amount of waste they generate per week. This law also requires local jurisdictions across the state to implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. The minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

SB 1383 (2016) requires a 50% reduction in organic waste disposal from 2014 levels by 2020 and a 75% reduction by 2025—essentially requiring the diversion of up to 27 million tons of organic waste—to reduce GHG emissions. SB 1383 also requires that no less than 20% of edible food that is currently disposed be recovered for human consumption by 2025.

California is not currently on track to meet the 75% organic waste diversion target set by SB 1383 for 2025. While the state has made progress in implementing organic waste diversion programs, various reports indicate that the current pace of implementation is not sufficient to reach the ambitious 75% reduction goal by the 2025 deadline.

2.2.3.7 Other State Actions

Senate Bill 97

SB 97 (2007) directed the Governor's Office of Planning and Research and CNRA to develop guidelines under CEQA for the mitigation of GHG emissions. CNRA adopted the CEQA Guidelines amendments in December 2009, which became effective in March 2010.

Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4[a]). The CEQA Guidelines require a lead agency to consider the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures (14 CCR 15126.4[c]). The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply its own thresholds of significance or those developed by other agencies or experts. CNRA also acknowledged that a lead agency could consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions (CNRA 2009).

With respect to GHG emissions, CEQA Guidelines Section 15064.4(a), as subsequently amended in 2018, states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines now note that an agency "shall have discretion to determine, in the context of a particular project, whether to: (1) Quantify greenhouse gas emissions resulting from a project; and/or (2) Rely on a qualitative analysis or performance-based standards" (14 CCR 15064.4[a]). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]).

Executive Order S-13-08

EO S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the EO directs state agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009, and an update, Safeguarding California: Reducing Climate Risk, followed in July 2014. To assess the state's vulnerability, the report summarizes key climate change impacts to the state for the following areas: agriculture, biodiversity and habitat, emergency management, energy, forestry, ocean and coastal ecosystems and resources, public health, transportation, and water. Issuance of Safeguarding California: Implementation Action Plans followed in March 2016. In January 2018, CNRA released the Safeguarding California Plan: 2018 Update, which communicates current and needed actions that state government should take to build climate change resiliency.

2.2.4 Local Regulations

2.2.4.1 South Coast Air Quality Management District

Air districts typically act in an advisory capacity to local governments in establishing the framework for environmental review of air pollution impacts under CEQA. This may include recommendations regarding significance thresholds, analytical tools to estimate emissions and assess impacts, and mitigations for potentially significant impacts. Although air districts will also address some of these issues on a project-specific basis as responsible agencies, they may provide general guidance to local governments on these issues (SCAQMD 2008).

2.2.4.2 Southern California Association of Governments

California's 18 MPOs have been tasked with creating SCSs in an effort to reduce the region's VMT in order to help meet AB 32's GHG targets through integrated transportation, land use, housing, and environmental planning. Pursuant to SB 375, CARB set per-capita GHG emission reduction targets from passenger vehicles for each of the state's 18 MPOs. For SCAG, the state's initial mandated reductions were set at 8% by 2020 and 13% by 2035. In March 2018, CARB updated the SB 375 targets for SCAG to require 8% reduction by 2020 and a 19% reduction by 2035 in per-capita passenger vehicle GHG emissions.

The RTP/SCSs do not require that local general plans, specific plans, or zoning be consistent with it but provide incentives for consistency for governments and developers. Incentives include access to state and federal transportation funds, streamlined environmental review for projects consistent with the RTP/SCS and located in high quality transit areas, job centers, and transit priority areas, and eligibility for SCAG-administered grants such as the Sustainable Communities Program. The RTP/SCS is updated every 4 years. SCAG adopted the 2024–2050 RTP/SCS, also referred to as "Connect SoCal 2024" on April 4, 2024. The Connect SoCal 2024 builds upon prior planning cycles to update the vision of the region's future (SCAG 2024). Connect SoCal 2024 identifies the following strategy areas to support its environmental goals: Sustainable Development, Air Quality, Clean Transportation, Natural and Agricultural Lands Preservation, and Climate Resilience. SCAG's Connect SoCal 2024 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The Connect SoCal 2024 RTP/SCS is a regional growth management strategy, which targets per capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California region pursuant to SB 375. In addition to demonstrating the region's ability to attain the GHG emission reduction targets set forth by CARB, the Connect SoCal 2024 RTP/SCS outlines a series of actions and strategies for integrating the transportation network with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands (SCAG 2024). Thus, successful implementation of the Connect SoCal 2024 RTP/SCS would result in more complete communities with various transportation and housing choices while reducing automobile use.

Amendment No. 1, approved on September 5, 2024, updates the original 2024–2050 RTP/SCS to incorporate time-sensitive project modifications and ensure consistency with the 2025 Federal Transportation Improvement Program. This amendment maintains compliance with state and federal planning, air quality, and environmental requirements while allowing critical transportation projects to advance on schedule.

2.2.4.3 City of Garden Grove

City of Garden Grove General Plan

The City of Garden Grove General Plan (City of Garden Grove 2008) does not include specific goals and policies related to GHG emissions, but its Air Quality Element, Conservation Element, Safety Element, and Circulation Element include goals and policies that would have the co-benefit of reducing GHG emissions.

Air Quality Element

Goal AQ-1. Air quality that meets the standards set by State and Federal governments.

Policy AQ-1.2. Strive to achieve conformance with state-mandated congestion management plans (CMPs), transportation demand management (TDM) plans, or other like State or Federally required pollution reduction plans.

AQ-IMP-1B. Encourage and assist employers in developing and implementing work trip reduction plans, employee ride sharing, modified work schedules, preferential carpool and vanpool parking, or any other trip reduction approach that is consistent with the Air Quality Management Plan for the South Coast Air Basin.

Goal AQ-2. Increased awareness and participation throughout the community in efforts to reduce air pollution and enhance air quality.

Policy AQ-2.2. Promote and encourage ride sharing activities within the community.

Policy AQ-2.3. Continue to improve existing sidewalks, bicycle trails, and parkways, and require sidewalk and bicycle trail improvements and parkways for new development or redevelopment projects.

Policy AQ-2.4. Relieve congestion on major arterials and reduce emissions.

AQ-IMP-2B. Require new development or redevelopment projects to provide pedestrian and bicycle trails access to nearby shopping and employment centers.

Goal AQ-3. A diverse and energy efficient transportation system incorporating all feasible modes of transportation for the reduction of pollutants.

Policy AQ-3.1. Cooperate and participate in regional and local efforts to develop an efficient transportation system that reduces vehicle trips and vehicle miles traveled.

Policy AQ-3.2. Cooperate in efforts to expand and promote the use of bus, rail, and other forms of transit within the region in order to further reduce pollutants.

Goal AQ-4. Efficient development that promotes alternative modes of transportation, while ensuring that economic development goals are not sacrificed.

Policy AQ-4.1. Review site developments to ensure pedestrian safety and promote non-automotive users.

AQ-IMP-4C. Require sidewalks through parking lots, bicycle racks near building entrances and other provisions for the safety and convenience of pedestrian and bicycle riders at all commercial, mixed use, and production facilities.

Goal AQ-5. An improved balance of residential, commercial, industrial, recreational, and institutional uses to satisfy the needs of the social and economic segments of the population. Work towards clean air while still permitting reasonable planned growth.

Policy AQ-5.2. Encourage infill development projects within urbanized areas that include jobs centers and transportation nodes.

Policy AQ-5.6. Increase residential and commercial densities around bus and/or rail transit stations, and along major arterial corridors.

AQ-IMP-4C. Require sidewalks through parking lots, bicycle racks near building entrances and other provisions for the safety and convenience of pedestrian and bicycle riders at all commercial, mixed use, and production facilities.

Goal AQ-6. Increased energy efficiency and conservation.

Policy AQ-6.1. Develop incentives and/or regulations regarding energy conservation requirements for private and public developments.

Policy AQ-6.2. Promote energy conservation and disseminate information throughout the community about energy conservation measures.

AQ-IMP-6D. Require new development to comply with the energy use guidelines in Title 24 of the California Administrative Code.

Conservation Element

Goal Con-1. Garden Grove's water resources shall be conserved to ensure equitable amounts of clean water for all users.

Policy CON-1.2. Reduce the waste of potable water through efficient technologies, conservation efforts, and design and management practices, and by better matching the source and quality of water to the user's needs.

Policy CON-1.3. Promote water conservation in new development or redevelopment project design, construction, and operations.

Policy CON-1.4. Continue to implement a Water Conservation Program.

CON-IMP-1B. Require on-site infiltration whenever feasible for new development or redevelopment projects.

CON-IMP-1C. Promote site appropriate, low water-use, and drought tolerant native plants city-wide.

CON-IMP-1F. Promote cost-saving conservation measures such as low-flow fixtures, waterless urinals, and other techniques that extend scarce supplies for all homes and businesses.

Goal Con-2. Protect and improve water quality.

Policy CON-2.1. Enhance water infiltration throughout watersheds by decreasing accelerated runoff rates and enhancing groundwater recharge. Whenever possible, maintain or increase a site's pre-development infiltration to reduce downstream erosion and flooding.

Policy CON-2.2. Encourage practices that enable water to percolate into the surrounding soil, instead of letting sediment, metals, pesticides and chemicals runoff directly into the storm drain system, creeks, or regional flood control facilities.

CON-IMP-2D. Minimize impervious services [surfaces] for new development, and incorporate technologies such as pervious paving, landscaped roofs, planter boxes, and rainwater capture and reuse.

Goal Con-3. Reduce Total waste diverted to treatment or disposal at the waste source and through re-use and recycling.

Policy CON-3.1. Update as appropriate and continue to implement the Source Reduction and Recycling Element (SRRE) for the City.

Policy CON-3.4. Encourage the use of materials with minimal impacts to the environment for new development or redevelopment projects in the City.

CON-IMP-3D. Encourage the use of recycled or rapidly renewable materials, and building reuse and renovation over new construction, where feasible.

Goal Con-4. Reduce per-capita non-renewable energy waste and city-wide peak electricity demand through energy efficiency and conservation.

Policy CON-4.1. Integrate energy efficiency and conservation requirements that exceed State standards into the development review and building permit processes.

Policy CON-4.2. Create incentives such as expedited permit processing, technical assistance, and other methods that will encourage energy efficiency technology and practices.

CON-IMP-4A. Adopt Energy Efficiency Standards for new and remodeled buildings that exceed Title 24 building standards.

Goal Con-5. Reduce dependency on non-renewable energy resources through the use of local and imported alternative energy sources.

Policy CON-5.1. Integrate technically and financially feasible renewable energy resources requirements into development and building standards through adopted Renewable Energy Building Standards.

Policy CON-5.2. Promote renewable energy use through regulations, incentives, and available funding opportunities.

Policy CON-5.3. Create opportunities for the purchase and development of local renewable energy resources.

CON-IMP-5G. Encourage renewable technologies through streamlined planning and development rules, codes, and processes.

CON-IMP-5H. Provide incentives such as expedited processing for facilities that use renewable sources for energy production.

Goal Con-6. Green Building programs achieve water and energy efficiency, minimize raw resource consumption, and reduce the amount of waste placed in landfills while improving human health and quality of life in the City.

Policy CON-6.1. The City shall promote improvement in the health and productivity of new buildings, by understanding and training building personnel in new construction practices and the use of alternative or recycled building materials.

Policy CON-6.2. Provide information, marketing, training, and education to the public to support green building activities.

Safety Element

Goal SAF-10. A robust, climate-responsive community prepared to anticipate, adapt to, and mitigate impacts stemming from climate change.

Policy SAF-10.6. Encourage development projects to incorporate design features that reduce the impact of extreme heat events.

Policy SAF-10.7. Consider the possibility of constrained future water supplies due to long-term climate change impacts on water supplies and require enhanced water conservation for new construction and retrofits.

Policy SAF-10.8. Contribute to and participate in ongoing climate change prevention programs at the regional, State, and Federal levels.

Policy SAF-10.9. Investigate all possible strategies to reduce greenhouse gases from municipal operations, private businesses, and residences.

Policy SAF-10.10. Encourage mixed-use development throughout the City consistent with the goals and policies of the Land Use Element in order to encourage jobs/housing proximity, promote transit-oriented development, and encourage high density development along major corridors, which encourages walking, bicycling and the use of public transit systems.

Policy SAF-10.11. Encourage infill, redevelopment, and higher density development consistent with the goals and policies of the Land Use Element.

SAF-IMP-10F. Design new buildings to use less cooling through passive heat and cooling techniques.

SAF-IMP-10G. Encourage the use of water-porous pavement materials to allow for groundwater recharge and reductions in stormwater runoff and materials that also can reflect solar energy, speed up evaporation, and otherwise stay cooler than traditional pavements.

SAF-IMP-10I. Require the use of sustainable landscaping techniques and water conservation measures in new development beyond the current requirements.

SAF-IMP-10O. Promote limiting idling time for commercial vehicles including delivery and construction vehicles, consistent with South Coast Air Quality Management District idling regulations.

SAF-IMP-10Q. Encourage the use of available energy saving measures that exceed the minimum Title 24 requirements for residential and commercial projects.

SAF-IMP-10AB. Develop a strategy to reduce greenhouse gas emissions citywide consistent with other City policy objectives. Consider developing a climate action plan or other document that defines that strategy. Actions that may be considered as part of the strategy may include:

- On-site renewable energy generation capabilities for larger-scale commercial, industrial, institutional, and multi-family residential developments
- Actions that will move Garden Grove toward zero-net energy over a longer time frame
- Enhanced transit connections to the streetcar station once it is operational
- Outreach to local businesses to identify measures they can pursue to reduce emissions associated with deliveries, production, cooking (for restaurants), and other business practices
- Coordination with local schools to reduce traffic congestion/idling vehicles during pick-up and drop-off times

Circulation Element

Goal CIR-4. A reduction in vehicle miles traveled in order to create a more efficient urban form.

Policy CIR-4.1. Strive to achieve a balance of land uses whereby residential, commercial, and public land uses are proportionally balanced.

Policy CIR-4.2. Strive to reduce the number of miles traveled by residents to their places of employment.

Goal CIR-5. Increased awareness and use of alternate forms of transportation generated in, and traveling through, the City of Garden Grove.

Policy CIR-5.1. Promote the use of public transit.

Policy CIR-5.3. Provide appropriate bicycle access throughout the City of Garden Grove.

Policy CIR-5.4. Provide appropriate pedestrian access throughout the City of Garden Grove.

Policy CIR-5.5. Continue to implement the provisions of the Transportation Demand Ordinance.

CIR-IMP-5A. Promote the use of Transportation Demand Management (TDM) Measures.

CIR-IMP-5B. Encourage the creation of programs such as Transportation Systems Management (TSM), public transit, carpools/ vanpools, ride-match, bicycling, and other alternatives to the energy-inefficient use of vehicles.

Goal CIR-6. A safe, appealing, and comprehensive bicycle network provides additional recreational opportunities for Garden Grove residents and employees.

Policy CIR-6.3. Encourage existing major traffic generators, and new major traffic generators to incorporate facilities, such as bicycle racks and showers, into the development.

CIR-IMP-6H. Encourage the placement of signage that educates and informs automobiles and bicyclists that use the facility.

Goal CIR-10. Participation in regional transportation planning efforts to address interjurisdictional issues, and maintain competitive advantage in capital improvement funding programs, as appropriate.

Policy CIR-10.3. Encourage employers to reduce employee-related travel.

Goal CIR-11. Continued compliance with regional congestion management, transportation demand, traffic improvement, air quality management, and growth management programs.

Policy CIR-11.5. Encourage employers to reduce employee-related travel.

CIR-IMP-11D. Continue to encourage employers to use vans, small buses, and other HOVs to link work places with potential park-and-ride facilities and transit centers.

CIR-IM-11E. Encourage the provision of convenient eating and recreational facilities on-site for businesses employing more than 100 people.

CIR-IM-11F. Encourage businesses to establish incentives and regulations to spread work trips over a longer period to reduce peak period congestion.

2.3 Significance Criteria and Methodology

2.3.1 Thresholds of Significance

CEQA Guidelines

The significance thresholds used to evaluate the Project's GHG emissions impacts are based on the recommendations provided in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). For the purposes of this GHG emissions analysis, the Project would have a significant environmental impact if it would:

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment
2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. The Appendix G thresholds for GHGs do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures (MMs). Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA.

With respect to GHG emissions, CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project's GHG emissions and/or rely on a "qualitative analysis or performance-based standards" (14 CCR 15064.4[a]). A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change" (14 CCR 15064.4[c]). The CEQA Guidelines provide that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment (14 CCR 15064.4[b]):

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

In addition, the CEQA Guidelines specify that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7[c]).

Governor's Office of Planning and Research Guidance

The Governor's Office of Planning and Research technical advisory titled, "CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review," states that "public agencies are encouraged but not required to adopt thresholds of significance for environmental impacts. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact" (OPR 2008). Furthermore, the advisory document indicates that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice" (OPR 2008).

South Coast Air Quality Management District Guidance

In October 2008, SCAQMD proposed recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts, as presented in its Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold (SCAQMD 2008). This guidance document, which builds on the

previous guidance prepared by the California Air Pollution Control Officers Association, explored various approaches for establishing a significance threshold for GHG emissions. The draft interim CEQA thresholds guidance document was not adopted or approved by the Governing Board. However, in December 2008, SCAQMD adopted an interim 10,000 MT CO_2e per-year screening level threshold for stationary source/industrial projects for which SCAQMD is the lead agency (see SCAQMD Resolution No. 08-35, December 5, 2008).

SCAQMD formed a GHG CEQA Significance Threshold Working Group to develop GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. From December 2008 to September 2010, SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The most recent proposal, issued in September 2010, proposed the following tiered threshold approach to evaluate potential GHG impacts from various uses (SCAQMD 2010):

Tier 1. Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.

Tier 2. Consider whether or not the project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.

Tier 3. Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MT CO_2e per-year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO_2e per year), commercial projects (1,400 MT CO_2e per year), and mixed-use projects (3,000 MT CO_2e per year). Under option 2, a single numerical screening threshold of 3,000 MT CO_2e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.

Tier 4. Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of Assembly Bill (AB) 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MT CO_2e per-service population for project-level analyses and 6.6 MT CO_2e per-service population for plan-level analyses. The 2035 efficiency targets are 3.0 MT CO_2e per-service population for project-level analyses and 4.1 MT CO_2e per-service population for plan-level analyses If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.

Tier 5. Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project emissions to the target significance threshold.

Notably, the bright-line thresholds were intended to capture 90% of new development. The 2035 SCAQMD-efficiency threshold target date was based on SB 375 target date for achieving GHG reductions. The SCAQMD-efficiency thresholds specified in Tier 4, therefore, do not consider SB 32 which has a target date of 2030 or the new carbon neutrality target of 2045. These regulatory measures were adopted after the SCAQMD-efficiency thresholds were developed. As the Tier 4 efficiency thresholds may not be sufficient to achieve the deeper emissions cuts required under SB 32 and the carbon neutrality goals, to be conservative, the Tier 4 efficiency metric is not used here to determine the potential significance of the Project's GHG impacts. The conservative approach utilized to determine the potential significance of GHG impacts is described in the next subsection.

Approach to Determining Significance

The CEQA Guidelines do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific MMs. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009). The 3,000 MT CO_2e per year threshold was recommended by the SCAQMD for all non-industrial projects; however, the City, in exercising its lead agency discretion, has conservatively elected to apply the SCAQMD recommended Tier 3 threshold of 1,400 MT CO_2e per year for commercial projects for this Project with respect to CEQA Guidelines Checklist Question 1 – Whether the Project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. This approach is conservative because the City is applying the lowest numeric threshold recommended by the SCAQMD. That threshold is significantly lower compared to the thresholds for mixed-use (3,000 MT CO_2e per year) and residential (3,500 MT CO_2e per year) development. As described previously, under the tiered approaches recommended by SCAQMD, the City exercised its discretion to not use the Tier 4 efficiency threshold. The Project is not eligible to use Tier 1 or 2 because it is not exempt from CEQA and there is no City adopted GHG reduction plan.

SCAQMD established the various bright-line thresholds to facilitate the achievement of statewide and regional goals for GHG emissions. As discussed above, use of 1,400 MT CO_2e per year as a bright-line threshold for the Project is a conservative approach. The SCAQMD thresholds were derived from modeling and analysis that showed GHG impacts would be less than significant at the identified threshold levels by screening out from further review only the lowest emitting 10% of projects in terms of GHG emissions. Thus, the City's conservative use of the SCAQMD threshold demonstrates that GHG emissions for the Project would be less than cumulatively considerable if those emissions fall (or are reduced to) below the 1,400 MT CO_2e per year threshold.

Regarding CEQA Guidelines Checklist Question 2 – Whether the Project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, in the absence of a City Climate Action Plan, this analysis evaluates consistency with state and regional GHG reduction plans, as well as consistency with any GHG related goals and policies of the City's General Plan, to assess the impact.

The Scoping Plan (approved by CARB in 2008 and updated in 2014, 2017, and 2022) provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific projects, nor is it intended to be used for project-level evaluations.[3] Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., LCFS), among others. At the regional level, the 2024 Connect SoCal serves as the RTP/SCS and has been adopted for the purpose of reducing GHG emissions attributable to passenger vehicles in the Southern California region.

[3] The Final Statement of Reasons for the amendments to the State CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009).

If the Project does not conflict with the regulations and actions outlined in the applicable state plans (i.e., 2022 Scoping Plan), regional plans (i.e., SCAG RTP/SCS) or applicable City General Plan goals and policies, then it would have a less-than-significant impact.

2.3.2 Approach and Methodology

CalEEMod 2022 Version 2022.1.1.30 was used to estimate emissions from construction and operation of the Project (CAPCOA 2022). CalEEMod is a computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant and GHG emissions associated with construction activities and operation of a variety of land use projects. CalEEMod input parameters, including the land use type used to represent the Project and its size, construction schedule, and anticipated use of construction equipment, were based on the experience of GHG experts and information provided by the City or the applicant, or relevant default model assumptions where Project specifics were unavailable.

2.3.2.1 CalEEMod Land Use Assumptions

The land use assumptions used to estimate construction and operational emissions in CalEEMod are presented in Table 2-2.

Table 2-2. CalEEMod Land Use Development Summary

CalEEMod Land Use Type	CalEEMod Land Use Subtype	Land Use Amount (Size)	Land Use Size Metric	Building Square Footage	Land Use Acreage
Recreational	Hotel	500	Room	417,233	3.72
Parking	Enclosed Parking with Elevator	528	SP	301,686	0

Notes: CalEEMod = California Emissions Estimator Model.
Ancillary uses associated with the hotel such as restaurant, meeting rooms, entertainment spaces and health and fitness are included within the hotel building square footage as those uses will only be available to guests of the hotel. The GHG emissions associated with the swim facilities were also calculated and included in the operational GHG emission estimates.

2.3.2.2 Construction Emissions

2.3.2.2.1 Construction Scenario

Construction of the Project would result in GHG emissions associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. For purposes of estimating Project emissions, the analysis conservatively evaluated project construction as if it would commence in October 2025. The construction schedule utilized in the analysis represents a "worst-case" analysis scenario since emission factors for construction equipment decrease as the analysis year progresses, due to improvements in technology and more stringent regulatory requirements for emissions from construction equipment. Therefore, construction emissions would likely decrease if the construction schedule moved to a later year. The duration of construction activity and associated equipment represent a reasonable approximation of the expected construction fleet as required per CEQA guidelines. Table 2-3 presents the construction scenario used for estimating Project-generated construction emissions in CalEEMod. Additional details are provided in Appendix A, Construction CalEEMod Files.

Table 2-3. Construction Scenario

Construction Phase	Start Date	End Date	One-Way Vehicle Trips				Equipment		
			Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	On-Site Trucks	Equipment Type	Quantity	Usage Hours
Site Preparation	10/1/2025	10/28/2025	18	6	0	0	Rubber Tired Dozers	2	8
							Tractors/Loaders/ Backhoes	3	8
Site Grading	10/29/2025	12/2/2025	16	6	254	0	Graders	1	8
							Excavators	1	8
							Tractors/Loaders/ Backhoes	3	8
							Rubber Tired Dozers	1	8
							Compactor (Other Construction Equipment)	2	3
Building Construction	12/3/2025	1/11/2028	418	164	0	0	Forklifts	3	8
							Generator Sets	1	8
							Cranes	1	6
							Welders	1	8
							Tractors/Loaders/ Backhoes	3	8
Paving	1/12/2028	3/14/2028	24	4	0	0	Tractors/Loaders/ Backhoes	1	8
							Cement and Mortar Mixers	2	6
							Pavers	1	8
							Paving Equipment	2	6
							Rollers	2	6
Architectural Coating	3/15/2028	6/27/2028	84	4	0	0	Air Compressors	1	6

Notes: No demolition is required for the Project as there are no structures on the Project site.

Amortization of Construction Emissions

GHG emissions from construction activities occur over a relatively short-term period; accordingly, they contribute a relatively small portion of the overall lifetime project GHG emissions. In addition, GHG emission reduction measures for construction equipment are relatively limited. The SCAQMD recommends amortizing the construction GHG emissions over the life of the project so that GHG reduction measures present a more complete assessment of a project's GHG contributions (SCAQMD 2008). The California Association of Environmental Professionals Climate Change Committee also recommends amortizing construction emissions and combining them with operational emissions to make a single significance determination. Amortization of construction GHG emissions is done by adding all the construction GHG emissions for every year of construction and then dividing that number by the operational lifetime (CAEP 2016). The SCAQMD recommends that construction emissions be amortized over a 30-year project lifetime (SCAQMD 2008). This time frame is supported by lifecycle analyses and industry standards, which indicate that significant asset renewal and maintenance activities typically occur around this timeframe (RDH 2015). While the Project could continue to exist for more than 30 years, - during and after the 30-year Project life period, the Project would be subject to a range of existing and future regulatory standards and policies applicable to the built environment. California is expected to implement numerous additional policies, regulations and programs to reduce statewide emissions to achieve the GHG reduction goals of SB 32 and EO S-3-05. Based on SCAQMD guidance, lifecycle analyses, and industry standards, a 30-year project life has been utilized in this analysis.

2.3.2.2.2 Land Use Change (Stored Carbon Loss)

Land use development has the potential to result in loss of sequestered carbon that would result from removal of trees or vegetation on site during construction. The Project site is currently graded with no trees or substantial vegetation that would result in meaningful carbon storage. As such, this GHG analysis does not include a calculation of the existing vegetation-related carbon loss.

2.3.2.3 Operational Emissions

2.3.2.3.1 Operational Emission Sources

Project-generated operational GHG emissions were estimated for mobile, area, energy sources, water and wastewater, solid waste, refrigerants, and stationary sources using CalEEMod and based on Project-specific values and relevant CalEEMod default values for the land use type when Project-specifics were not available. The Project's first full year of operation after construction is estimated to be 2029; however, because construction is anticipated to end in April 2028, the year 2028 was conservatively applied as the build-out year. Table 2-2 provides a summary of the land use inputs included in the CalEEMod modeling with additional details provided in Appendix A, Operational CalEEMod Files.

Mobile Sources

Mobile sources for the Project would be hotel guests, vendors, and employees traveling to and from the Project site. CalEEMod default emission factors representing the vehicle mix and emissions for 2028 were used for build-out of the Project. As represented in CalEEMod, motor vehicles may be fueled with gasoline, diesel, or alternative fuels, such as electricity. The Project's VMT assessment (Translutions 2025) was used to inform the mobile source emissions estimate.

The effectiveness of fuel economy improvements was evaluated using the CalEEMod emission factors for motor vehicles to the extent it was captured in CalEEMod 2022.1.1.30 which is based on EMFAC2021. As noted previously, this analysis does not speculate on how industry and other governments will respond to recent federal efforts related to fuel economy standards.

Area Sources

CalEEMod was used to estimate operational emissions from area sources, including emissions from landscape maintenance equipment. Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. The emissions associated with landscape maintenance equipment were calculated based on the relevant default values provided in CalEEMod.

Emissions associated with natural gas usage in space heating, water heating, and stoves are calculated in the building energy use module of CalEEMod, as described in the following text.

Energy Source

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. GHG emissions associated with the natural gas and electricity usage associated with the Project were calculated by CalEEMod using default parameters.

The relevant CalEEMod default energy intensity factor (CO_2, CH_4, and N_2O mass emissions per kilowatt-hour) for Southern California Edison was applied, which is based on the projected value for Southern California Edison's energy mix in 2028 (CAPCOA 2022). As explained in Section 2.2.3.3, Renewable Energy and Energy Procurement, SB 100 and SB 1020 call for further development of renewable energy, with targets of 52% by December 31, 2027; 60% by December 31, 2030; 90% by December 31, 2035; 95% by December 31, 2040; and 100% by December 31, 2045. As such, GHG emissions associated with Project electricity demand would continue to decrease over time. However, conservatively, the Project analysis of GHG emissions related to energy sources is based on the energy mix projected to exist in 2028.

Water and Wastewater

Supply, conveyance, treatment, and distribution of water for the Project require the use of electricity, which would result in associated indirect GHG emissions. Similarly, the conveyance and treatment of the project's wastewater would generate GHG emissions.

Solid Waste

The Project would generate solid waste. A large percentage of this waste will be diverted from landfills by a variety of means, such as by reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted will be disposed of at a landfill. The City and CALGreen require 65% diversion of waste from construction debris. California has established a target of 75% organic waste diversion target compared to 2014

levels and to recover 20% of edible foods by 2025. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions based on the disposal of solid waste associated with the Project were calculated by CalEEMod using relevant default parameters. Municipal solid waste associated with the recreational water facilities (swimming pool), such as empty chemical containers was included in the hotel solid waste estimates.

A review of CalRecycle data shows that hotels and lodging contribute 1.5% to the total commercial waste stream in Garden Grove (CalRecycle 2025). The CalRecycle data also shows that hotels and lodgings in Garden Grove divert approximately 19.8% of their mixed solid waste. The most recent statewide waste characterization study showed that large hotels divert 22.7% of their mixed solid waste (CalRecycle 2006).

Refrigerants

Refrigerants are substances used in the equipment for air conditioning and refrigeration. Most of the refrigerants used today are HFCs or blends thereof, which can have high GWP values. All equipment that uses refrigerants has a charge size (i.e., quantity of refrigerant the equipment contains) and an operational refrigerant leak rate, and each refrigerant has a GWP that is specific to that refrigerant. CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime, and then derives average annual emissions from the lifetime estimates.

Refrigerant emissions are associated with buildings and mobile sources primarily from air conditioning usage.

Stationary Sources

A stationary source is defined as any building, structure, facility, or installation which emits or may emit any pollutants. A 1,341 horsepower backup generator may be required during emergency outages. Emergency backup diesel generators are considered stationary sources and subject to permitting from the SCAQMD. The modeling evaluated the generators based on statewide average emission factors for a 2028 operational year and operation of an average of 40 hours annually, primarily for testing purposes.

Land Use Change (Carbon Sequestration)

The Project will plant trees that will serve to sequester carbon. Planting trees and enhancing landscaping can significantly contribute to carbon sequestration because trees absorb CO_2 during photosynthesis and store it in their biomass (trunks, branches, leaves, and roots). Over time, this process helps reduce the overall concentration of CO_2 in the atmosphere, mitigating the effects of climate change. The Project did not take any reduction in GHG emissions attributable to carbon sequestration benefits from tree planting.

2.4 Impact Analysis

2.4.1 Would the Project Generate Greenhouse Gas Emissions, Either Directly or Indirectly, That May Have a Significant Impact on the Environment?

Quantification of GHG Emissions

Construction Emissions

Construction of the Project would result in GHG emissions, which are primarily associated with the use of off-road construction equipment, haul trucks, on-road vendor trucks, and worker vehicles.

CalEEMod was used to calculate the annual GHG emissions based on the construction scenario described in Section 2.3.2.2, Construction Emissions. Table 2-4 presents the unmitigated construction emissions for the Project in 2025 through 2028. As noted in Section 1.4.1, Project Design Features Previously Approved, the Project includes PDFs for construction that would potentially reduce GHG emissions. The Project's PDFs include many of the best management practices for reducing GHG emissions from construction. Specifically, PDF-4, PDF-5, and PDF-10, would encourage more efficient fuel consumption and PDF-8 would establish electricity supply to the Project site for use of electric-powered equipment instead of diesel-fueled equipment. Given the nature of those PDFs and to conservatively analyze the GHG emissions, the analysis does not take credit for any reductions in the Project's GHG emissions that may be attributable to those PDFs. The amortized construction emissions are also shown.

Table 2-4. Estimated Annual Construction Greenhouse Gas Emissions - Unmitigated

Year	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
2025	397.94	0.02	0.04	0.34	411.57
2026	1,512.89	0.05	0.11	1.65	1,549.05
2027	1,491.17	0.05	0.11	1.48	1,525.84
2028	121.00	0.00	0.01	0.10	122.87
				Total	**3,609.33**
				Amortized 30-Year Construction Emissions	***120.31***

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R = refrigerant; CO_2e = carbon dioxide equivalent; <0.01 = reported value less than 0.01. The values shown are the annual emissions reflect CalEEMod "unmitigated" output.
Totals may not sum due to rounding.
See Appendix A for complete results.

As shown in Table 2-4, the estimated total unmitigated GHG emissions during construction would be approximately 3,609 MT CO_2e over the construction period. Estimated unmitigated Project-generated construction emissions amortized over 30 years would be approximately 120 MT CO_2e per year.

Operational Emissions

Operation of the Project would generate GHG emissions through vehicle trips by hotel guests, employees, and vendors to and from the Project site; area sources such landscape maintenance equipment operation; energy use

(generation of electricity consumed by the Project and natural gas use); solid waste disposal; water supply, treatment, and distribution and wastewater treatment; and refrigerants. CalEEMod was used to calculate the annual GHG emissions based on the operational specifications described in Section 2.3.2.3, Operational Emissions.

The estimated unmitigated operational Project-generated GHG emissions are shown in Table 2-5. As noted previously, the operational PDFs are qualitative in nature and, to be conservative, the analysis does not include any reductions in the Project's GHG emissions attributable to those PDFs.

Table 2-5. Estimated Annual Operational Greenhouse Gas Emissions – 2028 - Unmitigated

Emission Source	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
Mobile	2,614.57	0.14	0.11	3.24	2,655.24
Area	14.58	<0.01	<0.01	NA	14.63
Energy	4,982.24	0.45	0.02	NA	4,999.39
Water	40.13	0.93	0.02	NA	70.19
Waste	37.48	3.75	0.00	NA	131.11
Refrigerant	NA	NA	NA	107.99	107.99
Stationary	25.53	<0.01	<0.01	0.00	25.61
Total	**7,714.52**	**5.27**	**0.16**	**111.23**	**8,004.17**
				Amortized 30-Year Construction Emissions	*120.31*
				Project Operation + Amortized Construction Total	**8,124.48**
				GHG Threshold	**1,400**
				Exceed Threshold?	**Yes**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R= refrigerant; CO_2e = carbon dioxide equivalent; <0.01 = reported value less than 0.01; NA = not applicable.
Columns may not sum due to rounding.
See Appendix B for complete results.

As shown in Table 2-5, most GHGs associated with the Project are generated by energy sources and mobile sources such as on-road vehicles. The Project would result in approximately 8,004.17 MT CO_2e per year without amortized construction emissions and 8,124.48 MT CO_2e per year with amortized construction emissions. This amount would exceed the GHG threshold of 1,400 MT CO_2e per year. Therefore, the Project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. This would represent a potentially significant impact without mitigation.

Level of Significance Before Mitigation

The Project would have a **potentially significant impact**.

MMs are required to minimize construction and operational-related GHG impacts.

MMs under CEQA are selected based on their ability to substantially lessen or avoid significant environmental impacts while considering feasibility. In CEQA, "feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors. The goal is to balance effective environmental protection with realistic implementation.

Mitigation Measures

Construction (On-Site) Mitigation Measures

As noted previously, GHG MMs for construction emissions are limited; however, available feasible construction GHG emissions MMs are imposed as noted below. The following mitigation measures that were identified as quantifiable would reduce the Project's GHG emissions in a quantifiable way. Those reductions are included in the quantitative analysis. Otherwise, for the non-quantifiable mitigation measures that are imposed, GHG reductions have not been identified in this analysis.

MM-GHG-1. Electric Construction Equipment. Prior to issuance of building permits, the Project applicant or designee shall submit documentation to the City of Garden that temporary power will be established to the Project site during vertical construction. All generator(s) and crane(s) shall be electric-powered. In addition, the Project shall limit air compressors used during the architectural coating/painting phase to equipment that is electric-powered.

MM-GHG-1 is quantified in the construction analysis.

MM-GHG-2. Construction Office Energy Efficiency. Prior to issuance of building permits, the Applicant or designee shall submit documentation to the City of Garden Grove that temporary construction field office(s) are equipped with energy efficient lighting such as compact fluorescent or LEDs and that heating and cooling units are Energy Star certified.

MM-GHG-2 is not quantified in the construction analysis.

MM-GHG-3. Construction Debris Recycling. Prior to the start of construction, the Project's contractor shall develop a Construction Waste Management Plan for submittal and approval to the City of Garden Grove. The Construction Waste Management Plan shall recycle or salvage non-hazardous construction debris such that a minimum target of 75% is achieved. This will exceed the City's current target of 65% diversion.

MM-GHG-3 is not quantified in the construction analysis.

Operational (On-site) Mitigation Measures

MM-GHG-4. Electric Vehicle Charging Infrastructure. Prior to issuance of building permits, the Project applicant or designee shall submit a site plan to the City of Garden Grove for approval noting the location of electric vehicle infrastructure and charging stations. Prior to issuance of the final certificate of occupancy, the Project applicant or designee shall provide electric vehicle (EV) charging infrastructure within the Project site as required by the applicable California Green Building Standards Code, but that, at a minimum, meets or exceeds 2022 California Green Building Standards Code, Tier 2 standards. Tier 2 requires approximately 225 parking spaces to be EV capable, and 75 spaces to be equipped with EV Supply Equipment (EVSE). The Project shall install a minimum of 225 EV capable spaces and 100 EVSE spaces.

MM-GHG-4 is not quantified in the operational analysis.

MM-GHG-5. Guest Vehicle Trip Reductions. Prior to issuance of building permits, the Project applicant shall submit a site plan to the City of Garden Grove for approval identifying where pedestrian and bicycle connections to adjacent facilities will be provided and where bicycle parking spaces will be provided. The City shall verify the inclusion of pedestrian and bicycle infrastructure prior to the issuance of the final certificate of occupancy. The Project applicant or designee shall ensure that, at a minimum, the following trip reduction measures are implemented during Project operations to reduce the number of auto-based trips generated by the Project and to encourage the use of transit, bicycling, and walking.

- Improve the walkability and design of the Project by providing pedestrian and bicycling connections within the Project site and to adjacent off-site facilities (i.e., sidewalks, crosswalks, wayfinding signage, etc.).
- Provide secure on-site bicycle racks to accommodate a minimum of 38 bicycle parking spaces and provide bicycle rentals for hotel guests.
- Alternative transportation services such bike rentals and transit information shall be seamlessly integrated into the guest experience, making alternative modes of travel easy to understand, access, and use.
- Hotel management/concierge should provide information that promotes walking, bicycling and public transit options to nearby attractions. This should include information on local bus routes and schedules and wayfinding to the existing transit stops along Harbor Boulevard.
- Qualitative assessments (e.g., user satisfaction surveys, walk audits, guest feedback) shall be regularly conducted to evaluate the effectiveness of trip reduction strategies.
- An annual report summarizing how transportation options are being used, guest perceptions, and planned improvements shall be submitted to the City.

MM-GHG-5 is not quantified in the operational analysis.

MM-GHG-6. Limit Large Diesel Trucks During Operation. Prior to issuance of certificate of occupancy, the Project applicant or designee shall submit a Truck Delivery Management Plan to the City of Garden Grove that documents how truck deliveries will be restricted and monitored. The Project applicant or designee shall implement a monitoring program to restrict the number of large diesel trucks coming to the site (i.e., for deliveries, trash collection, or other services) to an average of 10 trucks per day or less. This restriction is specifically applicable to trucks classified as medium-heavy duty and heavy-heavy duty with gross vehicle weight (GVW) greater than 19,500 pounds. Annual reports summarizing heavy-duty truck trips shall be provided to the City of Garden Grove.

MM-GHG-6 is quantified in the operational analysis.

MM-GHG-7. Building Energy Efficiency Measures. Prior to issuance of building permits, the Project applicant or designee shall submit documentation of building energy efficiency measures to the City of Garden Grove. Energy efficiency measures shall include, at a minimum, the following:

1. LED Lighting - High-lumen LED light fixtures shall be used exclusively for the lighting of spaces throughout the Project that require 8 watts to 10 watts per fixture.
2. Energy efficient lighting shall be incorporated into all on-site lighting.

3. HVAC Optimization - The HVAC system shall include the following:
   a. Heat pumps will be used to heat spaces and water using a heat exchanger and will be monitored by the Project Building Management System (BMS).
   b. Smart thermostats, which include a motion sensor detector and door/window open sensors, will be installed in each guest room.
   c. The central plant will utilize a Combination Plant with SmartPlate EV
4. Glazing - All glazing for the tower and exterior public spaces shall be installed with Low-E glass [U-factor (thermal transmittance) ≤ 0.28 and Solar Heat Gain Coefficient (SHGC) ≤ 0.23.
5. Energy Management System - The Project shall use advanced systems to monitor and optimize energy use in real time.
6. Benchmarking and Monitoring- The Project shall incorporate an Energy Star Portfolio Management system to track and manage energy consumption
7. Third-Party Verification/LEED Certification - The Project shall obtain third-party HVAC commissioning verification or LEED certification to verify energy savings

MM-GHG-7 is quantified in the operational analysis.

MM-GHG-8. Cool Roof/Deck. Prior to issuance of building permits, the Project applicant or designee shall submit plans to the City for approval that require cool roof and cool deck surfaces to be included as part of the Project for the podium and tower consistent with the specifications provided below.

- Cool Roof Installation:

  All roofing materials shall meet or exceed the California Title 24, Part 6 requirements for cool roofs, based on roof slope:

  - Low-sloped roofs (⩽ 2:12 pitch):
    - Aged Solar Reflectance (SR) ⩾ 0.63
    - Thermal Emittance (TE) ⩾ 0.75
    - Or Solar Reflectance Index (SRI) ⩾ 75
  - Steep-sloped roofs (> 2:12 pitch):
    - Aged SR ⩾ 0.20
    - TE ⩾ 0.75
    - Or SRI ⩾ 16
  - Cool Deck Surfaces:

  All exterior hardscape surfaces exposed to sunlight (e.g., pool decks, patios, walkways) shall use high-albedo materials or cool surface coatings with:

    - Minimum SR of 0.29 or higher
    - Or materials with a demonstrated surface temperature reduction of at least 10°F compared to conventional concrete or asphalt

To meet the above standards, the project applicant may implement one or more of the following:

- Use Energy Star®-rated roofing products or materials listed in the Cool Roof Rating Council (CRRC) directory.
- Apply reflective coatings or single-ply membranes with compliant SR and TE values.
- Install light-colored or permeable pavers, cool concrete, or coated surfaces for decks and walkways, such as permeable interlocking concrete pavers, porous asphalt, permeable concrete, geocell systems, or bio-asphalt.
- Incorporate green roofs or vegetated shading structures as alternative compliance pathways (subject to City approval).

Monitoring and Reporting shall include:

- Submittal of roofing and hardscaping material specifications to the City of Garden Grove Building Division prior to issuance of building permits.
- City inspectors shall verify installation during final inspection and prior to issuance of the final certificate of occupancy.

MM-GHG-8 is not quantified in the operational analysis.

MM-GHG-9. Renewable Energy. The Project Applicant or designee shall install a solar photovoltaic system capable of generating a minimum of 267,000 kilowatt hours (kWh) per year prior to issuance of certificate of occupancy.

MM-GHG-9 is quantified in the operational analysis.

MM-GHG-10. Water Conservation. Prior to receiving the final certificate of occupancy, the Project applicant or designee shall submit a Water Conservation Compliance Report to the City of Garden Grove for review and approval. The Project shall achieve a minimum 10% reduction in total water use compared to the baseline of 167 gallons per room per day as identified in the Water Supply Assessment (Psomas 2022). This equates to a target of no more than 150.3 GPCD at full occupancy. The Water Conservation Compliance Report shall include product specifications for all water-saving fixtures and systems, landscape and irrigation plans, greywater system design and capacity documentation, post-occupancy water use monitoring plan for the first 12 months after occupancy. To meet or exceed the performance standard, the Project may implement a combination of water conservation strategies such as the following:

- Low-Flow Water Fixtures for guest rooms and public areas.
- Smart Irrigation System - outdoor landscaping shall include weather-based irrigation controllers and drought-resistant landscaping to minimize outdoor water use.
- Greywater Recycling.

MM-GHG-10 is quantified in the operational analysis.

MM-GHG-11. Waste Reduction. Prior to issuance of the final certificate of occupancy, the Project applicant or designee shall submit a Waste Management, Recycling, and Composting Plan to the City of Garden Grove for review and approval. The program shall be implemented on-site at the Project

location and apply to all operational areas, including guest services, food and beverage operations, maintenance, and administrative functions. The waste reduction program shall be fully implemented during Project operations. The Plan shall specify a minimum diversion of 25% of municipal solid waste generated on-site from landfill disposal. The Waste Management, Recycling, and Composting Plan may include but not be limited to the following:

- Recycling Program
  - - Labeled bins for recyclables and certified hauler contracts.
- Organics and Composting Program
  - Collection of food scraps and compostables.
- Source Reduction Measures
  - Reduce single-use items and paper use
- Employee and Guest Education
  - Staff training and signage for guests
- Monitoring and Reporting
  - Track waste and submit Annual Waste Diversion Report to the City of Garden Grove

MM-GHG-11 is quantified in the operational analysis.

MM-GHG-12. Zero Emission Landscape Equipment. During Project operations, the Project Applicant or designee shall ensure zero-emission landscape equipment (defined as equipment that does not emit tailpipe emissions during operation) is utilized. The Project applicant or designee shall be responsible for ensuring that all landscape maintenance contractors and staff comply with this measure. All landscape maintenance activities associated with the Project shall utilize zero-emission landscaping equipment, such as electric-powered or battery-operated tools. This requirement applies to all landscaped areas within the Project site, including but not limited to courtyards, green spaces, perimeter landscaping, and rooftop gardens. The requirement shall be implemented prior to the commencement of landscape maintenance operations. To meet or exceed the performance standard, the Project may implement a combination of the following strategies:

Electric-Powered Equipment

- Use of electric or battery-powered:
  - Leaf blowers
  - Lawn mowers
  - Hedge trimmers
  - Edgers
  - Chainsaws

Contractor Requirements

- Include zero-emission equipment requirements in all landscape maintenance contracts.
- Require contractors to provide documentation of equipment type and compliance.

On-Site Charging Infrastructure

- Install dedicated charging stations or outlets for landscape equipment.

Equipment Inventory and Tracking

- Maintain an inventory of all landscape equipment used on-site.
- Submit an annual compliance report to the City of Garden Grove verifying that only zero-emission equipment is in use.

Training and Education

- Provide training to landscape maintenance staff on the proper use and maintenance of electric equipment.
- Display signage or include information in sustainability reports to promote awareness.

MM-GHG-12 is quantified in the operational analysis.

MM-GHG-13. Prohibit Woodburning devices, Natural Gas Fireplaces and Fire Pits. Prior to the issuance of building permits, the Project applicant or designee shall submit building design plans for approval of the City showing the prohibition of on-site woodburning devices, natural gas fireplaces, fire pits, or other decorative combustion features throughout the Project site. Prior to the issuance of the final certificate of occupancy, the City shall confirm that this prohibition has been implemented.

MM GHG-13 is not quantified in the operational analysis.

MM-GHG-14. Refrigerant Management Program. Prior to issuance of mechanical permits, the Project Applicant or designee shall develop and submit a Refrigerant Management Program to the City of Garden for review and approval. The Project applicant or designee shall be responsible for developing, implementing, and maintaining the refrigerant management program in coordination with HVAC contractors and facility operations staff. The Refrigerant Management Program shall include the use of low-GWP refrigerants (e.g., R-32 or better) and incorporate best management practices to reduce emissions from service, operation, and disposal of refrigerants. This measure shall apply to all refrigeration and HVAC systems installed and operated within the Project site, including guest rooms, common areas, kitchens, and mechanical rooms. The Project shall ensure that:

- 100% of installed HVAC and refrigeration systems use refrigerants with a GWP $\leqslant$ 750, consistent with California Air Resources Board (CARB) regulations.
- The refrigerant management program shall achieve a minimum 10% reduction in potential refrigerant emissions compared to standard industry practices, as demonstrated through leak rate tracking and maintenance logs.

To meet or exceed the performance standard, the Project may implement a combination of the following strategies:

Mechanical Equipment

- Install microchannel heat exchangers in A/C equipment in place of conventional heat exchangers.

Use of Low-GWP Refrigerants

- Select refrigerants such as R-32, R-454B, or other CARB-compliant alternatives with GWP $\leqslant$ 750.
- Avoid high-GWP refrigerants such as R-410A and R-404A.

Leak Detection and Prevention

- Install automatic leak detection systems for large-capacity systems.
- Conduct quarterly inspections and maintain leak logs.

Refrigerant Recovery and Disposal

- Use certified technicians for refrigerant recovery and disposal.
- Maintain documentation of recovered and recycled refrigerants.

Preventive Maintenance Program

- Implement a scheduled maintenance plan to inspect and service HVAC and refrigeration systems.
- Include refrigerant charge optimization and system performance checks.

Training and Certification

- Ensure all HVAC technicians are EPA Section 608 certified.
- Provide training on low-GWP refrigerant handling and leak prevention.

Third-Party Verification

- Obtain third-party verification of refrigerant management practices through programs such as GreenChill or LEED Enhanced Refrigerant Management credit.

Prior to issuance of certificate of occupancy, the City of Garden Grove will verify that the equipment specified in the Refrigerant Management Program has been installed. Ongoing compliance shall be performed by the Project applicant or their designee.

MM GHG-14 is quantified in the operational analysis.

MM-GHG-1 through MM-GHG-14 will be imposed on the Project in accordance with CEQA to reduce construction and operational GHG emissions. Table 2-7 shows the Project's mitigated construction GHG emissions and Table 2-8 shows the Project's mitigated operational emissions.

Table 2-7. Estimated Annual Construction Greenhouse Gas Emissions - Mitigated

Year	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
2025	388.92	0.02	0.04	0.34	402.52
2026	1,398.25	0.05	0.11	1.65	1,434.02
2027	1,376.54	0.04	0.11	1.48	1,410.81
2028	113.11	<0.01	0.01	0.10	114.95
				Total	**3,362.30**
				Amortized 30-Year Construction Emissions	*112.08*

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R = refrigerant; CO_2e = carbon dioxide equivalent; <0.01 = reported value less than 0.01. The values shown are the annual emissions reflect CalEEMod "unmitigated" output.
Totals may not sum due to rounding.
See Appendix A for complete results.

Table 2-8. Estimated Annual Operational Greenhouse Gas Emissions –2028 - Mitigated

Emission Source	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
Mobile	2,447.19	0.13	0.09	3.08	2,479.52
Area	0	0	0	NA	0
Energy	4,714.60	0.42	0.02	NA	4,730.66
Water	35.48	0.84	0.02	NA	62.54
Waste	28.11	2.81	<0.01	NA	98.34
Refrigerant	NA	NA	NA	11.34	11.34
Stationary	25.53	<0.01	<0.01	0.00	25.61
Total	**7,250.91**	**4.20**	**0.13**	**14.42**	**7,408.02**
				Amortized 30-Year Construction Emissions	*112.08*
				Project Operation + Amortized Construction Total	**7,520.09**
				GHG Threshold	**1,400**
				Exceed Threshold?	**Yes**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R= refrigerant; CO_2e = carbon dioxide equivalent; <0.01 = reported value less than 0.01; NA = not applicable; GHG = greenhouse gas.
Columns may not sum due to rounding.
See Appendix B for complete results.

As shown in Table 2-8, the mitigated GHG emissions with the imposition of MM-GHG-1 through MM-GHG-14 exceed the 1,400 MT CO_2e per year threshold. The Project's GHG emissions would be a potentially significant GHG impact after implementation of mitigation.

As mitigation measures MM-GHG-1 through GHG-14 do not reduce the Project's GHG emission below the applicable threshold, carbon offsets are evaluated below, consistent with Tier 5 of the SCAQMD guidance and other CEQA guidance which includes implementation of CEQA mitigation including the purchase of GHG offsets.

Carbon Offsets

Following implementation of all feasible construction and operational (on-site) MMs, the purchase and retirement of carbon offsets through the voluntary market to reduce all construction GHG emissions and operational GHG emissions below the 1,400 MT CO_2e per year threshold for the life of the Project (30 years) was evaluated.

The use of carbon offsets as a CEQA mitigation strategy for the reduction of GHG emissions was memorialized with the SB97-directed amendments to the CEQA Guidelines, as adopted by the Office of Planning and Research (now the Office of Land Use and Climate Innovation) and CNRA circa 2009. The use of off-site actions and credits, such as carbon offsets, to mitigate GHG impacts are based on the following:

- CEQA Section 15126.4 (c)(3) states that mitigation measures for GHG emissions may include "offsite measures, including offsets that are not otherwise required, to mitigate a project's emissions"
- CEQA Section 151370 (e) states that mitigation includes "Compensating for the impact by replacing or providing substitute resources or environments"
- CEQA Section 21168.6.5 (i)(1) states that "Offset credits shall be employed by the applicant only after feasible local emission reduction measures have been implemented."
- The California Natural Resources Agency's Final Statement Of Reasons For Regulatory Action for the CEQA Guidelines Amendments (2009) also supports the use of GHG credits: "Proposed subdivision (c)(3) recognizes the availability of various offsite mitigation measures. Such measures could include, among others, the purchase of carbon offsets, community energy conservation projects, and off-site forestry projects"

For these purposes, the City will require offsets purchased from the following CARB-accredited registries: Climate Action Reserve, the American Carbon Registry (ACR), or Verra (formerly, the Verified Carbon Standard); as well as credits issued for projects listed on the California Carbon Sequestration and Climate Resiliency Project Registry, which is maintained by CNRA to be adequate to meet the offset requirements described herein.

Verra's Verified Carbon Units are issued only after projects undergo a rigorous validation and verification process. Each Verified Carbon Unit represents 1 ton of CO_2e emissions reduced or removed and must meet quality assurance principles ensuring that reductions are real, measurable, additional, permanent, independently verified, conservatively estimated, uniquely numbered, and transparently listed.

Climate Action Reserve protocols are developed through a transparent, multi-stakeholder process. Projects must be independently verified and adhere to standards that ensure emissions reductions are real, permanent, and additional. Climate Action Reserve also assigns unique serial numbers to carbon credits to prevent double counting and ensure they are verifiable and enforceable.

ACR is widely recognized for its rigorous standards. ACR's protocols similarly require that carbon offset projects demonstrate additionality, undergo third-party verification, and ensure that reductions are real, quantifiable, permanent, and verifiable. ACR's standards are aligned with international best practices and are often referenced alongside Verra and Climate Action Reserve in regulatory and voluntary markets.

As discussed before, for purposes of assessing the Project's overall GHG emissions, construction emissions are typically amortized and added to the operational emissions. To provide flexibility for acquisition of carbon credits in bulk or in increments consistent with CEQA standards for contemporaneous mitigation of impacts, construction and

operational emission offsets have been separately identified so that the purchase of construction offsets can occur prior to the start of construction while the purchase of operational offsets could occur prior to first occupancy in bulk or in increments. MM-GHG-15 requires the Project applicant to purchase carbon offsets to mitigate all construction GHG emissions and requires the Project to reduce the operational emissions below the 1,400 MT CO_2e per year threshold for a period of 30 years as a lump sum or purchase carbon offsets on an annual basis.

MM-GHG-15. Carbon Offsets – The Project Applicant (or its designee) shall implement the following carbon offsets in accordance with the Project's construction and operational phases as outlined below.

Timeline for Acquisition of Carbon Offset Credits

Construction

Prior to issuance of grading permits, the Project Applicant (or its designee) shall purchase and retire carbon offsets in a quantity sufficient to offset all construction GHG emissions in a lump sum with the quantification, performance standards, and requirements set forth below. Alternatively, construction offsets may be purchased on an annual basis by purchasing the first phase of construction offsets prior to start of grading and then purchasing offsets for each following year by December 31 of the year preceding the new year in which construction will occur. Annual construction GHG emission offsets shall also be subject to the same quantification, performance standards, and requirements set forth below.

Operation

Prior to issuance of the final certificate of occupancy, the Project Applicant or its designee shall purchase and retire carbon offsets in a quantity sufficient to offset, for a 30-year period following occupancy of the Project, the construction and operational GHG emissions from Project to the 1,400 MT CO_2e per year threshold, consistent with the quantification, performance standards and requirements set forth below. Alternatively, the Project Applicant or its designee may purchase and retire annual operational GHG offsets for a period of 30 years by December 31 of the year preceding each new year after the issuance of the final certificate of occupancy. Annual operational GHG emission offsets shall also be subject to the same quantification, performance standards, and requirements set forth below.

Quantification of GHG Emissions and Reductions Required

Construction

The estimated total construction GHG emissions to be offset are 3,362.30 MT CO_2e if purchased in a lump sum. If purchased on an annual basis, the following schedule provides the estimated annual emissions and date of compliance.

Year	Offsets Required MT CO2e	Purchase and Retirement Deadline
1	402.52	Prior to issuance of grading permits
2	1,434.02	December 31st of Year 1
3	1,410.81	December 31st of Year 2

4	114.95	December 31st of Year 3
Total	**3,362.30**	

Operation

The estimated operational emissions are 7,408.02 MT CO_2e. To mitigate operational emissions below the 1,400 MT CO_2e threshold, the Project would purchase and retire one lump sum of 180,270.60 MT CO_2e of offsets [7,408.02 MT CO_2e – 6,009.02 (offsets) = 1,399 MT CO_2e remaining; 6,009.02 MT CO_2e x 30-year life = 180,270.60 MT CO_2e]; or that same total amount of credits in increments over the 30 years. The following schedule provides the estimated offset emissions and dates of compliance under the scenarios where credits are purchased and retired in a lump sum or on an annual basis.

Scenario	Offsets Required MT CO_2e	Purchase and Retirement Deadline
Lump Sum	180,270.60	Prior to issuance of certificate of occupancy
Annual Basis 30-year term	6,009.02	Prior to issuance of certificate of occupancy for Year 1 and December 31 of preceding year.

If the Project Applicant or its designee selects the scenario where the credits are purchased on something other than in one lump sum initially, they can purchase and retire the remaining offsets required in a lump sum in accordance with the remaining term and conditions outlined herein.

Carbon Offset Standards – Eligible Registries, Acceptable Protocols, Defined Terms, and Geographic Priorities

"Carbon offset" shall mean an instrument, credit or other certification verifying the reduction of GHG emissions issued by the following CARB-accredited registries: Climate Action Reserve, the American Carbon Registry, or Verra (formerly, the Verified Carbon Standard); as well as credits issued for projects listed on the California Carbon Sequestration and Climate Resiliency Project Registry, which is maintained by the California Natural Resources Agency and may provide additional offsets. This shall include, but is not limited to, an instrument, credit or other certification issued by these registries for GHG reduction activities. The Project shall neither purchase offsets from the Clean Development Mechanism registry nor purchase offsets generated under Clean Development Mechanism protocols.

To be eligible under this mitigation measure, carbon offsets must satisfy the "Reporting and Enforcement Standards" below and demonstrate that each registry shall continue its existing practice of requiring the following for the development and approval of protocols or methodologies:

1. Adherence to established GHG accounting principles set forth in the International Organization for Standardization (ISO) 14064, Part 2 or the World Resources Institute/World Business Council for Sustainable Development (WRI/WBCSD) Greenhouse Gas Protocol for Project Accounting; and
2. Oversight of the implementation of protocols and methodologies that define the eligibility of carbon offset projects and set forth standards for the estimation, monitoring and verification of GHG reductions achieved from such projects. The protocols and methodologies shall:
    a. Be developed by the registries through a transparent public and expert stakeholder review process that affords an opportunity for comment and is informed by science;
    b. Incorporate standardized offset crediting parameters that define whether and how much emissions reduction credit a carbon offset project should receive, having identified conservative project baselines and the length of the crediting period and considered potential leakage and quantification uncertainties;
    c. Establish data collection and monitoring procedures, mechanisms to ensure permanency in reductions, and additionality and geographic boundary provisions; and,
    d. Adhere to the principles set forth in the program manuals of each of the aforementioned registries, as such manuals are updated from time to time. The current registry documentation, includes the Climate Action Reserve's *Reserve Offset Program Manual*[4] (April 2024) and *Climate Forward Program Manual*[5] (December 2021); the American Carbon Registry's *The ACR Standard, Requirements and Specifications for the Quantification, Monitoring, Reporting, Verification, and Registration of Project-Based GHG Emissions Reductions and Removals*[6] (July 2023); and, Verra's VCS Standard, *Program Guide* [7] (August 2023) and *Methodology Requirements*[8] (October 2023).

The City has reviewed the registries' methodologies and has determined that protocols established pursuant to such methodologies – including updates to those protocols and methodologies as may occur from time to time by the registries in accordance with the registry documentation listed in the prior paragraph to ensure the continuing efficacy of the reduction activities – are eligible for use under this mitigation measure.

The carbon offsets purchased to satisfy this measure must represent the reduction or sequestration of one MT CO_2e that is "not otherwise required" (CEQA Guidelines Section 15126.4(c)(3)). The carbon offsets must achieve the standard of additional, real, permanent, quantifiable, verifiable, and enforceable reductions, which are defined for purposes of this

4 https://climateactionreserve.org/wp-content/uploads/2024/04/Reserve-Program-Manual-v9.2.pdf
5 https://climateforward.org/wp-content/uploads/2021/12/Climate-Forward-Program-Manual-December-2021_12-FINAL.pdf
6 https://acrcarbon.org/wp-content/uploads/2023/10/ACR-Standard-v8.0.pdf
7 https://verra.org/documents/vcs-program-guide-v4-4/
8 https://verra.org/documents/vcs-methodology-requirements-v4-4/

mitigation measure as follows consistent with the applicable provisions in the California Code of Regulations, Title 17:

1. "Additional" means that the carbon offset is not otherwise required by law or regulation, and not any other GHG emissions reduction that otherwise would occur.
2. "Real" means that the GHG reduction underlying the carbon offset results from a demonstrable action or set of actions, and is quantified under the protocol or methodology using appropriate, accurate, and conservative methodologies that account for all GHG emissions sources and sinks within the boundary of the applicable carbon offset project, uncertainty, and the potential for activity-shifting leakage and market-shifting leakage.
3. "Verifiable" means that the GHG reduction underlying the carbon offset is well documented, transparent and set forth in a document prepared by an independent verification body that is accredited through the American National Standards Institute (ANSI).
4. "Permanent" means that the GHG reduction underlying the carbon offset is not reversible; or, when GHG reduction may be reversible, that a mechanism is in place to replace any reversed GHG emission reduction.
5. "Quantifiable" means the ability to accurately measure and calculate the GHG reduction relative to a project baseline in a reliable and replicable manner for all GHG emission sources and sinks included within the boundary of the carbon offset project, while accounting for uncertainty and leakage.
6. "Enforceable" means that the implementation of the GHG reduction activity must represent the legally binding commitment of the offset project developer to undertake and carry it out.

The City has reviewed and determined that methodologies and protocols established by American Climate Registry, Climate Action Reserve, and Verra establish and require carbon offset projects to comply with standards designed to achieve additional, real, permanent, quantifiable, verifiable and enforceable reductions. Additionally, the "Reporting and Enforcement Standards" below shall ensure that the requirements of this mitigation measure will be enforced, as the City has authority to hold the applicant accountable and to take appropriate corrective action if it determines that any carbon offsets do not comply with the requirements herein.

Carbon offsets secured from the CARB-accredited registries shall be prioritized in accordance with the following criteria: (1) offsets within the City; (2) offsets within the County, only if in-City offsets are unavailable; (3) offsets within the State of California, only if in-county offsets are unavailable; (3) offsets within the United States, only if in-state offsets are unavailable.[9]

The above definitions are provided as criteria and performance standards associated with the use of carbon offsets. Such criteria and performance standards are intended only to further construe the standards under CEQA for mitigation related to GHG emissions (see, e.g., State CEQA Guidelines

[9] For purposes of this provision, offset credits will be deemed "unavailable" if they are either unobtainable generally from the CARB-accredited registries, or if on a per-unit basis if such a credit is otherwise available: (a) for offset credits within the City of Garden Grove, more than twice as costly as offset credits within the County of Orange, but not within the City of Garden Grove; (b) for offset credits within the County of Orange, more than five times as costly as offset credits within California, but not within the County of Orange; (c) for offset credits within the United State, sufficient offset credits within California are not available for purchase at any cost.

Section 15126.4(a), (c)), and are not intended to apply or incorporate the requirements of any other statutory or regulatory scheme not applicable to the Project (e.g., the Cap-and-Trade Program).

Monitoring, Reporting and Enforcement Standards

Prior to the timeline identified in the initial section of this mitigation measure, the Project Applicant or its designee shall submit documentation in the form of a report to the City that identifies the quantity of emission reductions required by this mitigation measure, as well as the carbon offset proposed for acquisition to achieve compliance with this measure. For purposes of demonstrating that each offset is additional, real, permanent, quantifiable, verifiable and enforceable, the reports shall include: (i) the applicable protocol(s) and methodologies associated with the carbon offsets, (ii) the third-party verification report(s) and statement(s) affiliated with the carbon offset projects, (iii) the unique serial numbers assigned by the registry(ies) to the carbon offset, which serves as evidence that the registry has determined the carbon offset project to have been implemented in accordance with the applicable protocol or methodology and ensures that the offsets cannot be further used in any manner, and (iv) the carbon offset meets the locational attributes as specified by this mitigation measure and verified through a market survey report prepared by a carbon offset broker that identifies the carbon registry listings reviewed for carbon offset availability, including the related date of inquiry.

The Project Applicant (or its designee) shall select and retain at least one independent, third-party expert on GHG mitigation and offsets to review the documentation provided by the Applicant (or its designee) relating to, among other data, construction- and operation-related emissions, and provide a report with analysis and recommendations to the City (with supporting materials), on whether the Project has complied with the off-site GHG emissions reduction measures set forth in this mitigation measure. The Project Applicant's (or its designee's) selection of each expert, who shall not be a current or former employee or agent of the Project Applicant (or its designee), shall be subject to the approval of the City Attorney, which shall not be unreasonably withheld. The Project Applicant (or its designee) shall retain the expert(s) for all offset credit submissions made to the City until all offsets required this mitigation measure are acquired and accepted by the City.

If the City determines that the Project's carbon offsets at issue in the Project Applicant's (or their designee's) submission meet the requirements of this mitigation measure, the offsets required to be acquired by the Project will be proportionally reduced. Upon an affirmative finding from the City that the Project's carbon offsets are eligible for use under this measure, and within the applicable timeframe required by the first section of this mitigation measure, the Project applicant (or their designee) shall provide to the City copies of the relevant portions of the GHG offset contracts demonstrating the applicable carbon offsets have been acquired. This will serve as the final documentation required to demonstrate compliance with this mitigation measure.

If the City determines that the Project's carbon offsets do not meet the requirements of this mitigation measure, the City shall provide a detailed explanation of the basis for the City's determination. Carbon offsets not approved by the City as meeting the requirements of this mitigation measure cannot be used to reduce Project GHG emissions and the Applicant will be required to submit qualifying carbon offsets accepted by the City prior to the applicable timeframe specified in the first section of this mitigation measure.

Level of Significance After Mitigation

Table 2-9 shows the Project's GHG construction emissions after incorporation of all PDFs and MMs including carbon offsets.

Table 2-9. Estimated Annual Construction Greenhouse Gas Emissions – Mitigated plus Carbon Offsets

Year	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
2025	388.92	0.02	0.04	0.34	402.52
2026	1,398.25	0.05	0.11	1.65	1,434.02
2027	1,376.54	0.04	0.11	1.48	1,410.81
2028	113.11	<0.01	0.01	0.10	114.95
				Total	**3,362.30**
				Offsets to be purchased and retired	*3,362.30*
				Remaining Emissions	**0**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R = refrigerant; CO_2e = carbon dioxide equivalent; <0.01 = reported value less than 0.01. The values shown are the annual emissions reflect CalEEMod "unmitigated" output.
Totals may not sum due to rounding.
See Appendix A for complete results.

Table 2-10 shows the Project's GHG operational emissions after incorporation of all PDFs and MMs including carbon offset credits.

Table 2-10. Estimated Annual Operational Greenhouse Gas Emissions – 2028 – Mitigated plus Carbon Offsets

Emission Source	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
Mobile	2,447.19	0.13	0.09	3.08	2,479.52
Area	0	0	0	NA	0
Energy	4,714.60	0.42	0.02	NA	4,730.66
Water	35.48	0.84	0.02	NA	62.54
Waste	28.11	2.81	<0.01	NA	98.34
Refrigerant	NA	NA	NA	11.34	11.34
Stationary	25.53	<0.01	<0.01	0.00	25.61
Total	**7,250.91**	**4.20**	**0.13**	**14.42**	**7,408.02**
				Annual GHG Offsets to be Purchased	**6,009.02**
				Remaining Emissions	**1,399**
				GHG Threshold	**1,400**
				Exceed Threshold?	**No**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R= refrigerant; CO_2e = carbon dioxide equivalent; <0.01 = reported value less than 0.01; N/A = not applicable; GHG = greenhouse gas.
Columns may not sum due to rounding.
See Appendix A for complete results.

As shown in Table 2-9 and 2-10, with implementation of MMs specified above, the Project's emissions would be below the 1,400 MT CO_2e per year significance threshold on an annual basis for the 30-year life of the Project. Other agencies have included carbon offsets as mitigation and concluded that such a measure is effective at reducing GHG impacts to less than significant. Nonetheless, for the purpose of mitigating GHG emissions, the City recognizes that uncertainty exists regarding the availability of qualifying carbon offsets and the viability of carbon offsets qualifying as feasible and effective mitigation under CEQA. Therefore, notwithstanding the imposition of MM-GHG-15, the Project's GHG impacts were determined to be **significant and unavoidable**.

2.4.2 Would the Project Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases?

Applicable plans, policies or regulations adopted for the purpose of reducing GHG emissions include Connect SoCal 2024, the 2022 Scoping Plan, and applicable policies from the General Plan. The Project's potential to conflict with those applicable GHG reduction plans, policies or regulations is evaluated below.

Potential to Conflict with SCAG's RTP/SCS (Connect SoCal)

In April 2024, SCAG adopted the 2024–2050 RTP/SCS, also referred to as Connect SoCal 2024 which builds upon the prior RTP/SCS. Connect SoCal 2024 includes regional planning policies in the following categories: Mobility, Communities, Environment, and Economy. The primary objective of the RTP/SCS is to provide guidance for future regional growth (i.e., the location of new residential and non-residential land uses) and transportation patterns throughout the region, as stipulated under SB 375 to achieve compliance with the State's GHG reduction goals. The Connect SoCal 2024 policies are evaluated in Table 2-11 below.

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
Mobility		
System Preservation and Resilience		
1	Prioritize repair, maintenance and preservation of the SCAG region's existing transportation assets, following a "Fix-It-First" principle	***Not applicable***. This policy addresses the potential development of new transportation assets and is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. The Project does not propose new transportation assets.
2	Promote transportation investments that advance progress toward the achievement of asset management targets, including the condition of the National Highway System pavement and bridges and transit assets (rolling stock, equipment, facilities and infrastructure)	***Not applicable***. This policy concerns transportation investments and is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. The Project does not propose transportation investments of the type addressed by this policy.

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
Complete Streets		
3	Pursue the development of Complete Streets that comprise a safe, multimodal network with flexible use of public rights-of-way for people of all ages and abilities using a variety of modes (e.g., people walking, biking, rolling, driving, taking transit)	***Not applicable***. This policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. As such they are beyond the control of a single project applicant. Nonetheless, the project would participate in providing a safe multi-modal network through its site plan and implementation of MM-GHG-5 that strives to improve walkability and design of the Project through the provision of pedestrian and bicycle connections.
4	Ensure the implementation of Complete Streets that are sensitive to urban, suburban or rural contexts and improve transportation safety for all, but especially for vulnerable road users (e.g., people, especially older adults and children, walking and biking)	***Not applicable***. This policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. Nonetheless, the Project promotes Complete Streets as it would participate in providing a safe multi-modal network through its site plan and implementation of MM-GHG-5 that strives to improve walkability and design of the Project through the provision of pedestrian and bicycle connections.
5	Facilitate the implementation of Complete Streets and curb space management strategies that accommodate and optimize new technologies, micromobility devices and first/last mile connections to transit and last-mile delivery.	***Not applicable***. This policy related to Complete Streets and curb management strategies is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders.
6	Support implementation of Complete Streets improvements in Priority Equity Communities, particularly with respect to Transportation Equity Zones, as a way to enhance mobility, safety and access to opportunities.	***Not applicable***. This Complete Streets policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. The Project is not located in a Priority Equity Community and does not conflict with this policy.
Transit and Multimodal Integration		
7	Encourage and support the implementation of projects, both physical and digital, that facilitate multimodal connectivity, prioritize transit and shared mobility, and result in improved mobility, accessibility and safety.	***Not applicable***. This policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders..
8	Support connections across the public, private	***Not applicable***. This policy is a

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
	and nonprofit sectors to develop transportation projects and programs that result in improved connectivity.	transportation project measure designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders.
9	Encourage residential and employment development in areas surrounding existing and planned transit/rail stations	***No conflict.*** The Project is located on an infill site and would provide employment opportunities near existing transit consistent with the City's General Plan.
10	Support the implementation of transportation projects in Priority Equity Communities, particularly with respect to Transportation Equity Zones, as a way to enhance mobility, safety and access to opportunities	***Not applicable***. This policy relates to transportation projects and is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. The Project is not a transportation project and it is not located in a Priority Equity Community.
11	Create a resilient transportation system by preparing for emergencies and the impacts of climate change	***Not applicable***. This policy relates to transportation projects and is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders.
Transportation System Management		
12	Pursue efficient use of the transportation system using a set of operational improvement strategies that maintain the performance of the existing transportation system instead of adding roadway capacity, where possible.	***Not applicable***. This transportation system operational improvement policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. As such this policy does not apply to a single project applicant like the Project applicant.
13	Prioritize transportation investments that increase travel time reliability, including build-out of the regional express lanes network.	***Not applicable***. This transportation investment policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. The project is in a transit priority area and does not propose the addition of roadway capacity.
Transportation Demand Management		
14	Encourage the development of transportation projects that provide convenient, cost-effective and safe alternatives to single-occupancy vehicle travel (e.g., trips made by foot, on bikes, via transit, etc.)	***Not applicable***. This policy regarding the development of transportation projects is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. Nonetheless, the Project is in a transit

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
		priority area and would not build new transportation projects but would encourage alternatives to single-occupancy vehicle trips through transportation mitigation measures to encourage employee commute trip reductions such as MM-TRA-1 and MM-TRA 2 and guest vehicle trip reductions through MM-GHG-5.
15	Encourage jurisdictions and TDM practitioners to develop and expand local plans and policies to promote alternatives to single occupancy vehicle travel for residents, workers and visitors	***Not applicable.*** This measure addresses local Transportation Demand Management (TDM) plans and policies and is intended for jurisdictions and TDM practitioners and not individual projects. Nonetheless, the Project would implement TDM measures through MM-TRA-1 and MM-TRA-2. In addition, the Project would implement MM-GHG-5 that seeks to reduce vehicle trips from guests visiting the site.
16	Encourage municipalities to update existing (legacy) TDM ordinances by incorporating new travel modes and new technology and by incorporating employment and residential sites of certain populations—for example, employers who have less than 250 employees (below the 250 or more employees threshold identified in AQMD's Rule 2202)	***Not applicable.*** This measure encourages updates to local TDM plans and policies my municipalities and not individual projects. Nonetheless, the Project includes TDM measures such as MM-TRA-1 that implements a commute trip reduction program and MM-TRA-2 that provides bicycle parking facilities for employees. In addition, the Project would implement MM-GHG-5 that seeks to reduce vehicle trips from guests visiting the site.
17	Support the implementation of technology designed to provide equal access to mobility, employment, economic opportunity, education, health and other quality-of-life opportunities for all residents within the SCAG region.	***Not applicable***. This technology-related policy that emphasizes equal access and is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. The policy is not applicable to an individual General Plan consistent development located in a transit priority area like the Project.
18	Advocate for data sharing between the public and private sectors to effectively evaluate the services' benefits and impacts on communities while protecting data security and privacy	***Not applicable.*** This data sharing policy is intended to be carried out by public agencies, such as SCAG, County Transportation Commissions, or local governments and is not applicable to a single-project applicant. This policy is more aspirational rather than an

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
		enforceable standard or requirement for individual projects.
19	Advocate for technology that is adaptive and responsive to ensure it remains up to date and meets the evolving needs of users and stakeholders	***Not applicable.*** This policy is intended to be carried out by public agencies, such as SCAG, County Transportation Commissions, or local governments and is not applicable to a single-project applicant. This policy is more aspirational rather than an enforceable standard or requirement for individual projects.
20	Promote technology that has the capacity to facilitate economic growth, improve workforce development opportunities, and enhance safety and security	***Not applicable.*** This policy is intended to be carried out by public agencies, such as SCAG, County Transportation Commissions, or local governments and is not applicable to a single-project applicant.
21	Proactively monitor and plan for the development, deployment and commercialization of new technology as it relates to integration with transportation infrastructure	***Not applicable.*** This policy is intended to be carried out by public agencies, such as SCAG, County Transportation Commissions, or local governments and is not applicable to a single-project applicant. This policy is more aspirational rather than an enforceable standard or requirement for individual projects.
Safety		
22	Eliminate transportation-related fatalities and serious injuries (especially those involving vulnerable road users, such as people, especially older adults and children, walking and biking) on the regional multimodal transportation system	***Not applicable.*** This policy addresses the regional multimodal transportation systems and is intended to be carried out by public agencies, such as SCAG, County Transportation Commissions, or local governments and is not applicable to a single-project applicant. This policy is more aspirational rather than an enforceable standard or requirement for individual projects. Nonetheless, the Project would support this policy through implementation of MM-GHG-5 that strives to improve walkability and design of the Project through the provision of pedestrian and bicycle connections within the Project site and to adjacent off-site facilities.
23	Integrate the assessment of equity into the regional transportation safety and security planning process, focusing on the analysis and mitigation of disproportionate impacts on disadvantaged communities	***Not applicable***. This policy is designed to address the regional transportation safety and security planning process and be implemented at a regional scale and requires coordination among multiple

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
		jurisdictions, agencies, and stakeholders. The Project does not propose any improvements that would trigger the regional transportation safety and security planning process and does not conflict with this policy.
24	Support innovative approaches for addressing transit safety and security issues so that impacts to transit employees and the public are minimized and those experiencing issues (e.g., unhoused persons) are supported.	***Not applicable***. This policy relates to safe and secure use of the transit system and is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. The Project does not conflict with this policy.
25	Support the use of transportation safety and system security data in investment decision-making, including consideration of new highway and transit/rail investments that would address safety and security needs	***Not applicable***. This policy relates to investments in a safe and secure transit system and is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. The Project does not conflict with this policy.
Funding		
26	Promote stability and sustainability for core state and federal transportation funding sources.	***Not applicable***. This policy concerns state and federal transportation funding and is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. This policy is more aspirational rather than an enforceable standard or requirement for individual projects.
27	Establish a user fee–based system that better reflects the true cost of transportation, provides firewall protection for new and existing transportation funds, and represents equitable distribution of costs and benefits.	***Not applicable***. This policy addresses user fees for the transportation system and is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. The Project does not conflict with this policy.
28	Pursue funding tools that promote access to opportunity and support economic development through innovative mobility programs	***Not applicable***. This policy relates to funding mobility programs and is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. The Project does not conflict with this policy.
29	Promote national and state programs that include return-to-source guarantees while maintaining the	***Not applicable***. This policy concerns state and federal transportation funding

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
	flexibility to reward regions that continue to commit substantial local resources	programs and is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. This policy is more aspirational rather than an enforceable standard or requirement for individual projects.
30	Leverage locally available funding with innovative financing tools to attract private capital and accelerate project delivery.	***Not applicable***. This policy is transportation funding focused and is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. The Project does not conflict with this policy.
31	Promote local funding strategies that maximize the value of public assets while improving mobility, sustainability and resilience	***Not applicable***. This policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. This policy is more aspirational rather than an enforceable standard or requirement for individual projects.
Priority Development Areas		
32	Promote the growth of origins and destinations, with a focus on future housing and population growth, in areas with existing and planned urban infrastructure that includes transit and utilities.	***No conflict.*** The Project is located on an infill site that is zoned for commercial use. The Project would provide employment opportunities along a major transportation corridor near existing transit.
33	Promote the growth of origins and destinations, in areas with a proclivity toward multimodal options like transit and active transportation, to reduce single occupant vehicle (SOV) dependency and vehicle miles traveled.	***No conflict with mitigation.*** The Project is in a transit priority area which supports this policy. However, without TDMs to encourage multi-modal travel options the Project would potentially conflict with this policy. The Project includes MM-TRA-1 and MM-TRA-2, which would help to reduce employee commute trips. With the implementation of these measures, the Project would not conflict with this policy.
34	Seek to realize scale economies or a critical mass of jobs and destinations in areas across the region that can support non-SOV options and shorter trip distances, combined trips and reduced vehicle miles traveled.	***No conflict with mitigation***. The Project is a general plan consistent development located in a transit priority area that is convenient to other visitor serving uses. Without TDM measures to encourage non-SOV vehicle trips and reduced VMT, the Project would potentially conflict with the policy.

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
		The Project includes MM-TRA-1 and MM-TRA-2 that serves to reduce employee commute trips and MM-GHG-5 that serves to reduce guest vehicle trips through the promotion of transit and alternative transportation. With the implementation of these measures, the Project would not conflict with this policy.
Housing the Region		
35	Encourage housing development in areas with access to important resources and amenities (economic, educational, health, social and similar) to further fair housing access and equity across the region	***Not applicable***. This policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. Notably, the Project is located on an infill site that is General Plan designated for visitor serving uses of the kind proposed by the Project. The City's General Plan designates other areas within the City to satisfy local and regional housing needs.
36	Encourage housing development in transit-supportive and walkable areas to create more interconnected and resilient communities	***Not applicable***. This policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. As such they are beyond the control of a single project applicant. The Project would offer employment opportunities near a major transportation corridor near existing transit consistent with the General Plan. The City's General Plan designates other areas within the City to satisfy local and regional housing needs.
37	Support local, regional, state and federal efforts to produce and preserve affordable housing while meeting additional housing needs across the region	***Not applicable***. This policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. The Project is located on an infill site that is General Plan designated for the visitor serving uses contemplated by the Project. The City's General Plan designates other areas within the City to satisfy local and regional housing needs.
38	Prioritize communities that are vulnerable to displacement pressures by supporting community stabilization and increasing access to housing that meets the needs of the region.	***Not applicable***. This policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. The Project does not require the displacement of existing housing, and the Project site is General Plan designated for

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
		the visitor serving uses contemplated by the Project. The City's General Plan designates other areas within the City to satisfy local and regional housing needs.
39	Promote innovative strategies and partnerships to increase homeownership opportunities across the region with an emphasis on communities that have been historically impacted by redlining and other systemic barriers to homeownership for people of color and other marginalized groups	***Not applicable***. This policy is more aspirational rather than an enforceable standard or requirement for individual projects. The Project is located on an infill site that is General Plan designated for the visitor serving uses contemplated by the Project. The City's General Plan designates other areas within the City to satisfy local and regional housing needs.
40	Advocate for and support programs that emphasize reducing housing cost burden (for renters and homeowners), with a focus on the communities with the greatest needs and vulnerabilities.	***Not applicable***. This policy is more aspirational rather than an enforceable standard or requirement for individual projects. This policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. The Project is located on an infill site that is General Plan designated for the visitor serving uses contemplated by the Project. The City's General Plan designates other areas within the City to satisfy local and regional housing needs.
41	Support efforts to increase housing and services for people experiencing homelessness across the region.	***Not applicable***. This policy is more aspirational rather than an enforceable standard or requirement for individual projects. This policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. The Project is located on an infill site that is General Plan designated for the visitor serving uses contemplated by the Project. The City's General Plan designates other areas within the City to satisfy local and regional housing needs.
15-Minute Communities		
42	Promote 15-minute communities as places with a mix of complementary land uses and accessible mobility options that align with and support the diversity of places (or communities) across the region. These are communities where residents can either access their most basic, day-to-day needs within a 15-minute walk, bike ride or roll from their home or as places that result in fewer	***Not applicable***. This policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. It is also more aspirational rather than an enforceable standard or requirement for individual projects. The Project is located on an infill site that is General Plan

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
	and shorter trips because of the proximity of complementary land uses.	designated for the visitor serving uses contemplated by the Project. The Project would offer employment opportunities near a major transportation corridor near existing transit.
43	Support communities across the region to realize 15-minute communities through incremental changes that improve equity, quality of life, public health, mobility, sustainability, resilience and economic vitality.	***Not applicable***. This policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. It is also more aspirational rather than an enforceable standard or requirement for individual projects. The Project is located on an infill site that is commercially zoned. The Project is located on an infill site that is General Plan designated for the visitor serving uses contemplated by the Project. The City's General Plan designates other areas within the City to satisfy local and regional housing needs and the other types of policies addressed in this policy.
44	Encourage efforts that elevate innovative approaches to increasing access to neighborhood destinations and amenities through an array of people-centered mobility options	***Not applicable***. This policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. It is also more aspirational rather than an enforceable standard or requirement for individual projects. The Project is located on an infill site in a transit priority area that is General Plan designated for the visitor serving uses contemplated by the Project. The Project would offer employment and visitor serving uses near a major transportation corridor that is near existing transit.
Equitable Engagement and Decision-Making		
45	Advance community-centered interventions, resources and programming that serve the most disadvantaged communities and people in the region, like Priority Equity Communities, with strategies that can be implemented in the short-to-long-term.	***Not applicable.*** This policy is intended to be carried out by public agencies such as SCAG, County Transportation Commissions, or local governments. The Project does not conflict with this policy as the Project site has long been General Plan designated for the proposed visitor serving use; it is located in a transit priority area and it is not located in a Priority Equity Community.
46	Promote racial equity that is grounded in the recognition of the past and current harms of	***Not applicable.*** This policy is designed to be implemented at a regional scale and

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
	systemic racism and one that advances restorative justice.	requires coordination among multiple jurisdictions, agencies, and stakeholders. This policy is more aspirational rather than an enforceable standard or requirement for individual projects. The Project does not preclude SCAG's ability to implement this policy and would not conflict with this policy.
47	Increase equitable, inclusive, and meaningful representation and participation of people of color and disadvantaged communities in planning processes.	***Not applicable.*** This policy reflects an aspirational goal rather than enforceable standards or requirements for individual development projects. The Project does not preclude SCAG's ability to implement this policy and would not conflict with this policy.
Environment		
Sustainable Development		
48	Promote sustainable development and best practices that enhance resource conservation, reduce resource consumption and promote resilience.	***Not applicable***. This is a region-wide measure. This policy reflects an aspirational goal rather than enforceable standards or requirements for individual development projects. The Project does not preclude SCAG's ability to implement this policy and would not conflict with this policy. Nonetheless, the Project would be designed to comply with current Title 24 standards, which continue to become more stringent over time. It also incorporates PDFs that promote resource conservation and the use of sustainable building materials. Additionally, during construction MM GHG-1 to MM GHG-3 would require the use of specific electric construction equipment, energy efficiency in the construction office(s), and construction debris recycling which would serve to conserve resources. During Project operations, MM GHG-4 to MM GHG-14 would promote EV charging, reduce guest vehicle trips, limit heavy-duty diesel trucks, encourage building energy efficiencies, include renewable energy, conserve water, and reduce waste which would serve to make the Project more sustainable during its operational

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
		life. The above measures represent best practices for resource conservation and reduction in resource consumption..
49	Support communities across the region to advance innovative sustainable development practices.	***Not applicable***. This is a region-wide measure. This policy reflects an aspirational goal rather than enforceable standards or requirements for individual development projects. The Project does not preclude SCAG's ability to implement this policy and would not conflict with this policy. Nonetheless, as described under Policy 48, the Project includes project features and mitigation measures that would further advance sustainable development practices.
50	Recognize and support the diversity of communities across the region by promoting local place-making, planning and development efforts that advance equity, mobility, resilience and sustainability.	***Not applicable***. This is a region-wide measure. This policy reflects an aspirational goal rather than enforceable standards or requirements for individual development projects. The Project does not preclude SCAG's ability to implement this policy and would not conflict with this policy. Nonetheless, as described under Policy 48, includes design features and mitigation measures that would advance mobility and sustainable development efforts.
Air Quality		
51	Reduce hazardous air pollutants and greenhouse gas emissions and improve air quality throughout the region through planning and implementation efforts.	***No conflict with mitigation***. As a hotel, the Project is not a source of substantial hazardous air pollutants. The Project's CEQA analysis that is the subject of the Writ demonstrates that the Project has potentially significant air quality impacts prior to mitigation but less than significant air quality impacts with mitigation. The Project would potentially conflict with this policy if it did not reduce GHG emissions through planning and implementation efforts. As previously described, the Project is consistent with the General Plan land use designation, will be constructed on an infill site within a transit priority area near existing transit

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
		that would serve to support planning efforts to reduce GHG emissions through planning. Additionally, to further reduce GHGs, the Project also includes MM-GHG-1 through MM-GHG-14 that would serve to reduce GHG emissions.. The Project includes PDFs during construction that serve to increase fuel efficiencies and generate less criteria air pollutant emissions. With implementation of these measures Project would not conflict with this policy.
52	Support investments that reduce hazardous air pollutants and greenhouse gas emissions.	***No conflict with mitigation***. See the response to Policy 51. The Project would also invest in EV charging facilities and renewable energy system through MM-GHG-4 and MM-GHG-9, respectively. In addition, the Project would invest in building energy efficiencies above regulatory standards through MM-GHG-7. With implementation of these measures Project would not conflict with this policy.
53	Reduce the exposure and impacts of emissions and pollutants and promote local and regional efforts that improve air quality for vulnerable populations, including but not limited to Priority Equity Communities and the AB 617 Communities.	***Not applicable***. The Project is not located within a Priority Equity Community or an AB 617 community. Nonetheless, the Project would invest in technologies, project design features, and mitigation measures that reduce GHG emissions.
Clean Transportation		
54	Accelerate the deployment of a zero-emission transportation system and use near-zero-emission technology to offer short-term benefits where zero-emissions solutions are not yet feasible or commercially viable.	***No conflict with mitigation***. This is a region wide measure; however, the Project would potentially conflict with this measure if it did not incorporate technologies to encourage EV use. The Project would implement MM-GHG-4 that requires EV charging facilities that exceed Title 24 requirements and MM-GHG-9 requiring on site renewable energy generation thus helping to accelerate zero-emission transportation. With implementation of these measures Project would not conflict with this policy.
55	Promote equitable use of and access to clean transportation technologies so that all may benefit from them.	***Not applicable***. This is a region wide measure however, the Project would not limit SCAG's ability to promote the equitable use of and access to clean transportation technologies.

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
		Nonetheless, the Project would provide access to EV charging facilities to its guests and employees, which would support this policy.
56	Consider the full environmental life cycle of clean transportation technologies, including upstream production and end of life as an important part of meeting SCAG's objectives in economic development and recovery, resilience planning and achievement of equity.	***Not applicable***. This policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. As such they are beyond the control of a single project applicant Nonetheless, the Project incorporates several GHG reduction strategies, including EV charging infrastructure, solar energy generation, grey water recycling, and advanced building energy efficiency measures. These features demonstrate a commitment to sustainability and align with the SCAG's policy No. 56, which emphasizes the importance of considering the full environmental life cycle of clean transportation technologies. By integrating EV charging stations, the Project supports the adoption of zero-emission vehicles, contributing to reduced tailpipe GHG emissions. The use of solar energy and energy-efficient building systems reduces reliance on fossil fuels and lowers upstream GHG emissions associated with other forms of non-renewable electricity generation. Grey water recycling further enhances resource conservation and resilience. Although this policy is not applicable at the project-level the Project supports this Policy's objectives in economic development, climate resilience, and equity.
57	Maintain a technology-neutral approach in the study of, advancement of and investment in clean transportation technology.	***Not applicable*** This is a region wide measure and not applicable at the project-level. Nonetheless, by incorporating a range of sustainable features and mitigation measures—such as EV charging infrastructure, solar energy systems, grey water recycling, and energy-efficient building design—the Project supports the Policy of maintaining a technology-neutral approach in the study of, advancement of,

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
		and investment in clean transportation technology.
Natural Agricultural Lands Preservation		
58	Prioritize the climate mitigation, adaptation, resilience and economic benefits of natural and agricultural lands in the region.	***Not applicable***. The Project is an infill development on a previously developed site that has not supported and will not support natural or agricultural lands.
59	Support conservation of habitats that are prone to hazards exacerbated by climate change, such as wildfires and flooding.	***Not applicable***. The Project is an infill development on a previously developed site that does not impact habitats that are prone to hazards exacerbated by climate change such as wildfires or flooding.
60	Support regional conservation planning and collaboration across the region.	***Not applicable***. The Project is an infill development on a previously developed property without sensitive habitat or species. The Project does not preclude SCAG's ability to support regional conservation planning and collaboration across the region.
61	Encourage the protection and restoration of natural habitat and wildlife corridors	***Not applicable***. The Project is an infill development on a previously developed site without natural habitats or wildlife corridors. The Project does not preclude SCAG's ability to encourage the protection and restoration of natural habitat and wildlife corridors.
62	Encourage the conservation and viability of agricultural lands to protect the regional and local food supply and ensure the sustainability of local agriculture as a vital part of the region's economy.	***Not applicable***. The Project is an infill development on a previously developed site that does not qualify as agricultural land. The Project does not preclude SCAG's ability to encourage the conservation and viability of agricultural lands to protect the regional and local food supply and ensure the sustainability of local agriculture as a vital part of the region's economy.
63	Encourage policy development of the link between natural and agricultural conservation with public health.	***Not applicable.*** The Project is an infill development on a previously developed site that does not qualify as agricultural land. The Project does not preclude SCAG's ability to encourage policy development of the link between natural and agricultural conservation with public health.
Climate Resilience		
64	Prioritize the most vulnerable populations and	***Not applicable***. This policy is designed to

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
	communities subject to climate hazards to help the people, places and infrastructure that are most at risk for climate change impacts. In doing so, recognize that disadvantaged communities are often overburdened	be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. As such they are beyond the control of a single project applicant. The Project would not preclude SCAG's ability to prioritize vulnerable populations and communities subject to climate hazards. Nonetheless, by incorporating EV charging, solar energy, grey water recycling, and energy-efficient systems and other features, the Project reduces greenhouse gas emissions and resource consumption in a manner that supports this climate resilience policy.
65	Support local and regional climate and hazard planning and implementation efforts for transportation, land use, and other factors.	***Not applicable***. This policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. As such they are beyond the control of a single project applicant. Nonetheless, the Project incorporates design and operational features that directly support local and regional climate and hazard planning goals. Through the integration of solar energy systems, grey water recycling, EV charging infrastructure, and energy-efficient building technologies, the project contributes to broader efforts to reduce greenhouse gas emissions, conserve resources, and enhance climate resilience. These measures not only reduce the environmental footprint of the development but also support regional strategies for sustainable land use and transportation. By proactively addressing climate-related risks and aligning with hazard mitigation best practices, the Project does not conflict with SCAG's regional planning objectives.
66	Support nature-based solutions to increase regional resilience of the natural and built environment	***Not applicable***. The Project is an infill development in an urban environment on a previously developed site and would not preclude SCAG's ability to support nature-based solutions.
67	Promote sustainable water use planning, practices and storage that improve regional water	***Not applicable.*** This policy is designed to be implemented at a regional scale and

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
	security and resilience in a drier environment	requires coordination among multiple jurisdictions, agencies, and stakeholders. As such they are beyond the control of a single project applicant. Nonetheless, the Project does not conflict with this policy as the Project must comply with all water conservation regulations and includes MM-GHG-7 (grey water recycling) and MM-GHG-10 (water conservation), which would support this policy.
68	Support an integrated planning approach to help local jurisdictions meet housing production needs in a drier environment.	***Not applicable***. This policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. As such they are beyond the control of a single project applicant. The Project does not preclude SCAG's ability to support integrated planning approaches for developing more housing in drier environments. The Project is located within a commercial district specifically designated as a location for visitor serving uses like the Project. Additionally, the Project includes water conservation measures such as MM-GHG-10, which would support this policy.
Economy		
Goods Movement		
69	Leverage and prioritize investments, particularly where there are mutual co-benefits to both freight and passenger/commuter rail.	***Not applicable***. This policy is designed to be implemented at a regional scale and requires coordination among multiple jurisdictions, agencies, and stakeholders. The Project is not located near freight or passenger/commuter rail and does not involve the development of rail transportation.
70	Prioritize community and environmental justice concerns, together with economic needs, and support workforce development opportunities, particularly around deployment of zero-emission and clean technologies and their supporting infrastructure.	***Not applicable.*** This policy is intended to be carried out by public agencies such as SCAG, County Transportation Commissions, or local governments. Further, this policy reflects an aspirational goal rather than enforceable standards or requirements for individual development projects. However, the Project would support this policy through development consistent with the General Plan

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
		designation for the Project site, its proximity to transit and other visitor servicing uses.
71	Explore and advance the transition toward zero-emission and clean technologies and other transformative technologies, where viable.	***Not applicable.*** This policy is intended to be carried out by public agencies such as SCAG, County Transportation Commissions, or local governments, as such it beyond the scope and control of a single project applicant. Further, this policy reflects an aspirational goal rather than enforceable standards or requirements for individual development projects. Nonetheless, the Project would support this policy through its incorporation of on-site solar facilities, and compliance with the PDFs and mitigation measures including MM-GHG-4, which provides EV charging infrastructure and MM-GHG-12 that incorporates the use of zero-emission landscape equipment.
72	Advance comprehensive, systems-level planning of corridor/supply chain operational strategies that is integrated with road and rail infrastructure and inland port concepts	***Not applicable.*** This policy is intended to be carried out by public agencies such as SCAG, County Transportation Commissions, or local governments. Further, this policy reflects an aspirational goal rather than enforceable standards or requirements for individual development projects.
73	Ensure continued, significant investment in a safe, secure, clean and efficient transportation system—including both highways and rail—to support the intermodal movement of goods across the region.	***Not applicable.*** This policy is intended to be carried out by public agencies such as SCAG, County Transportation Commissions, or local governments. Further, this policy reflects an aspirational goal rather than enforceable standards or requirements for individual development projects.
Broadband		
74	Support ubiquitous regional broadband deployment and access to provide the necessary infrastructure and capability for Smart Cities strategies—to ensure the benefits of these strategies improve safety and are distributed equitably.	***Not applicable.*** This broadband policy is intended to be carried out by public agencies such as SCAG, County Transportation Commissions, or local governments. The Project is an infill development that does not conflict with this policy.
75	Develop networks that are efficient, scalable, resilient and sustainable to support	***Not applicable.*** This broadband policy is intended to be carried out by public

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
	transportation systems management, operations services and "tele-everything" strategies that reduce vehicle miles traveled, optimize efficiency and accommodate future growth of regional economies.	agencies such as SCAG, County Transportation Commissions, or local governments. The Project is an infill development that does not conflict with this policy.
76	Encourage investments that provide access to digital activities that support educational, financial and economic growth.	***Not applicable.*** This broadband policy is intended to be carried out by public agencies such as SCAG, County Transportation Commissions, or local governments. The Project is an infill development that does not conflict with this policy.
77	Advocate for current, accurate data to identify opportunity zones and solutions that support the development of broadband services to community anchor institutions and local businesses	***Not applicable.*** This broadband policy is intended to be carried out by public agencies such as SCAG, County Transportation Commissions, or local governments. The Project does not conflict with this policy.
78	Promote an atmosphere that allows for healthy competition and speed-driven innovative solutions while remaining technologically neutral	***Not applicable.*** This broadband policy is intended to be carried out by public agencies such as SCAG, County Transportation Commissions, or local governments. The Project does not conflict with this policy.
79	Use a bottom-up approach to identify and support a community's broadband needs.	***Not applicable.*** This broadband policy is intended to be carried out by public agencies such as SCAG, County Transportation Commissions, or local governments, as such it beyond the scope and control of a single project applicant.
Universal Basic Mobility		
80	Encourage partnerships and policies to broaden safe and efficient access to a range of mobility services that improve connections to jobs, education and basic services	***Not applicable.*** This policy is intended to be carried out by public agencies such as SCAG, County Transportation Commissions, or local governments. Further, this policy reflects an aspirational goal rather than enforceable standards or requirements for individual development projects.
81	Promote increased payment credentials for disadvantaged community members and the transition of cash users to digital payment technologies to address payment barriers	***Not applicable.*** This policy is intended to be carried out by public agencies such as SCAG, County Transportation Commissions, or local governments. Further, this policy reflects an aspirational goal rather than enforceable standards or requirements for individual development projects.

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
Workforce Development		
82	Foster a positive business climate by promoting regional collaboration in workforce and economic development between cities, counties, educational institutions and employers	***Not applicable.*** This policy is intended to be carried out by public agencies such as SCAG, County Transportation Commissions, or local governments. Further, this policy reflects an aspirational goal rather than enforceable standards or requirements for individual development projects.
83	Encourage inclusive workforce development that promotes upward economic mobility.	***Not applicable.*** This policy is intended to be carried out by public agencies such as SCAG, County Transportation Commissions, or local governments. Further, this policy reflects an aspirational goal rather than enforceable standards or requirements for individual development projects.
84	Support entrepreneurial growth with a focus on underrepresented communities.	***Not applicable.*** This policy is intended to be carried out by public agencies such as SCAG, County Transportation Commissions, or local governments. Further, this policy reflects an aspirational goal rather than enforceable standards or requirements for individual development projects.
85	Foster a resilient workforce that is poised to effectively respond to changing economic conditions (e.g., market dynamics, technological advances and climate change).	***Not applicable.*** This policy is intended to be carried out by public agencies such as SCAG, County Transportation Commissions, or local governments. Further, this policy reflects an aspirational goal rather than enforceable standards or requirements for individual development projects.
86	Inform and facilitate data-driven decision-making about the region's workforce.	***Not applicable.*** This policy is intended to be carried out by public agencies such as SCAG, County Transportation Commissions, or local governments as opposed to an individual development project.
Tourism		
87	Consult and collaborate with state, county and local agencies within the region that are charged with promoting tourism and transportation.	***Not applicable.*** This policy is intended to be carried out by public agencies such as SCAG, County Transportation Commissions, or local governments. Consistent with the General Plan designation, the Project proposes a hotel that would support tourism.

Table 2-11. Project Potential to Conflict with Connect SoCal 2024

Policy Number	Policy Description	Potential to Conflict
88	Encourage the reduced use of cars by visitors to the region by working with state, county and local agencies (e.g., park services, transportation agencies) to highlight and increase access to alternative options, including transit, passenger rail and active transportation.	***No conflict with mitigation.*** The Project proposes visitor serving uses on a site designated by the General Plan for such a use that is also located in a transit priority area, near other visitor serving uses. The Project would potentially conflict with this policy if it did not promote transportation alternatives to guests visiting the region. The Project includes MM-GHG-5, which would serve to reduce vehicle trips by guests by promoting alternative transportation. With MM-GHG-5, the Project would not conflict with this policy.

Source: SCAG 2024.
Notes: SCAG = Southern California Association of Governments; MM = mitigation measure; GHG = greenhouse gas; CTR = Commute Trip Reduction; TDM = transportation demand management; SOV = single-occupancy vehicle; EV = electric vehicle; CEQA = California Environmental Quality Act; PDF = Project Design Feature.

Based on the analysis above, the Project has the potential to conflict with the SCAG 2024–2050 RTP/SCS. This is a potentially significant impact, and as such, mitigation is required to reduce the potential conflicts to a less than significant level.

Potential to Conflict with State Reduction Targets and CARB's Scoping Plan

As discussed in Section 2.2.3, State Regulations, the California State Legislature passed AB 32 to provide initial direction to limit California's GHG emissions to 1990 levels by 2020 and initiate the state's long-range climate objectives. Since the passage of AB 32, the state has adopted GHG emissions reduction targets for future years beyond the initial 2020 horizon year. CARB is required to develop a Scoping Plan, which provides the framework for actions to achieve the state's GHG emission targets. While the Scoping Plan is not directly applicable to specific projects, nor is it intended to be used as the sole basis for project-level evaluations, it is the official framework for the measures and regulations that will be implemented to reduce California's GHG emissions in alignment with the adopted targets. Therefore, a project would be found to not conflict with the statutes if it meets the Scoping Plan policies and would not impede attainment of the goals therein.

For the Project, the relevant GHG emissions reduction targets include those established by SB 32 and AB 1279, which require GHG emissions to be reduced to 40% below 1990 levels by 2030, and 85% below 1990 levels by 2045, respectively. In addition, AB 1279 requires the state to achieve net zero GHG emissions by no later than 2045 and achieve and maintain net negative GHG emissions thereafter. CARB's 2017 Scoping Plan update was the first to address the state's strategy for achieving the 2030 GHG reduction target set forth in SB 32 (CARB 2017a), and the most recent CARB 2022 Scoping Plan update outlines the state's plan to reduce emissions and achieve carbon neutrality by 2045 in alignment with AB 1279 and assesses progress is making toward the 2030 SB 32 target (CARB 2022). As such, given that SB 32 and AB 1279 are the relevant GHG emission targets, the 2017 and 2022 Scoping Plan updates that outline the strategy to achieve those targets, are the most applicable to the Project.

The 2017 Scoping Plan included measures to promote renewable energy and energy efficiency (including the mandates of SB 350), increase stringency of the low-carbon fuel standard, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed SLCP Plan, and increase stringency of SB 375 targets. The 2022 Scoping Plan builds upon and accelerates programs currently in place, including moving to 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; and displacement of fossil fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines) (CARB 2022). Many of the measures and programs included in the Scoping Plan would result in the reduction of project-related GHG emissions with no action required at the project level, including GHG emission reductions through increased energy efficiency and renewable energy production (SB 350), reduction in carbon intensity of transportation fuels (low-carbon fuel standard), and the accelerated efficiency and electrification of the statewide vehicle fleet (Mobile Source Strategy).

Table 2-12 highlights the measures from the 2022 Scoping Plan that are relevant to the Project and demonstrates that the Project would not conflict with the 2022 Scoping Plan with implementation of the described mitigation measures.

Table 2-12. Project Potential to Conflict with 2022 Scoping Plan

Sector	Action	Potential to Conflict
GHG Emissions Reductions Relative to the SB 32 Target	40% below 1990 levels by 2030	*No conflict with mitigation*. While the SB 32 GHG emissions reduction target is not an Action that is analyzed independently, it is included in Table 2-1 of the 2022 Scoping Plan for reference. As the analysis in this report demonstrates, including the Project's consistency with the RTP/SCS and the measures adopted to reduce GHG emissions, the Project would not obstruct or interfere with efforts to meet the SB 32 reduction goal.
Smart Growth / VMT	VMT per capita reduced 25% below 2019 levels by 2030, and 30% below 2019 levels by 2045	*No conflict with mitigation*. The VMT goals outlined in the Scoping Plan are being pursued through a multi-prong approach that includes transforming land use and mobility options. The State is encouraging compact, infill development near high quality transit corridors to reduce VMT. The Project would not obstruct or interfere with agency efforts to meet this regional VMT reduction goal, including through implementation of SB 375. The Project is a General Plan land use consistent infill commercial development within a TPA [it is located within half a mile of a major transit stop (Harbor Boulevard and Chapman Avenue intersection), based on the frequency of bus services in the City]. These characteristics would be considered smart

Table 2-12. Project Potential to Conflict with 2022 Scoping Plan

Sector	Action	Potential to Conflict
		growth and supportive of the State's approach for achieving these VMT targets. However, as disclosed in Section 4.2 of the SEIR, the Project would have a potentially significant VMT impact which would result in a potential conflict with this strategy. The Project would implement TRA-1 and TRA-2 to reduce the VMT impact to a less than significant level. With the implementation of these mitigation measures, the Project would not conflict with this strategy.
Light-duty Vehicle (LDV) Zero Emission Vehicles (ZEVs)	100% of LDV sales are ZEV by 2035	***Not applicable***. This action pertains to automakers and LDV sales within California. The Project would not obstruct or interfere with its implementation. Nonetheless, the Project would support the transition from fossil fuel LDV to ZEV through compliance with regulations and its provision of reserved parking for EVs (MM-TRA-1) and EV chargers (MM GHG-4).
Truck ZEVs	100% of medium-duty vehicle (MDV)/ heavy-duty vehicle (HDV) sales are ZEV by 2040	***Not applicable***. This action pertains to automakers and MDV and HDV sales within California. The Project would not obstruct or interfere with its implementation.
Electricity Generation	Sector GHG target of 38 million metric tons of carbon dioxide equivalent (MMT CO_2e) in 2030 and 30 MMT CO_2e in 2035 Retail sales load coverage[1] 20 gigawatts (GW) of offshore wind by 2045 Meet increased demand for electrification without new fossil gas-fired resources	***Not applicable.*** This action pertains to the statewide procurement of renewably generated electricity. The Project would not obstruct or interfere with its implementation. Nonetheless, the Project would support increased generation of renewable electricity through the installation of on-site solar panels and/or other means sufficient to generate up to 267,000 kWh of electricity per year (MM GHG-9). Additionally, the Project would be designed to be energy efficient (MM-GHG-7), which would serve to reduce overall electricity demand.
New Residential and Commercial Buildings	All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030	***Not applicable***. The Project would be developed before the 2029 trigger date. Nonetheless, appliances within the Project will be largely electric.

Table 2-12. Project Potential to Conflict with 2022 Scoping Plan

Sector	Action	Potential to Conflict
Construction Equipment	25% of energy demand electrified by 2030 and 75% electrified by 2045	***Not applicable***. As this action pertains to the electrification of off-road equipment across California, the Project would not obstruct or interfere with its implementation.
Low Carbon Fuels for Transportation	Biomass supply is used to produce conventional and advanced biofuels, as well as hydrogen	***Not applicable***. As this action pertains to the statewide effort to use and develop low-cost fuels for use in the transportation sector across California, the Project would not obstruct or interfere with agency efforts to increase the provision of low carbon fuels for transportation.
Low Carbon Fuels for Buildings and Industry	In 2030s biomethane blended in pipeline Renewable hydrogen blended in fossil gas pipeline at 7% energy (~20% by volume), ramping up between 2030 and 2040 In 2030s, dedicated hydrogen pipelines constructed to serve certain industrial clusters	***Not applicable***. As this action pertains to the statewide effort to use and develop low-cost fuels for building and industry sectors across California, the Project would not obstruct or interfere with agency efforts to increase the provision of low carbon fuels for use in buildings and industry.
High GWP Potential Emissions	Low GWP refrigerants introduced as building electrification increases, mitigating HFC emissions	***Not applicable***. This action pertains to statewide efforts to develop Low GWP refrigerants and CARB regulations to decrease higher GWP refrigerants. The Project would not obstruct or interfere with efforts to introduce low GWP refrigerants and regulations. While this action may not be directly applicable, the Project includes MM-GHG-14, which supports the intent of the action by reducing refrigerant emissions through the use of low-GWP refrigerants and a refrigerant management program.

Source: CARB 2022.
Notes: GHG = greenhouse gas; SB = Senate Bill; RTP = Regional Transportation Plan; SCS = Sustainable Communities Strategy; SCAQMD = South Coast Air Quality Management District; VMT = vehicle miles traveled; SEIR = supplemental environmental impact report; TPA = Transit Priority Area; LDV = light-duty vehicle; ZEV = zero emission vehicle; EV = electric vehicle; MDV = medium-duty vehicle; HDV = heavy-duty vehicle; MM = mitigation measure; MMT = million metric tons; CO_2e = carbon dioxide equivalent; GW = gigawatt; GWP = global warming potential; HFC = hydrofluorocarbon.

[1] As noted in Table 2-1 of the 2022 Scoping Plan, SB 100 speaks only to retail sales and state agency procurement of electricity (i.e., wholesale or non-retail sales and losses from storage and transmission and distribution lines are not subject to the law).

Based on the analysis in Table 2-12, the Project would potentially conflict with the 2022 Scoping Plan prior to mitigation. This is a potentially significant impact, and as such, mitigation is required to reduce the potential conflicts to a less than significant level.

The 2045 carbon neutrality goal required CARB to expand proposed actions in the 2022 Scoping Plan to include those that capture and store carbon in addition to those that reduce only anthropogenic sources of GHG emissions.

However, the 2022 Scoping Plan emphasizes that reliance on carbon sequestration in the state's natural and working lands will not be sufficient to address residual GHG emissions, and achieving carbon neutrality will require research, development, and deployment of additional methods to capture atmospheric GHG emissions (e.g., mechanical direct air capture). Overall, the Project would comply will all regulations adopted in furtherance of the Scoping Plan to the extent applicable and required by law. As demonstrated above, the Project would potentially conflict with CARB's 2022 Scoping Plan and with the state's ability to achieve the 2030 and 2045 GHG reduction and carbon neutrality goals prior to mitigation. This is a potentially significant impact, and as such, mitigation is imposed that reduced those potential impacts to less than significant.

Potential to Conflict with City of Garden Grove General Plan

The City of Garden Grove General Plan does not include a GHG reduction element, but many of its goals, policies, and implementation measures support GHG reduction as a co-benefit. These strategies align with state and regional climate goals by promoting sustainable land use, transportation, energy efficiency, and resource conservation. Table 2-13 presents the Project's potential to conflict with applicable GHG reduction related goals, policies, and implementation measures from the City's General Plan.

Table 2-13. Project Potential to Conflict with City of Garden Grove General Plan

General Plan Element/Type	General Plan Number	Description	Potential to Conflict
Air Quality Element			
Goal	AQ-4	Efficient development that promotes alternative modes of transportation, while ensuring that economic development goals are not sacrificed.	***No conflict with mitigation***. The Project is located on a previously developed infill site in a TPA near existing transit and is consistent with the General Plan land use designation. These Project characteristics would be supportive of this goal. However, the Project could generate substantial VMT from guests and employees, potentially conflicting with the City's goal to reduce emissions through efficient development and alternative transportation. The Project would and include measures to promote alternative transportation, such as MM-TRA-1, MM-TRA-2, and MM-GHG-5 to address the potential conflict. With the implementation of these measures, the Project would not conflict with this goal.
Policy	AQ-4.1	Review site developments to ensure pedestrian safety and promote non-automotive users.	***No conflict with mitigation.*** The Project includes PDFs to ensure pedestrian safety and the promotion of alternatives to automotive transportation. MM-

Table 2-13. Project Potential to Conflict with City of Garden Grove General Plan

General Plan Element/Type	General Plan Number	Description	Potential to Conflict
			TRA-2 and MM-GHG-5 require the inclusion of safe pedestrian and bicycle access and connections to adjacent uses.
Implementation	AQ-IMP-4C	Require sidewalks through parking lots, bicycle racks near building entrances and other provisions for the safety and convenience of pedestrian and bicycle riders at all commercial, mixed use, and production facilities.	***No conflict with mitigation.*** The Project includes MM-GHG-5 that requires the inclusion of safe pedestrian and bicycle access and bicycle parking and MM-TRA-2 that requires bicycle parking. Implementation of these mitigation measures would address the potential conflict.
Goal	AQ-5	An improved balance of residential, commercial, industrial, recreational, and institutional uses to satisfy the needs of the social and economic segments of the population. Work towards clean air while still permitting reasonable planned growth.	***No conflict with mitigation.*** The Project would construct a new resort hotel use within an infill developed area that is General Plan designated for such a visitor serving use within a TPA. These characteristics would support this goal, however without the inclusion of measures to reduce GHG emissions, the Project would potentially conflict with this goal. The Project incorporates project design features and MM-GHG-1 through MM-GHG-14 to reduce emissions from construction and operation of the Project. With implementation of these measures, the Project would not conflict with this policy.
Policy	AQ-5.2	Encourage infill development projects within urbanized areas that include jobs centers and transportation nodes.	***No conflict.*** The Project will create additional jobs and is located on an infill site within an urbanized area near existing transit lines and other job centers.
Policy	AQ-5.6	Increase residential and commercial densities around bus and/or rail transit stations, and along major arterial corridors.	***No conflict***. The Project would construct a new commercial use near existing transit lines and major arterial corridors.

Table 2-13. Project Potential to Conflict with City of Garden Grove General Plan

General Plan Element/Type	General Plan Number	Description	Potential to Conflict
Goal	AQ-6	Increased energy efficiency and conservation.	*No conflict with mitigation*. The Project would be built to current Title 24 standards at the time building permits are issued. The City's goal is addressing increased energy efficiency and conservation. The Project would potentially conflict with this goal without the inclusion of energy efficiency and conservation measures that go beyond regulatory requirements. The Project includes project design features and mitigation measures such as MM-GHG-7 which includes increased building energy efficiencies that serve to reduce and conserve energy use as well as generate on-site renewable energy.
Policy	AQ-6.1	Develop incentives and/or regulations regarding energy conservation requirements for private and public developments.	*No conflict with mitigation*. See response to Goal AQ-6. The Project would not prevent the City from implementing this policy.
Policy	AQ-6.2	Promote energy conservation and disseminate information throughout the community about energy conservation measures.	*No conflict with mitigation*. See response to Goal AQ-6. The Project would not prevent the City from implementing this policy.
Implementation	AQ-IMP-6D	Require new development to comply with the energy use guidelines in Title 24 of the California Administrative Code.	*No conflict*. The Project would be built to current Title 24 standards at the time building permits are issued. Additionally, the Project includes MM-GHG-7, which would include building energy efficiencies that serve to further reduce and conserve energy use.
Conservation Element			
Goal	CON-1	Garden Grove's water resources shall be conserved to ensure equitable amounts of clean water for all users.	*No conflict with mitigation*. Although the Project is located on a previously developed infill site and the resort hotels use is consistent with the General Plan

Table 2-13. Project Potential to Conflict with City of Garden Grove General Plan

General Plan Element/Type	General Plan Number	Description	Potential to Conflict
			designation for the Project site. The Project must comply with all applicable water conservation regulations and it includes grey water recycling and water conservation measures in MM-GHG-10, which requires a minimum 10% reduction in water use compared to baseline demand. The reduction would be achieved through low-flow fixtures, smart irrigation systems, and greywater recycling. These measures directly support water conservation and reduce the Project's impact on local water supplies. By integrating sustainable water management practices, the Project would not conflict with the City's goal of ensuring equitable and efficient use of water resources.
Policy	CON-1.2	Reduce the waste of potable water through efficient technologies, conservation efforts, and design and management practices, and by better matching the source and quality of water to the user's needs.	*No conflict with mitigation*. See response to Goal CON-1. Notably, the use of grey water recycling would be considered an efficient technology to reduce potable water use. The Project would not conflict with this policy with implementation of MM-GHG-10.
Policy	CON-1.3	Promote water conservation in new development or redevelopment project design, construction, and operations.	*No conflict with mitigation*. See response to Goal CON-1. MM-GHG-10 requires the implementation of water conservation measures. The Project would not conflict with this policy with implementation of MM-GHG-10.
Policy	CON-1.4	Continue to implement a Water Conservation Program.	*Not applicable*. This is a City-wide measure. The Project would not prevent the City from implementing this policy. The Project must comply with all applicable water conservation regulations and programs the City develops. Although this policy is not specifically applicable to the

Table 2-13. Project Potential to Conflict with City of Garden Grove General Plan

General Plan Element/Type	General Plan Number	Description	Potential to Conflict
			Project, the Project includes water conservation measures through MM-GHG-10, and thus, would not conflict with this policy.
Implementation	CON-IMP-1B	Require on-site infiltration whenever feasible for new development or redevelopment projects.	***Not conflict***. The Project would not prevent the City from implementing this policy. The Project must comply with all applicable on-site filtration requirements of the City and other applicable agencies. Although this policy is not specifically applicable at the project-level, the Project includes MM-GHG-8, which could include permeable surfaces to allow greater infiltration.
Implementation	CON-IMP-1C	Promote site-appropriate, low water-use, and drought-tolerant native plants city-wide.	***Not conflict***. The Project would not prevent the City from implementing this policy and the Project design contemplates landscaping as described by this policy. Nonetheless, the Project includes MM-GHG-10, which would require low water use and drought-tolerant plants in the landscaping plans for the Project.
Implementation	CON-IMP-1F	Promote cost-saving conservation measures such as low-flow fixtures, waterless urinals, and other techniques that extend scarce supplies for all homes and businesses.	***Not applicable***. This is a City-wide measure. The Project would not prevent the City from implementing this policy. Nonetheless, The Project includes MM-GHG-10, which would require low-flow water fixtures.
Goal	CON-2	Protect and improve water quality.	***No conflict***. The Project would comply with applicable regulations for protecting water quality during construction and operation. Protecting water quality through stormwater management helps to reduce more energy-intensive stormwater treatment.
Policy	CON-2.1	Enhance water infiltration throughout watersheds by	***Not applicable***. This is a City-wide measure. The Project would not

Table 2-13. Project Potential to Conflict with City of Garden Grove General Plan

General Plan Element/Type	General Plan Number	Description	Potential to Conflict
		decreasing accelerated runoff rates and enhancing groundwater recharge.	interfere with the City's ability to implement this policy. Nonetheless, the Project would comply with applicable City standards and implement MM-GHG-8 to provide a mechanism for considering the use of permeable surfaces.
Policy	CON-2.2	Encourage practices that enable water to percolate into the surrounding soil, instead of letting sediment, metals, pesticides, and chemicals runoff directly into the storm drain system.	***Not applicable.*** This is a City-wide measure. The Project would not interfere with the City's ability to implement this policy and would comply with applicable City standards. Nonetheless, the Project would implement MM-GHG-8 to provide a mechanism for considering the use of permeable surfaces as a cool deck.
Implementation	CON-IMP-2D	Minimize impervious surfaces for new development, and incorporate technologies such as pervious paving, landscaped roofs, planter boxes, and rainwater capture and reuse.	***No conflict***. The Project would not interfere with the City's ability to implement this policy and would comply with applicable City standards. Nonetheless, MM-GHG-8 would provide a mechanism for considering the use of permeable surfaces as a cool deck.
Goal	CON-3	Reduce total waste diverted to treatment or disposal at the waste source and through re-use and recycling.	***No conflict with mitigation***. The Project must comply with all applicable waste diversion regulations. However, without the inclusion of additional waste reduction measures, the Project would potentially conflict with this goal. The Project would implement MM-GHG-3 to increase construction debris recycling above the City standard and MM-GHG-11 to reduce operational waste above current industry standards. With implementation of these measures, the Project would not conflict with this goal.
Policy	CON-3.1	Update as appropriate and continue to implement the Source	***Not applicable***. This is not a project-specific policy. The Project would not interfere with

Table 2-13. Project Potential to Conflict with City of Garden Grove General Plan

General Plan Element/Type	General Plan Number	Description	Potential to Conflict
		Reduction and Recycling Element (SRRE) for the City.	the City's ability to implement this policy. Nonetheless, the Project would comply with all applicable waste diversion regulations and implement MM-GHG-3 to increase construction debris recycling above the City standard and MM-GHG-11 to reduce operational waste above current industry standards.
Policy	CON-3.4	Encourage the use of materials with minimal impacts to the environment for new development or redevelopment projects in the City.	*No conflict*. The Project includes PDF-27 that will prioritize sustainable building materials during material selection.
Implementation	CON-IMP-3D	Encourage the use of recycled or rapidly renewable materials, and building reuse and renovation over new construction, where feasible.	*No conflict*. The Project would not interfere with the City's ability to implement this policy. The Project includes PDF-27 that will prioritize sustainable building materials during material selection.
Goal	CON-4	Reduce per-capita non-renewable energy waste and city-wide peak electricity demand through energy efficiency and conservation.	*No conflict with mitigation*. Without the inclusion of measures to reduce non-renewable energy waste and reduce electricity demand the Project would potentially conflict with this goal. The Project includes Project design features that would serve to reduce non-renewable fuel use and reduce electricity use. Additionally, the Project includes MM-GHG-7, which would serve to reduce electricity demand through building efficiencies as well as MM-GHG-9 requiring on-site renewable energy generation. MM-GHG-10 serves to reduce water use which also indirectly reduces energy used to treat and supply water. With implementation of the above measure, the Project would not conflict with this goal.

Table 2-13. Project Potential to Conflict with City of Garden Grove General Plan

General Plan Element/Type	General Plan Number	Description	Potential to Conflict
Policy	CON-4.1	Integrate energy efficiency and conservation requirements that exceed State standards into the development review and building permit processes.	***Not applicable***. The City is responsible for integrating this policy into its development review and building permit process. The Project would not interfere with the City's ability to implement this policy. Nonetheless, the Project includes MM-GHG-7, which would require building energy efficiencies and MM-GHG-9 which requires on-site renewable energy generation.
Policy	CON-4.2	Create incentives such as expedited permit processing, technical assistance, and other methods that will encourage energy efficiency technology and practices.	***Not applicable***. The City is responsible for development of these incentives. The Project would not interfere with the City's ability to implement this policy.
Implementation	CON-IMP-4A	Adopt Energy Efficiency Standards for new and remodeled buildings that exceed Title 24 building standards.	***Not applicable***. The City is responsible for the adoption of energy efficiency standards. The Project would not interfere with the City's ability to implement this policy. Nonetheless, the Project includes MM-GHG-7 that would enhance building energy efficiencies consistent with this implementation measure.
Goal	CON-5	Reduce dependency on non-renewable energy resources through the use of local and imported alternative energy sources.	***No conflict with mitigation***. The Project would not interfere with the City's ability to implement this policy. However, without the inclusion of mitigation, the Project would potentially conflict with this goal. The Project includes MM-GHG-9, which requires the Project to provide a portion of its energy use from on-site renewable solar energy. With implementation of this measure, the Project would not conflict with this goal.
Policy	CON-5.1	Integrate technically and financially feasible renewable energy	***Not applicable***. The City is responsible for integrating renewable energy resource

Table 2-13. Project Potential to Conflict with City of Garden Grove General Plan

General Plan Element/Type	General Plan Number	Description	Potential to Conflict
		resources requirements into development and building standards.	requirements into its development and building standards. The Project would not interfere with the City's ability to implement this policy. Nonetheless, the Project includes MM-GHG-9, which requires the Project to provide a portion of its energy use from on-site renewable solar energy. Although this policy is not applicable at the project-level, Implementation of this measure would be supportive of this policy.
Policy	CON-5.2	Promote renewable energy use through regulations, incentives, and available funding opportunities.	***Not applicable***. The City is responsible for development of incentives and regulations to promote renewable energy. Project would not interfere with the City's ability to implement this policy. Although this policy is not applicable at the project-level, the Project includes MM-GHG-9, which requires the Project to provide a portion of its energy use from on-site renewable solar energy; this measure would be supportive of this policy.
Policy	CON-5.3	Create opportunities for the purchase and development of local renewable energy resources.	***Not applicable***. The City is responsible for creating opportunities for the purchase and development of local renewable energy resources. The Project would not interfere with the City's ability to implement this policy. Although this policy is not applicable at the project-level, the Project includes MM-GHG-9, which requires the Project to provide a portion of its energy use from on-site renewable solar energy; this measure would not conflict with this policy.
Implementation	CON-IMP-5G	Encourage renewable technologies through streamlined planning	***Not applicable***. The City is responsible for implementation of this measure. The Project

Table 2-13. Project Potential to Conflict with City of Garden Grove General Plan

General Plan Element/Type	General Plan Number	Description	Potential to Conflict
		and development rules, codes, and processes.	would not interfere with the City's ability to implement this policy. Nonetheless, the Project includes MM-GHG-9, which would require the Project to provide a portion of its energy use from on-site renewable solar energy.
Implementation	CON-IMP-5H	Provide incentives such as expedited processing for facilities that use renewable sources for energy production.	***Not applicable***. The City is responsible for implementation of this measure. The Project would not interfere with the City's ability to implement this policy. Nonetheless, the Project includes MM-GHG-9, which requires the Project to provide a portion of its energy use from on-site renewable solar energy.
Goal	CON-6	Green Building programs achieve water and energy efficiency, minimize raw resource consumption, and reduce the amount of waste placed in landfills while improving human health and quality of life in the City.	***Not applicable***. The City is responsible for the development of green building programs. The Project would not interfere with the City's ability to implement this goal. Although not applicable at the project-level, the Project includes MM-GHG-7, MM-GHG-8, MM-GHG-10, and MM-GHG-11, which would serve to meet the goals outlined in the City's policy to conserve energy and water and reduce waste.
Policy	CON-6.1	Promote improvement in the health and productivity of new buildings by training building personnel in new construction practices and the use of alternative or recycled building materials.	***Not applicable***. The City is responsible for the development of training to promote improvements in the health and productivity of buildings. The Project would not interfere with the City's ability to implement this policy. Nonetheless, the Project includes PDF-27 that supports the use of sustainable building materials.
Policy	CON-6.2	Provide information, marketing, training, and education to the public to support green building activities.	***Not applicable.*** The City is responsible for the development of marketing, training, and education to support green building activities. The Project

Table 2-13. Project Potential to Conflict with City of Garden Grove General Plan

General Plan Element/Type	General Plan Number	Description	Potential to Conflict
			would not interfere with the City's ability to implement this policy. Nonetheless, the Project includes PDF-27, MM-GHG-7, MM-GHG-8, MM-GHG-10, and MM-GHG-11, which would serve to support this policy.
Safety Element			
Goal	SAF-10	A robust, climate-responsive community prepared to anticipate, adapt to, and mitigate impacts stemming from climate change.	*Not applicable*. The Project would not interfere with the City's ability to implement this policy. Nonetheless, the Project has incorporated PDFs and mitigation measures focused on the following categories: *Transportation and land use* ▪ The Project is an infill development on previously developed land consistent with its land use designation, located within a TPA near existing transit; ▪ MM-GHG-4 (EV charging), ▪ MM-GHG-5 (Guest Trip Reduction) ▪ MM-TRA-1 (Employee Commute Trip Reduction) ▪ MM-TRA-2 (Bike Facilities) *Energy and buildings* ▪ PDF-27 (Sustainable building materials) ▪ MM-GHG-1 (Construction Office Energy) ▪ MM-GHG-7 (Building Energy Efficiency) ▪ MM-GHG-8 (Cool Roof/Deck) ▪ MM-GHG-9 (Renewable Energy) ▪ MM-GHG-12 (Zero Emission Landscape Equipment) *Water and waste* ▪ PDF-27 (Sustainable Building Materials) ▪ MM-GHG-3 (Construction Waste)

Table 2-13. Project Potential to Conflict with City of Garden Grove General Plan

General Plan Element/Type	General Plan Number	Description	Potential to Conflict
			▪ MM-GHG-10 Water Conservation ▪ MM-GHG-11 Waste Reduction ▪ MM-GHG-14 (Refrigerant Management) The above measures represent best practices for anticipating and mitigating climate change impacts.
Policy	SAF-10.6	Encourage development projects to incorporate design features that reduce the impact of extreme heat events.	***Not applicable***. The Project would not interfere with the City's ability to implement this policy. See Response to SAF-10.
Policy	SAF-10.7	Consider the possibility of constrained future water supplies due to long-term climate change impacts on water supplies and require enhanced water conservation for new construction and retrofits.	***No conflict with mitigation***. Without the incorporation of measures to address potentially constrained water supplies in the future, the Project would potentially conflict with this policy. As discussed in the response to Goal SAF-10, the Project would not interfere with the City's ability to implement this policy and would include MM-GHG-10 to conserve water and mitigate the potential of constrained water supplies in the future. With implementation of this measure, the Project would not conflict with this policy.
Policy	SAF-10.10	Encourage mixed-use development throughout the City consistent with the goals and policies of the Land Use Element to promote jobs/housing proximity, transit-oriented development, and high-density development along major corridors.	***No conflict***. The Project does not interfere with the City's ability to implement this policy. While the Project is not mixed use, it does include jobs near existing transit within an infill urban area near residential and other commercial uses.
Policy	SAF-10.11	Encourage infill, redevelopment, and higher density development consistent	***No conflict***. The Project would construct a resort hotel on an infill site near existing transit and surrounded by urban uses.

Table 2-13. Project Potential to Conflict with City of Garden Grove General Plan

General Plan Element/Type	General Plan Number	Description	Potential to Conflict
		with the goals and policies of the Land Use Element.	
Implementation	SAF-IMP-10F	Design new buildings to use less cooling through passive heat and cooling techniques.	*No conflict with mitigation*. The Project includes MM-GHG-7 that requires building energy efficiency that would result in less energy use for heating and cooling. Implementation of this measure would eliminate the potential conflict.
Implementation	SAF-IMP-10G	Encourage the use of water-porous pavement materials to allow for groundwater recharge and reductions in stormwater runoff, and materials that reflect solar energy and stay cooler.	*No conflict with mitigation*. The Project does not interfere with the City's implementation of this measure. The Project includes MM-GHG-8, which could include permeable surfaces as well as light-colored materials with solar reflectivity to stay cooler. Implementation of this measure would remove the potential conflict.
Implementation	SAF-IMP-10I	Require the use of sustainable landscaping techniques and water conservation measures in new development beyond current requirements.	*No conflict with mitigation*. See Response to Goal SAF-10. The Project does not interfere with the City's implementation of this measure. The Project includes MM-GHG-10, which would serve to reduce water use beyond regulatory requirements. Implementation of this measure would remove the potential conflict.
Implementation	SAF-IMP-10O	Promote limiting idling time for commercial vehicles including delivery and construction vehicles, consistent with South Coast Air Quality Management District idling regulations.	*No conflict*. The Project includes PDF-12 and PDF-21, which serve to reduce idling by delivery and construction vehicles.
Implementation	SAF-IMP-10Q	Encourage the use of available energy-saving measures that exceed the minimum Title 24 requirements for residential and commercial projects.	*No conflict with mitigation*. See Response to Goal SAF-10. The Project does not interfere with the City's implementation of this measure. The Project includes MM-GHG-7, which would require the Project to include building

Table 2-13. Project Potential to Conflict with City of Garden Grove General Plan

General Plan Element/Type	General Plan Number	Description	Potential to Conflict
			energy efficiencies. Implementation of this measure would remove the potential conflict.
Implementation	SAF-IMP-10AB	Develop a strategy to reduce greenhouse gas emissions citywide consistent with other City policy objectives. Consider developing a climate action plan or similar document.	***Not applicable***. The City is responsible for development of a strategy to reduce GHG emissions citywide. The Project would not interfere with the City's ability to develop a Climate Action Plan. Nonetheless, the Project includes sustainable project design features and mitigation measures that often serve as best practices in new development for achieving GHG reductions.
Circulation Element			
Goal	CIR-4	A reduction in vehicle miles traveled in order to create a more efficient urban form.	***No conflict with mitigation***. The Project would not interfere with the City's ability to implement this goal. The Project would have less than significant VMT impacts under most scenarios, but mitigation is required for one VMT scenario as described in Section 4.2 of the SEIR. However, the Project's proximity to transit and inclusion of MM-TRA-1, MM-TRA-2, and MM-GHG-5 would resolve the potential conflict.
Policy	CIR-4.1	Strive to achieve a balance of land uses whereby residential, commercial, and public land uses are proportionally balanced.	***No conflict***. The Project would not interfere with the City's ability to implement this goal. The Project would develop visitor serving uses on appropriately designated land within a TPA on a previously developed infill site. These Project characteristics would be supportive of this policy and thus not conflict.
Policy	CIR-4.2	Strive to reduce the number of miles traveled by residents to their places of employment.	***No conflict with mitigation***. The Project would offer new employment opportunities in the City of Garden Grove. Without MM-TRA-1 and MM-TRA-2, the Project would initially potentially

Table 2-13. Project Potential to Conflict with City of Garden Grove General Plan

General Plan Element/Type	General Plan Number	Description	Potential to Conflict
			conflict with this policy. Implementation of these measures would reduce vehicle trips and associated VMT and resolve the potential conflict.
Goal	CIR-5	Increased awareness and use of alternate forms of transportation generated in, and traveling through, the City of Garden Grove.	***No conflict with mitigation***. The Project is located on a previously developed infill site within a TPA near transit. However, without MM-TRA-1, MM-TRA-2, and MM-GHG-5, the Project would initially potentially conflict with this policy. Implementation of these measures would reduce vehicle trips and associated VMT from employees and guests, thus resolving the potential conflict.
Policy	CIR-5.1	Promote the use of public transit.	***No conflict with mitigation***. See response to Goal CIR-5. The Project is located within a TPA and includes MM-GHG-5 and MM-TRA-1, which would include promoting the use of public transit.
Policy	CIR-5.3	Provide appropriate bicycle access throughout the City of Garden Grove.	***Not applicable***. The City is responsible for ensuring appropriate bicycle access throughout the City of Garden Grove. The Project would not interfere with the City's ability to implement this policy. In addition, the Project includes MM-GHG-5 and MM-TRA-2, which would provide access through the Project site and bicycle parking that would be supportive of this policy.
Policy	CIR-5.4	Provide appropriate pedestrian access throughout the City of Garden Grove.	***Not applicable.*** The City is responsible for providing appropriate pedestrian access throughout the City of Garden Grove. The Project would not interfere with the City's ability to implement this policy. Nonetheless, the Project design and MM-GHG-5 would provide safe pedestrian access throughout the Project site and to

Table 2-13. Project Potential to Conflict with City of Garden Grove General Plan

General Plan Element/Type	General Plan Number	Description	Potential to Conflict
			connecting public pedestrian networks.
Policy	CIR-5.5	Continue to implement the provisions of the Transportation Demand Ordinance.	***Not applicable***. The City is responsible for implementation of its Transportation Demand Ordinance. The Project does not interfere with the City's ability to implement this policy. Nonetheless, the Project includes MM-TRA-1 and MM-TRA-2, which would reduce employee commute trips by encouraging shared rides and use of alternative transportation. Implementation of these measures would be supportive of this policy.
Implementation	CIR-IMP-5A	Promote the use of Transportation Demand Management (TDM) Measures.	***Not applicable***. The City is responsible for promotion of TDM measures. The Project does not interfere with the City's ability to implement this policy. Nonetheless, the Project includes MM-TRA-1 and MM-TRA-2, which promote ride-sharing and alternative transportation to reduce employee commute trips, supporting this implementation measure.
Implementation	CIR-IMP-5B	Encourage the creation of programs such as Transportation Systems Management (TSM), public transit, carpools/vanpools, ride-match, bicycling, and other alternatives to the energy-inefficient use of vehicles.	***Not applicable***. The City is responsible for the creation of TSM programs. The Project does not interfere with the City's ability to implement this policy. Nonetheless, the Project includes MM-TRA-1 and MM-TRA-2, which promote ride-sharing and alternative transportation to reduce employee commute trips, supporting this implementation measure.
Goal	CIR-6	A safe, appealing, and comprehensive bicycle network provides additional recreational opportunities for Garden Grove residents and employees.	***Not applicable***. The City is responsible for the development of a comprehensive bicycle network. The Project does not interfere with the City's ability to implement this policy.

Table 2-13. Project Potential to Conflict with City of Garden Grove General Plan

General Plan Element/Type	General Plan Number	Description	Potential to Conflict
			In addition, the Project includes MM-GHG-5 that would provide safe bicycle access through the Project site, thus supporting this goal.
Policy	CIR-6.3	Encourage existing and new major traffic generators to incorporate facilities such as bicycle racks and showers into the development.	***No conflict with mitigation***. The Project does not interfere with the City's ability to implement this policy. Without MM-TRA-2 and MM-GHG-5, the Project would initially potentially conflict with the City's policy encouraging bicycle racks and showers for new traffic generators. However, these measures include bicycle parking for employees and guests, and the Project design incorporates employee showers, resolving the potential conflict.
Implementation	CIR-IMP-6H	Encourage the placement of signage that educates and informs automobiles and bicyclists that use the facility.	***Not applicable*** The City is responsible for this implementation measure. The Project does not interfere with the City's ability to implement this measure. Additionally, the Project includes MM-GHG-5 that would be supportive of this implementation measure.
Goal	CIR-10	Participation in regional transportation planning efforts to address interjurisdictional issues and maintain competitive advantage in capital improvement funding programs.	***Not applicable***. The City is responsible for its participation in regional transportation planning. The Project does not interfere with the City's ability to implement this goal.
Policy	CIR-10.3	Encourage employers to reduce employee-related travel.	***No conflict with mitigation***. The Project does not interfere with the City's ability to implement this policy. Without MM-TRA-1 and MM-TRA-2, the Project would initially potentially conflict with this policy. However, these measures would reduce employee commute trips by encouraging shared rides and

Table 2-13. Project Potential to Conflict with City of Garden Grove General Plan

General Plan Element/Type	General Plan Number	Description	Potential to Conflict
			use of alternative transportation, resolving the potential conflict.
Goal	CIR-11	Continued compliance with regional congestion management, transportation demand, traffic improvement, air quality management, and growth management programs.	***No conflict***. The City is responsible for its compliance with regional congestion management, transportation demand, traffic improvement, air quality management, and growth management programs. The Project would not interfere with the City's ability to implement this goal. Nonetheless, the Project is consistent with the City's General Plan development and therefore, the City's planned growth. Additionally, the Project includes MM-TRA-1, MM-TRA-2, and MM-GHG-5 that seek to reduce vehicle trips from employees and guests and promote alternative transportation.
Policy	CIR-11.5	Encourage employers to reduce employee-related travel.	***No conflict with mitigation***. The Project does not interfere with the City's ability to implement this policy. Without MM-TRA-1 and MM-TRA-2, the Project would potentially initially conflict with this policy. However, these measure would reduce employee commute trips by encouraging shared rides and use of alternative transportation, thus resolving the potential conflict.
Implementation	CIR-IMP-11D	Encourage employers to use vans, small buses, and other HOVs to link workplaces with park-and-ride facilities and transit centers.	***Not applicable***. The Project does not interfere with the City's ability to implement this measure. Nonetheless, the Project is located near existing transit and includes MM-TRA-1 and MM-TRA-2 to reduce employee commute trips and encourage alternative transportation.
Implementation	CIR-IMP-11E	Encourage the provision of convenient eating and recreational facilities on-site for businesses	***No conflict***. The Project does not interfere with the City's ability to implement this measure. The Project also includes eating and

Table 2-13. Project Potential to Conflict with City of Garden Grove General Plan

General Plan Element/Type	General Plan Number	Description	Potential to Conflict
		employing more than 100 people.	recreational facilities that could serve employees.
Implementation	CIR-IMP-11F	Encourage businesses to establish incentives and regulations to spread work trips over a longer period to reduce peak period congestion.	***No conflict***. The Project does not interfere with the City's ability to implement this measure. As a resort hotel that requires 24-hour employment, workers will arrive at the Project at different times throughout the day and evening.

Source: City of Garden Grove General Plan 2030, 2008.
Notes: TPA = transit priority area; MM = mitigation measure; GHG = greenhouse gas; VOC = volatile organic compound; VMT = vehicle miles traveled.

As shown above, the Project would potentially conflict with some of the applicable General Plan goals and policies adopted for the purpose of reducing the emissions of GHGs prior to mitigation. This is a potentially significant impact. The Project would implement mitigation measures that are considered best practices for the reduction of GHG emissions. Implementation of these measures would resolve any potential conflicts. Based on the preceding the Project would not conflict with the General Plan goals and policies adopted for the purpose of reducing GHG emissions. The impact would be less than significant with mitigation.

Level of Significance Before Mitigation

As shown in Table 2-11 through Table 2-13, the Project would potentially conflict with applicable plans policies, or regulations adopted for the purpose of reducing the emissions of GHGs; this is a **potentially significant impact**.

Mitigation Measures

The Project would implement MM-TRA-1, MM-TRA-2 (See Section 4.2 Transportation), and MM-GHG-1 through MM-GHG-14 described above to address potential conflicts with the applicable plans.

Level of Significance After Mitigation

The Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs after implementation of the above described mitigation measures that would align the Project with the goals and strategies outlined in the GHG reduction plans. The impact would be **less than significant with mitigation.**

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4 Preparers

Dudek

Jennifer Reed, Air Quality Services Manager
Elena Nuño, Senior Air Quality Specialist

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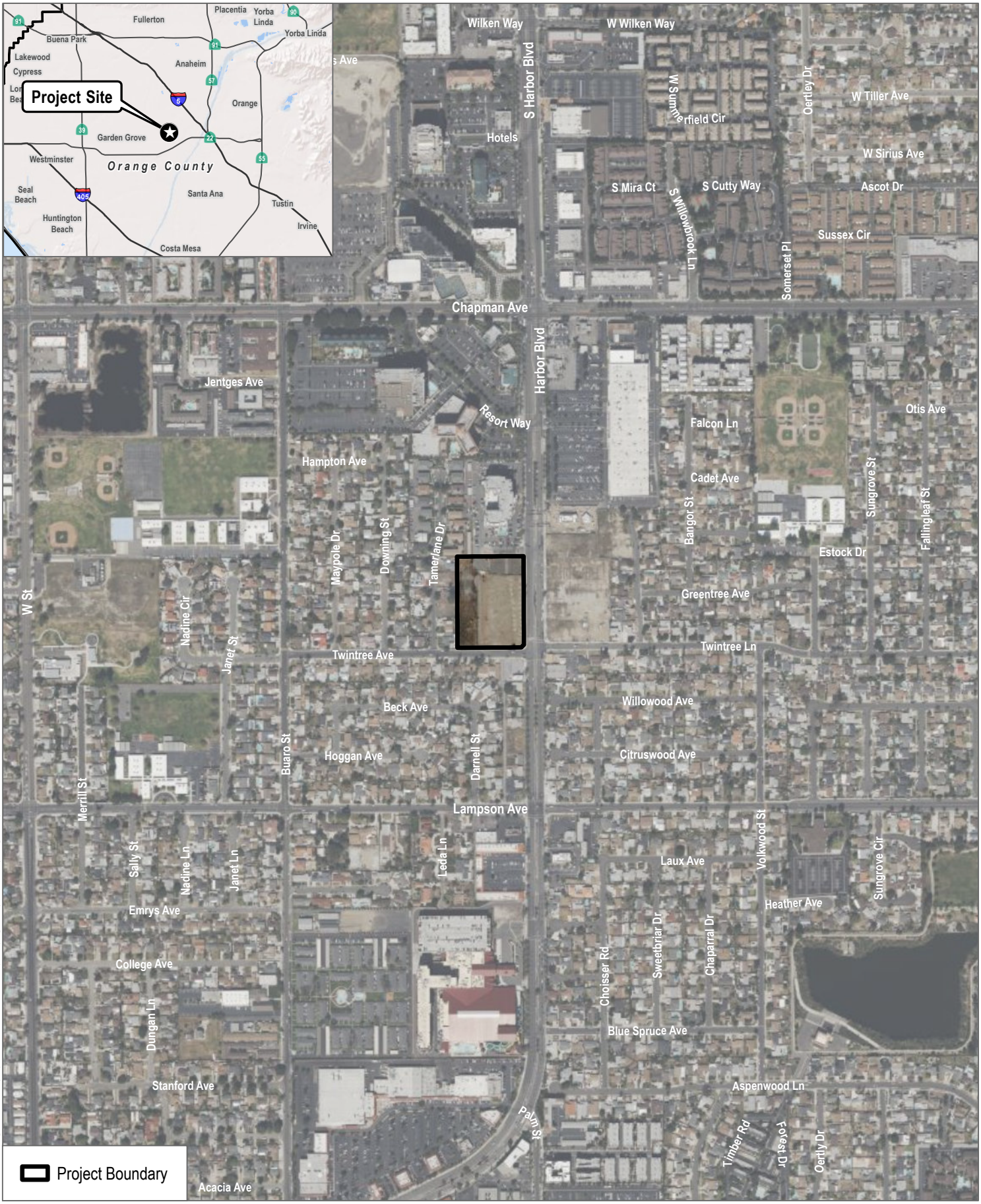

SOURCE: Bing Maps (Access: 2025)

FIGURE 1

Project Location

DUDEK

0 365 730 Feet

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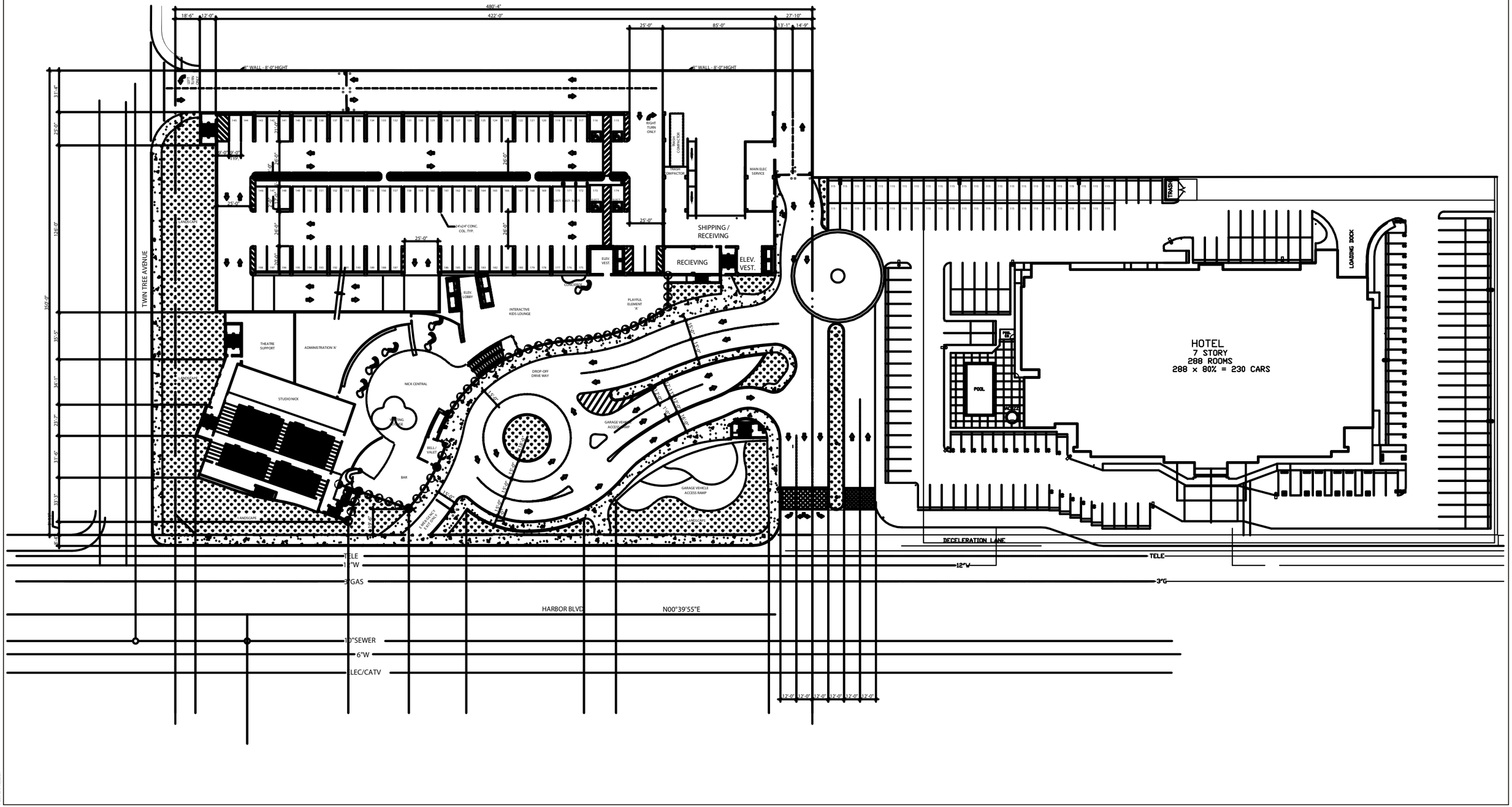

FIGURE 2

Site Plan

B-2 Hotel Project

DUDEK

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Appendix A
Construction CalEEMod Files

B-2 Hotel GHG Construction and Operation August 2025 - Unmitigated Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	B-2 Hotel GHG Construction and Operation August 2025 - Unmitigated
Construction Start Date	10/6/2025
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	18.2
Location	33.784339912522455, -117.91552871705632
County	Orange
City	Garden Grove
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5829
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.30

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Hotel	500	Room	3.72	417,233	39,711	0.00	—	—

Enclosed Parking with Elevator	528	Space	0.00	301,685	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-1-A	Use Electric or Hybrid Powered Equipment
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-5	Use Advanced Engine Tiers
Transportation	T-14*	Provide Electric Vehicle Charging Infrastructure
Transportation	T-34*	Provide Bike Parking
Energy	E-1	Buildings Exceed 2019 Title 24 Building Envelope Energy Efficiency Standards
Energy	E-7*	Require Higher Efficacy Public Street and Area Lighting
Energy	E-9*	Utilize a Combined Heat and Power System
Energy	E-10-B	Establish Onsite Renewable Energy Systems: Solar Power
Energy	E-21*	Install Cool Pavement
Energy	E-22*	Obtain Third-party HVAC Commissioning and Veri cation of Energy Savings
Energy	E-25*	Install Electric Heat Pumps
Water	W-2	Use Grey Water
Water	W-5	Design Water-Efficient Landscapes
Water	W-7	Adopt a Water Conservation Strategy
Waste	S-1/S-2	Implement Waste Reduction Plan
Waste	S-4*	Recycle Demolished Construction Material
Refrigerants	R-1	Use Alternative Refrigerants Instead of High-GWP Refrigerants
Refrigerants	R-4	Install Microchannel Heat Exchangers in A/C Equipment in Place of Conventional Heat Exchanger
Refrigerants	R-5	Reduce Service Leak Emissions
Refrigerants	R-6	Reduce Operational Leak Emissions

Refrigerants	R-7*	Reduce Disposal Emissions
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment

* 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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	52.9	16.4	37.6	0.06	7.28	2.05	12,984	0.42	0.94	32.2	13,308
Mit.	52.7	8.11	34.7	0.05	6.93	1.73	12,015	0.38	0.94	32.2	12,335
% Reduced	< 0.5%	50%	8%	16%	5%	16%	7%	9%	1%	—	7%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	52.9	39.1	36.0	0.15	8.61	3.59	21,099	1.57	2.93	1.00	22,010
Mit.	52.7	24.8	33.0	0.15	7.94	2.98	21,102	1.57	2.93	1.00	22,014
% Reduced	< 0.5%	36%	8%	—	8%	17%	> -0.5%	—	—	—	> -0.5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.0	12.0	25.3	0.04	5.15	1.45	9,138	0.31	0.67	9.94	9,356
Mit.	10.9	6.11	23.2	0.04	4.89	1.22	8,446	0.28	0.67	9.94	8,662
% Reduced	1%	49%	8%	16%	5%	16%	8%	9%	1%	—	7%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.01	2.19	4.61	0.01	0.94	0.27	1,513	0.05	0.11	1.65	1,549
Mit.	1.99	1.11	4.23	0.01	0.89	0.22	1,398	0.05	0.11	1.65	1,434
% Reduced	1%	49%	8%	16%	5%	16%	8%	9%	1%	—	7%

Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—
Threshold	75.0	100	550	150	150	55.0	—	—	—	—	—
Unmit.	No	No	No	No	No	No	—	—	—	—	Yes
Mit.	No	No	No	No	No	No	—	—	—	—	Yes
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—
Threshold	75.0	100	550	150	150	55.0	—	—	—	—	—
Unmit.	No	No	No	No	No	No	—	—	—	—	Yes
Mit.	No	No	No	No	No	No	—	—	—	—	Yes

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2026	2.59	16.4	37.6	0.06	7.28	2.05	12,984	0.42	0.94	32.2	13,308
2027	2.33	15.7	36.1	0.06	7.24	2.01	12,797	0.41	0.91	29.0	13,107
2028	52.9	1.14	5.10	< 0.005	1.15	0.28	1,310	0.02	0.02	3.31	1,321
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	2.74	39.1	36.0	0.15	8.61	3.59	21,099	1.57	2.93	1.00	22,010
2026	2.58	16.8	34.6	0.06	7.28	2.05	12,724	0.43	0.94	0.83	13,016
2027	2.32	15.9	33.3	0.06	7.24	2.01	12,541	0.41	0.91	0.75	12,823
2028	52.9	15.2	32.2	0.06	7.20	1.98	12,334	0.41	0.91	0.67	12,616
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2025	0.43	4.89	5.24	0.02	1.34	0.56	2,404	0.14	0.26	2.05	2,486
2026	1.84	12.0	25.3	0.04	5.15	1.45	9,138	0.31	0.67	9.94	9,356

2027	1.66	11.5	24.3	0.04	5.12	1.43	9,007	0.30	0.65	8.96	9,216
2028	11.0	1.30	2.88	< 0.005	0.45	0.13	731	0.02	0.03	0.58	742
Annual	—	—	—	—	—	—	—	—	—	—	—
2025	0.08	0.89	0.96	< 0.005	0.25	0.10	398	0.02	0.04	0.34	412
2026	0.34	2.19	4.61	0.01	0.94	0.27	1,513	0.05	0.11	1.65	1,549
2027	0.30	2.10	4.43	0.01	0.93	0.26	1,491	0.05	0.11	1.48	1,526
2028	2.01	0.24	0.53	< 0.005	0.08	0.02	121	< 0.005	0.01	0.10	123

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2026	1.67	8.11	34.7	0.05	6.93	1.73	12,015	0.38	0.94	32.2	12,335
2027	1.45	7.89	33.2	0.05	6.93	1.73	11,828	0.37	0.90	29.0	12,134
2028	52.7	0.33	3.98	< 0.005	1.13	0.27	1,178	0.02	0.02	3.31	1,189
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	1.76	24.8	33.0	0.15	7.94	2.98	21,102	1.57	2.93	1.00	22,014
2026	1.66	8.51	31.7	0.05	6.93	1.73	11,754	0.39	0.94	0.83	12,044
2027	1.43	8.13	30.4	0.05	6.93	1.73	11,572	0.38	0.90	0.75	11,850
2028	52.7	7.91	29.3	0.05	6.93	1.73	11,366	0.38	0.90	0.67	11,643
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2025	0.17	2.34	5.00	0.01	1.23	0.45	2,349	0.14	0.26	2.05	2,431
2026	1.18	6.11	23.2	0.04	4.89	1.22	8,446	0.28	0.67	9.94	8,662
2027	1.03	5.95	22.2	0.04	4.89	1.22	8,314	0.27	0.64	8.96	8,521
2028	10.9	0.52	2.66	< 0.005	0.42	0.11	683	0.02	0.03	0.58	694
Annual	—	—	—	—	—	—	—	—	—	—	—

2025	0.03	0.43	0.91	< 0.005	0.22	0.08	389	0.02	0.04	0.34	403
2026	0.22	1.11	4.23	0.01	0.89	0.22	1,398	0.05	0.11	1.65	1,434
2027	0.19	1.09	4.05	0.01	0.89	0.22	1,377	0.04	0.11	1.48	1,411
2028	1.99	0.09	0.48	< 0.005	0.08	0.02	113	< 0.005	0.01	0.10	115

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	30.7	49.9	124	0.31	18.0	6.37	49,745	31.9	0.94	698	51,519
Mit.	25.5	48.9	92.5	0.30	17.8	6.27	47,921	25.5	0.91	114	48,945
% Reduced	17%	2%	26%	2%	1%	2%	4%	20%	3%	84%	5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	25.5	50.1	89.9	0.30	17.9	6.33	49,002	31.9	0.97	653	50,742
Mit.	25.4	49.4	89.2	0.29	17.8	6.27	47,288	25.5	0.94	69.7	48,277
% Reduced	< 0.5%	2%	1%	2%	< 0.5%	1%	3%	20%	2%	89%	5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	23.7	27.1	99.2	0.28	17.0	5.55	46,596	31.8	0.95	672	48,346
Mit.	20.2	26.2	77.1	0.27	16.9	5.46	44,807	25.4	0.92	88.1	45,806
% Reduced	15%	4%	22%	2%	1%	2%	4%	20%	3%	87%	5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.33	4.95	18.1	0.05	3.10	1.01	7,715	5.27	0.16	111	8,004
Mit.	3.68	4.78	14.1	0.05	3.08	1.00	7,418	4.21	0.15	14.6	7,584
% Reduced	15%	4%	22%	2%	1%	2%	4%	20%	3%	87%	5%
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—

Threshold	—	—	—	—	—	—	—	—	—	—	1,400
Unmit.	—	—	—	—	—	—	—	—	—	—	Yes
Mit.	—	—	—	—	—	—	—	—	—	—	Yes

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.99	5.39	62.6	0.16	15.6	4.02	16,241	0.79	0.66	45.4	16,502
Area	15.1	0.26	31.3	< 0.005	0.06	0.04	129	0.01	< 0.005	—	129
Energy	1.08	19.7	16.5	0.12	1.50	1.50	30,093	2.71	0.12	—	30,197
Water	—	—	—	—	—	—	242	5.64	0.14	—	424
Waste	—	—	—	—	—	—	226	22.6	0.00	—	792
Refrig.	—	—	—	—	—	—	—	—	—	652	652
Stationary	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Total	30.7	49.9	124	0.31	18.0	6.37	49,745	31.9	0.94	698	51,519
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.92	5.85	59.3	0.15	15.6	4.02	15,626	0.83	0.69	1.18	15,853
Area	9.99	—	—	—	—	—	—	—	—	—	—
Energy	1.08	19.7	16.5	0.12	1.50	1.50	30,093	2.71	0.12	—	30,197
Water	—	—	—	—	—	—	242	5.64	0.14	—	424
Waste	—	—	—	—	—	—	226	22.6	0.00	—	792
Refrig.	—	—	—	—	—	—	—	—	—	652	652
Stationary	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Total	25.5	50.1	89.9	0.30	17.9	6.33	49,002	31.9	0.97	653	50,742
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.85	5.89	60.5	0.15	15.4	3.98	15,792	0.82	0.69	19.6	16,038

Area	13.5	0.18	21.4	< 0.005	0.04	0.03	88.1	< 0.005	< 0.005	—	88.4
Energy	1.08	19.7	16.5	0.12	1.50	1.50	30,093	2.71	0.12	—	30,197
Water	—	—	—	—	—	—	242	5.64	0.14	—	424
Waste	—	—	—	—	—	—	226	22.6	0.00	—	792
Refrig.	—	—	—	—	—	—	—	—	—	652	652
Stationary	0.30	1.35	0.77	< 0.005	0.04	0.04	154	0.01	< 0.005	0.00	155
Total	23.7	27.1	99.2	0.28	17.0	5.55	46,596	31.8	0.95	672	48,346
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.61	1.08	11.0	0.03	2.81	0.73	2,615	0.14	0.11	3.24	2,655
Area	2.46	0.03	3.91	< 0.005	0.01	0.01	14.6	< 0.005	< 0.005	—	14.6
Energy	0.20	3.59	3.02	0.02	0.27	0.27	4,982	0.45	0.02	—	4,999
Water	—	—	—	—	—	—	40.1	0.93	0.02	—	70.2
Waste	—	—	—	—	—	—	37.5	3.75	0.00	—	131
Refrig.	—	—	—	—	—	—	—	—	—	108	108
Stationary	0.06	0.25	0.14	< 0.005	0.01	0.01	25.5	< 0.005	< 0.005	0.00	25.6
Total	4.33	4.95	18.1	0.05	3.10	1.01	7,715	5.27	0.16	111	8,004

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.99	5.39	62.6	0.16	15.6	4.02	16,241	0.79	0.66	45.4	16,502
Area	9.99	—	—	—	—	—	—	—	—	—	—
Energy	1.04	18.9	15.9	0.11	1.44	1.44	28,482	2.56	0.11	—	28,580
Water	—	—	—	—	—	—	214	5.08	0.12	—	378
Waste	—	—	—	—	—	—	170	17.0	0.00	—	594
Refrig.	—	—	—	—	—	—	—	—	—	68.5	68.5

Stationary	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Total	25.5	48.9	92.5	0.30	17.8	6.27	47,921	25.5	0.91	114	48,945
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.92	5.85	59.3	0.15	15.6	4.02	15,626	0.83	0.69	1.18	15,853
Area	9.99	—	—	—	—	—	—	—	—	—	—
Energy	1.04	18.9	15.9	0.11	1.44	1.44	28,463	2.56	0.11	—	28,560
Water	—	—	—	—	—	—	214	5.08	0.12	—	378
Waste	—	—	—	—	—	—	170	17.0	0.00	—	594
Refrig.	—	—	—	—	—	—	—	—	—	68.5	68.5
Stationary	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Total	25.4	49.4	89.2	0.29	17.8	6.27	47,288	25.5	0.94	69.7	48,277
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.85	5.89	60.5	0.15	15.4	3.98	15,792	0.82	0.69	19.6	16,038
Area	9.99	—	—	—	—	—	—	—	—	—	—
Energy	1.04	18.9	15.9	0.11	1.44	1.44	28,476	2.56	0.11	—	28,573
Water	—	—	—	—	—	—	214	5.08	0.12	—	378
Waste	—	—	—	—	—	—	170	17.0	0.00	—	594
Refrig.	—	—	—	—	—	—	—	—	—	68.5	68.5
Stationary	0.30	1.35	0.77	< 0.005	0.04	0.04	154	0.01	< 0.005	0.00	155
Total	20.2	26.2	77.1	0.27	16.9	5.46	44,807	25.4	0.92	88.1	45,806
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.61	1.08	11.0	0.03	2.81	0.73	2,615	0.14	0.11	3.24	2,655
Area	1.82	—	—	—	—	—	—	—	—	—	—
Energy	0.19	3.45	2.90	0.02	0.26	0.26	4,715	0.42	0.02	—	4,731
Water	—	—	—	—	—	—	35.5	0.84	0.02	—	62.5
Waste	—	—	—	—	—	—	28.1	2.81	0.00	—	98.3
Refrig.	—	—	—	—	—	—	—	—	—	11.3	11.3
Stationary	0.06	0.25	0.14	< 0.005	0.01	0.01	25.5	< 0.005	< 0.005	0.00	25.6

Total	3.68	4.78	14.1	0.05	3.08	1.00	7,418	4.21	0.15	14.6	7,584

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.24	21.5	20.8	0.03	0.92	0.85	3,627	0.15	0.03	—	3,639
Dust From Material Movement	—	—	—	—	5.11	2.63	—	—	—	—	—
Onsite truck	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	0.12	1.18	1.14	< 0.005	0.05	0.05	199	0.01	< 0.005	—	199
Dust From Material Movement	—	—	—	—	0.28	0.14	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.21	0.21	< 0.005	0.01	0.01	32.9	< 0.005	< 0.005	—	33.0
Dust From Material Movement	—	—	—	—	0.05	0.03	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.07	0.87	0.00	0.24	0.06	227	< 0.005	0.01	0.02	230
Vendor	0.01	0.21	0.10	< 0.005	0.05	0.02	191	0.01	0.03	0.01	200
Hauling	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	0.05	0.00	0.01	< 0.005	12.6	< 0.005	< 0.005	0.02	12.8
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	10.5	< 0.005	< 0.005	0.01	10.9
Hauling	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	< 0.005	< 0.005	2.09	< 0.005	< 0.005	< 0.005	2.12
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.74	< 0.005	< 0.005	< 0.005	1.81
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	1.77	19.5	0.03	0.07	0.07	3,627	0.15	0.03	—	3,639
Dust From Material Movement	—	—	—	—	5.11	2.63	—	—	—	—	—
Onsite truck	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	0.10	1.07	< 0.005	< 0.005	< 0.005	199	0.01	< 0.005	—	199
Dust From Material Movement	—	—	—	—	0.28	0.14	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.20	< 0.005	< 0.005	< 0.005	32.9	< 0.005	< 0.005	—	33.0
Dust From Material Movement	—	—	—	—	0.05	0.03	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.07	0.87	0.00	0.24	0.06	227	< 0.005	0.01	0.02	230
Vendor	0.01	0.21	0.10	< 0.005	0.05	0.02	191	0.01	0.03	0.01	200
Hauling	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	0.05	0.00	0.01	< 0.005	12.6	< 0.005	< 0.005	0.02	12.8
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	10.5	< 0.005	< 0.005	0.01	10.9
Hauling	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	< 0.005	< 0.005	2.09	< 0.005	< 0.005	< 0.005	2.12
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.74	< 0.005	< 0.005	< 0.005	1.81
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2025) - 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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.77	16.5	18.1	0.03	0.73	0.67	2,985	0.12	0.02	—	2,995
Dust From Material Movement	—	—	—	—	2.79	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.13	1.24	< 0.005	0.05	0.05	204	0.01	< 0.005	—	205
Dust From Material Movement	—	—	—	—	0.19	0.09	—	—	—	—	—
Onsite truck	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	0.21	0.23	< 0.005	0.01	0.01	33.9	< 0.005	< 0.005	—	34.0
Dust From Material Movement	—	—	—	—	0.03	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
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.06	0.77	0.00	0.21	0.05	202	< 0.005	0.01	0.02	204
Vendor	0.01	0.21	0.10	< 0.005	0.05	0.02	191	0.01	0.03	0.01	200
Hauling	0.36	22.3	9.61	0.12	4.82	1.51	17,720	1.43	2.87	0.97	18,611
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.06	0.00	0.01	< 0.005	14.0	< 0.005	< 0.005	0.02	14.2
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	13.1	< 0.005	< 0.005	0.02	13.7
Hauling	0.03	1.55	0.65	0.01	0.33	0.10	1,213	0.10	0.20	1.11	1,276
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	< 0.005	< 0.005	2.32	< 0.005	< 0.005	< 0.005	2.35
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.17	< 0.005	< 0.005	< 0.005	2.27
Hauling	< 0.005	0.28	0.12	< 0.005	0.06	0.02	201	0.02	0.03	0.18	211

3.4. Grading (2025) - 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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	2.23	17.9	0.03	0.06	0.06	2,985	0.12	0.02	—	2,995
Dust From Material Movement	—	—	—	—	2.79	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	1.23	< 0.005	< 0.005	< 0.005	204	0.01	< 0.005	—	205

Dust From Material Movement	—	—	—	—	0.19	0.09	—	—	—	—	—
Onsite truck	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	0.03	0.22	< 0.005	< 0.005	< 0.005	33.9	< 0.005	< 0.005	—	34.0
Dust From Material Movement	—	—	—	—	0.03	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
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.77	0.00	0.21	0.05	202	< 0.005	0.01	0.02	204
Vendor	0.01	0.21	0.10	< 0.005	0.05	0.02	191	0.01	0.03	0.01	200
Hauling	0.36	22.3	9.61	0.12	4.82	1.51	17,720	1.43	2.87	0.97	18,611
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.06	0.00	0.01	< 0.005	14.0	< 0.005	< 0.005	0.02	14.2
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	13.1	< 0.005	< 0.005	0.02	13.7
Hauling	0.03	1.55	0.65	0.01	0.33	0.10	1,213	0.10	0.20	1.11	1,276
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	< 0.005	< 0.005	2.32	< 0.005	< 0.005	< 0.005	2.35
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.17	< 0.005	< 0.005	< 0.005	2.27
Hauling	< 0.005	0.28	0.12	< 0.005	0.06	0.02	201	0.02	0.03	0.18	211

3.5. Building Construction (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	0.40	2,398	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.59	0.74	< 0.005	0.02	0.02	136	0.01	< 0.005	—	137
Onsite truck	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	0.11	0.14	< 0.005	< 0.005	< 0.005	22.5	< 0.005	< 0.005	—	22.6
Onsite truck	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	1.47	1.65	20.2	0.00	5.46	1.28	5,280	0.07	0.20	0.55	5,342
Vendor	0.14	5.64	2.77	0.04	1.44	0.42	5,231	0.29	0.73	0.37	5,455
Hauling	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	0.08	0.09	1.20	0.00	0.31	0.07	304	< 0.005	0.01	0.51	308
Vendor	0.01	0.32	0.16	< 0.005	0.08	0.02	297	0.02	0.04	0.35	310
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.22	0.00	0.06	0.01	50.3	< 0.005	< 0.005	0.09	51.0
Vendor	< 0.005	0.06	0.03	< 0.005	0.01	< 0.005	49.1	< 0.005	0.01	0.06	51.3

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.60	10.0	0.01	0.03	0.03	1,427	0.06	0.01	—	1,432
Onsite truck	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	0.09	0.57	< 0.005	< 0.005	< 0.005	81.0	< 0.005	< 0.005	—	81.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.10	< 0.005	< 0.005	< 0.005	13.4	< 0.005	< 0.005	—	13.5
Onsite truck	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	1.47	1.65	20.2	0.00	5.46	1.28	5,280	0.07	0.20	0.55	5,342
Vendor	0.14	5.64	2.77	0.04	1.44	0.42	5,231	0.29	0.73	0.37	5,455
Hauling	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	0.08	0.09	1.20	0.00	0.31	0.07	304	< 0.005	0.01	0.51	308

Vendor	0.01	0.32	0.16	< 0.005	0.08	0.02	297	0.02	0.04	0.35	310
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.22	0.00	0.06	0.01	50.3	< 0.005	< 0.005	0.09	51.0
Vendor	< 0.005	0.06	0.03	< 0.005	0.01	< 0.005	49.1	< 0.005	0.01	0.06	51.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	0.35	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	0.35	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	7.04	9.26	0.02	0.27	0.25	1,712	0.07	0.01	—	1,718
Onsite truck	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	0.14	1.28	1.69	< 0.005	0.05	0.05	283	0.01	< 0.005	—	284
Onsite truck	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	1.41	1.27	22.0	0.00	5.46	1.28	5,443	0.06	0.20	18.9	5,523
Vendor	0.11	5.24	2.62	0.04	1.44	0.42	5,144	0.26	0.73	13.3	5,380
Hauling	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	1.41	1.46	19.0	0.00	5.46	1.28	5,180	0.07	0.20	0.49	5,242
Vendor	0.10	5.45	2.68	0.04	1.44	0.42	5,146	0.26	0.73	0.34	5,369
Hauling	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	1.00	1.04	14.1	0.00	3.86	0.90	3,751	0.05	0.14	5.83	3,800
Vendor	0.08	3.92	1.89	0.03	1.02	0.30	3,675	0.18	0.52	4.11	3,838
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.19	2.57	0.00	0.70	0.16	621	0.01	0.02	0.97	629
Vendor	0.01	0.72	0.35	< 0.005	0.19	0.05	608	0.03	0.09	0.68	635
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2026) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.60	10.0	0.01	0.03	0.03	1,427	0.06	0.01	—	1,432
Onsite truck	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	0.15	1.60	10.0	0.01	0.03	0.03	1,427	0.06	0.01	—	1,432
Onsite truck	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	0.11	1.15	7.17	0.01	0.02	0.02	1,019	0.04	0.01	—	1,023
Onsite truck	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	0.21	1.31	< 0.005	< 0.005	< 0.005	169	0.01	< 0.005	—	169
Onsite truck	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	1.41	1.27	22.0	0.00	5.46	1.28	5,443	0.06	0.20	18.9	5,523
Vendor	0.11	5.24	2.62	0.04	1.44	0.42	5,144	0.26	0.73	13.3	5,380
Hauling	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	1.41	1.46	19.0	0.00	5.46	1.28	5,180	0.07	0.20	0.49	5,242
Vendor	0.10	5.45	2.68	0.04	1.44	0.42	5,146	0.26	0.73	0.34	5,369
Hauling	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	1.00	1.04	14.1	0.00	3.86	0.90	3,751	0.05	0.14	5.83	3,800
Vendor	0.08	3.92	1.89	0.03	1.02	0.30	3,675	0.18	0.52	4.11	3,838
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.19	2.57	0.00	0.70	0.16	621	0.01	0.02	0.97	629
Vendor	0.01	0.72	0.35	< 0.005	0.19	0.05	608	0.03	0.09	0.68	635
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	0.31	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	0.31	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	6.71	9.24	0.02	0.24	0.22	1,712	0.07	0.01	—	1,718
Onsite truck	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	0.13	1.22	1.69	< 0.005	0.04	0.04	283	0.01	< 0.005	—	284
Onsite truck	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	1.19	1.25	20.7	0.00	5.46	1.28	5,351	0.06	0.20	17.0	5,429
Vendor	0.11	5.03	2.50	0.04	1.44	0.42	5,049	0.26	0.69	12.1	5,273
Hauling	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	1.18	1.28	17.8	0.00	5.46	1.28	5,093	0.06	0.20	0.44	5,154

Vendor	0.10	5.25	2.56	0.04	1.44	0.42	5,051	0.25	0.69	0.31	5,263
Hauling	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	0.85	1.03	13.2	0.00	3.86	0.90	3,688	0.05	0.14	5.24	3,736
Vendor	0.08	3.77	1.80	0.03	1.02	0.30	3,607	0.18	0.49	3.72	3,762
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.19	2.42	0.00	0.70	0.16	611	0.01	0.02	0.87	619
Vendor	0.01	0.69	0.33	< 0.005	0.19	0.05	597	0.03	0.08	0.62	623
Hauling	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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.60	10.0	0.01	0.03	0.03	1,427	0.06	0.01	—	1,432
Onsite truck	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	0.15	1.60	10.0	0.01	0.03	0.03	1,427	0.06	0.01	—	1,432
Onsite truck	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	0.11	1.15	7.17	0.01	0.02	0.02	1,019	0.04	0.01	—	1,023
Onsite truck	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	0.21	1.31	< 0.005	< 0.005	< 0.005	169	0.01	< 0.005	—	169
Onsite truck	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	1.19	1.25	20.7	0.00	5.46	1.28	5,351	0.06	0.20	17.0	5,429
Vendor	0.11	5.03	2.50	0.04	1.44	0.42	5,049	0.26	0.69	12.1	5,273
Hauling	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	1.18	1.28	17.8	0.00	5.46	1.28	5,093	0.06	0.20	0.44	5,154
Vendor	0.10	5.25	2.56	0.04	1.44	0.42	5,051	0.25	0.69	0.31	5,263
Hauling	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	0.85	1.03	13.2	0.00	3.86	0.90	3,688	0.05	0.14	5.24	3,736
Vendor	0.08	3.77	1.80	0.03	1.02	0.30	3,607	0.18	0.49	3.72	3,762
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.19	2.42	0.00	0.70	0.16	611	0.01	0.02	0.87	619
Vendor	0.01	0.69	0.33	< 0.005	0.19	0.05	597	0.03	0.08	0.62	623
Hauling	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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	8.92	12.9	0.02	0.30	0.28	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.19	0.28	< 0.005	0.01	0.01	51.6	< 0.005	< 0.005	—	51.8
Onsite truck	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	0.05	< 0.005	< 0.005	< 0.005	8.54	< 0.005	< 0.005	—	8.57
Onsite truck	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	1.15	1.26	16.7	0.00	5.46	1.28	5,002	0.06	0.20	0.39	5,064
Vendor	0.10	5.04	2.47	0.04	1.44	0.42	4,934	0.25	0.69	0.28	5,146
Hauling	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	0.03	0.38	0.00	0.12	0.03	109	< 0.005	< 0.005	0.14	111
Vendor	< 0.005	0.11	0.05	< 0.005	0.03	0.01	106	0.01	0.01	0.10	111
Hauling	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	0.07	0.00	0.02	< 0.005	18.1	< 0.005	< 0.005	0.02	18.3
Vendor	< 0.005	0.02	0.01	< 0.005	0.01	< 0.005	17.6	< 0.005	< 0.005	0.02	18.4
Hauling	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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.60	10.0	0.01	0.03	0.03	1,427	0.06	0.01	—	1,432
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.22	< 0.005	< 0.005	< 0.005	30.7	< 0.005	< 0.005	—	30.8
Onsite truck	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	0.04	< 0.005	< 0.005	< 0.005	5.09	< 0.005	< 0.005	—	5.10
Onsite truck	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	1.15	1.26	16.7	0.00	5.46	1.28	5,002	0.06	0.20	0.39	5,064
Vendor	0.10	5.04	2.47	0.04	1.44	0.42	4,934	0.25	0.69	0.28	5,146
Hauling	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	0.03	0.38	0.00	0.12	0.03	109	< 0.005	< 0.005	0.14	111
Vendor	< 0.005	0.11	0.05	< 0.005	0.03	0.01	106	0.01	0.01	0.10	111

Hauling	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	0.07	0.00	0.02	< 0.005	18.1	< 0.005	< 0.005	0.02	18.3
Vendor	< 0.005	0.02	0.01	< 0.005	0.01	< 0.005	17.6	< 0.005	< 0.005	0.02	18.4
Hauling	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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	5.85	8.80	0.01	0.21	0.19	1,350	0.05	0.01	—	1,355
Paving	0.00	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.72	1.08	< 0.005	0.03	0.02	166	0.01	< 0.005	—	167
Paving	0.00	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.13	0.20	< 0.005	< 0.005	< 0.005	27.6	< 0.005	< 0.005	—	27.7
Paving	0.00	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.96	0.00	0.31	0.07	287	< 0.005	0.01	0.02	291
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.04	0.01	35.9	< 0.005	< 0.005	0.05	36.4
Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.01	< 0.005	5.94	< 0.005	< 0.005	0.01	6.02
Vendor	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

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	2.14	9.35	0.01	0.05	0.05	1,350	0.05	0.01	—	1,355
Paving	0.00	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.26	1.15	< 0.005	0.01	0.01	166	0.01	< 0.005	—	167
Paving	0.00	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.05	0.21	< 0.005	< 0.005	< 0.005	27.6	< 0.005	< 0.005	—	27.7
Paving	0.00	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.96	0.00	0.31	0.07	287	< 0.005	0.01	0.02	291
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.04	0.01	35.9	< 0.005	< 0.005	0.05	36.4
Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.01	< 0.005	5.94	< 0.005	< 0.005	0.01	6.02
Vendor	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

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.81	1.12	< 0.005	0.02	0.01	134	0.01	< 0.005	—	134
Architectural Coatings	52.5	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.11	0.81	1.12	< 0.005	0.02	0.01	134	0.01	< 0.005	—	134
Architectural Coatings	52.5	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.17	0.23	< 0.005	< 0.005	< 0.005	27.4	< 0.005	< 0.005	—	27.5
Architectural Coatings	10.8	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.03	0.04	< 0.005	< 0.005	< 0.005	4.54	< 0.005	< 0.005	—	4.56
Architectural Coatings	1.97	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.23	0.22	3.92	0.00	1.10	0.26	1,056	0.01	0.01	3.05	1,061
Vendor	< 0.005	0.12	0.06	< 0.005	0.04	0.01	120	0.01	0.02	0.26	126

Hauling	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	0.23	0.25	3.37	0.00	1.10	0.26	1,005	0.01	0.04	0.08	1,018
Vendor	< 0.005	0.12	0.06	< 0.005	0.04	0.01	120	0.01	0.02	0.01	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.72	0.00	0.22	0.05	209	< 0.005	0.01	0.27	212
Vendor	< 0.005	0.03	0.01	< 0.005	0.01	< 0.005	24.7	< 0.005	< 0.005	0.02	25.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.13	0.00	0.04	0.01	34.7	< 0.005	< 0.005	0.04	35.1
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.09	< 0.005	< 0.005	< 0.005	4.27
Hauling	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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	52.5	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Architectural Coatings	52.5	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	10.8	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.97	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.23	0.22	3.92	0.00	1.10	0.26	1,056	0.01	0.01	3.05	1,061
Vendor	< 0.005	0.12	0.06	< 0.005	0.04	0.01	120	0.01	0.02	0.26	126
Hauling	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	0.23	0.25	3.37	0.00	1.10	0.26	1,005	0.01	0.04	0.08	1,018
Vendor	< 0.005	0.12	0.06	< 0.005	0.04	0.01	120	0.01	0.02	0.01	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.72	0.00	0.22	0.05	209	< 0.005	0.01	0.27	212
Vendor	< 0.005	0.03	0.01	< 0.005	0.01	< 0.005	24.7	< 0.005	< 0.005	0.02	25.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.13	0.00	0.04	0.01	34.7	< 0.005	< 0.005	0.04	35.1
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.09	< 0.005	< 0.005	< 0.005	4.27
Hauling	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

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	5,538	0.53	0.06	—	5,570
Enclosed Parking with Elevator	—	—	—	—	—	—	1,056	0.10	0.01	—	1,062
Total	—	—	—	—	—	—	6,594	0.63	0.08	—	6,633
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	5,538	0.53	0.06	—	5,570
Enclosed Parking with Elevator	—	—	—	—	—	—	1,056	0.10	0.01	—	1,062

Total	—	—	—	—	—	—	6,594	0.63	0.08	—	6,633
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	917	0.09	0.01	—	922
Enclosed Parking with Elevator	—	—	—	—	—	—	175	0.02	< 0.005	—	176
Total	—	—	—	—	—	—	1,092	0.10	0.01	—	1,098

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	4,838	0.46	0.06	—	4,867
Enclosed Parking with Elevator	—	—	—	—	—	—	1,064	0.10	0.01	—	1,071
Total	—	—	—	—	—	—	5,903	0.56	0.07	—	5,937
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	4,827	0.46	0.06	—	4,855
Enclosed Parking with Elevator	—	—	—	—	—	—	1,056	0.10	0.01	—	1,062
Total	—	—	—	—	—	—	5,884	0.56	0.07	—	5,918
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	800	0.08	0.01	—	805
Enclosed Parking with Elevator	—	—	—	—	—	—	176	0.02	< 0.005	—	177
Total	—	—	—	—	—	—	976	0.09	0.01	—	982

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	1.08	19.7	16.5	0.12	1.50	1.50	23,499	2.08	0.04	—	23,564
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	1.08	19.7	16.5	0.12	1.50	1.50	23,499	2.08	0.04	—	23,564
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	1.08	19.7	16.5	0.12	1.50	1.50	23,499	2.08	0.04	—	23,564
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	1.08	19.7	16.5	0.12	1.50	1.50	23,499	2.08	0.04	—	23,564
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.20	3.59	3.02	0.02	0.27	0.27	3,891	0.34	0.01	—	3,901
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.20	3.59	3.02	0.02	0.27	0.27	3,891	0.34	0.01	—	3,901

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	1.04	18.9	15.9	0.11	1.44	1.44	22,580	2.00	0.04	—	22,642

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	1.04	18.9	15.9	0.11	1.44	1.44	22,580	2.00	0.04	—	22,642
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	1.04	18.9	15.9	0.11	1.44	1.44	22,580	2.00	0.04	—	22,642
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	1.04	18.9	15.9	0.11	1.44	1.44	22,580	2.00	0.04	—	22,642
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.19	3.45	2.90	0.02	0.26	0.26	3,738	0.33	0.01	—	3,749
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.19	3.45	2.90	0.02	0.26	0.26	3,738	0.33	0.01	—	3,749

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.93	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.06	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	5.14	0.26	31.3	< 0.005	0.06	0.04	129	0.01	< 0.005	—	129
Total	15.1	0.26	31.3	< 0.005	0.06	0.04	129	0.01	< 0.005	—	129

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.93	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.06	—	—	—	—	—	—	—	—	—	—
Total	9.99	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.63	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.19	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.64	0.03	3.91	< 0.005	0.01	0.01	14.6	< 0.005	< 0.005	—	14.6
Total	2.46	0.03	3.91	< 0.005	0.01	0.01	14.6	< 0.005	< 0.005	—	14.6

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.93	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.06	—	—	—	—	—	—	—	—	—	—
Total	9.99	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.93	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.06	—	—	—	—	—	—	—	—	—	—
Total	9.99	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.63	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.19	—	—	—	—	—	—	—	—	—	—
Total	1.82	—	—	—	—	—	—	—	—	—	—

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	242	5.64	0.14	—	424
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	242	5.64	0.14	—	424
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	242	5.64	0.14	—	424
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	242	5.64	0.14	—	424
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	40.1	0.93	0.02	—	70.2
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	40.1	0.93	0.02	—	70.2

4.4.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	214	5.08	0.12	—	378
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	214	5.08	0.12	—	378
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	214	5.08	0.12	—	378
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	214	5.08	0.12	—	378
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	35.5	0.84	0.02	—	62.5
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	35.5	0.84	0.02	—	62.5

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Hotel	—	—	—	—	—	—	226	22.6	0.00	—	792
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	226	22.6	0.00	—	792
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	226	22.6	0.00	—	792
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	226	22.6	0.00	—	792
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	37.5	3.75	0.00	—	131
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	37.5	3.75	0.00	—	131

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	170	17.0	0.00	—	594
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	170	17.0	0.00	—	594
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	170	17.0	0.00	—	594

Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	170	17.0	0.00	—	594
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	28.1	2.81	0.00	—	98.3
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	28.1	2.81	0.00	—	98.3

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	652	652
Total	—	—	—	—	—	—	—	—	—	652	652
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	652	652
Total	—	—	—	—	—	—	—	—	—	652	652
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	108	108
Total	—	—	—	—	—	—	—	—	—	108	108

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	68.5	68.5
Total	—	—	—	—	—	—	—	—	—	68.5	68.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	68.5	68.5
Total	—	—	—	—	—	—	—	—	—	68.5	68.5
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	11.3	11.3
Total	—	—	—	—	—	—	—	—	—	11.3	11.3

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	PM10T	PM2.5T	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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Total	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Total	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Annual	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.06	0.25	0.14	< 0.005	0.01	0.01	25.5	< 0.005	< 0.005	0.00	25.6
Total	0.06	0.25	0.14	< 0.005	0.01	0.01	25.5	< 0.005	< 0.005	0.00	25.6

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Total	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Total	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Annual	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.06	0.25	0.14	< 0.005	0.01	0.01	25.5	< 0.005	< 0.005	0.00	25.6
Total	0.06	0.25	0.14	< 0.005	0.01	0.01	25.5	< 0.005	< 0.005	0.00	25.6

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	PM10T	PM2.5T	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	PM10T	PM2.5T	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	PM10T	PM2.5T	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	PM10T	PM2.5T	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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetation	ROG	NOx	CO	SO2	PM10T	PM2.5T	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	PM10T	PM2.5T	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	PM10T	PM2.5T	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
Site Preparation	Site Preparation	10/1/2025	10/28/2025	5.00	20.0	—
Grading	Grading	10/29/2025	12/2/2025	5.00	25.0	—
Building Construction	Building Construction	12/3/2025	1/11/2028	5.00	550	—
Paving	Paving	1/12/2028	3/14/2028	5.00	45.0	—
Architectural Coating	Architectural Coating	3/15/2028	6/27/2028	5.00	75.0	—

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
Site Preparation	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38

Grading	Tractors/Loaders/Back	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Plate Compactors	Diesel	Average	2.00	3.00	8.00	0.43
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	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	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
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Plate Compactors	Diesel	Average	2.00	3.00	8.00	0.43
Building Construction	Cranes	Electric	Average	1.00	7.00	367	0.29

Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Electric	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Tier 4 Final	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	6.00	36.0	0.38
Architectural Coating	Air Compressors	Electric	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
Site Preparation	—	—	—	—
Site Preparation	Worker	18.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	0.00	—	HHDT
Grading	—	—	—	—
Grading	Worker	16.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	6.00	10.2	HHDT,MHDT
Grading	Hauling	254	20.0	HHDT
Grading	Onsite truck	0.00	—	HHDT
Building Construction	—	—	—	—

Building Construction	Worker	418	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	164	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	—	HHDT
Paving	—	—	—	—
Paving	Worker	24.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	0.00	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	84.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	0.00	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	18.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	0.00	—	HHDT
Grading	—	—	—	—
Grading	Worker	16.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	6.00	10.2	HHDT,MHDT
Grading	Hauling	254	20.0	HHDT
Grading	Onsite truck	0.00	—	HHDT
Building Construction	—	—	—	—

Building Construction	Worker	418	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	164	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	—	HHDT
Paving	—	—	—	—
Paving	Worker	24.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	0.00	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	84.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	0.00	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

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	0.00	0.00	625,850	208,617	14,968

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 (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	15.0	0.00	—
Grading	0.00	60,720	30.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Hotel	0.00	0%
Enclosed Parking with Elevator	0.00	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	346	0.03	< 0.005
2027	0.00	346	0.03	< 0.005
2028	0.00	346	0.03	< 0.005
2025	0.00	349	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
Total all Land Uses	3,262	3,262	3,262	1,190,630	21,914	21,914	21,914	7,998,610

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	3,262	3,262	3,262	1,190,630	21,914	21,914	21,914	7,998,610

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)
0	0.00	625,850	208,617	—

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Hotel	5,838,635	346	0.0330	0.0040	73,322,792
Enclosed Parking with Elevator	1,113,650	346	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)
Hotel	5,089,460	346	0.0330	0.0040	70,455,120
Enclosed Parking with Elevator	1,113,650	346	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)
Hotel	28,637,929	514,669
Enclosed Parking with Elevator	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Hotel	25,774,136	219,837
Enclosed Parking with Elevator	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Hotel	420	—
Enclosed Parking with Elevator	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Hotel	315	—
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
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Hotel	Household refrigerators and/or freezers	R-32	675	0.00	0.30	—	1.00

Hotel	Other commercial A/C and heat pumps	R-32	675	1.17	2.00	2.00	18.0
Hotel	Walk-in refrigerators and freezers	R-32	675	< 0.005	3.75	2.00	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
Emergency Generator	Diesel	1.00	2.00	40.0	1,676	0.73

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	10.1	annual days of extreme heat
Extreme Precipitation	3.85	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

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

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	1	0	0	N/A
Drought	3	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	5	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

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

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	1	1	1	2
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	3	1	1	3
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	5	1	1	4

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	48.5
AQ-PM	75.5

AQ-DPM	45.1
Drinking Water	65.2
Lead Risk Housing	90.5
Pesticides	0.00
Toxic Releases	89.3
Traffic	45.9
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	26.2
Haz Waste Facilities/Generators	46.4
Impaired Water Bodies	0.00
Solid Waste	71.2
Sensitive Population	—
Asthma	37.2
Cardio-vascular	47.5
Low Birth Weights	90.0
Socioeconomic Factor Indicators	—
Education	68.8
Housing	76.3
Linguistic	73.7
Poverty	72.4
Unemployment	73.4

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	16.59181317

Employed	35.60887976
Median HI	37.26421147
Education	—
Bachelor's or higher	23.94456564
High school enrollment	100
Preschool enrollment	26.45964327
Transportation	—
Auto Access	78.96830489
Active commuting	70.88412678
Social	—
2-parent households	29.42384191
Voting	9.251892724
Neighborhood	—
Alcohol availability	26.66495573
Park access	37.07173104
Retail density	61.60657
Supermarket access	85.24316694
Tree canopy	22.57153856
Housing	—
Homeownership	27.65302194
Housing habitability	14.32054408
Low-inc homeowner severe housing cost burden	23.23880405
Low-inc renter severe housing cost burden	29.00038496
Uncrowded housing	8.879763891
Health Outcomes	—
Insured adults	12.98601309
Arthritis	97.6
Asthma ER Admissions	62.7

High Blood Pressure	97.9
Cancer (excluding skin)	98.5
Asthma	30.0
Coronary Heart Disease	96.5
Chronic Obstructive Pulmonary Disease	79.3
Diagnosed Diabetes	88.2
Life Expectancy at Birth	31.3
Cognitively Disabled	68.5
Physically Disabled	95.1
Heart Attack ER Admissions	48.9
Mental Health Not Good	24.7
Chronic Kidney Disease	93.4
Obesity	51.2
Pedestrian Injuries	70.7
Physical Health Not Good	49.9
Stroke	93.8
Health Risk Behaviors	—
Binge Drinking	3.5
Current Smoker	17.2
No Leisure Time for Physical Activity	36.8
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	7.8
Elderly	67.6
English Speaking	22.2
Foreign-born	84.2
Outdoor Workers	45.0

Climate Change Adaptive Capacity	—
Impervious Surface Cover	36.6
Traffic Density	48.7
Traffic Access	87.4
Other Indices	—
Hardship	82.1
Other Decision Support	—
2016 Voting	53.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	75.0
Healthy Places Index Score for Project Location (b)	26.0
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

Land Use	Project description. 500 room hotel with amenities on 3.72 acres.
Construction: Construction Phases	no demo. Approx 32 months of construction.
Construction: Architectural Coatings	arch coating
Operations: Water and Waste Water	Based on WSA of total 94 acre-feet per year
Operations: Vehicle Data	Based on VMT study. All trips assigned to hotel use.
Construction: Trips and VMT	Adjusted numbers to be even numbered trips.
Construction: Paving	Estimated acreage for paved area from 528 parking lot spaces and 80% of site that is impervious
Construction: Off-Road Equipment	Client added plate compactors.
Construction: Dust From Material Movement	Based on Project Description of 60,720 cy of export
Operations: Energy Use	61,276,566 is estimated natural gas usage for swimming pool heating
Operations: Emergency Generators and Fire Pumps	Based on applicant provided information.
Operations: Fleet Mix	CalEEMod default fleet mix
Operations: Hearths	—
Operations: Solid Waste	Swimming pool solid waste is assumed to be included with hotel. The default solid waste estimate for the hotel is 273.75 tons per year. Based on the square footage provided for the swimming pool the default solid waste estimate is 142.39 tons per year. Solid waste generation adjusted to include default pool solid waste estimates.

B-2 Hotel GHG Construction and Operation August 2025 - Mitigated with truck restrictions Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	B-2 Hotel GHG Construction and Operation August 2025 - Mitigated with truck restrictions
Construction Start Date	10/6/2025
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	18.2
Location	33.784339912522455, -117.91552871705632
County	Orange
City	Garden Grove
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5829
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.30

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Hotel	500	Room	3.72	417,233	39,711	0.00	—	—

Enclosed Parking with Elevator	528	Space	0.00	301,685	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-1-A	Use Electric or Hybrid Powered Equipment
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-5	Use Advanced Engine Tiers
Transportation	T-14*	Provide Electric Vehicle Charging Infrastructure
Transportation	T-34*	Provide Bike Parking
Energy	E-1	Buildings Exceed 2019 Title 24 Building Envelope Energy Efficiency Standards
Energy	E-7*	Require Higher Efficacy Public Street and Area Lighting
Energy	E-9*	Utilize a Combined Heat and Power System
Energy	E-10-B	Establish Onsite Renewable Energy Systems: Solar Power
Energy	E-21*	Install Cool Pavement
Energy	E-22*	Obtain Third-party HVAC Commissioning and Veri cation of Energy Savings
Energy	E-25*	Install Electric Heat Pumps
Water	W-2	Use Grey Water
Water	W-5	Design Water-Efficient Landscapes
Water	W-7	Adopt a Water Conservation Strategy
Waste	S-1/S-2	Implement Waste Reduction Plan
Waste	S-4*	Recycle Demolished Construction Material
Refrigerants	R-1	Use Alternative Refrigerants Instead of High-GWP Refrigerants
Refrigerants	R-4	Install Microchannel Heat Exchangers in A/C Equipment in Place of Conventional Heat Exchanger
Refrigerants	R-5	Reduce Service Leak Emissions
Refrigerants	R-6	Reduce Operational Leak Emissions

Refrigerants	R-7*	Reduce Disposal Emissions
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment

* 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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	52.9	16.4	37.6	0.06	7.28	2.05	12,984	0.42	0.94	32.2	13,308
Mit.	52.7	8.11	34.7	0.05	6.93	1.73	12,015	0.38	0.94	32.2	12,335
% Reduced	< 0.5%	50%	8%	16%	5%	16%	7%	9%	1%	—	7%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	52.9	39.1	36.0	0.15	8.61	3.59	21,099	1.57	2.93	1.00	22,010
Mit.	52.7	24.8	33.0	0.15	7.94	2.98	21,102	1.57	2.93	1.00	22,014
% Reduced	< 0.5%	36%	8%	—	8%	17%	> -0.5%	—	—	—	> -0.5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.0	12.0	25.3	0.04	5.15	1.45	9,138	0.31	0.67	9.94	9,356
Mit.	10.9	6.11	23.2	0.04	4.89	1.22	8,446	0.28	0.67	9.94	8,662
% Reduced	1%	49%	8%	16%	5%	16%	8%	9%	1%	—	7%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.01	2.19	4.61	0.01	0.94	0.27	1,513	0.05	0.11	1.65	1,549
Mit.	1.99	1.11	4.23	0.01	0.89	0.22	1,398	0.05	0.11	1.65	1,434
% Reduced	1%	49%	8%	16%	5%	16%	8%	9%	1%	—	7%

Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—
Threshold	75.0	100	550	150	150	55.0	—	—	—	—	—
Unmit.	No	No	No	No	No	No	—	—	—	—	Yes
Mit.	No	No	No	No	No	No	—	—	—	—	Yes
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—
Threshold	75.0	100	550	150	150	55.0	—	—	—	—	—
Unmit.	No	No	No	No	No	No	—	—	—	—	Yes
Mit.	No	No	No	No	No	No	—	—	—	—	Yes

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2026	2.59	16.4	37.6	0.06	7.28	2.05	12,984	0.42	0.94	32.2	13,308
2027	2.33	15.7	36.1	0.06	7.24	2.01	12,797	0.41	0.91	29.0	13,107
2028	52.9	1.14	5.10	< 0.005	1.15	0.28	1,310	0.02	0.02	3.31	1,321
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	2.74	39.1	36.0	0.15	8.61	3.59	21,099	1.57	2.93	1.00	22,010
2026	2.58	16.8	34.6	0.06	7.28	2.05	12,724	0.43	0.94	0.83	13,016
2027	2.32	15.9	33.3	0.06	7.24	2.01	12,541	0.41	0.91	0.75	12,823
2028	52.9	15.2	32.2	0.06	7.20	1.98	12,334	0.41	0.91	0.67	12,616
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2025	0.43	4.89	5.24	0.02	1.34	0.56	2,404	0.14	0.26	2.05	2,486
2026	1.84	12.0	25.3	0.04	5.15	1.45	9,138	0.31	0.67	9.94	9,356

2027	1.66	11.5	24.3	0.04	5.12	1.43	9,007	0.30	0.65	8.96	9,216
2028	11.0	1.30	2.88	< 0.005	0.45	0.13	731	0.02	0.03	0.58	742
Annual	—	—	—	—	—	—	—	—	—	—	—
2025	0.08	0.89	0.96	< 0.005	0.25	0.10	398	0.02	0.04	0.34	412
2026	0.34	2.19	4.61	0.01	0.94	0.27	1,513	0.05	0.11	1.65	1,549
2027	0.30	2.10	4.43	0.01	0.93	0.26	1,491	0.05	0.11	1.48	1,526
2028	2.01	0.24	0.53	< 0.005	0.08	0.02	121	< 0.005	0.01	0.10	123

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2026	1.67	8.11	34.7	0.05	6.93	1.73	12,015	0.38	0.94	32.2	12,335
2027	1.45	7.89	33.2	0.05	6.93	1.73	11,828	0.37	0.90	29.0	12,134
2028	52.7	0.33	3.98	< 0.005	1.13	0.27	1,178	0.02	0.02	3.31	1,189
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	1.76	24.8	33.0	0.15	7.94	2.98	21,102	1.57	2.93	1.00	22,014
2026	1.66	8.51	31.7	0.05	6.93	1.73	11,754	0.39	0.94	0.83	12,044
2027	1.43	8.13	30.4	0.05	6.93	1.73	11,572	0.38	0.90	0.75	11,850
2028	52.7	7.91	29.3	0.05	6.93	1.73	11,366	0.38	0.90	0.67	11,643
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2025	0.17	2.34	5.00	0.01	1.23	0.45	2,349	0.14	0.26	2.05	2,431
2026	1.18	6.11	23.2	0.04	4.89	1.22	8,446	0.28	0.67	9.94	8,662
2027	1.03	5.95	22.2	0.04	4.89	1.22	8,314	0.27	0.64	8.96	8,521
2028	10.9	0.52	2.66	< 0.005	0.42	0.11	683	0.02	0.03	0.58	694
Annual	—	—	—	—	—	—	—	—	—	—	—

2025	0.03	0.43	0.91	< 0.005	0.22	0.08	389	0.02	0.04	0.34	403
2026	0.22	1.11	4.23	0.01	0.89	0.22	1,398	0.05	0.11	1.65	1,434
2027	0.19	1.09	4.05	0.01	0.89	0.22	1,377	0.04	0.11	1.48	1,411
2028	1.99	0.09	0.48	< 0.005	0.08	0.02	113	< 0.005	0.01	0.10	115

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	30.7	49.9	124	0.31	18.0	6.37	49,745	31.9	0.94	698	51,519
Mit.	25.5	48.9	92.5	0.30	17.8	6.27	47,921	25.5	0.91	114	48,945
% Reduced	17%	2%	26%	2%	1%	2%	4%	20%	3%	84%	5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	25.5	50.1	89.9	0.30	17.9	6.33	49,002	31.9	0.97	653	50,742
Mit.	25.4	49.4	89.2	0.29	17.8	6.27	47,288	25.5	0.94	69.7	48,277
% Reduced	< 0.5%	2%	1%	2%	< 0.5%	1%	3%	20%	2%	89%	5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	23.8	25.9	99.6	0.27	16.9	5.52	45,585	31.8	0.79	671	47,284
Mit.	20.3	25.0	77.5	0.26	16.8	5.43	43,796	25.4	0.76	87.1	44,745
% Reduced	15%	4%	22%	2%	1%	2%	4%	20%	3%	87%	5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.35	4.74	18.2	0.05	3.09	1.01	7,547	5.26	0.13	111	7,828
Mit.	3.70	4.56	14.1	0.05	3.07	0.99	7,251	4.20	0.13	14.4	7,408
% Reduced	15%	4%	22%	2%	1%	2%	4%	20%	3%	87%	5%
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—

Threshold	—	—	—	—	—	—	—	—	—	—	1,400
Unmit.	—	—	—	—	—	—	—	—	—	—	Yes
Mit.	—	—	—	—	—	—	—	—	—	—	Yes

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.99	5.39	62.6	0.16	15.6	4.02	16,241	0.79	0.66	45.4	16,502
Area	15.1	0.26	31.3	< 0.005	0.06	0.04	129	0.01	< 0.005	—	129
Energy	1.08	19.7	16.5	0.12	1.50	1.50	30,093	2.71	0.12	—	30,197
Water	—	—	—	—	—	—	242	5.64	0.14	—	424
Waste	—	—	—	—	—	—	226	22.6	0.00	—	792
Refrig.	—	—	—	—	—	—	—	—	—	652	652
Stationary	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Total	30.7	49.9	124	0.31	18.0	6.37	49,745	31.9	0.94	698	51,519
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.92	5.85	59.3	0.15	15.6	4.02	15,626	0.83	0.69	1.18	15,853
Area	9.99	—	—	—	—	—	—	—	—	—	—
Energy	1.08	19.7	16.5	0.12	1.50	1.50	30,093	2.71	0.12	—	30,197
Water	—	—	—	—	—	—	242	5.64	0.14	—	424
Waste	—	—	—	—	—	—	226	22.6	0.00	—	792
Refrig.	—	—	—	—	—	—	—	—	—	652	652
Stationary	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Total	25.5	50.1	89.9	0.30	17.9	6.33	49,002	31.9	0.97	653	50,742
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.93	4.73	60.8	0.15	15.4	3.95	14,781	0.78	0.53	18.6	14,976

Area	13.5	0.18	21.4	< 0.005	0.04	0.03	88.1	< 0.005	< 0.005	—	88.4
Energy	1.08	19.7	16.5	0.12	1.50	1.50	30,093	2.71	0.12	—	30,197
Water	—	—	—	—	—	—	242	5.64	0.14	—	424
Waste	—	—	—	—	—	—	226	22.6	0.00	—	792
Refrig.	—	—	—	—	—	—	—	—	—	652	652
Stationary	0.30	1.35	0.77	< 0.005	0.04	0.04	154	0.01	< 0.005	0.00	155
Total	23.8	25.9	99.6	0.27	16.9	5.52	45,585	31.8	0.79	671	47,284
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.63	0.86	11.1	0.03	2.80	0.72	2,447	0.13	0.09	3.08	2,480
Area	2.46	0.03	3.91	< 0.005	0.01	0.01	14.6	< 0.005	< 0.005	—	14.6
Energy	0.20	3.59	3.02	0.02	0.27	0.27	4,982	0.45	0.02	—	4,999
Water	—	—	—	—	—	—	40.1	0.93	0.02	—	70.2
Waste	—	—	—	—	—	—	37.5	3.75	0.00	—	131
Refrig.	—	—	—	—	—	—	—	—	—	108	108
Stationary	0.06	0.25	0.14	< 0.005	0.01	0.01	25.5	< 0.005	< 0.005	0.00	25.6
Total	4.35	4.74	18.2	0.05	3.09	1.01	7,547	5.26	0.13	111	7,828

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.99	5.39	62.6	0.16	15.6	4.02	16,241	0.79	0.66	45.4	16,502
Area	9.99	—	—	—	—	—	—	—	—	—	—
Energy	1.04	18.9	15.9	0.11	1.44	1.44	28,482	2.56	0.11	—	28,580
Water	—	—	—	—	—	—	214	5.08	0.12	—	378
Waste	—	—	—	—	—	—	170	17.0	0.00	—	594
Refrig.	—	—	—	—	—	—	—	—	—	68.5	68.5

Stationary	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Total	25.5	48.9	92.5	0.30	17.8	6.27	47,921	25.5	0.91	114	48,945
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.92	5.85	59.3	0.15	15.6	4.02	15,626	0.83	0.69	1.18	15,853
Area	9.99	—	—	—	—	—	—	—	—	—	—
Energy	1.04	18.9	15.9	0.11	1.44	1.44	28,463	2.56	0.11	—	28,560
Water	—	—	—	—	—	—	214	5.08	0.12	—	378
Waste	—	—	—	—	—	—	170	17.0	0.00	—	594
Refrig.	—	—	—	—	—	—	—	—	—	68.5	68.5
Stationary	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Total	25.4	49.4	89.2	0.29	17.8	6.27	47,288	25.5	0.94	69.7	48,277
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.93	4.73	60.8	0.15	15.4	3.95	14,781	0.78	0.53	18.6	14,976
Area	9.99	—	—	—	—	—	—	—	—	—	—
Energy	1.04	18.9	15.9	0.11	1.44	1.44	28,476	2.56	0.11	—	28,573
Water	—	—	—	—	—	—	214	5.08	0.12	—	378
Waste	—	—	—	—	—	—	170	17.0	0.00	—	594
Refrig.	—	—	—	—	—	—	—	—	—	68.5	68.5
Stationary	0.30	1.35	0.77	< 0.005	0.04	0.04	154	0.01	< 0.005	0.00	155
Total	20.3	25.0	77.5	0.26	16.8	5.43	43,796	25.4	0.76	87.1	44,745
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.63	0.86	11.1	0.03	2.80	0.72	2,447	0.13	0.09	3.08	2,480
Area	1.82	—	—	—	—	—	—	—	—	—	—
Energy	0.19	3.45	2.90	0.02	0.26	0.26	4,715	0.42	0.02	—	4,731
Water	—	—	—	—	—	—	35.5	0.84	0.02	—	62.5
Waste	—	—	—	—	—	—	28.1	2.81	0.00	—	98.3
Refrig.	—	—	—	—	—	—	—	—	—	11.3	11.3
Stationary	0.06	0.25	0.14	< 0.005	0.01	0.01	25.5	< 0.005	< 0.005	0.00	25.6

Total	3.70	4.56	14.1	0.05	3.07	0.99	7,251	4.20	0.13	14.4	7,408

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.24	21.5	20.8	0.03	0.92	0.85	3,627	0.15	0.03	—	3,639
Dust From Material Movement	—	—	—	—	5.11	2.63	—	—	—	—	—
Onsite truck	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	0.12	1.18	1.14	< 0.005	0.05	0.05	199	0.01	< 0.005	—	199
Dust From Material Movement	—	—	—	—	0.28	0.14	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.21	0.21	< 0.005	0.01	0.01	32.9	< 0.005	< 0.005	—	33.0
Dust From Material Movement	—	—	—	—	0.05	0.03	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.07	0.87	0.00	0.24	0.06	227	< 0.005	0.01	0.02	230
Vendor	0.01	0.21	0.10	< 0.005	0.05	0.02	191	0.01	0.03	0.01	200
Hauling	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	0.05	0.00	0.01	< 0.005	12.6	< 0.005	< 0.005	0.02	12.8
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	10.5	< 0.005	< 0.005	0.01	10.9
Hauling	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	< 0.005	< 0.005	2.09	< 0.005	< 0.005	< 0.005	2.12
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.74	< 0.005	< 0.005	< 0.005	1.81
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	1.77	19.5	0.03	0.07	0.07	3,627	0.15	0.03	—	3,639
Dust From Material Movement	—	—	—	—	5.11	2.63	—	—	—	—	—
Onsite truck	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	0.10	1.07	< 0.005	< 0.005	< 0.005	199	0.01	< 0.005	—	199
Dust From Material Movement	—	—	—	—	0.28	0.14	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.20	< 0.005	< 0.005	< 0.005	32.9	< 0.005	< 0.005	—	33.0
Dust From Material Movement	—	—	—	—	0.05	0.03	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.07	0.87	0.00	0.24	0.06	227	< 0.005	0.01	0.02	230
Vendor	0.01	0.21	0.10	< 0.005	0.05	0.02	191	0.01	0.03	0.01	200
Hauling	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	0.05	0.00	0.01	< 0.005	12.6	< 0.005	< 0.005	0.02	12.8
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	10.5	< 0.005	< 0.005	0.01	10.9
Hauling	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	< 0.005	< 0.005	2.09	< 0.005	< 0.005	< 0.005	2.12
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.74	< 0.005	< 0.005	< 0.005	1.81
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2025) - 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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.77	16.5	18.1	0.03	0.73	0.67	2,985	0.12	0.02	—	2,995
Dust From Material Movement	—	—	—	—	2.79	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.13	1.24	< 0.005	0.05	0.05	204	0.01	< 0.005	—	205
Dust From Material Movement	—	—	—	—	0.19	0.09	—	—	—	—	—
Onsite truck	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	0.21	0.23	< 0.005	0.01	0.01	33.9	< 0.005	< 0.005	—	34.0
Dust From Material Movement	—	—	—	—	0.03	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
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.06	0.77	0.00	0.21	0.05	202	< 0.005	0.01	0.02	204
Vendor	0.01	0.21	0.10	< 0.005	0.05	0.02	191	0.01	0.03	0.01	200
Hauling	0.36	22.3	9.61	0.12	4.82	1.51	17,720	1.43	2.87	0.97	18,611
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.06	0.00	0.01	< 0.005	14.0	< 0.005	< 0.005	0.02	14.2
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	13.1	< 0.005	< 0.005	0.02	13.7
Hauling	0.03	1.55	0.65	0.01	0.33	0.10	1,213	0.10	0.20	1.11	1,276
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	< 0.005	< 0.005	2.32	< 0.005	< 0.005	< 0.005	2.35
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.17	< 0.005	< 0.005	< 0.005	2.27
Hauling	< 0.005	0.28	0.12	< 0.005	0.06	0.02	201	0.02	0.03	0.18	211

3.4. Grading (2025) - 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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	2.23	17.9	0.03	0.06	0.06	2,985	0.12	0.02	—	2,995
Dust From Material Movement	—	—	—	—	2.79	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	1.23	< 0.005	< 0.005	< 0.005	204	0.01	< 0.005	—	205

Dust From Material Movement	—	—	—	—	0.19	0.09	—	—	—	—	—
Onsite truck	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	0.03	0.22	< 0.005	< 0.005	< 0.005	33.9	< 0.005	< 0.005	—	34.0
Dust From Material Movement	—	—	—	—	0.03	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
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.77	0.00	0.21	0.05	202	< 0.005	0.01	0.02	204
Vendor	0.01	0.21	0.10	< 0.005	0.05	0.02	191	0.01	0.03	0.01	200
Hauling	0.36	22.3	9.61	0.12	4.82	1.51	17,720	1.43	2.87	0.97	18,611
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.06	0.00	0.01	< 0.005	14.0	< 0.005	< 0.005	0.02	14.2
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	13.1	< 0.005	< 0.005	0.02	13.7
Hauling	0.03	1.55	0.65	0.01	0.33	0.10	1,213	0.10	0.20	1.11	1,276
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	< 0.005	< 0.005	2.32	< 0.005	< 0.005	< 0.005	2.35
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.17	< 0.005	< 0.005	< 0.005	2.27
Hauling	< 0.005	0.28	0.12	< 0.005	0.06	0.02	201	0.02	0.03	0.18	211

3.5. Building Construction (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	0.40	2,398	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.59	0.74	< 0.005	0.02	0.02	136	0.01	< 0.005	—	137
Onsite truck	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	0.11	0.14	< 0.005	< 0.005	< 0.005	22.5	< 0.005	< 0.005	—	22.6
Onsite truck	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	1.47	1.65	20.2	0.00	5.46	1.28	5,280	0.07	0.20	0.55	5,342
Vendor	0.14	5.64	2.77	0.04	1.44	0.42	5,231	0.29	0.73	0.37	5,455
Hauling	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	0.08	0.09	1.20	0.00	0.31	0.07	304	< 0.005	0.01	0.51	308
Vendor	0.01	0.32	0.16	< 0.005	0.08	0.02	297	0.02	0.04	0.35	310
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.22	0.00	0.06	0.01	50.3	< 0.005	< 0.005	0.09	51.0
Vendor	< 0.005	0.06	0.03	< 0.005	0.01	< 0.005	49.1	< 0.005	0.01	0.06	51.3

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.60	10.0	0.01	0.03	0.03	1,427	0.06	0.01	—	1,432
Onsite truck	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	0.09	0.57	< 0.005	< 0.005	< 0.005	81.0	< 0.005	< 0.005	—	81.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.10	< 0.005	< 0.005	< 0.005	13.4	< 0.005	< 0.005	—	13.5
Onsite truck	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	1.47	1.65	20.2	0.00	5.46	1.28	5,280	0.07	0.20	0.55	5,342
Vendor	0.14	5.64	2.77	0.04	1.44	0.42	5,231	0.29	0.73	0.37	5,455
Hauling	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	0.08	0.09	1.20	0.00	0.31	0.07	304	< 0.005	0.01	0.51	308

Vendor	0.01	0.32	0.16	< 0.005	0.08	0.02	297	0.02	0.04	0.35	310
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.22	0.00	0.06	0.01	50.3	< 0.005	< 0.005	0.09	51.0
Vendor	< 0.005	0.06	0.03	< 0.005	0.01	< 0.005	49.1	< 0.005	0.01	0.06	51.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	0.35	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	0.35	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	7.04	9.26	0.02	0.27	0.25	1,712	0.07	0.01	—	1,718
Onsite truck	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	0.14	1.28	1.69	< 0.005	0.05	0.05	283	0.01	< 0.005	—	284
Onsite truck	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	1.41	1.27	22.0	0.00	5.46	1.28	5,443	0.06	0.20	18.9	5,523
Vendor	0.11	5.24	2.62	0.04	1.44	0.42	5,144	0.26	0.73	13.3	5,380
Hauling	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	1.41	1.46	19.0	0.00	5.46	1.28	5,180	0.07	0.20	0.49	5,242
Vendor	0.10	5.45	2.68	0.04	1.44	0.42	5,146	0.26	0.73	0.34	5,369
Hauling	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	1.00	1.04	14.1	0.00	3.86	0.90	3,751	0.05	0.14	5.83	3,800
Vendor	0.08	3.92	1.89	0.03	1.02	0.30	3,675	0.18	0.52	4.11	3,838
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.19	2.57	0.00	0.70	0.16	621	0.01	0.02	0.97	629
Vendor	0.01	0.72	0.35	< 0.005	0.19	0.05	608	0.03	0.09	0.68	635
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2026) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.60	10.0	0.01	0.03	0.03	1,427	0.06	0.01	—	1,432
Onsite truck	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	0.15	1.60	10.0	0.01	0.03	0.03	1,427	0.06	0.01	—	1,432
Onsite truck	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	0.11	1.15	7.17	0.01	0.02	0.02	1,019	0.04	0.01	—	1,023
Onsite truck	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	0.21	1.31	< 0.005	< 0.005	< 0.005	169	0.01	< 0.005	—	169
Onsite truck	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	1.41	1.27	22.0	0.00	5.46	1.28	5,443	0.06	0.20	18.9	5,523
Vendor	0.11	5.24	2.62	0.04	1.44	0.42	5,144	0.26	0.73	13.3	5,380
Hauling	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	1.41	1.46	19.0	0.00	5.46	1.28	5,180	0.07	0.20	0.49	5,242
Vendor	0.10	5.45	2.68	0.04	1.44	0.42	5,146	0.26	0.73	0.34	5,369
Hauling	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	1.00	1.04	14.1	0.00	3.86	0.90	3,751	0.05	0.14	5.83	3,800
Vendor	0.08	3.92	1.89	0.03	1.02	0.30	3,675	0.18	0.52	4.11	3,838
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.19	2.57	0.00	0.70	0.16	621	0.01	0.02	0.97	629
Vendor	0.01	0.72	0.35	< 0.005	0.19	0.05	608	0.03	0.09	0.68	635
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	0.31	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	0.31	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	6.71	9.24	0.02	0.24	0.22	1,712	0.07	0.01	—	1,718
Onsite truck	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	0.13	1.22	1.69	< 0.005	0.04	0.04	283	0.01	< 0.005	—	284
Onsite truck	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	1.19	1.25	20.7	0.00	5.46	1.28	5,351	0.06	0.20	17.0	5,429
Vendor	0.11	5.03	2.50	0.04	1.44	0.42	5,049	0.26	0.69	12.1	5,273
Hauling	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	1.18	1.28	17.8	0.00	5.46	1.28	5,093	0.06	0.20	0.44	5,154

Vendor	0.10	5.25	2.56	0.04	1.44	0.42	5,051	0.25	0.69	0.31	5,263
Hauling	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	0.85	1.03	13.2	0.00	3.86	0.90	3,688	0.05	0.14	5.24	3,736
Vendor	0.08	3.77	1.80	0.03	1.02	0.30	3,607	0.18	0.49	3.72	3,762
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.19	2.42	0.00	0.70	0.16	611	0.01	0.02	0.87	619
Vendor	0.01	0.69	0.33	< 0.005	0.19	0.05	597	0.03	0.08	0.62	623
Hauling	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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.60	10.0	0.01	0.03	0.03	1,427	0.06	0.01	—	1,432
Onsite truck	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	0.15	1.60	10.0	0.01	0.03	0.03	1,427	0.06	0.01	—	1,432
Onsite truck	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	0.11	1.15	7.17	0.01	0.02	0.02	1,019	0.04	0.01	—	1,023
Onsite truck	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	0.21	1.31	< 0.005	< 0.005	< 0.005	169	0.01	< 0.005	—	169
Onsite truck	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	1.19	1.25	20.7	0.00	5.46	1.28	5,351	0.06	0.20	17.0	5,429
Vendor	0.11	5.03	2.50	0.04	1.44	0.42	5,049	0.26	0.69	12.1	5,273
Hauling	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	1.18	1.28	17.8	0.00	5.46	1.28	5,093	0.06	0.20	0.44	5,154
Vendor	0.10	5.25	2.56	0.04	1.44	0.42	5,051	0.25	0.69	0.31	5,263
Hauling	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	0.85	1.03	13.2	0.00	3.86	0.90	3,688	0.05	0.14	5.24	3,736
Vendor	0.08	3.77	1.80	0.03	1.02	0.30	3,607	0.18	0.49	3.72	3,762
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.19	2.42	0.00	0.70	0.16	611	0.01	0.02	0.87	619
Vendor	0.01	0.69	0.33	< 0.005	0.19	0.05	597	0.03	0.08	0.62	623
Hauling	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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	8.92	12.9	0.02	0.30	0.28	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.19	0.28	< 0.005	0.01	0.01	51.6	< 0.005	< 0.005	—	51.8
Onsite truck	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	0.05	< 0.005	< 0.005	< 0.005	8.54	< 0.005	< 0.005	—	8.57
Onsite truck	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	1.15	1.26	16.7	0.00	5.46	1.28	5,002	0.06	0.20	0.39	5,064
Vendor	0.10	5.04	2.47	0.04	1.44	0.42	4,934	0.25	0.69	0.28	5,146
Hauling	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	0.03	0.38	0.00	0.12	0.03	109	< 0.005	< 0.005	0.14	111
Vendor	< 0.005	0.11	0.05	< 0.005	0.03	0.01	106	0.01	0.01	0.10	111
Hauling	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	0.07	0.00	0.02	< 0.005	18.1	< 0.005	< 0.005	0.02	18.3
Vendor	< 0.005	0.02	0.01	< 0.005	0.01	< 0.005	17.6	< 0.005	< 0.005	0.02	18.4
Hauling	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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.60	10.0	0.01	0.03	0.03	1,427	0.06	0.01	—	1,432
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.22	< 0.005	< 0.005	< 0.005	30.7	< 0.005	< 0.005	—	30.8
Onsite truck	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	0.04	< 0.005	< 0.005	< 0.005	5.09	< 0.005	< 0.005	—	5.10
Onsite truck	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	1.15	1.26	16.7	0.00	5.46	1.28	5,002	0.06	0.20	0.39	5,064
Vendor	0.10	5.04	2.47	0.04	1.44	0.42	4,934	0.25	0.69	0.28	5,146
Hauling	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	0.03	0.38	0.00	0.12	0.03	109	< 0.005	< 0.005	0.14	111
Vendor	< 0.005	0.11	0.05	< 0.005	0.03	0.01	106	0.01	0.01	0.10	111

Hauling	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	0.07	0.00	0.02	< 0.005	18.1	< 0.005	< 0.005	0.02	18.3
Vendor	< 0.005	0.02	0.01	< 0.005	0.01	< 0.005	17.6	< 0.005	< 0.005	0.02	18.4
Hauling	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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	5.85	8.80	0.01	0.21	0.19	1,350	0.05	0.01	—	1,355
Paving	0.00	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.72	1.08	< 0.005	0.03	0.02	166	0.01	< 0.005	—	167
Paving	0.00	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.13	0.20	< 0.005	< 0.005	< 0.005	27.6	< 0.005	< 0.005	—	27.7
Paving	0.00	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.96	0.00	0.31	0.07	287	< 0.005	0.01	0.02	291
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.04	0.01	35.9	< 0.005	< 0.005	0.05	36.4
Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.01	< 0.005	5.94	< 0.005	< 0.005	0.01	6.02
Vendor	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

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	2.14	9.35	0.01	0.05	0.05	1,350	0.05	0.01	—	1,355
Paving	0.00	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.26	1.15	< 0.005	0.01	0.01	166	0.01	< 0.005	—	167
Paving	0.00	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.05	0.21	< 0.005	< 0.005	< 0.005	27.6	< 0.005	< 0.005	—	27.7
Paving	0.00	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.96	0.00	0.31	0.07	287	< 0.005	0.01	0.02	291
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.04	0.01	35.9	< 0.005	< 0.005	0.05	36.4
Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.01	< 0.005	5.94	< 0.005	< 0.005	0.01	6.02
Vendor	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

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.81	1.12	< 0.005	0.02	0.01	134	0.01	< 0.005	—	134
Architectural Coatings	52.5	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.11	0.81	1.12	< 0.005	0.02	0.01	134	0.01	< 0.005	—	134
Architectural Coatings	52.5	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.17	0.23	< 0.005	< 0.005	< 0.005	27.4	< 0.005	< 0.005	—	27.5
Architectural Coatings	10.8	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.03	0.04	< 0.005	< 0.005	< 0.005	4.54	< 0.005	< 0.005	—	4.56
Architectural Coatings	1.97	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.23	0.22	3.92	0.00	1.10	0.26	1,056	0.01	0.01	3.05	1,061
Vendor	< 0.005	0.12	0.06	< 0.005	0.04	0.01	120	0.01	0.02	0.26	126

Hauling	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	0.23	0.25	3.37	0.00	1.10	0.26	1,005	0.01	0.04	0.08	1,018
Vendor	< 0.005	0.12	0.06	< 0.005	0.04	0.01	120	0.01	0.02	0.01	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.72	0.00	0.22	0.05	209	< 0.005	0.01	0.27	212
Vendor	< 0.005	0.03	0.01	< 0.005	0.01	< 0.005	24.7	< 0.005	< 0.005	0.02	25.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.13	0.00	0.04	0.01	34.7	< 0.005	< 0.005	0.04	35.1
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.09	< 0.005	< 0.005	< 0.005	4.27
Hauling	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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	52.5	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Architectural Coatings	52.5	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	10.8	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.97	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.23	0.22	3.92	0.00	1.10	0.26	1,056	0.01	0.01	3.05	1,061
Vendor	< 0.005	0.12	0.06	< 0.005	0.04	0.01	120	0.01	0.02	0.26	126
Hauling	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	0.23	0.25	3.37	0.00	1.10	0.26	1,005	0.01	0.04	0.08	1,018
Vendor	< 0.005	0.12	0.06	< 0.005	0.04	0.01	120	0.01	0.02	0.01	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.72	0.00	0.22	0.05	209	< 0.005	0.01	0.27	212
Vendor	< 0.005	0.03	0.01	< 0.005	0.01	< 0.005	24.7	< 0.005	< 0.005	0.02	25.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.13	0.00	0.04	0.01	34.7	< 0.005	< 0.005	0.04	35.1
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.09	< 0.005	< 0.005	< 0.005	4.27
Hauling	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

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	5,538	0.53	0.06	—	5,570
Enclosed Parking with Elevator	—	—	—	—	—	—	1,056	0.10	0.01	—	1,062
Total	—	—	—	—	—	—	6,594	0.63	0.08	—	6,633
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	5,538	0.53	0.06	—	5,570
Enclosed Parking with Elevator	—	—	—	—	—	—	1,056	0.10	0.01	—	1,062

Total	—	—	—	—	—	—	6,594	0.63	0.08	—	6,633
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	917	0.09	0.01	—	922
Enclosed Parking with Elevator	—	—	—	—	—	—	175	0.02	< 0.005	—	176
Total	—	—	—	—	—	—	1,092	0.10	0.01	—	1,098

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	4,838	0.46	0.06	—	4,867
Enclosed Parking with Elevator	—	—	—	—	—	—	1,064	0.10	0.01	—	1,071
Total	—	—	—	—	—	—	5,903	0.56	0.07	—	5,937
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	4,827	0.46	0.06	—	4,855
Enclosed Parking with Elevator	—	—	—	—	—	—	1,056	0.10	0.01	—	1,062
Total	—	—	—	—	—	—	5,884	0.56	0.07	—	5,918
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	800	0.08	0.01	—	805
Enclosed Parking with Elevator	—	—	—	—	—	—	176	0.02	< 0.005	—	177
Total	—	—	—	—	—	—	976	0.09	0.01	—	982

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	1.08	19.7	16.5	0.12	1.50	1.50	23,499	2.08	0.04	—	23,564
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	1.08	19.7	16.5	0.12	1.50	1.50	23,499	2.08	0.04	—	23,564
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	1.08	19.7	16.5	0.12	1.50	1.50	23,499	2.08	0.04	—	23,564
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	1.08	19.7	16.5	0.12	1.50	1.50	23,499	2.08	0.04	—	23,564
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.20	3.59	3.02	0.02	0.27	0.27	3,891	0.34	0.01	—	3,901
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.20	3.59	3.02	0.02	0.27	0.27	3,891	0.34	0.01	—	3,901

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	1.04	18.9	15.9	0.11	1.44	1.44	22,580	2.00	0.04	—	22,642

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	1.04	18.9	15.9	0.11	1.44	1.44	22,580	2.00	0.04	—	22,642
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	1.04	18.9	15.9	0.11	1.44	1.44	22,580	2.00	0.04	—	22,642
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	1.04	18.9	15.9	0.11	1.44	1.44	22,580	2.00	0.04	—	22,642
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.19	3.45	2.90	0.02	0.26	0.26	3,738	0.33	0.01	—	3,749
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.19	3.45	2.90	0.02	0.26	0.26	3,738	0.33	0.01	—	3,749

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.93	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.06	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	5.14	0.26	31.3	< 0.005	0.06	0.04	129	0.01	< 0.005	—	129
Total	15.1	0.26	31.3	< 0.005	0.06	0.04	129	0.01	< 0.005	—	129

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.93	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.06	—	—	—	—	—	—	—	—	—	—
Total	9.99	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.63	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.19	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.64	0.03	3.91	< 0.005	0.01	0.01	14.6	< 0.005	< 0.005	—	14.6
Total	2.46	0.03	3.91	< 0.005	0.01	0.01	14.6	< 0.005	< 0.005	—	14.6

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.93	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.06	—	—	—	—	—	—	—	—	—	—
Total	9.99	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.93	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.06	—	—	—	—	—	—	—	—	—	—
Total	9.99	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.63	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.19	—	—	—	—	—	—	—	—	—	—
Total	1.82	—	—	—	—	—	—	—	—	—	—

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	242	5.64	0.14	—	424
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	242	5.64	0.14	—	424
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	242	5.64	0.14	—	424
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	242	5.64	0.14	—	424
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	40.1	0.93	0.02	—	70.2
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	40.1	0.93	0.02	—	70.2

4.4.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	214	5.08	0.12	—	378
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	214	5.08	0.12	—	378
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	214	5.08	0.12	—	378
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	214	5.08	0.12	—	378
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	35.5	0.84	0.02	—	62.5
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	35.5	0.84	0.02	—	62.5

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Hotel	—	—	—	—	—	—	226	22.6	0.00	—	792
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	226	22.6	0.00	—	792
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	226	22.6	0.00	—	792
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	226	22.6	0.00	—	792
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	37.5	3.75	0.00	—	131
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	37.5	3.75	0.00	—	131

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	170	17.0	0.00	—	594
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	170	17.0	0.00	—	594
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	170	17.0	0.00	—	594

Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	170	17.0	0.00	—	594
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	28.1	2.81	0.00	—	98.3
Enclosed Parking with Elevator	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	28.1	2.81	0.00	—	98.3

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	652	652
Total	—	—	—	—	—	—	—	—	—	652	652
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	652	652
Total	—	—	—	—	—	—	—	—	—	652	652
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	108	108
Total	—	—	—	—	—	—	—	—	—	108	108

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	68.5	68.5
Total	—	—	—	—	—	—	—	—	—	68.5	68.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	68.5	68.5
Total	—	—	—	—	—	—	—	—	—	68.5	68.5
Annual	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	11.3	11.3
Total	—	—	—	—	—	—	—	—	—	11.3	11.3

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	PM10T	PM2.5T	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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Total	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Total	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Annual	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.06	0.25	0.14	< 0.005	0.01	0.01	25.5	< 0.005	< 0.005	0.00	25.6
Total	0.06	0.25	0.14	< 0.005	0.01	0.01	25.5	< 0.005	< 0.005	0.00	25.6

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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Total	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Total	5.50	24.6	14.0	0.03	0.81	0.81	2,814	0.11	0.02	0.00	2,823
Annual	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.06	0.25	0.14	< 0.005	0.01	0.01	25.5	< 0.005	< 0.005	0.00	25.6
Total	0.06	0.25	0.14	< 0.005	0.01	0.01	25.5	< 0.005	< 0.005	0.00	25.6

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	PM10T	PM2.5T	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	PM10T	PM2.5T	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	PM10T	PM2.5T	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	PM10T	PM2.5T	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	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetation	ROG	NOx	CO	SO2	PM10T	PM2.5T	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	PM10T	PM2.5T	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	PM10T	PM2.5T	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
Site Preparation	Site Preparation	10/1/2025	10/28/2025	5.00	20.0	—
Grading	Grading	10/29/2025	12/2/2025	5.00	25.0	—
Building Construction	Building Construction	12/3/2025	1/11/2028	5.00	550	—
Paving	Paving	1/12/2028	3/14/2028	5.00	45.0	—
Architectural Coating	Architectural Coating	3/15/2028	6/27/2028	5.00	75.0	—

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
Site Preparation	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38

Grading	Tractors/Loaders/Back	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Plate Compactors	Diesel	Average	2.00	3.00	8.00	0.43
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	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	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
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Plate Compactors	Diesel	Average	2.00	3.00	8.00	0.43
Building Construction	Cranes	Electric	Average	1.00	7.00	367	0.29

Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Electric	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Tier 4 Final	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	6.00	36.0	0.38
Architectural Coating	Air Compressors	Electric	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
Site Preparation	—	—	—	—
Site Preparation	Worker	18.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	0.00	—	HHDT
Grading	—	—	—	—
Grading	Worker	16.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	6.00	10.2	HHDT,MHDT
Grading	Hauling	254	20.0	HHDT
Grading	Onsite truck	0.00	—	HHDT
Building Construction	—	—	—	—

Building Construction	Worker	418	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	164	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	—	HHDT
Paving	—	—	—	—
Paving	Worker	24.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	0.00	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	84.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	0.00	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	18.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	0.00	—	HHDT
Grading	—	—	—	—
Grading	Worker	16.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	6.00	10.2	HHDT,MHDT
Grading	Hauling	254	20.0	HHDT
Grading	Onsite truck	0.00	—	HHDT
Building Construction	—	—	—	—

Building Construction	Worker	418	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	164	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	—	HHDT
Paving	—	—	—	—
Paving	Worker	24.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	0.00	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	84.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	0.00	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

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	0.00	0.00	625,850	208,617	14,968

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 (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	15.0	0.00	—
Grading	0.00	60,720	30.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Hotel	0.00	0%
Enclosed Parking with Elevator	0.00	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	346	0.03	< 0.005
2027	0.00	346	0.03	< 0.005
2028	0.00	346	0.03	< 0.005
2025	0.00	349	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
Total all Land Uses	3,262	3,262	3,262	1,190,630	21,914	21,914	21,914	7,998,610

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	3,262	3,262	3,262	1,190,630	21,914	21,914	21,914	7,998,610

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)
0	0.00	625,850	208,617	—

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Hotel	5,838,635	346	0.0330	0.0040	73,322,792
Enclosed Parking with Elevator	1,113,650	346	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)
Hotel	5,089,460	346	0.0330	0.0040	70,455,120
Enclosed Parking with Elevator	1,113,650	346	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)
Hotel	28,637,929	514,669
Enclosed Parking with Elevator	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Hotel	25,774,136	219,837
Enclosed Parking with Elevator	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Hotel	420	—
Enclosed Parking with Elevator	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Hotel	315	—
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
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Hotel	Household refrigerators and/or freezers	R-32	675	0.00	0.30	—	1.00

Hotel	Other commercial A/C and heat pumps	R-32	675	1.17	2.00	2.00	18.0
Hotel	Walk-in refrigerators and freezers	R-32	675	< 0.005	3.75	2.00	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
Emergency Generator	Diesel	1.00	2.00	40.0	1,676	0.73

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	10.1	annual days of extreme heat
Extreme Precipitation	3.85	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

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

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	1	0	0	N/A
Drought	3	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	5	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

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

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	1	1	1	2
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	3	1	1	3
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	5	1	1	4

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	48.5
AQ-PM	75.5

AQ-DPM	45.1
Drinking Water	65.2
Lead Risk Housing	90.5
Pesticides	0.00
Toxic Releases	89.3
Traffic	45.9
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	26.2
Haz Waste Facilities/Generators	46.4
Impaired Water Bodies	0.00
Solid Waste	71.2
Sensitive Population	—
Asthma	37.2
Cardio-vascular	47.5
Low Birth Weights	90.0
Socioeconomic Factor Indicators	—
Education	68.8
Housing	76.3
Linguistic	73.7
Poverty	72.4
Unemployment	73.4

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	16.59181317

Employed	35.60887976
Median HI	37.26421147
Education	—
Bachelor's or higher	23.94456564
High school enrollment	100
Preschool enrollment	26.45964327
Transportation	—
Auto Access	78.96830489
Active commuting	70.88412678
Social	—
2-parent households	29.42384191
Voting	9.251892724
Neighborhood	—
Alcohol availability	26.66495573
Park access	37.07173104
Retail density	61.60657
Supermarket access	85.24316694
Tree canopy	22.57153856
Housing	—
Homeownership	27.65302194
Housing habitability	14.32054408
Low-inc homeowner severe housing cost burden	23.23880405
Low-inc renter severe housing cost burden	29.00038496
Uncrowded housing	8.879763891
Health Outcomes	—
Insured adults	12.98601309
Arthritis	97.6
Asthma ER Admissions	62.7

High Blood Pressure	97.9
Cancer (excluding skin)	98.5
Asthma	30.0
Coronary Heart Disease	96.5
Chronic Obstructive Pulmonary Disease	79.3
Diagnosed Diabetes	88.2
Life Expectancy at Birth	31.3
Cognitively Disabled	68.5
Physically Disabled	95.1
Heart Attack ER Admissions	48.9
Mental Health Not Good	24.7
Chronic Kidney Disease	93.4
Obesity	51.2
Pedestrian Injuries	70.7
Physical Health Not Good	49.9
Stroke	93.8
Health Risk Behaviors	—
Binge Drinking	3.5
Current Smoker	17.2
No Leisure Time for Physical Activity	36.8
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	7.8
Elderly	67.6
English Speaking	22.2
Foreign-born	84.2
Outdoor Workers	45.0

Climate Change Adaptive Capacity	—
Impervious Surface Cover	36.6
Traffic Density	48.7
Traffic Access	87.4
Other Indices	—
Hardship	82.1
Other Decision Support	—
2016 Voting	53.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	75.0
Healthy Places Index Score for Project Location (b)	26.0
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

Land Use	Project description. 500 room hotel with amenities on 3.72 acres.
Construction: Construction Phases	no demo. Approx 32 months of construction.
Construction: Architectural Coatings	arch coating
Operations: Water and Waste Water	Based on WSA of total 94 acre-feet per year
Operations: Vehicle Data	Based on VMT study. All trips assigned to hotel use.
Construction: Trips and VMT	Adjusted numbers to be even numbered trips.
Construction: Paving	Estimated acreage for paved area from 528 parking lot spaces and 80% of site that is impervious
Construction: Off-Road Equipment	Client added plate compactors.
Construction: Dust From Material Movement	Based on Project Description of 60,720 cy of export
Operations: Energy Use	61,276,566 is estimated natural gas usage for swimming pool heating
Operations: Emergency Generators and Fire Pumps	Based on applicant provided information.
Operations: Fleet Mix	MHD and HHD limited to average of 10 trucks per day
Operations: Hearths	—
Operations: Solid Waste	Swimming pool solid waste is assumed to be included with hotel. The default solid waste estimate for the hotel is 273.75 tons per year. Based on the square footage provided for the swimming pool the default solid waste estimate is 142.39 tons per year. Solid waste generation adjusted to include default pool solid waste estimates.

Appendix B

Mitigation Measures from Appeal Letter

Mitigation Measures

The following section evaluates mitigation measures that were suggested during the appeal process of the prior CEQA document.

Table 1. Mitigation Measures Suggested During Project Appeal

Mitigation	Comment
Construction	
Enforce idling time restrictions for construction vehicles	This is a CalEEMod qualitative measure. The Project includes PDF-5 which limits all excess idling defined as idling for more than 5 minutes.
Require construction vehicles to operate with the highest tier engines commercially available	This is not a GHG reduction measure. However, the Writ approved portion of the Project's CEQA document included PDF-3 that required Tier 4 construction engines that reduces oxides of nitrogen (NO_x) and particulate matter (PM).
Divert and recycle construction and demolition waste and use locally-sourced building materials with a high recycled material content to the greatest extent feasible	The City of Garden Grove has a construction and demolition ordinance that requires 65% diversion. The Project includes MM-GHG-3 that requires the Project to achieve a 75% target for diversion of waste.
Minimize tree removal and mitigate indirect GHG emissions increases that occur due to vegetation removal loss of sequestration and soil disturbance	There is no vegetation onsite. The Project would include tree planting, but no carbon sequestration credit is claimed for landscaping.
Utilize existing grid power for electric energy rather than operating temporary gasoline/diesel powered generators	Included as PDF-8 which establishes electricity supply to the construction site. MM-GHG-1 specifies that all construction generators, cranes, and air compressors shall be electric-powered.
Increase use of electric and renewable fuel powered construction equipment and require renewable diesel fuel where commercially available	The Project includes PDF-8 to establish an electricity supply to the construction site and use electric-powered equipment instead of diesel where feasible. MM-GHG-1 specifically requires the use of electric generators, cranes, and air compressors during construction. Renewable diesel fuel was not included as a mitigation measure as it can sometimes result in increased emissions of NO_x depending on the blend of fuels.
Require diesel equipment fleets to be lower emitting than any current emission standard.	Please see the above response regarding PDF-3.
Operation	
Comply with lead agency's standards for mitigating transportation impacts under SB 743	The Project's Transportation assessment evaluated the Project for VMT impacts under SB 743 in accordance with City standards. The

Table 1. Mitigation Measures Suggested During Project Appeal

Mitigation	Comment
	Project's VMT impact was less than significant with mitigation measures TRA-1 through TRA-3.
Require on-site EV charging capabilities for parking spaces serving the project to meet jurisdiction-wide EV proliferation goals	MM-GHG-4 requires EV charging infrastructure that exceeds the CALGreen Tier 2 standards and helps promote EV proliferation.
Allow for new construction to install fewer on-site parking spaces than required by local municipal building code, if appropriate	The Project provides fewer parking spaces than would be required if each of the Project's mix of uses were separately evaluated under the City's code. The Project provides the amount of parking specified in the shared parking study.
Dedicate on-site parking for shared vehicles	The Project incorporates preferential parking pursuant to MM-TRA-1 to reduce employee commute trips by single-occupancy (SOV) vehicles.
Provide adequate, safe, convenient, and secure on-site bicycle parking and storage in multi-family residential projects and in non-residential projects	The Project includes bicycle parking for employees pursuant to MM-TRA-2. The Project will provide 38 bicycle parking spaces for guests.
Provide on and off-site safety improvements for bike, pedestrian, and transit connections, and/or implement relevant improvements identified in an applicable bicycle and/or pedestrian master plan	The Project includes MM-GHG-6 that includes safe pedestrian and bicycle access to adjacent offsite facilities including transit.
Require on-site renewable energy generation	MM-GHG-9 requires the Project to install a solar photovoltaic (PV) energy system capable of generating a minimum of 267,000 kilowatt hours (kWh) per year.
Prohibit wood-burning fireplaces in new development, and require replacement of wood-burning fireplaces for renovations over a certain size development.	MM-GHG-13 prohibits woodburning devices as well as natural gas fireplaces and firepits.
Require cool roofs and "cool parking' that promotes cool surface treatment for new parking facilities as well as existing surface lots undergoing resurfacing	MM-GHG-8 requires cool roofs and decks.
Require solar-ready roofs	MM-GHG-9 requires the Project to install a solar photovoltaic energy system capable of generating a minimum of 267,000 kWh per year.
Require organic collection in new developments	MM-GHG-11 requires the Project to divert a minimum of 25% of its municipal solid waste, which includes organics. The Project is required to divert organic waste to comply with existing regulations.
Require low-water landscaping in new developments. Require water efficient landscape maintenance to conserve water and reduce landscape waste.	MM-GHG-10 requires the use of low-water, drought-tolerant landscaping along with smart irrigation systems to conserve water.
Achieve Zero Net Energy performance targets prior to dates required by CALGreen.	MM-GHG-9 requires the Project to include solar PV panels to reduce on-site energy demand. The Project also includes MM-GHG-7 to increase

Table 1. Mitigation Measures Suggested During Project Appeal

Mitigation	Comment
	building energy efficiencies further reducing on-site energy demand. Given the limited Project area and roof space, offsetting all energy use through on-site renewable energy generation is not feasible.
Require new construction, including municipal building construction, to achieve third-party green building certifications, such as the GreenPoint Rated program or the LEED rating system	The Project includes MM-GHG-7 to increase building energy efficiencies, MM-GHG-9 to include solar PV, MM-GHG-10 to conserve water, and MM-GHG-14 to reduce refrigerant emissions. These mitigation measures result in a more sustainable project design that would qualify the Project for LEED accreditation if pursued.
Require the design of bike lanes to connect to the regional bicycle network	As an infill development, the Project provides direct access to Harbor Blvd. as well as bicycle friendly amenities described in this Table and the SEIR..
Expand urban forestry and green infrastructure in new land development	The Project includes a relatively small, urban, infill footprint. Within those constraints, the Project would include new trees as depicted on the Project landscape plans.
Require preferential parking spaces for park and ride to incentivize carpooling vanpooling, commuter bus, electric vehicles, and rail service use	The Project incorporates preferential parking pursuant to MM-TRA-1 to reduce employee commute trips by SOVs.
Require a transportation management plan for specific plans which establishes a numeric target for non-SOV travel and overall VMT	The Project includes MM-TRA-1 to reduce employee commute trips by SOVs. As noted above, the Project has a less than significant impact relative to VMT.
Develop a rideshare program targeting commuters to major employment centers	The Project includes MM-TRA-1 to reduce employee commute trips.
Require the design of bus stops/shelters/express lanes in new developments to promote the usage of mass-transit	The Project is located less than ½ mile from an existing major transit stop and no additional bus stops are required for this in-fill development site. The Project includes MM-TRA-1 which includes promoting the use of existing transit to employees pursuant to the Commute Trip Reduction Program. The Project also includes MM-GHG-5 which includes providing information to guests on existing transit and providing wayfinding to facilitate use of transit by guests.
Require gas outlets in residential backyards for use with outdoor cooking appliances such as gas barbeques if natural gas service is available	Not applicable.
Require the installation of electrical outlets on the exterior walls of both the front and back of residences to promote the use of electric landscape maintenance equipment	Not applicable.

Table 1. Mitigation Measures Suggested During Project Appeal

Mitigation	Comment
Require the design of the electric boxes in new residential unit garages to promote electric vehicle usage	Not applicable.
Require electric vehicle charging station (Conductive/inductive) and signage for non-residential developments	MM-GHG-4 requires EV charging infrastructure that exceeds the CALGreen Tier 2 standards.
Provide electric outlets to promote the use of electric landscape maintenance equipment to the extent feasible on parks and public/quasi-public lands	Not applicable.
Require each residential unit to be “solar ready,' including installing the appropriate hardware and proper structural engineering	Not applicable.
Require the installation of energy conserving appliances such as on-demand tank-less water heaters and whole-house fans	The Project includes MM-GHG-7 that requires building energy efficiency measures such as high energy efficiency LED lighting on-site, HVAC optimization, heat pumps monitored by a project building management system, glazing of windows, and energy management systems.
Require each residential and commercial building equip buildings with energy efficient AC units and heating systems with programmable thermostats/timers	The Project includes MM-GHG-7 that requires HVAC optimization to reduce onsite energy through building energy efficiencies.
Require large-scale residential developments and commercial buildings to report energy use, and set specific targets for per-capita energy use	The Project includes MM-GHG-7 that requires an energy management system with specific performance criteria and monitoring, benchmarking and third-party verification.
Require each residential and commercial building to utilize low flow water fixtures such as low flow toilets and faucets	The Project includes MM-GHG-10 that requires low flow water fixtures and water conservation strategies with specific targets that exceed industry standards.
Require the use of energy-efficient lighting for all street, parking, and area lighting	The Project includes MM-GHG-7 that requires the use of energy efficient lighting.
Require the landscaping design for parking lots to utilize tree cover	The Project would be designed in accordance with City standards that require tree coverage in parking lots.
Incorporate water retention in the design of parking lots and landscaping	The Project includes MM-GHG-10 which serves to conserve water through landscaping and irrigation design. The Project would comply with the National Pollutant Discharge Elimination System (NPDES) which regulates stormwater discharges from commercial facilities. The NPDES is enforced by the California Regional Water Quality Control Board. Compliance with this permit would minimize pollution in stormwater runoff through on-site drainage management.

Table 1. Mitigation Measures Suggested During Project Appeal

Mitigation	Comment
Require the development project to propose an off-site mitigation project which should generate carbon credits equivalent to the anticipated GHG emission reductions This would be implemented via an approved protocol for carbon credits from California Air Pollution Control Officers Association (CAPCOA), the California Air Resources Board, or other similar entities determined acceptable by the local air district	MM-GHG-15 requires the purchase of carbon offsets through CARB-accredited registries and includes a geographical hierarchy performance standard.
Require the project to purchase carbon credits from the CAPCOA GHG Reduction Exchange Program, American Carbon Registry (ACR), Climate Action Reserve (CAR) or other similar carbon credit registry' determined to be acceptable by the local air district	CAPCOA is no longer running a GHG offsets program. The Project includes MM-GHG-15 which requires the purchase of carbon offsets through CARB-accredited registries.
Encourage the applicant to consider generating or purchasing local and California-only carbon credits as the preferred mechanism to implement its off-site mitigation measure for GHG emissions and that will facilitate the State's efforts in achieving the GHG emission reduction goal	As it relates to GHG impacts, while there is no scientific basis for limiting the purchase of greenhouse gas (GHG) offsets to local or California alone as GHGs are a global issue and their reduction benefits the entire planet, it is important to recognize the additional co-benefits of reducing emissions within California. These local benefits include improved air quality, public health, and support for the state's environmental goals and policies. The Project includes MM-GHG-15 which requires the purchase of carbon offsets through CARB-accredited registries and includes a geographical hierarchy that prioritizes local and California credits to the extent those credits are available consistent with recent case law.